



Environment

Prepared for:
Superfund Standby Program
NYSDEC
Albany, NY

Prepared by:
AECOM
Chestnut Ridge, NY
60277021
August 2015

Groundwater Sampling Report (March 2015 Sampling Event) Liberty Industrial Finishing Site Site #1-52-108 Work Assignment No. D007626-17.1

Final



Environment

Prepared for:
Superfund Standby Program
NYSDEC
Albany, NY

Prepared by:
AECOM
Chestnut Ridge, NY
60277021
August 2015

Groundwater Sampling Report (March 2015 Sampling Event) Liberty Industrial Finishing Site Site #1-52-108 Work Assignment No. D007626-17.1

Final

A handwritten signature in cursive script, reading "Paul Kareth".

Prepared By: Paul Kareth

A handwritten signature in cursive script, reading "Scott Underhill".

Reviewed By: Scott Underhill

Contents

1.0 Introduction.....	1-1
2.0 Background Information.....	2-1
2.1 Site Description.....	2-1
2.2 Site History.....	2-1
2.3 Deviations from the Site Management Plan	2-2
3.0 Field Activities	3-1
3.1 Water Level Survey	3-1
3.2 March 2015 Groundwater Sampling Event.....	3-2
4.0 Sampling Results	4-1
4.1 Metals Data	4-1
4.2 Filtered versus Unfiltered Metals Samples	4-3
4.3 Round 8 (March 2015) Data Quality Review	4-4
5.0 Summary and Recommendations for Future Site Remediation Activities	5-1
5.1 Summary of Groundwater Sampling Data.....	5-1
5.2 Recommendations for Future Work.....	5-2

List of Tables

Table 1 Well Construction Data

Table 2 Groundwater Elevations

Table 3 Summary of TAL Metals in Groundwater

Table 4 Comparison of Filtered and Unfiltered Metals Data in Groundwater

Table 5 Field Duplicate Data – TAL Metals in Groundwater

List of Figures

Figure 1 Site Location Map

Figure 2 Site Plan

Figure 3 Groundwater Elevations, August 21, 2012

Figure 4 Groundwater Hydrograph

Figure 5 Summary of TAL Metals in Groundwater

Figure 6 Cadmium Concentrations in Selected Monitoring Wells

Figure 6A Cadmium Concentrations in Shallow Monitoring Wells

Figure 6B Cadmium Concentrations in Deep, Very Deep, and Magothy Monitoring Wells

Figure 7 Cadmium Isoconcentration Map, Shallow Wells, August 2012

Figure 7A Cadmium Isoconcentration Map, Shallow Wells, November 2013

Figure 7B Cadmium Isoconcentration Map, Shallow Wells, March 2015

Figure 8 Chromium Concentrations in Selected Monitoring Wells

Figure 8A Chromium Concentrations in Shallow Monitoring Wells

Figure 8B Chromium Concentrations in Deep, Very Deep, and Magothy Monitoring Wells

Figure 9 Chromium Isoconcentration Map, Shallow Wells, August 2012

Figure 9A Chromium Isoconcentration Map, Shallow Wells, November 2013

Figure 9B Chromium Isoconcentration Map, Shallow Wells, March 2015

Figure 10 Lead Concentrations in Selected Monitoring Wells

Figure 10A Lead concentrations in Shallow Monitoring Wells

Figure 10B Lead Concentrations in Deep, Very Deep and Magothy Monitoring Wells

Figure 11 Antimony Concentrations in Selected Monitoring Wells

List of Appendices

Appendix A Monitoring Well Sampling Forms

Appendix B NYSDEC Monitoring Well Field Inspection Logs

Appendix C Laboratory Data Summary Packages

1.0 Introduction

AECOM Technical Services Northeast, Inc. (AECOM [formerly Earth Tech Northeast, Inc.]) has prepared this Groundwater Monitoring Report for the Liberty Industrial Finishing Site in Brentwood, New York (Site No. 1-52-108). This work was performed for the New York State Department of Environmental Conservation (NYSDEC) under Work Assignment D007626-17. Sampling rounds 1 through 5 were conducted by AECOM under Work Assignment D004445-14. As part of the long-term monitoring plan for the Site, groundwater samples are collected from selected monitoring wells once every five quarters. This groundwater monitoring report provides the results of the groundwater sampling data collected in March 2015. The regularly scheduled February 2015 sampling event was postponed due to several large snow storms in January and February 2015.

Eight rounds of groundwater sampling have been conducted at the Site since 2006 when long term monitoring began.

- The first round (Round 1) of sampling was conducted in June 2006.
- The second round (Round 2) of sampling was conducted in August 2007.
- The third round of sampling (Round 3) was conducted in November 2008.
- The fourth round (Round 4) of sampling conducted in March 2010.
- The fifth round (Round 5) of sampling was conducted in May 2011.
- The sixth round (Round 6) of sampling was conducted in August 2012.
- The seventh round (Round 7) of samples was conducted in November 2013.
- The eighth round (Round 8) of samples was collected in March 2015.

This report focuses on the most recent (Round 8) sampling event at the site and includes the data from the earlier rounds.

2.0 Background Information

2.1 Site Description

The Liberty Industrial Finishing Superfund site is located at 550 Suffolk Avenue, Brentwood, Suffolk County, New York (see Figure 1).

The Site is approximately 3.9 acres in total area of which 1.3 acres are historically undeveloped. The remainder of the site consists of previously developed areas with remnants of the former building (concrete floor slab), walkways, parking lots, and driveway areas. The Site is located in an area that is primarily residential and light commercial. A Site location map is included as Figure 1.

The Site is bound to the north by Suffolk Avenue, to the east by commercial properties, to the south by the Long Island Rail Road (LIRR), and to the west by a gasoline retailer and a shopping plaza. The parcels immediately north of Suffolk Avenue are undeveloped. Immediately south of the LIRR are the Town of Islip Athletic fields and the water supply wells for the Brentwood Water District. The Brentwood municipal water supply wells are less than 500 feet south of the Site.

2.2 Site History

Liberty Industrial Finishing Products was a metal finishing facility engaged in finishing and plating of components used primarily in the aircraft industry. Metal finishing activities included passivation, phosphotization, electroplating, conversion coating, anodizing, painting, and non-destructive testing. Industrial operation of the facility spanned the period from 1978 through 1997. When active, the industrial operation at the Site included a 30,000-square foot factory building, six underground storage tanks (USTs) for plating process and wastewater, sanitary leaching pools, and stormwater drywells. The USTs were equipped with “emergency” overflow pipes that discharged to the on-site leaching pools.

Shortly after operations began at the Site, concerns for public health and the environment resulting from operational and waste handling practices at the Site were investigated by the Suffolk County Department of Health Services (SCDHS). In 1982, surface and subsurface discharges of waste water were addressed in an Order of Consent between Liberty and the SCDHS. Corrective actions were implemented to eliminate the discharge of industrial waste water to the environment and the order was reportedly satisfied.

An inspection conducted by NYSDEC in 1984 identified deficiencies in Site hygiene and waste handling practices. Samples were collected of the liquids in the sanitary leaching pool, the storm water dry well, and a soil sample was collected near the northeast corner of the building. The sanitary system and the storm water dry well were subsequently pumped out and cleaned (July 1985).

A Phase II Site Investigation was performed in 1987 and a Phase II Supplemental Site Investigation was performed in 1991. An emergency remedial measure removed a total of 45 inches of sediment/soil from the bottom of the leaching pool (1992). As a result of the Phase II supplemental site investigation, the Site was reclassified as a Class “2” site on the Registry of Inactive Hazardous Waste Disposal Sites in February of 1994.

A Consent Order (March 1996) required that the facility conduct a Focused Remedial Investigation (FRI) to determine the extent of contamination within the six USTs and the emergency leaching pool. FRI activities were never implemented by Liberty Industrial Finishing due to financial constraints.

In 1997, Liberty Industrial Finishing removed waste materials from the on-site building.

A Remedial Investigation (RI) was performed in 1997-1998 for NYSDEC by Dvirka and Bartilucci. Based on the RI, the NYSDEC conducted a supplemental Remedial Investigation/Feasibility Study (RI/FS) of the Site in 1997-1998. The results and conclusions of the supplemental RI/FS were documented in a report by Dvirka and Bartilucci dated September, 1999. Elevated concentrations of regulated metals, specifically chromium, were reported in excess of the applicable cleanup criteria in surface and subsurface soils, drainage structures, and on-site and off-site groundwater.

A Record of Decision (ROD) for the Site was issued by NYSDEC in March 1999. The ROD specified the site related contaminants of concern to include semivolatile organic compounds (phenol, benzo(k)anthracene, chrysene, and benzo(a)pyrene) in the sediment/sludge from the stormwater dry wells and metals (cadmium, chromium, copper, nickel, and zinc) in all media.

The United States Environmental Protection Agency (USEPA) conducted an emergency removal action including the removal of waste materials stored in the on-site factory building and the in-place closure of six USTs. The tanks were not removed due to the close proximity of the LIRR; however, UST in-place closure was determined to be equally protective of human health and the environment. A non-porous asphalt cap was constructed over the UST area to mitigate infiltration of precipitation into the contaminant source area (Figure 2).

All of the removal and in-place closure measures specified in the ROD were completed in September 2001. The results of these remedial actions were reported in the Final Remediation Report (Dvirka and Bartilucci, July 2002).

2.3 Deviations from the Site Management Plan

According to the Round 7 (November 2013 sampling event) Groundwater Sampling Report, the next scheduled five-quarter sampling event was supposed to occur in February 2015. However, the sampling event was postponed until March 2015 due to heavy winter snow storms in Suffolk County during January and February 2015.

3.0 Field Activities

The monitoring well survey information could not be located at the start of this project. As a part of this long-term monitoring program, each of the eight wells included in the sampling program were re-surveyed by YEC, Inc., a licensed New York State surveyor on March 21, 2007. A summary of well construction data is presented on Table 1.

The eighth round of groundwater sampling at the Liberty Industrial Finishing Site occurred on March 18, 19 and 20, 2015. Sampling was conducted in accordance with the Site Management Plan (SMP) prepared by AECOM Technical Services Northeast, Inc. (AECOM), dated September 2014. All field work was performed in Level D personal protection. Groundwater samples were collected using a bladder pump employing low flow sampling techniques. Field measurements of temperature, conductivity, dissolved oxygen, pH, oxygen reduction potential and turbidity were collected at approximately five-minute intervals. A sample was collected when parameters had stabilized for three consecutive readings. Both unfiltered and filtered groundwater samples were collected; filtered samples were field filtered using 0.45 micro filters. Purge forms are included as Appendix A.

3.1 Water Level Survey

Prior to the start of sampling, water levels were measured in each well to provide a synoptic event. Groundwater level measurements were recorded in the Field Notebook and on the Well Sampling Forms included in Appendix A. NYSDEC Monitoring Well Field Inspection Forms were completed for each well and are included in Appendix B. A summary of groundwater elevation measurements for all sampling events since 2006 is provided in Table 2. Each location was photo-documented and a hand-held global positioning system (GPS) unit was used to record the coordinates. The total depth of each of the 14 wells also varies significantly from 42.5 to 265 feet (ft). The groundwater elevation data are shown on Figure 3.

A groundwater hydrograph is presented in Figure 4. As shown on the figure, the groundwater elevations are very consistent from sampling event to sampling, generally rising and falling in unison. This trend was not present in the November 2013 sampling event. Using the previous August 2007 to November 2008 elevations to predict the trend for this round, the groundwater elevations should have dropped. This was not the case for three wells which exhibited rising water levels and three additional wells that did not drop in unison with the other wells. This is most evident in the four shallow wells along the southern property boundary, MW-2, MW-3, and MW-4, which are less than 100 ft apart. During the previous two sampling events, the groundwater elevations in these four wells were all within a few inches of each other and moved in unison from May 2011 to August 2012. During the November 2013 event, the water table in MW-2 rose significantly, decreased at MW-3, and dropped significantly at MW-4 so that the difference between MW-2 and MW-4 was over 3 ft. Several other wells deviated from the previous trends. The reason for these deviations is unknown at this time. The

long term trend appears to have returned for the March 2015 round with most elevations back to their relative positions as noted during the May 2011 and August 2012 events.

3.2 March 2015 Groundwater Sampling Event

Thirteen monitoring wells were identified for long term monitoring at the Site. The selected wells include MW-2, MW-3, MW-4, MW-5, MW-6, MW-10, MW-12, MW-14, MW-16, MW-18, MW-19, MW-20, and MW-21. Well locations are shown on Figure 2.

During previous sampling events, a Grundfos Redi-Flo2 submersible electric pump was used to purge at least three casing volumes of water prior to sampling. Groundwater samples were then collected using a Teflon bailer.

During the Round 6, 7 and 8 sampling events, groundwater samples were collected using low-flow techniques as detailed in the SMP. A bladder pump with poly discharge tubing was used to purge each monitoring well. An in-line flow cell was used to collect measurements of pH, specific conductance, temperature, dissolved oxygen, oxygen reduction potential, and turbidity. The measurements were recorded on the Well Sampling Forms at five minute intervals during purging. Samples were collected after the field measurements had stabilized. The sample was collected into laboratory supplied containers and stored in an ice-filled cooler. During this round, filtered metals samples were also collected. Groundwater samples were filtered in the field using dedicated, disposable 0.45-micron filters. Filtered groundwater samples were then poured into laboratory-supplied containers and placed in an ice-filled cooler. The samples were then transported to Hampton-Clarke Veritech Laboratory via laboratory courier. Proper chain-of-custody procedures and requirements were maintained throughout the sampling event in accordance with the QAPP.

4.0 Sampling Results

The samples from monitoring wells MW-2, MW-3, MW-4, MW-5, MW-6, MW-10, MW-12, MW-14, MW-16, MW-18, MW-19, MW-20, and MW-21 were labeled with the L- prefix to denote they were collected from the Liberty site. Groundwater samples were analyzed for target analyte list (TAL) metals using USEPA Method 6010/7470. The analyses were performed by Hampton Clarke Veritech (HCV), Fairfield, New Jersey, a NYSDOH ELAP certified laboratory (ELAP certification number 11408). The HCV data summary packages are included in Appendix C. A table showing the full data set is also included in Appendix C. A summary of the detections is presented in Table 3. The exceedances are also shown on Figure 5. The data are discussed in Sections 4.1 and 4.2, below.

In accordance with project plans, formal data validation was not performed. However, an AECOM chemist provided a limited review of the data packages. The review of the Round 8 data is presented in Section 4.3.

4.1 Metals Data

Concentrations of ten metals have been detected above the Class GA criterion in monitoring wells at the Site at least once during the eight sampling events. These metals include antimony, cadmium, chromium, copper, iron, lead, manganese, selenium, sodium and thallium. Results of the previous eight sampling events are summarized on Table 3. The Round 8 results are shown on Figure 5.

Contaminants of Concern and Cleanup Criteria

Groundwater (µg/L)		
Cadmium	10	* (5)
Chromium	50	
Copper	200	
Nickel	100	
Zinc	300	* (2,000)
Cyanide	100	

Notes:

Contaminants of concern and cleanup criteria taken from the March 1991 ROD, Section 4.4.1

*indicates NYSDEC criteria has changed since 1991 ROD was issued

NC – No criterion

Antimony was not detected in any of the 13 unfiltered or filtered metals samples during Round 8. Historically, antimony concentrations and exceedances have been noted sporadically in seven wells (Figure 11).

Cadmium was detected in six of 13 unfiltered samples, two of which exceeded the 5 µg/L criterion; maximum concentration of 42 µg/L noted in shallow monitoring well MW-10. Cadmium was detected in five of 13 filtered samples, two of which exceeded the criterion; maximum concentration of 33 µg/L noted in MW-10. Historically, cadmium exceedances have been noted in ten of the 13 wells monitored at the Site (Figures 6, 6A and 6B). Cadmium concentrations have exceeded the criterion for both unfiltered and filtered samples at MW-4 for the last four sampling rounds (Figure 6A). Cadmium isoconcentration maps were prepared for the last three sampling events: August 2012 (Figure 7), November 2013 (Figure 7A) and March 2015 (Figure 7B). As shown on these three figures, the cadmium plume extends from the source area at MW-4 into the baseball field southeast of the Site. Concentrations have declined in all the wells over the last three sampling events. The leading edge of the plume at MW-12/MW-14 appears to be receding and the concentrations within the plume are also decreasing.

Chromium was detected four of 13 unfiltered samples, two of which exceeded the 50 µg/L criterion; maximum concentration of 170 µg/L noted in MW-3. Chromium was detected in two of 13 filtered samples, both of which exceeded the criterion; maximum concentration of 83 µg/L noted in MW-10. Historically, chromium exceedances have been noted in six of the 13 wells monitored at the site (Figure 8). Five of these are shallow wells (Figure 8A) while one is a deep well (Figure 8B). Chromium isoconcentration maps were prepared for the last three sampling events: August 2012 (Figure 9), November 2013 (Figure 9A) and March 2015 (Figure 9B). As shown on these three figures, the extent of the chromium plume has decreased significantly over the past few years; in 2012, the leading edge of the plume was present in deep monitoring well MW-21, but by 2015, the leading edge of the plume has receded to a position upgradient of MW-12/MW-14.

Copper was detected in one of 13 unfiltered samples and did not exceed the 200 µg/L criterion. Copper was not detected in any of the 13 filtered samples. Historically, copper has been sporadically detected at concentrations below the criterion in a few wells at the Site; there has been only one exceedance noted in the eight sampling rounds conducted to date.

Iron was detected in six of 13 unfiltered samples, all six of which exceeded the 300 µg/L criterion; maximum concentration of 1,700 µg/L in MW-20. Iron was not detected in any of the 13 filtered samples. Historically, iron has been detected in the majority of the wells on site.

Lead was detected in six of 13 unfiltered samples, none of which exceeded the 25 µg/L criterion. Lead was not detected in any of the 13 filtered samples. Historically, lead has been detected at least once in 11 of the 13 monitoring wells at the Site (Figure 10). However, the criterion has only been exceeded in three wells, MW-4, MW-12 and MW-14 (Figure 10A and 10B).

Manganese was detected in four of 13 unfiltered samples, two of which exceeded the 300 µg/L criterion; maximum concentration of 950 µg/L noted in MW-18. Manganese was detected in two filtered samples, one of which exceeded the criterion, 350 µg/L at MW-16.

Selenium was not detected in any of the 13 filtered or unfiltered samples during Round 8.

Sodium was detected in 12 of 13 unfiltered samples, four of which exceeded the 20,000 µg/L criterion; maximum concentration of 110,000 µg/L noted in MW-14. Sodium was detected in 12 of 13 filtered samples, two of which exceeded the criterion; maximum concentration of 100,000 µg/L noted in MW-14.

Thallium was not detected in any of the 13 filtered or unfiltered samples during Round 8.

4.2 Filtered versus Unfiltered Metals Samples

Concentrations of total metals in groundwater samples at the Site trended to be highly variable between sampling events, as did field measurements of turbidity at the time of sample collection. Turbidity is typically correlated with the presence of suspended matter (e.g., entrained soil particles in the sample). Therefore, in Round 5 (May 2011), Round 6 (August 2012), Round 7 (November 2013), and 8 (March 2015), total metals (unfiltered) and dissolved metals (field filtered) groundwater samples were collected to evaluate the effect of turbidity on the metals concentrations.

The NYSDEC turbidity criterion is 50 nephelometric turbidity units (NTU) or less for well development and groundwater sampling (TAGM 4015; NYSDEC, 1988). At the Liberty Industrial Finishing Site, the turbidity was below 50 NTU at the time of sampling in nine of 13 samples, ranging from 2.6 to 140 NTU (see the bottom row of Table 4).

Table 4 presents a comparison of the total metals and the dissolved metals data for the 13 filtered/unfiltered sample pairs collected at the Liberty Site. The “percent dissolved” shown on the table is the ratio of the filtered sample concentration to the total (unfiltered) sample concentration.

Concentrations of metals that typically exist primarily in the dissolved phase (sodium, and calcium) are not expected to be affected by filtering. Hence the two samples (filtered and unfiltered) should essentially act as field duplicate samples for these parameters, and the concentrations in the filtered/unfiltered pairs would be expected to be very similar (e.g., the filtered/unfiltered ratio is close 100% +/- 10%). The filtered/unfiltered pairs for these two compounds were generally similar in the filtered and unfiltered samples indicating good reproducibility in the sampling/analytic process. Most of the other metals are expected to be generally associated with solid particles. Therefore it would be expected that the concentration in the filtered samples would range from similar to the unfiltered samples (for those wells with very low turbidity), to significantly lower for those wells with high turbidity (as long as the concentration are sufficiently higher than the detection for an accurate comparison). This is the case for all well samples. However, an important distinction in the data is that most of the “particle associated” metals (e.g., iron) were not detected in the filtered samples (i.e. are not soluble) except for cadmium, which was typically 50% soluble or greater. Thus, in samples where cadmium is detected, it is also detected in the filtered (dissolved) samples.

4.3 Round 8 (March 2015) Data Quality Review

In accordance with the project plans, data generated for this investigation were not subject to formal validation. However, AECOM's quality assurance officer (QAO) reviewed the data for reasonableness and the presence of any anomalies, including issues identified by the laboratory in the case narrative, and other items noted in review of shipping and handling documentation, inconsistencies with previous data, and review of the laboratory QA forms. The QAO also reviewed the field duplicate data.

Filtered and unfiltered groundwater samples were collected from 13 monitoring wells on March 18, 19, and 20, and received in good condition by the laboratory (Hampton Clarke Veritech, Fairfield, New Jersey) on March 20, 2015. Samples were analyzed for target analyte list (TAL) metals (unfiltered and filtered) as sample delivery group (SDG) AC83866. One field equipment blank was collected for both the filtered (LFB) and unfiltered (LFB-F) samples. Samples LMW-19 (unfiltered) and LMW-19F (filtered) were designated as the QC samples (spike and duplicate analysis), for the Round 8 sampling event.

A review of the metals data from MW-12 and MW-21 found anomalous results. Five metals were detected in the sample labeled MW-12F (field filtered). The concentrations of all five metals were higher in the "filtered" sample than in the "unfiltered" sample, LMW-12. Furthermore the concentrations of the ionic metals (i.e., calcium and sodium), which should be close to 100% dissolved and therefore not greatly affected by filtering, were different by more than a factor of two. Reviewing all of the recent and historical data, the unfiltered bottles for MW-12 and MW-21 appear mislabeled in the field or were switched at the laboratory; however, definitive proof could not be found. Consequently, the decision was made switch these results.

Laboratory QC limits were met for initial and continuing calibrations, blanks, laboratory control sample (LCS) recovery, post-digestion spikes, and laboratory duplicate precision. Serial dilutions criteria were not met for, magnesium, in sample AC83866-011 (LMW-19), and in AC83866-014 (LMW-19F). All other laboratory QC criteria were met for SDG AC83866. One unusual occurrence noted by the laboratory during the analysis of samples, was a poor potassium recovery on the laboratory control sample, which caused the laboratory to reset the analytical batch to achieve acceptable quality criteria.

One filtered/unfiltered site-specific field duplicate groundwater sample pair (LMW-19 and 19F/LMW-69 and 69F) was collected from the Liberty site in Round 7. Precision for the field duplicates (see Table 4) was very good. In the unfiltered sample pair (LMW-19/LMW-69U), relative percent difference (RPD) ranged from 0.0 to 14.3 percent, for 2 metals with results above the contract required detection limit. Precision was good in the filtered duplicate pair (19F/69F) for the 2 metals with results above the contract required detection limit, with RPDs ranging from 0.0 to 6.1 percent.

The filtered/unfiltered data pairs (see Table 4) were reviewed for anomalies, using the USEPA Region II metals validation criteria (USEPA HW-2, revision 13; USEPA, 2006). Based on these criteria, if the

dissolved (filtered sample) result exceeds the total (unfiltered) sample by more than 20 percent, the accuracy of the quantitation is suspect and both samples should be flagged (J) as estimated. If the filtered sample result exceeds the unfiltered sample result by more than 50 percent, the data is considered unusable and both samples should be flagged as rejected (R). No anomalies were found between the unfiltered/filtered samples other than the apparently switched samples discussed above.

5.0 Summary and Recommendations for Future Site Remediation Activities

5.1 Summary of Groundwater Sampling Data

As noted in Section 4.1, five metals (cadmium, chromium, copper, lead and zinc) were listed in the ROD as COCs. Based on a review of the data from the eight sampling events, concentrations of antimony, cadmium, chromium, copper, iron, lead, manganese, selenium, sodium, and thallium have been detected at concentrations above their Class GA criteria. Based on the March 2015 sample results, the following metals exceeded Class GA criteria in unfiltered samples: cadmium (two wells), chromium (two wells), iron (six wells), manganese (two wells), and sodium (four wells). The following metals exceeded the Class GA criteria in filtered samples: cadmium (two wells), chromium (two wells), manganese (one well), and sodium (two wells).

Iron, manganese and sodium are naturally occurring metals in groundwater on Long Island. The exceedances of these metals most likely represent background conditions and are not related to previous site activities.

Shallow monitoring well MW-5 is located west of the source area (plating waste tanks and leaching pools). There were no exceedances noted in the March 2015 sampling event. Historically, there have been no exceedances of TAL metals at this location with the exception of one exceedance of antimony during eight rounds of sampling.

Three shallow monitoring wells (MW-2, MW-3, and MW-4) are located near the former plating waste tanks. During the March 2015 sampling event, dissolved concentrations of cadmium, chromium and sodium were detected above their respective cleanup criteria as shown on Figure 5. Unfiltered samples also included exceedances of iron. Historically, concentrations of cadmium and chromium have exceeded the criterion in both filtered and unfiltered samples.

Two shallow wells are located downgradient of the plating waste tanks, MW-10, and MW-12. During the March 2015 sampling event, cadmium and chromium exceeded the criteria in MW-10 (both unfiltered and filtered samples). There were no exceedances other than sodium in MW-12, the most downgradient shallow well at the Site. Historically, MW-10 has had exceedances of both cadmium and chromium in both unfiltered and filtered samples, while MW-12 has had a few unfiltered cadmium exceedances (Figures 6A and 8A).

Isoconcentration maps were prepared for filtered cadmium results and are shown on Figures 7 (August 2012), 7A (November 2013) and 7B (March 2015). As shown on these maps, the filtered cadmium plume extends south from the plating waste tanks into the athletic fields. In August 2012, the leading edge of the plume extended south of MW-12 (Figure 7). Subsequent sampling events

indicate that the leading edge of the plume has retreated as concentrations have dropped below the criterion for the last two sampling events (Figures 7A and 7B).

Isoconcentration maps were also prepared for chromium results and are shown on figures 9 (August 2012), 9A (November 2013) and 9B (March 2015). As shown on these figures, the chromium plume extends south of the plating waste tanks similar to the cadmium plume. In August 2012, the leading edge of the plume appeared to be sinking as it was present in deep well MW-14 but not in the adjacent shallow well MW-12. The chromium plume appears to be dissipating as indicated in the November 2013 event where concentrations at downgradient location MW-14 were not detected and the March 2015 event where concentrations at shallow well MW-10 had decreased significantly.

There are three deep wells (screened approximately 100 ft bgs) at the Site, MW-16, MW-14 and MW-21 as shown on Figure 2. These three deep wells align with the general direction of groundwater flow leading away from the source area plating waste tanks. MW-16 is immediately downgradient of the source area, and MW-14 and MW-21 are further downgradient of the Site. There were no exceedances (other than manganese) noted during the March 2015 sampling event at MW-16. Historically, cadmium was detected in most samples at MW-16 but at concentrations below the criterion (Figure 6B). At MW-14, there have been no filtered cadmium exceedances noted during the four sampling events where filtered samples were collected. There was one chromium exceedance in a MW-14 filtered sample noted in August 2012 but none in the next three filtered sampling events. There have been several exceedances of these two metals in unfiltered samples (Figures 6A and 8A). Historically, there have been exceedances of antimony, copper, iron, lead, selenium and sodium in these two at this downgradient location (Table 3).

There are two very deep wells, MW-18 and MW-20, at the Site screened approximately 150 ft bgs. MW-18 is sidegradient to the source area and MW-20 is downgradient to the source area. There were no exceedances noted in these two wells during the March 2015 sampling event. Historically, the only exceedances noted in these two very deep wells were antimony, iron, manganese and sodium.

Two wells, MW-6 and MW-18, are screened in the Magothy Formation (approximately 250 ft bgs). There were no exceedances noted in these wells during the March 2015 sampling event. Historically, cadmium exceeded the criterion in both wells during the August 2007 sampling event (unfiltered samples) but has not exceeded the criterion since in either unfiltered or filtered samples (Figure 6A). There have been sporadic exceedances of antimony, iron and thallium in these wells (Table 3).

5.2 Recommendations for Future Work

Concentrations of cadmium and chromium were detected above their respective Class GA criterion in several monitoring wells during the March 2015 sampling event. AECOM recommends continued sampling to determine if the cadmium and chromium plumes are migrating downgradient of the Site.

Paired filtered/unfiltered groundwater samples for metals analysis were collected from all monitoring wells in the May 2011, August 2012, November 2013, and March 2015 sampling events. Cadmium appears to be present in the dissolved phase with dissolved concentrations at 50% of the unfiltered samples or greater, whereas chromium and lead are not found in the filtered samples. Filtering of samples can be discontinued, since the data have demonstrated that the presence of cadmium in a unfiltered sample does indicate site related contamination of the groundwater, while the presence of other metals such as lead and chromium are only associated with soil particles and do not reliably indicate site related contamination.

The next scheduled sampling event at the Liberty Site is August 2016.

Tables

Figures

Appendix A

Monitoring Well Sampling Forms

Appendix B

NYSDEC Monitoring Well Field Inspection Logs

Appendix C

Laboratory Data Summary Package

TABLE 1
LIBERTY INDUSTRIAL FINISHING SITE (1-25-108)
WELL CONSTRUCTION DATA

Well Number	Northing	Easting	Ground Elevation	Top of Riser Elevation	Top of Casing Elevation	Total Depth of Well
MW-1	202,384.57	2,206,633.80	92.92	91.57	92.92	42.5
MW-2	202,371.27	2,206,596.31	92.87	91.27	92.87	54.2
MW-3	202,360.99	2,206,568.43	93.08	91.25	93.08	53.9
MW-4	202,344.02	2,206,522.24	93.09	91.61	93.09	53.4
MW-5	202,308.86	2,206,350.98	92.19	93.32	93.60	50.0
MW-6	202,306.77	2,206,341.15	92.09	92.71	92.79	265.0
MW-10	202,243.14	2,206,590.12	91.84	90.40	91.84	50.0
MW-12	201,973.43	2,206,863.98	91.08	89.59	89.79	49.3
MW-14	201,966.33	2,206,866.03	91.12	89.55	89.77	100.0
MW-16	202,243.14	2,206,611.76	91.97	90.48	91.97	99.2
MW-18	202,101.70	2,206,373.86	93.14	91.55	92.03	150.0
MW-19	202,102.30	2,206,386.65	93.32	91.98	92.19	248.0
MW-20	201,798.92	2,206,946.09	90.27	88.59	89.08	149.5
MW-21	201,798.35	2,206,950.31	90.33	88.66	89.15	110.5

All elevations and depths in feet

Field survey performed by YEC, Inc., on March 23, 2007

(monitoring wells MW-1, 2, 3, 10 and 16 were not surveyed in 2007 as these wells were not included in the sampling at that time, these coordinates are estimated)

Horizontal datum: NAD 1927 State Plan

Vertical datum: NAVD 88, for NGVD 29, add 1.13 feet

TABLE 2
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
GROUNDWATER ELEVATIONS

Well # (screen interval)	Reference Elevation (ft, NGVD)	Total Depth of Well (ft)	Date	Depth To Water (ft)	Water Table Elevation (ft, NGVD)	Comments
MW-1 (shallow)	91.57		5/24/11 8/21/12 11/5/13 3/18/15	dry dry dry dry	NA NA NA NA	No water was observed in the well No water was observed in the well No water was observed in the well No water was observed in the well
MW-2 (shallow)	91.27	54.2	5/24/11 8/21/12 11/5/13 3/18/15	42.91 44.05 43.21 43.84	48.36 47.22 48.06 47.43	
MW-3 (shallow)	91.25	53.9	5/24/11 8/21/12 11/5/13 3/18/15	42.90 44.00 45.21 44.10	48.35 47.25 46.04 47.15	
MW-4 (shallow)	91.61	53.4	5/24/11 8/21/12 11/5/13 3/18/15	43.25 44.36 46.60 44.18	48.36 47.25 45.01 47.43	
MW-5 (shallow)	93.23	50.0	6/12/06 8/21/07 11/13/08 3/10/10 5/23/11 8/21/12 11/5/13 3/18/15	42.24 43.11 45.40 43.37 44.92 45.99 47.19 45.85	50.99 50.12 47.83 49.86 48.31 47.24 46.04 47.38	
MW-6 (Magothy)	92.71	265.0	6/12/06 8/21/07 11/13/08 3/10/10 5/23/11 8/21/12 11/5/13 3/18/15	42.19 43.15 45.23 43.12 44.76 45.70 45.95 48.30	50.52 49.56 47.48 49.59 47.95 47.01 46.76 44.41	
MW-10 (shallow)	90.40	50.0	5/24/11 8/21/12 11/5/13 3/18/15	42.12 43.18 43.10 43.30	48.28 47.22 47.30 47.10	

TABLE 2
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
GROUNDWATER ELEVATIONS

Well # (screen interval)	Reference Elevation (ft, NGVD)	Total Depth of Well (ft)	Date	Depth To Water (ft)	Water Table Elevation (ft, NGVD)	Comments
MW-12 (shallow)	89.59	49.3	6/14/06	39.09	50.50	
			8/24/07	39.95	49.64	
			11/13/08	42.25	47.34	
			12/23/08	41.81	47.78	
			3/10/10	40.07	49.52	
			5/24/11	41.69	47.90	
			8/21/12	42.75	46.84	
			11/5/13	43.00	46.59	
			3/18/15	42.52	47.07	
MW-14 (deep)	89.55	100.0	6/14/06	39.13	50.42	
			8/24/07	40.00	49.55	
			11/13/08	42.35	47.20	
			12/23/08	41.98	47.57	
			3/10/10	40.18	49.37	
			5/24/11	41.82	47.73	
			8/21/12	42.86	46.69	
			11/5/13	43.02	46.53	
			3/18/15	42.77	46.78	
MW-16 (deep)	90.48	99.2	5/24/11	42.03	48.45	
			8/21/12	43.41	47.07	
			11/5/13	44.63	45.85	
			3/18/15	43.21	47.27	
MW-18 (very deep)	91.55	150.0	6/22/06	40.76	50.79	
			8/21/07	41.25	50.30	
			11/13/08	43.80	47.75	
			3/10/10	41.82	49.73	
			5/24/11	43.41	48.14	
			8/21/12	44.47	47.08	
			11/5/13	45.69	45.86	
			3/18/15	44.46	47.09	
MW-19 (Magothy)	91.98	265.0	6/22/06	41.95	50.03	
			8/21/07	41.60	50.38	
			11/13/08	43.90	48.08	
			3/10/10	42.78	49.20	
			5/24/11	44.39	47.59	
			8/21/12	45.51	46.47	
			11/5/13	44.52	47.46	
			3/18/15	45.20	46.78	

TABLE 2
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
GROUNDWATER ELEVATIONS

Well # (screen interval)	Reference Elevation (ft, NGVD)	Total Depth of Well (ft)	Date	Depth To Water (ft)	Water Table Elevation (ft, NGVD)	Comments
MW-20 (very deep)	88.59	149.5	6/14/06	38.29	50.30	
			8/21/07	39.18	49.41	
			11/13/08	41.20	47.39	
			3/10/10	39.30	49.29	
			5/24/11	40.95	47.64	
			8/21/12	41.99	46.60	
			11/5/13	43.24	45.35	
			3/18/15	41.81	46.78	
MW-21 (deep)	88.66	110.5	6/14/06	38.30	50.36	
			8/21/07	39.20	49.46	
			11/13/08	41.47	47.19	
			3/10/10	39.31	49.35	
			5/24/11	40.94	47.72	
			8/21/12	41.97	46.69	
			11/5/13	43.20	45.46	
			3/18/15	41.79	46.87	

All measurements were taken from the top of PVC casing
Well Screen Interval

Shallow - 50 ft bgs
Deep - 100 ft bgs
Very deep - 150 ft bgs
Magothy - 250 ft bgs

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2
Sample ID	Class GA	LMW-2	LMW-2	LMW-2	LMW-2F	LMW-2	LMW-2F	LMW-2	LMW-2F
Laboratory ID	Ground	K0943-11	K0943-12	L1807-12	L1808-12	AC75576-029	AC75576-030	AC83866-001	AC83866-002
Sample Date	Water	5/26/11	5/26/11	8/23/12	8/23/12	11/6/13	11/6/13	3/18/15	3/18/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	118 B	ND	602	ND	ND	ND	1,200	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	44.6 B	44.9 B	39.5 B	31.9 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	8.5	5.5	3.5 B	2.7 B	ND	ND	ND	ND
Calcium	NC	16,300	16,700	20,400	21,500	30,000	29,000	16,000	15,000
Chromium	50	51.9	48.2	26.7	12.0 B	62.0	59.0	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	24 B	ND	14.4 B	4.2 B	ND	ND	ND	ND
Iron	300	205	ND	853	ND	ND	ND	1,700	ND
Lead	25	ND	ND	ND	ND	ND	ND	10.0	ND
Magnesium	35,000	3,180	3,250	3,720	3,870	ND	ND	ND	ND
Manganese	300	ND	ND	17.7 B	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	5.5 B	2.7 B	4.6 B	3.3 B	ND	ND	ND	ND
Potassium	NC	2,720	2,610	1,710 E	1,660	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	21,300	22,400	21,400	22,900	15,000	16,000	9,600	9,700
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	1.4 B	ND	ND	ND	ND	ND
Zinc	2,000	29.2 B	24.8 B	51.0	26.1 B	ND	ND	ND	ND

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3
Sample ID	Class GA	LMW-3	LMW-3	LMW-3	LMW-3F	LMW-3	LMW-3F	LMW-3	LMW-3F
Laboratory ID	Ground	K0943-13	K0943-14	L1807-13	L1808-13	AC75576-001	AC75576-002	AC83866-003	AC83866-004
Sample Date	Water	5/26/11	5/26/11	8/23/12	8/23/12	11/4/13	11/4/13	3/18/15	3/18/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	346	ND	360	ND	470	ND	1,400	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	19.1 B	18.1 B	28.9 B	27.9 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	6.6	4.6 B	3.0 B	2.8 B	4.7	3.5	4.2	2.4
Calcium	NC	16,900	16,800	28,600	29,400	29,000	27,000	16,000	16,000
Chromium	50	59.6	32.6	118	103	140	95.0	170	61.0
Cobalt	NC	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	45.5	11.7 B	14.2 B	6.5 B	ND	ND	ND	ND
Iron	300	462	ND	414	45.4 B	650	ND	1,800	ND
Lead	25	14.1	ND	ND	ND	8.5	ND	18.0	ND
Magnesium	35,000	2710	2,760	5,100	5,180	ND	ND	ND	ND
Manganese	300	11.8 B	ND	ND	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	6.7 B	4.3 B	3.8 B	3.4 B	ND	ND	ND	ND
Potassium	NC	1,950	1,770	2,560 E	2,480	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	12,400	13,200	30,800	31,000	38,000	35,000	24,000	26,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	1.4 B	ND	1.1 B	ND	ND	ND	ND	ND
Zinc	2,000	54.9	40.4 B	19.6 B	19.3 B	ND	ND	61.0	ND

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sample ID	Class GA	LMW-4	LMW-4	LMW-4	LMW-4F	LMW-4	LMW-4F	LMW-4	LMW-4F
Laboratory ID	Ground	K0943-15	K0943-16	L1807-14	L1808-14	AC75576-003	AC75576-004	AC83866-005	AC83866-006
Sample Date	Water	5/26/11	5/26/11	8/23/12	8/23/12	11/4/13	11/4/13	3/18/15	3/18/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc.	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	2,560	ND	1,980	1,130	310	ND	2,200	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	4.8 B	ND	6.4 B	ND	ND	ND	ND	ND
Barium	1,000	27.1 B	13.2 B	22.8 B	21.6 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	54.2	19.8	28.2	27.3	26.0	21.0	20.0	11.0
Calcium	NC	14,200	12,300	18,700	19,600	33,000	30,000	8,400	8,300
Chromium	50	176	142	74.9	58.7	ND	ND	53.0	ND
Cobalt	NC	3.3 B	2.6 B	0.73 B	ND	ND	ND	ND	ND
Copper	200	137	43.5	69.7	58.9	ND	ND	60.0	ND
Iron	300	2,660	109 B	2,000	1,110	320	ND	2,200	ND
Lead	25	43.2	ND	15.5	9.8 B	ND	ND	22.0	ND
Magnesium	35,000	1,710	1,270	2,770	2,870	ND	ND	ND	ND
Manganese	300	47.1 B	12.3 B	18.4 B	14.4 B	ND	ND	ND	ND
Mercury	0.7	0.036 B	ND	ND	ND	ND	ND	ND	ND
Nickel	100	43.5 B	12.8 B	17.5 B	15.8 B	ND	ND	ND	ND
Potassium	NC	6,600	6,790	2,340 E	2,460	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	26,100	29,100	13,400	14,400	21,000	21,000	ND	ND
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	7.0 B	1.2 B	4.9 B	3.2 B	ND	ND	ND	ND
Zinc	2,000	630	109	257	220	160	130	220	97.0

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
Sample ID	Class GA	LMW-5	LMW-5	LMW-5	LMW-5	LMW-5	LMW-5
Laboratory ID	Ground	E0833-01A	F1192-04A	G2136-07A	J0429-01A	K0919-02	K0919-01
Sample Date	Water	6/12/06	8/23/07	11/14/08	3/8/10	5/23/11	5/23/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	238	157 B	ND	87.5 BE	ND	ND
Antimony	3	3.7 B	ND	ND	ND	ND	ND
Arsenic	25	2.2 B	ND	ND	ND	ND	ND
Barium	1,000	49.3 B	50.0 B	45.7 B	49.4 B	9 B	8.3 B
Beryllium	3	ND	ND	ND	0.089 B	ND	ND
Cadmium	5	0.13 B	0.51 B	ND	ND	ND	ND
Calcium	NC	19,000	15,000	16,900	14,100	6,280	5400
Chromium	50	18.2 B	42.2	7.3 B	29.0	1.8 B	0.88 B
Cobalt	NC	0.67 B	1.4 B	ND	ND	ND	ND
Copper	200	23.8 B	10.9 B	ND	ND	ND	ND
Iron	300	198 B	122 B	ND	107 BN	151 BN	54.3 BN
Lead	25	1.3 B	3.4 B	ND	ND	ND	ND
Magnesium	35,000	2,040 E	1,870	2,040	1,830	2,370	2,140
Manganese	300	15.1 B	13.7 B	6.8 B	16.5 B	10.4 B	ND
Mercury	0.7	ND	ND	ND	0.056 B	ND	ND
Nickel	100	3.3 B	1.1 B	ND	1.2 B	2.5 B	1.3 B
Potassium	NC	4,330	4,500	4,380	4,740	627 B	613 B
Selenium	10	ND	7.4 B	ND	ND	ND	ND
Silver	50	ND	4.0 B	ND	ND	ND	ND
Sodium	20,000	4,460	7,800	7,570	6,570	8,000	7,420
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.59 B	ND	ND	ND	ND
Zinc	2,000	29.1 B	18.4 B	13.7 B	15.2 B	27.9 B	24.5 B

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
Sample ID	Class GA	LMW-5	LMW-5F	LMW-5	LMW-5F	LMW-5	LMW-5F
Laboratory ID	Ground	L1807-01	L1808-01	AC75576-009	AC75576-010	AC83866-007	AC83866-008
Sample Date	Water	8/20/12	8/20/12	11/5/13	11/5/13	3/19/15	3/19/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	245	157 B	ND	ND	500	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	56.9 B	60.4 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND
Calcium	NC	17,800	18,600	16,000	18,000	16,000	17,000
Chromium	50	1.7 B	1.5 B	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND
Iron	300	52.4 B	ND	ND	ND	ND	ND
Lead	25	ND	ND	ND	ND	ND	ND
Magnesium	35,000	3,210	3,390	ND	ND	ND	ND
Manganese	300	68.2	67.4	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	2.3 B	2.9 B	ND	ND	ND	ND
Potassium	NC	5,410 E	5,440	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	18,100	19,000	9,100	11,000	14,000	14,000
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	10.5 B	10.3 B	ND	ND	ND	ND

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
Sample ID	Class GA	LMW-6	LMW-6	LMW-6	LMW-6	LMW-6	LMW-6
Laboratory ID	Ground	E0833-02A	F1192-09A	G2136-06A	J0429-03A	K0919-04	K0919-03
Sample Date	Water	6/12/06	8/24/07	11/14/08	3/8/10	5/23/11	5/23/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	ND	398	ND	50.2 BE	ND	ND
Antimony	3	3.1 B	8.0 B	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	24.9 B	29.6 B	15.7 B	11.3 B	34.4 B	33.9 B
Beryllium	3	ND	ND	ND	0.062 B	ND	ND
Cadmium	5	ND	12.6	0.55 B	0.62 B	ND	ND
Calcium	NC	9,880	10,000	8,300	6,120	19,500	20,000
Chromium	50	0.79 B	28.7	ND	1.9 B	15.7 B	14.7 B
Cobalt	NC	0.31 B	2.2 B	ND	ND	ND	ND
Copper	200	15.6 B	31.3	ND	5.6 B	ND	ND
Iron	300	45.2 B	3,120	147 B	137 BN	ND	ND
Lead	25	ND	15.8	ND	ND	ND	ND
Magnesium	35,000	2,980 E	2,630	2,590	1,970	2,190	2,240
Manganese	300	5.9 B	60.9	40.8 B	11.4 B	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	3.6 B	12.3 B	2.2 B	1.9 B	ND	ND
Potassium	NC	759 B	1,390	2,060	1,180	3,500	3,530
Selenium	10	1.6 B	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	10,100	9,950	11,600	7,660	7,760	7,890
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	2.0 B	ND	ND	ND	ND
Zinc	2,000	24.8 B	118	21.9 B	25.4 B	16.6 B	18.8 B

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6
Sample ID	Class GA	LMW-6	LMW-6F	LMW-6	LMW-6F	LMW-6	LMW-6F
Laboratory ID	Ground	L1807-03	L1808-03	AC75576-011	AC75576-012	AC83866-009	AC83866-010
Sample Date	Water	8/20/12	8/20/12	11/5/13	11/5/13	3/19/15	3/19/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	488	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	14.4 B	2.7 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND
Calcium	NC	7,700	7,750	5,800	6,100	8,300	7,900
Chromium	50	2.1 B	ND	ND	ND	ND	ND
Cobalt	NC	0.86 B	ND	ND	ND	ND	ND
Copper	200	4.0 B	ND	ND	ND	ND	ND
Iron	300	338	39.8 B	ND	ND	ND	ND
Lead	25	ND	ND	ND	ND	ND	ND
Magnesium	35,000	3,180	3,180	ND	ND	ND	ND
Manganese	300	21.8 B	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	2.4 B	2.0 B	ND	ND	ND	ND
Potassium	NC	753 B	552 B	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	10,000	10,300	7,600	7,700	8,600	8,400
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	12.4 B	7.9 B	ND	ND	ND	ND

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10
Sample ID	Class GA	LMW-10	LMW-10	LMW-10	LMW-10F	LMW-10	LMW-10F	LMW-10	LMW-10F
Laboratory ID	Ground	K0943-03	K0943-04	L1807-10	L1808-10	AC75576-005	AC75576-006	AC83866-021	AC83866-022
Sample Date	Water	5/26/11	5/26/11	8/23/12	8/23/12	11/4/13	11/4/13	3/19/15	3/19/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	101 B	ND	159 B	ND	210	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	35.0 B	32.5 B	28.7 B	28.1 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	10.3	11.3	36.1	34.9	49.0	50.0	42.0	33.0
Calcium	NC	18,700	18,700	25,900	26,000	28,000	28,000	22,000	20,000
Chromium	50	72.7	89.3	152	155	140	140	92.0	83.0
Cobalt	NC	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	245	ND	391	ND	420	ND	410	ND
Lead	25	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	3,700	3,590	3,640	3,650	ND	ND	ND	ND
Manganese	300	16.8 B	ND	18.9 B	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	1.6 B	0.91 B	3.5 B	3.5 B	ND	ND	ND	ND
Potassium	NC	2,380	2,530	4,810 E	4,770	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	17,100	19,300	14,800	14,900	9,200	9,300	12,000	13,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	27.1 B	21.7 B	ND	ND	ND	ND	ND	ND

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16
Sample ID	Class GA	LMW-16	LMW-16	LMW-16	LMW-16F	LMW-16	LMW-16F	LMW-16	LMW-16F
Laboratory ID	Ground	K0943-09	K0943-10	L1807-11	L1808-11	AC75576-007	AC75576-008	AC83866-023	AC83866-024
Sample Date	Water	5/26/11	5/26/11	8/23/12	8/23/12	11/4/13	11/4/13	3/19/15	3/19/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	1,150	586	340	322	1,400	440	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	299	351	339	339	230	240	180	160
Beryllium	3	2.0 B	1.8 B	0.7 B	0.72 B	1.5	1.2	ND	ND
Cadmium	5	5.3	4.9 B	4.2 B	4.3 B	4.4	3.9	3.9	3.4
Calcium	NC	9,240	9,890	12,100	11,700	9,800	10,000	14,000	12,000
Chromium	50	11.7 B	8.9 B	2.8 B	2.3 B	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	9.4 B	11.3 B	66.6	63.0	ND	ND	ND	ND
Iron	300	115 B	ND	49.9 B	ND	1,800	ND	ND	ND
Lead	25	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	2,350	2,570	3,740	3,680	ND	ND	ND	ND
Manganese	300	597	623	661	632	570	530	380	350
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	13.9 B	14.1 B	11.8 B	12.0 B	ND	ND	ND	ND
Potassium	NC	4,930	4,880	6,010 E	5,860	5,100	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	14,700	14,500	13,900	13,500	11,000	11,000	10,000	10,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	67.5	69	34.2 B	33.2 B	ND	ND	ND	ND

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12
Sample ID	Class GA	LMW-12	LMW-12	LMW-12	LMW-12	LMW-12	LMW-12
Laboratory ID	Ground	E0833-03A	F1192-05A	G2415-01	J0429-04A	K0919-06	K0919-05
Sample Date	Water	6/14/06	8/24/07	12/23/08	3/9/10	5/24/11	5/24/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	445	9,070	2,260	33,600 E	12,000	ND
Antimony	3	1.8 B	11.2 B	ND	13.9 B	ND	ND
Arsenic	25	ND	3.3 B	ND	14.2 B	5.1 B	ND
Barium	1,000	45.2 B	75.4 B	60.5 B	188 B	88.9 B	28.1 B
Beryllium	3	0.38 B	0.24 B	0.19 B	2.1 B	0.79 B	ND
Cadmium	5	0.52 B	5.6	25.5	205	54.8	4.5 B
Calcium	NC	13,100	26,900	19,700	29,900	23,300	18,700
Chromium	50	2.5 B	37.5	18.9 B	251	72.8	ND
Cobalt	NC	0.63 B	5.5 B	2.6 B	12.8 B	4.1 B	ND
Copper	200	14.9 B	85.3	63.5	377	147	ND
Iron	300	467	10,900	4,080	38,100 N	11,300 N	1,620 N
Lead	25	7.7 B	106	83.7	553	230	ND
Magnesium	35,000	3,710 E	6,830	4,330	10,900	5,760	3,310
Manganese	300	77.3	96.9	82.7	253	77.6	37.3 B
Mercury	0.7	ND	ND	ND	0.54	ND	ND
Nickel	100	3.4 B	12.4 B	14.9 B	57.1	18.5 B	1.9 B
Potassium	NC	2,280	2,700	2,540	3,810	3,670	2,870
Selenium	10	2.6 B	ND	ND	13.4 B	ND	ND
Silver	50	ND	ND	7.6 B	ND	ND	ND
Sodium	20,000	11,700	13,400	27,100	33,600	8,250	7,660
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.77 B	28.8 B	8.6 B	89.7	33 B	1.5 B
Zinc	2,000	26.1 B	246	220	1,280	488	52.1

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12
Sample ID	Class GA	LMW-12	LMW-12F	LMW-12	LMW-12F	LMW-12	LMW-12F
Laboratory ID	Ground	L1807-06	L1808-06	AC75576-023	AC75576-024	AC83866-025	AC83866-030
Sample Date	Water	8/21/12	8/21/12	11/5/13	11/5/13	3/20/15	3/20/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	1,560	ND	810	ND	870	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	44.6 B	48.2 B	ND	51.0	68.0	58.0
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	4.4 B	9.3	2.9	ND	7.7	4.4
Calcium	NC	10,900	28,900	40,000	44,000	32,000	29,000
Chromium	50	103	ND	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	10.6 B	ND	ND	ND	ND	ND
Iron	300	1,740	39.0 B	740	ND	900	ND
Lead	25	19.4	ND	9.9	ND	6.8	ND
Magnesium	35,000	2,540	5,600	6,400	7,200	7,600	6,700
Manganese	300	211	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	6.4 B	2.0 B	ND	ND	ND	ND
Potassium	NC	4,350 E	2,970	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	15,400	16,200	12,000	14,000	37,000	37,000
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	3.9 B	ND	ND	ND	ND	ND
Zinc	2,000	32.5 B	55.9	ND	ND	78.0	ND

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14
Sample ID	Class GA	LMW-14	LMW-14	LMW-14	LMW-14	LMW-14	LMW-14
Laboratory ID	Ground	E0833-04A	F1192-06A	G2415-02	J0429-05A	K0919-08	K0919-07
Sample Date	Water	6/14/06	8/24/07	12/23/08	3/9/10	5/24/11	5/24/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	780	314	7,090	4,830 E	652	ND
Antimony	3	1.5 B	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	5.6 B	6.0 B	5.6 B	ND
Barium	1,000	40.5 B	31.5 B	162 B	107 B	57.1 B	50.4 B
Beryllium	3	ND	ND	0.38 B	0.28 B	ND	ND
Cadmium	5	4.9 B	1.5 B	59.1	26	9.2	7.6
Calcium	NC	13,100	12,900	35,800	18,700	18,300	18,400
Chromium	50	95.8	248	69.6	68.6	51.3	29.6
Cobalt	NC	2.0 B	1.2 B	5.1 B	2.7 B	0.72 B	ND
Copper	200	22.2 B	8.9 B	110	42.8	13.6 B	ND
Iron	300	728	389	9,320	14,000 N	1,780 N	1,430 N
Lead	25	2.9 B	3.4 B	221	76.5	18.8	ND
Magnesium	35,000	1,610 E	3,000	6,340	2,910	3,840	3,700
Manganese	300	35.3 B	21.2 B	231	186	260	235
Mercury	0.7	ND	ND	ND	0.1 B	ND	ND
Nickel	100	7.5 B	4.4 B	53.2	18.3 B	11.8 B	8.7 B
Potassium	NC	3,320	4,140	7,090	1,670	4,430	4,570
Selenium	10	ND	6.7 B	ND	ND	ND	ND
Silver	50	ND	3.2 B	4.3 B	ND	ND	ND
Sodium	20,000	31,900	28,900	561,000	25,400	20,400	20,300
Thallium	0.50	ND	3.4 B	ND	ND	ND	ND
Vanadium	NC	0.58 B	0.51 B	22.5 B	12.6 B	2.4 B	ND
Zinc	2,000	40.1 B	27.5 B	520	279	99.1	70.1

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14
Sample ID	Class GA	LMW-14	LMW-14F	LMW-14	LMW-14F	LMW-14	LMW-14F
Laboratory ID	Ground	L1807-07	L1808-07	AC75576-021	AC75576-022	AC83866-031	AC83866-032
Sample Date	Water	8/21/12	8/21/12	11/5/13	11/5/13	3/20/15	3/20/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	314	954	5,300	ND	1,500	ND
Antimony	3	ND	ND	2.2	ND	ND	ND
Arsenic	25	ND	ND	3.2	ND	ND	ND
Barium	1,000	47.2 B	43.3 B	56.0	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	9.3	3.7 B	6.6	2.4	3.5	2.4
Calcium	NC	28,100	10,900	11,000	12,000	9,700	8,900
Chromium	50	2.4 B	88.2	170	ND	74.0	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	5.0 B	7.2 B	ND	ND	ND	ND
Iron	300	279	1,180	6,000	930	1,800	ND
Lead	25	ND	13.2	53.0	3.7	14.0	ND
Magnesium	35,000	5,450	2,470	ND	ND	ND	ND
Manganese	300	ND	211	290	300	130	110
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	1.1 B	6.1 B	ND	ND	ND	ND
Potassium	NC	2,990 E	4,170	5,000	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	15,400	15,400	10,000	12,000	110,000	100,000
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	1.9 B	2.3 B	ND	ND	ND	ND
Zinc	2,000	56.3	25.5 B	94.0	ND	77.0	ND

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18
Sample ID	Class GA	LMW-18	LMW-18	LMW-18	LMW-18	LMW-18	LMW-18
Laboratory ID	Ground	E0868-14A	F1192-08A	G2136-02A	J0429-06A	K0919-10	K0919-09
Sample Date	Water	6/22/06	8/24/07	11/13/08	3/10/10	5/24/11	5/24/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	135 B	252	196 B	716 E	193 B	ND
Antimony	3	ND	ND	9.0 B	5.2 B	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	74.8 B	92.5 B	86.4 B	103 B	101 B	104 B
Beryllium	3	ND	ND	ND	0.12 B	ND	ND
Cadmium	5	0.33 B	1.3 B	0.92 B	0.86 B	3.0 B	2.9 B
Calcium	NC	12,800	15,500	13,500	18,900	21,100	21,900
Chromium	50	3.3 B	2.1 B	5.4 B	6.5 B	3.1 B	2.3 B
Cobalt	NC	0.48 B	1.3 B	ND	1.0 B	ND	ND
Copper	200	ND	8.1 B	11.0 B	9.8 B	6.9 B	ND
Iron	300	212	308	307	731 N	327 N	ND
Lead	25	ND	3.0 B	2.5 B	3.9 B	ND	ND
Magnesium	35,000	5,440	5,430	4,960	4,460	4,380	4,560
Manganese	300	169	547	122	312	521	421
Mercury	0.7	ND	ND	ND	0.057 B	ND	ND
Nickel	100	1.4 B	3.1 B	3.2 B	6.5 B	3.4 B	2.4 B
Potassium	NC	10,800	7,290	10,200	13,500	11,500	12,500
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	4.0 B	1.6 B	ND	ND	ND
Sodium	20,000	30,000	26,700	29,600	30,000	28,400	30,200
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.66 B	ND	0.63 B	ND	ND
Zinc	2,000	25.0 B	34.8 B	86.7	57.8	37.2 B	33.8 B

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18
Sample ID	Class GA	LMW-18	LMW-18F	LMW-18	LMW-18F	LMW-18	LMW-18F
Laboratory ID	Ground	L1807-04	L1808-04	AC75576-013	AC75576-014	AC83866-019	AC83866-020
Sample Date	Water	8/21/12	8/21/12	11/5/13	11/5/13	3/19/15	3/19/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	164 B	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	61.3 B	64.8 B	62.0	61.0	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND
Calcium	NC	15,800	15,700	19,000	20,000	18,000	16,000
Chromium	50	1.9 B	3.1 B	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND
Iron	300	ND	277	ND	ND	ND	ND
Lead	25	ND	ND	ND	ND	ND	ND
Magnesium	35,000	3,720	3,650	ND	ND	ND	ND
Manganese	300	39.1 B	539	1,200	ND	950	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	ND	1.5 B	ND	ND	ND	ND
Potassium	NC	9,220 E	8,720	8,200	7,800	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	26,600	26,000	25,000	26,000	19,000	18,000
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	16.0 B	8.0 B	ND	ND	ND	ND

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MARCH 2015 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19
Sample ID	Class GA	LMW-19	LMW-19	LMW-19	LMW-19	LMW-19	LMW-19
Laboratory ID	Ground	E0868-15A	F1192-07A	G2136-01A	J0429-07A	K0919-12	K0919-11
Sample Date	Water	6/22/06	8/24/07	11/13/08	3/10/10	5/24/11	5/24/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	53.4 B	74.9 B	ND	69.9 B E	ND	ND
Antimony	3	ND	6.7 B	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	14.2 B	21.5 B	20.0 B	18.7 B	13.0 B	12.6 B
Beryllium	3	ND	ND	ND	0.046 B	ND	ND
Cadmium	5	1.1 B	8.0	ND	2.7 B	ND	2.4 B
Calcium	NC	9,900	13,000	9,700	11,500	11,600	11,700
Chromium	50	1 B	2.0 B	ND	1.8 B	0.94 B	ND
Cobalt	NC	ND	1.2 B	ND	ND	ND	ND
Copper	200	ND	11.7 B	ND	ND	ND	ND
Iron	300	54.2 B	221	ND	234 N	40.1 B N	ND
Lead	25	ND	4.1 B	ND	ND	ND	ND
Magnesium	35,000	3,180	4,600	3,970	4,350	4,460	4,480
Manganese	300	3.5 B	9.3 B	14.9 B	8.0 B	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	ND	2.9 B	ND	0.96 B	ND	ND
Potassium	NC	816 B	949 B	947 B	1,070	993 B	1,120
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.3 B	1.1 B	ND	ND	ND
Sodium	20,000	10,200	14,400	13,400	14,900	14,600	14,600
Thallium	0.50	ND	2.9 B	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	42.8 B	48.1 B	30.5 B	47.0 B	28.0 B	28.2 B

Notes:

All values in µg/L

NC - No NYSDEC criterion

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
MARCH 2015 SAMPLING EVENT

COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-2	MW-2	MW-2	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4
Sample ID	Class GA	LMW-2	LMW-2F		LMW-3	LMW-3F		LMW-4	LMW-4F	
Laboratory ID	Ground	AC83866-001	AC83866-002		AC83866-003	AC83866-004		AC83866-005	AC83866-006	
Sample Date	Water	3/18/15	3/18/15		3/18/15	3/18/15		3/18/15	3/18/15	
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Dissolved	Unfiltered	Filtered	Dissolved	Unfiltered	Filtered	Dissolved
		conc. Q	conc. Q		conc. Q	conc. Q		conc. Q	conc. Q	
Aluminum	NC	1,200	ND	NC	1,400	ND	NC	2,200	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Barium	1,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	4.2	2.4	57.1%	20.0	11.0	55.0%
Calcium	NC	16,000	15,000	93.8%	16,000	16,000	100.0%	8,400	8,300	98.8%
Chromium	50	ND	ND	NC	170	61.0	35.9%	53.0	ND	NC
Cobalt	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC	60.0	ND	NC
Iron	300	1,700	ND	NC	1,800	ND	NC	2,200	ND	NC
Lead	25	10.0	ND	NC	18.0	ND	NC	22.0	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Manganese	300	ND	ND	NC	ND	ND	NC	ND	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	9,600	9,700	101.0%	24,000	26,000	108.3%	ND	ND	NC
Thallium	0.50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	61.0	ND	NC	220	97.0	44.1%
Turbidity (NTU)		47.1			47.4			60.9		

Notes: E - Estimated value due to interference
B - Estimated value
ND - Not Detected
BOLD/Italics - Exceeds criterion

All values except turbidity are in micrograms per liter (µg/L)
% Dissolved = filtered conc. / unfiltered conc.
NC - No NYSDEC criterion or Not Calculable

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
MARCH 2015 SAMPLING EVENT

COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-5	MW-5	MW-5	MW-6	MW-6	MW-6	MW-10	MW-10	MW-10
Sample ID	Class GA	LMW-5	LMW-5F		LMW-6	LMW-6F		LMW-10	LMW-10F	
Laboratory ID	Ground	AC83866-007	AC83866-008		AC83866-009	AC83866-010		AC83866-021	AC83866-022	
Sample Date	Water	3/19/15	3/19/15		3/19/15	3/19/15		3/19/15	3/19/15	
Filtered/Unfiltered	Criteria	Unfiltered conc. Q	Filtered conc. Q	Dissolved	Unfiltered conc. Q	Filtered conc. Q	Dissolved	Unfiltered conc. Q	Filtered conc. Q	Dissolved
Aluminum	NC	500	ND	NC	ND	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Barium	1,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC	42.0	33.0	78.6%
Calcium	NC	16,000	17,000	106.3%	8,300	7,900	95.2%	22,000	20,000	90.9%
Chromium	50	ND	ND	NC	ND	ND	NC	92.0	83.0	90.2%
Cobalt	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC	ND	ND	NC
Iron	300	ND	ND	NC	ND	ND	NC	410	ND	NC
Lead	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Manganese	300	ND	ND	NC	ND	ND	NC	ND	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	14,000	14,000	100.0%	8,600	8,400	97.7%	12,000	13,000	108.3%
Thallium	0.50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Turbidity (NTU)		43.5			28.2			9.2		

Notes: E - Estimated value due to interference
B - Estimated value
ND - Not Detected
BOLD/Italics - Exceeds criterion

All values except turbidity are in micrograms per liter (µg/L)
% Dissolved = filtered conc. / unfiltered conc.
NC - No NYSDEC criterion or Not Calculable

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
MARCH 2015 SAMPLING EVENT

COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-12	MW-12	MW-12	MW-14	MW-14	MW-14	MW-16	MW-16	MW-16
Sample ID	Class GA	LMW-12	LMW-12F		LMW-14	LMW-14F		LMW-16	LMW-16F	
Laboratory ID	Ground	AC83866-025	AC83866-030		AC83866-031	AC83866-032		AC83866-023	AC83866-024	
Sample Date	Water	3/20/15	3/20/15		3/20/15	3/20/15		3/19/15	3/19/15	
Filtered/Unfiltered	Criteria	Unfiltered	filtered	Dissolved	Unfiltered	Filtered	Dissolved	Unfiltered	Filtered	Dissolved
		conc. Q	conc. Q		conc. Q	conc. Q		conc. Q	conc. Q	
Aluminum	NC	870	ND	NC	1,500	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Barium	1,000	68.0	58.0	85.3%	ND	ND	NC	180	160	88.9%
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	7.7	4.4	57.1%	3.5	2.4	68.6%	3.9	3.4	87.2%
Calcium	NC	32,000	29,000	90.6%	9,700	8,900	91.8%	14,000	12,000	85.7%
Chromium	50	ND	ND	NC	74	ND	NC	ND	ND	NC
Cobalt	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC	ND	ND	NC
Iron	300	900	ND	NC	1,800	ND	NC	ND	ND	NC
Lead	25	6.8	ND	NC	14.0	ND	NC	ND	ND	NC
Magnesium	35,000	7,600	6,700	88.2%	ND	ND	NC	ND	ND	NC
Manganese	300	ND	ND	NC	130	110	84.6%	380	350	92.1%
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	37,000	37,000	100.0%	110,000	100,000	90.9%	10,000	10,000	100.0%
Thallium	0.50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	78	ND	NC	77	ND	NC	ND	ND	NC
Turbidity (NTU)		58.5			87.3			3.3		

Notes: E - Estimated value due to interference
B - Estimated value
ND - Not Detected
BOLD/Italics - Exceeds criterion

All values except turbidity are in micrograms per liter (µg/L)
% Dissolved = filtered conc. / unfiltered conc.
NC - No NYSDEC criterion or Not Calculable

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
MARCH 2015 SAMPLING EVENT
COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-18	MW-18	MW-18	MW-19	MW-19	MW-19
Sample ID	Class GA	LMW-18	LMW-18F		LMW-19	LMW-19F	
Laboratory ID	Ground	AC83866-019	AC83866-020		AC83866-011	AC83866-014	
Sample Date	Water	3/19/15	3/19/15		3/19/15	3/19/15	
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Dissolved	Unfiltered	Filtered	Dissolved
		conc. Q	conc. Q		conc.	conc. Q	
Aluminum	NC	ND	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC
Barium	1,000	ND	ND	NC	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC
Calcium	NC	18,000	16,000	88.9%	15,000	13,000	86.7%
Chromium	50	ND	ND	NC	ND	ND	NC
Cobalt	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC
Iron	300	ND	ND	NC	ND	ND	NC
Lead	25	ND	ND	NC	ND	ND	NC
Magnesium	35,000	ND	ND	NC	5,100	ND	NC
Manganese	300	950	ND	NC	ND	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC
Sodium	20,000	19,000	18,000	94.7%	17,000	16,000	94.1%
Thallium	0.50	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	ND	ND	NC
Turbidity (NTU)		20.0			2.6		

Notes:

E - Estimated value due to interference

B - Estimated value

ND - Not Detected

BOLD/Italics - Exceeds criterion

All values except turbidity are in micrograms per liter (µg/L)

% Dissolved = filtered conc. / unfiltered conc.

NC - No NYSDEC criterion or Not Calculable

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
MARCH 2015 SAMPLING EVENT
COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-20	MW-20	MW-20	MW-21	MW-21	MW-21
Sample ID	Class GA	LMW-20	LMW-20F		LMW-21	LMW-21F	
Laboratory ID	Ground	AC83866-027	AC83866-028		AC83866-029	AC83866-026	
Sample Date	Water	3/19/15	3/19/15		3/19/15	3/19/15	
Filtered/Unfiltered	Criteria	Unfiltered conc.	Filtered conc. Q	Dissolved	Unfiltered conc. Q	Filtered conc. Q	Dissolved
Aluminum	NC	2,000	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC
Barium	1,000	ND	ND	NC	56.0	56.0	100.0%
Beryllium	3	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC
Calcium	NC	16,000	13,000	81.3%	12,000	12,000	100.0%
Chromium	50	ND	ND	NC	ND	ND	NC
Cobalt	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC
Iron	300	2,700	ND	NC	ND	ND	NC
Lead	25	6.1	ND	NC	ND	ND	NC
Magnesium	35,000	7,700	6,200	80.5%	ND	ND	NC
Manganese	300	64.0	ND	NC	ND	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC
Sodium	20,000	18,000	16,000	88.9%	15,000	15,000	100.0%
Thallium	0.50	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	ND	ND	NC
Turbidity (NTU)		140.0			5.5		

Notes:

E - Estimated value due to interference

B - Estimated value

ND - Not Detected

BOLD/Italics - Exceeds criterion

All values except turbidity are in micrograms per liter (µg/L)

% Dissolved = filtered conc. / unfiltered conc.

NC - No NYSDEC criterion or Not Calculable

TABLE 5
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
MARCH 2015 (ROUND 8) SAMPLING EVENT
FIELD DUPLICATE DATA - TAL METALS IN GROUNDWATER

Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered Metal	LMW-19 LMW-19 AC83866-011 3/19/15 Unfiltered conc. Q	LMW-69 LMW-69 AC83866-017 3/19/15 Unfiltered conc. Q	Precision as Percent Difference (RPD)
Aluminum	ND	ND	NC
Antimony	ND	ND	NC
Arsenic	ND	ND	NC
Barium	ND	ND	NC
Beryllium	ND	ND	NC
Cadmium	ND	ND	NC
Calcium	15,000	13,000	14.3%
Chromium	ND	ND	NC
Cobalt	ND	ND	NC
Copper	ND	ND	NC
Iron	ND	ND	NC
Lead	ND	ND	NC
Magnesium	5,100	ND	NC
Manganese	ND	ND	NC
Mercury	ND	ND	NC
Nickel	ND	ND	NC
Potassium	ND	ND	NC
Selenium	ND	ND	NC
Silver	ND	ND	NC
Sodium	17,000	17,000	0.0%
Thallium	ND	ND	NC
Vanadium	ND	ND	NC
Zinc	ND	ND	NC

LMW-19F LMW-69F AC83866-014 3/19/15 Filtered conc. Q	LMW-19F LMW-69F AC83866-018 3/19/15 Filtered conc. Q	Precision as Percent Difference (RPD)
ND	ND	NC
ND	ND	NC
ND	ND	NC
ND	ND	NC
ND	ND	NC
ND	ND	NC
13,000	13,000	0.0%
ND	ND	NC
ND	ND	NC
ND	ND	NC
ND	ND	NC
ND	ND	NC
ND	ND	NC
ND	ND	NC
ND	ND	NC
16,000	17,000	6.1%
ND	ND	NC
ND	ND	NC
ND	ND	NC

Notes:

All values in µg/L

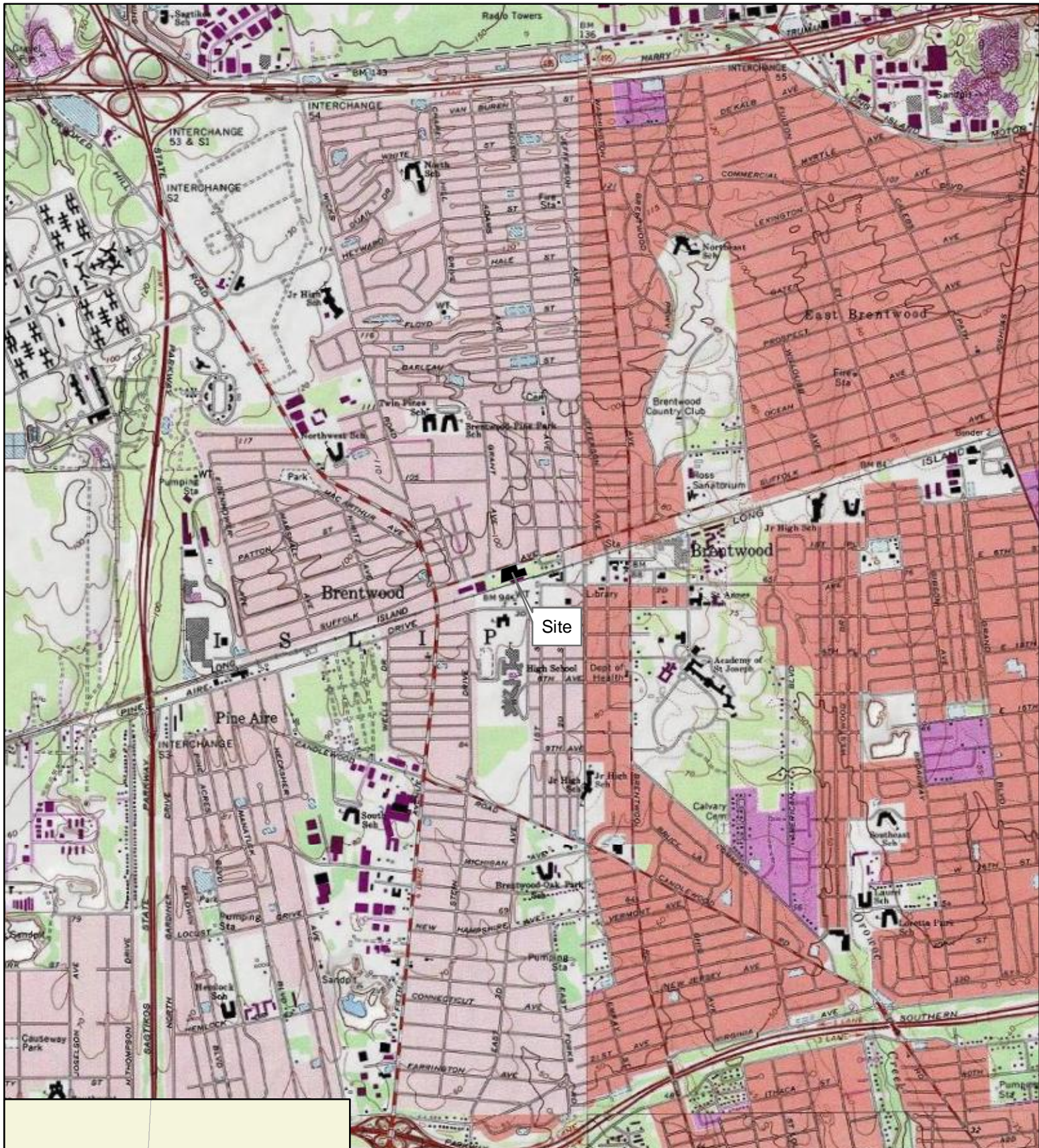
NC - Not Calculable (analyte not detected in one or both analyses)



ND - Not Detected

B - Estimated value (greater than MDL but less than RL)

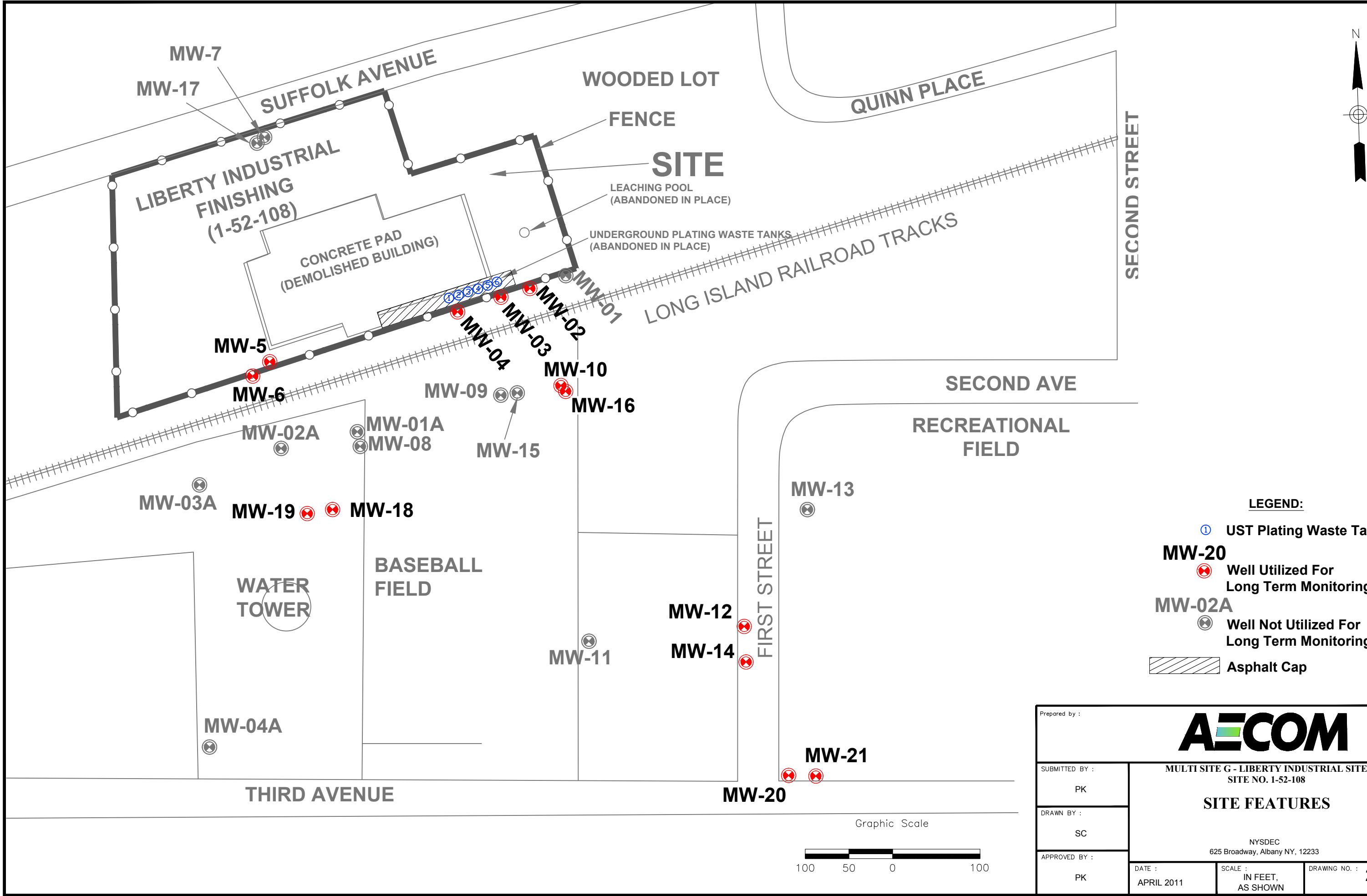
E - Estimated concentration due to interference based on serial dilution.

Figures



Prepared by: 	Prepared for: 	
<div>Multi Site G</div> <div>Operation, Maintenance & Monitoring</div> <div>Site Location</div> <div>Liberty Industrial Finishing Site</div>		
Date: January 2013	Scale: 1 inch = 2,500 feet	Figure No. : 1

Piscataway on uspsw2\fp001\Data_uspsw2\fp001\Environment\J
File: J:\Project\Liberty\Industrial\Cadd\Drawings\liberty prr Figures_2014-01-29.dwg Layout: Site Features Fig 2 User: karchj1 Plotted: Jan 29, 2014 - 12:57pm



Prepared by :		AECOM	
SUBMITTED BY :	PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108	
DRAWN BY :	SC	SITE FEATURES	
APPROVED BY :	PK	NYSDEC 625 Broadway, Albany NY, 12233	
DATE :		SCALE :	DRAWING NO. :
APRIL 2011		IN FEET, AS SHOWN	2

Piscataway on uspsw2vfp001\Data_uspsw2vfp001\Environment(J)
File: C:\Users\fostrerc2\Documents\Work\Multi Site G\Liberty\CADD\Liberty R8 2015 Figures.dwg Layout: GW Ele Shallow Fig 3 User: FosterC2 Plotted: Apr 14, 2015 - 9:18am

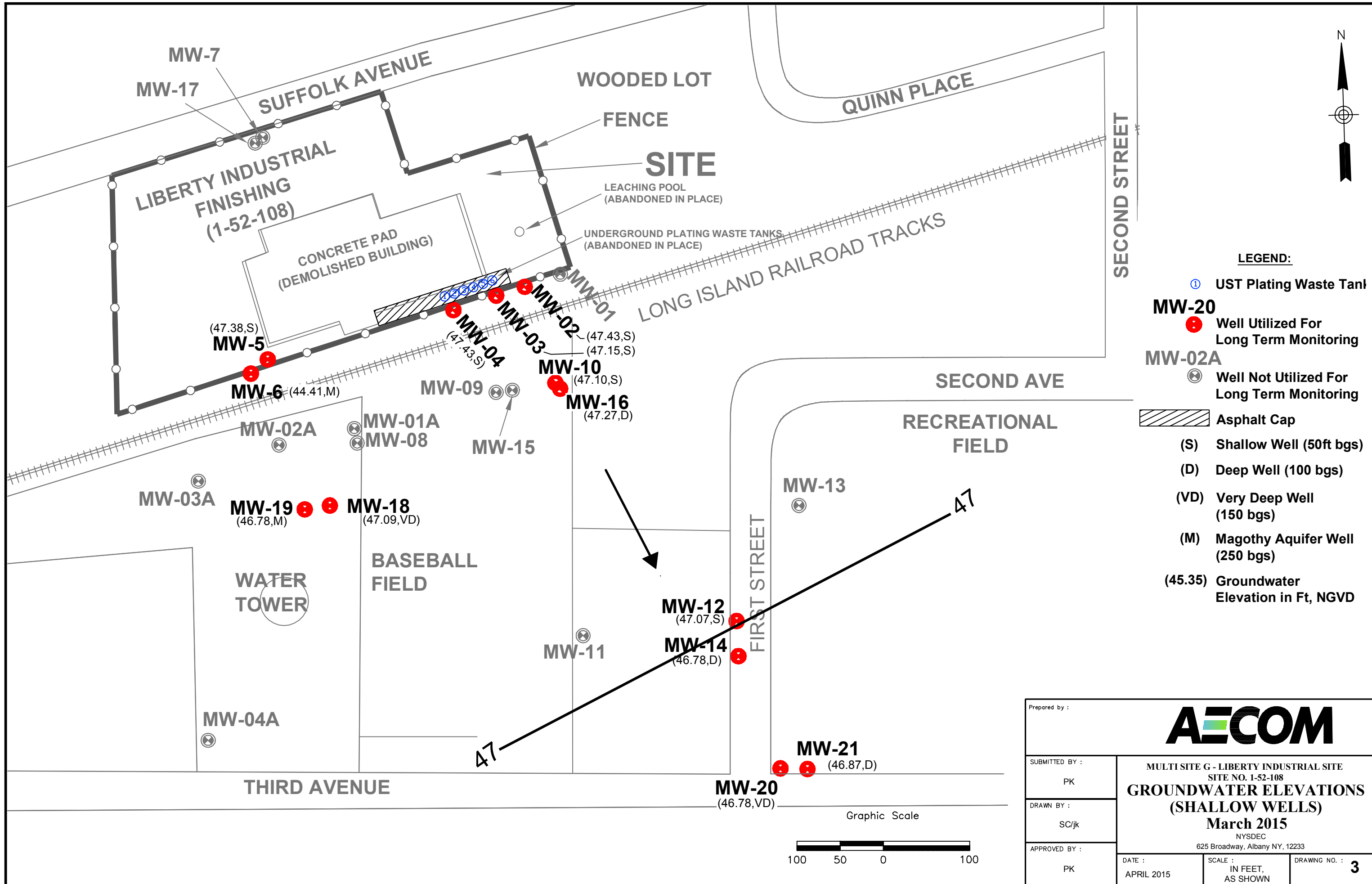


FIGURE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
GROUNDWATER HYDROGRAPH

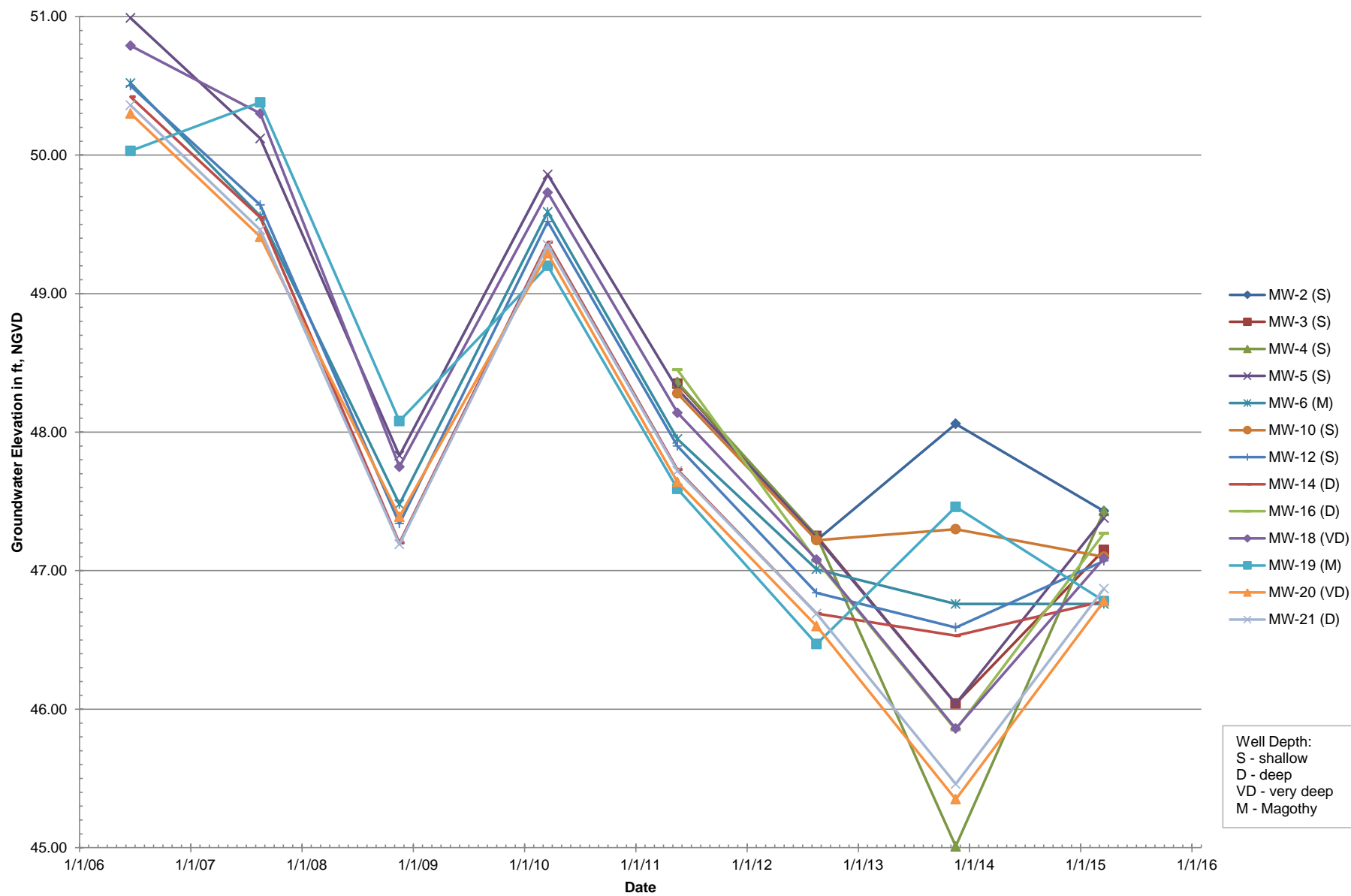


Figure 4A
Liberty Industrial Finishing Site (1-52-108)
Groundwater Hydrograph - Shallow Wells

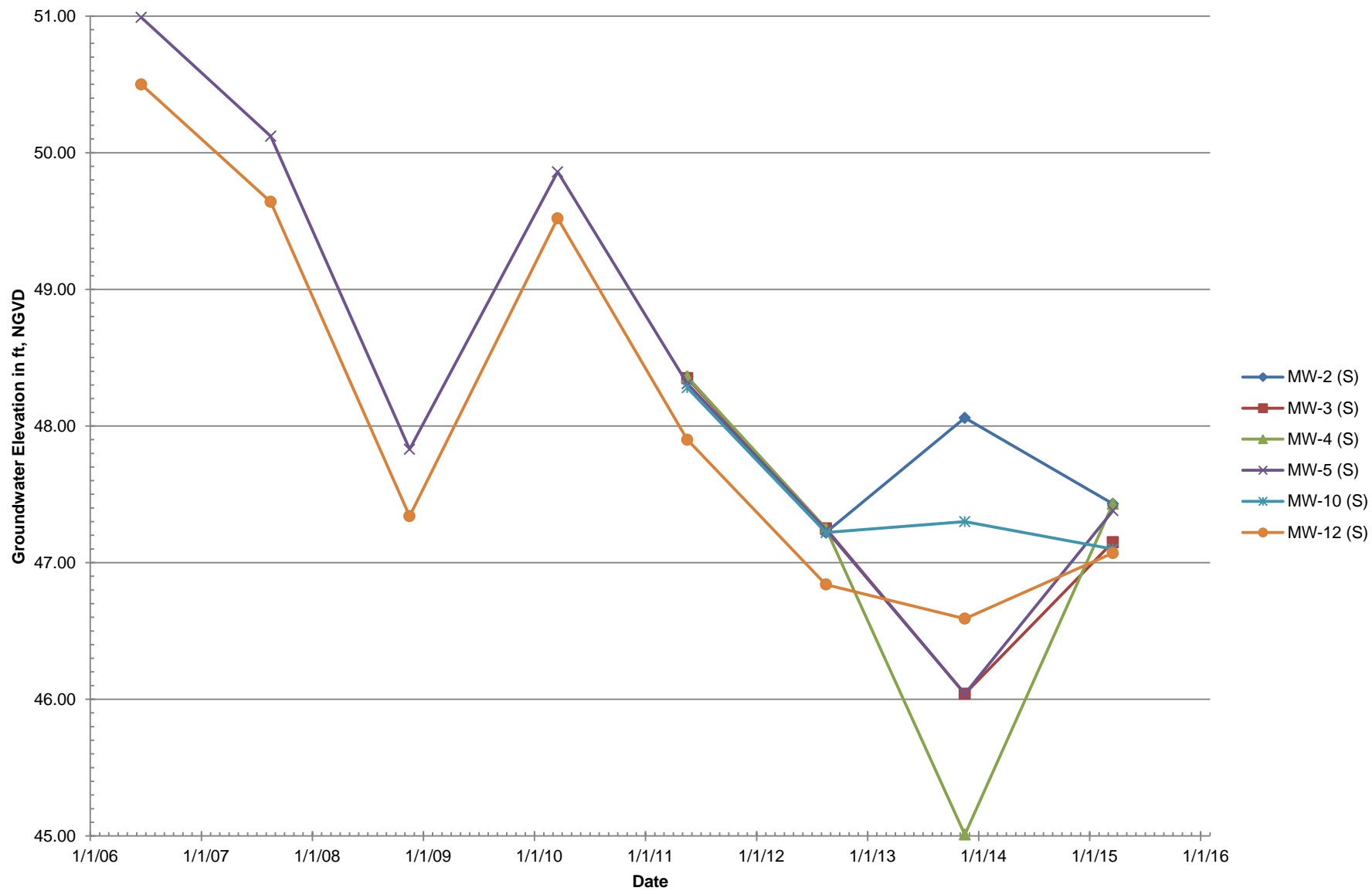


Figure 4B
Liberty Industrial Finishing Site (1-52-108)
Groundwater Hydrograph - Deep Wells

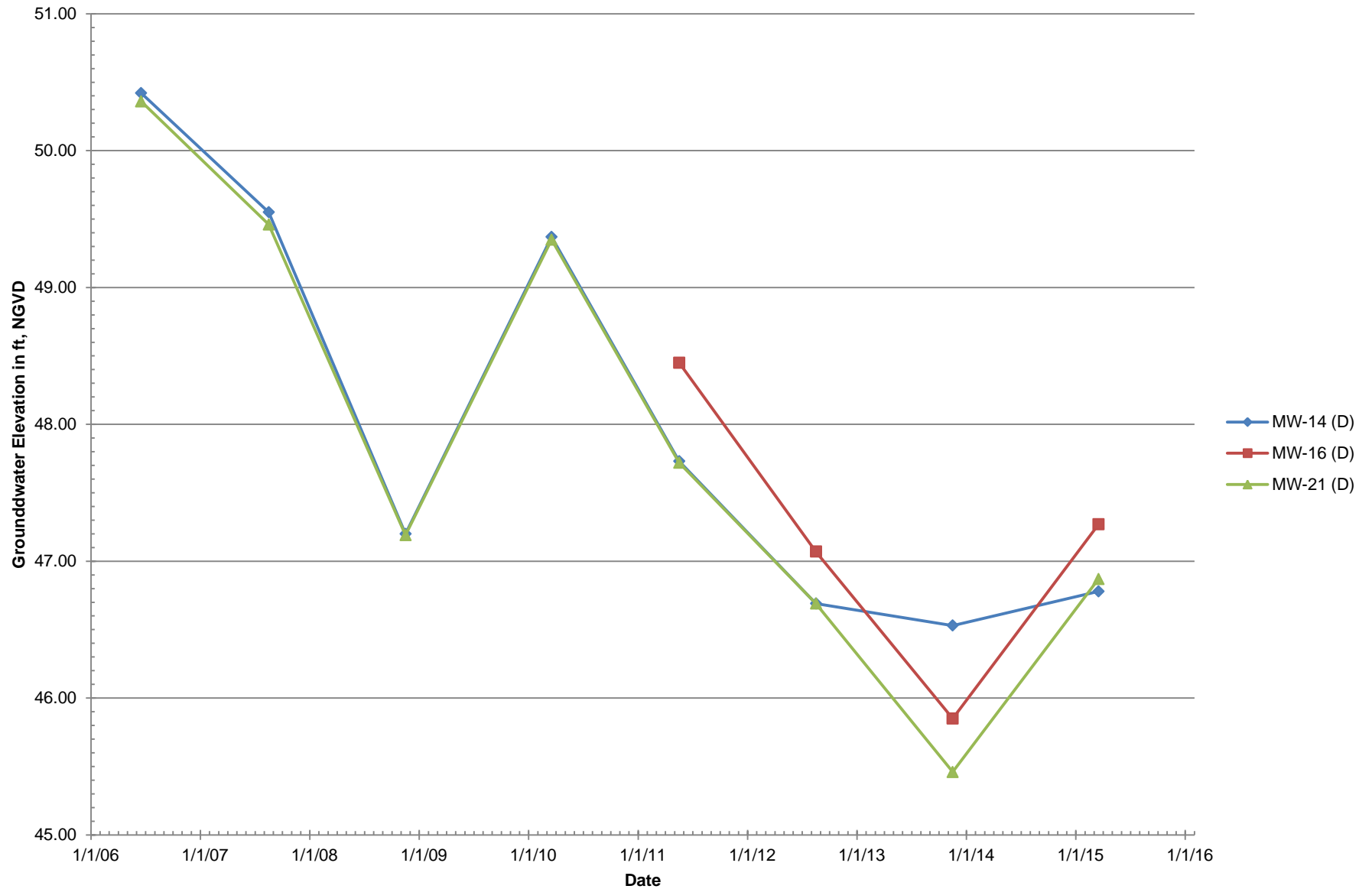


Figure 4C
Liberty Industrial Finishing Site (1-52-108)
Groundwater Hydrograph, Very Deep Wells

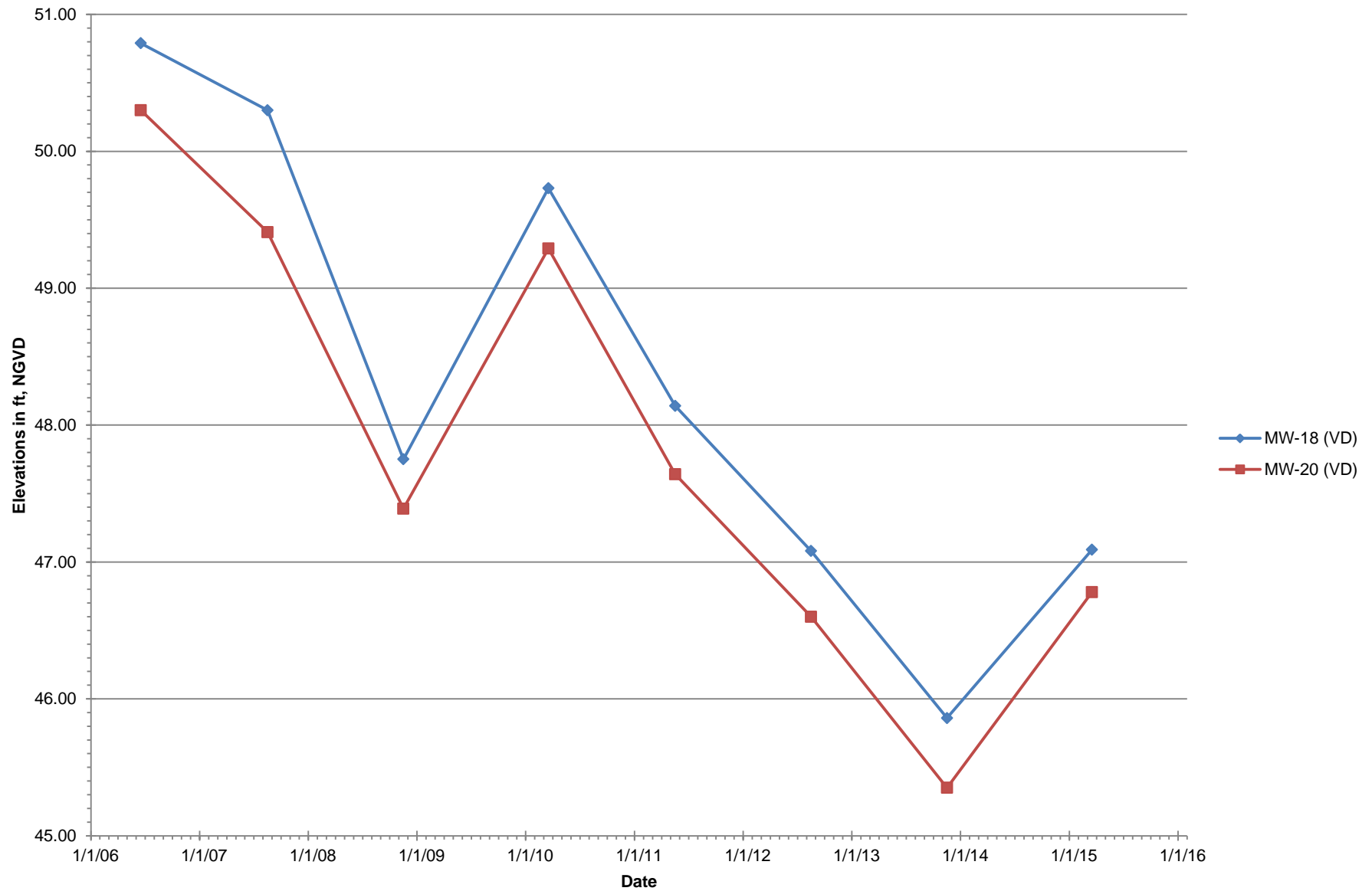
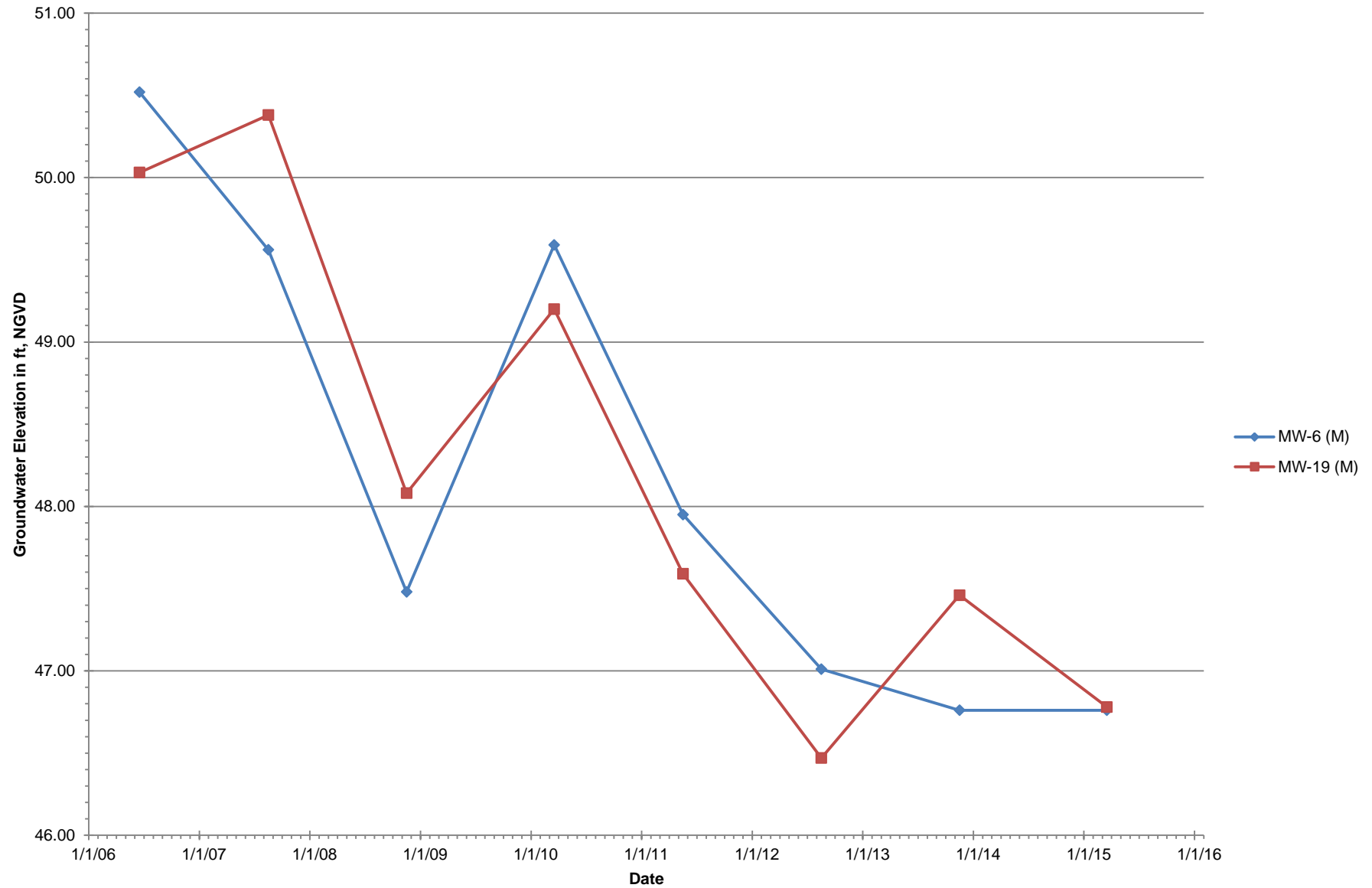
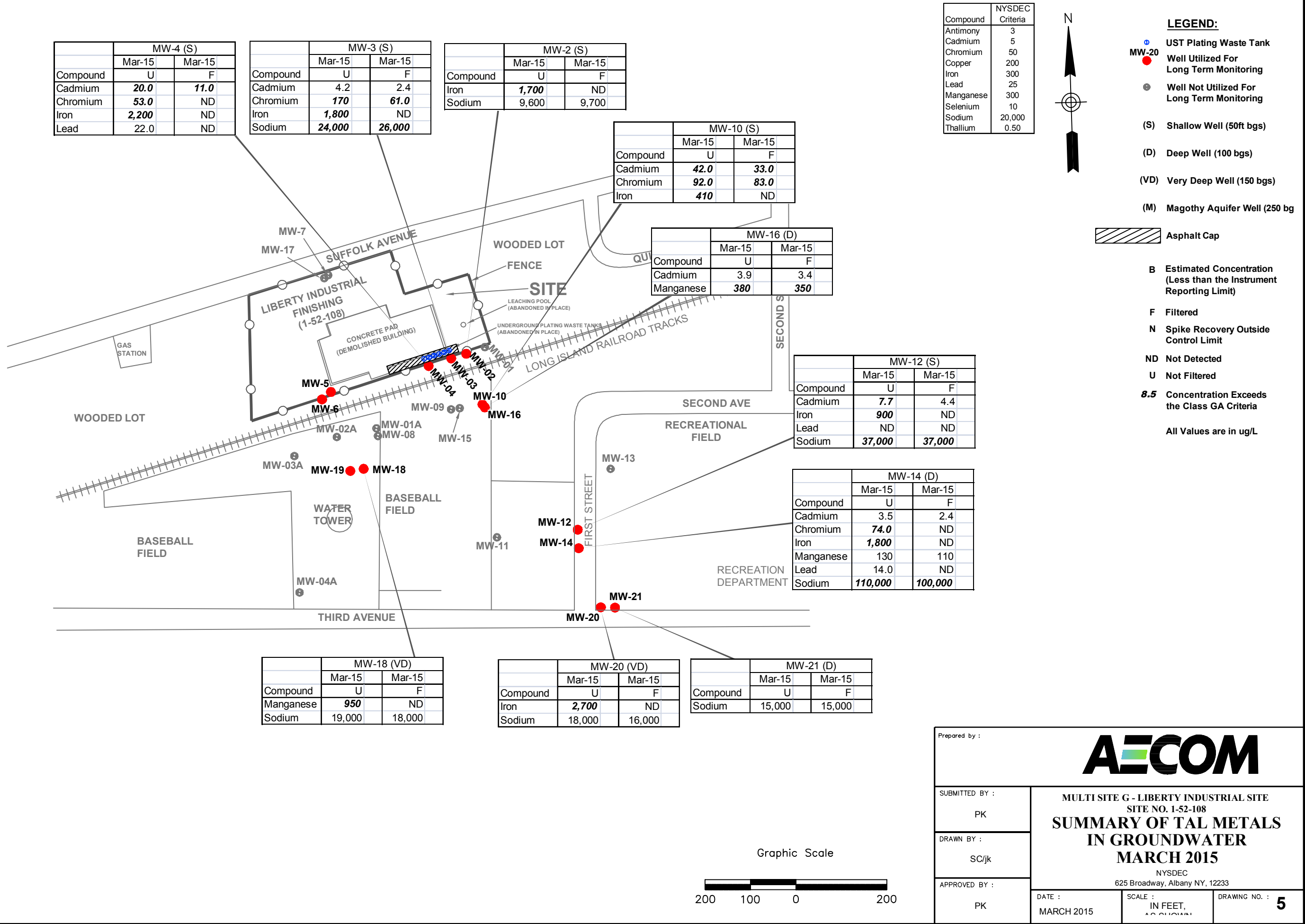
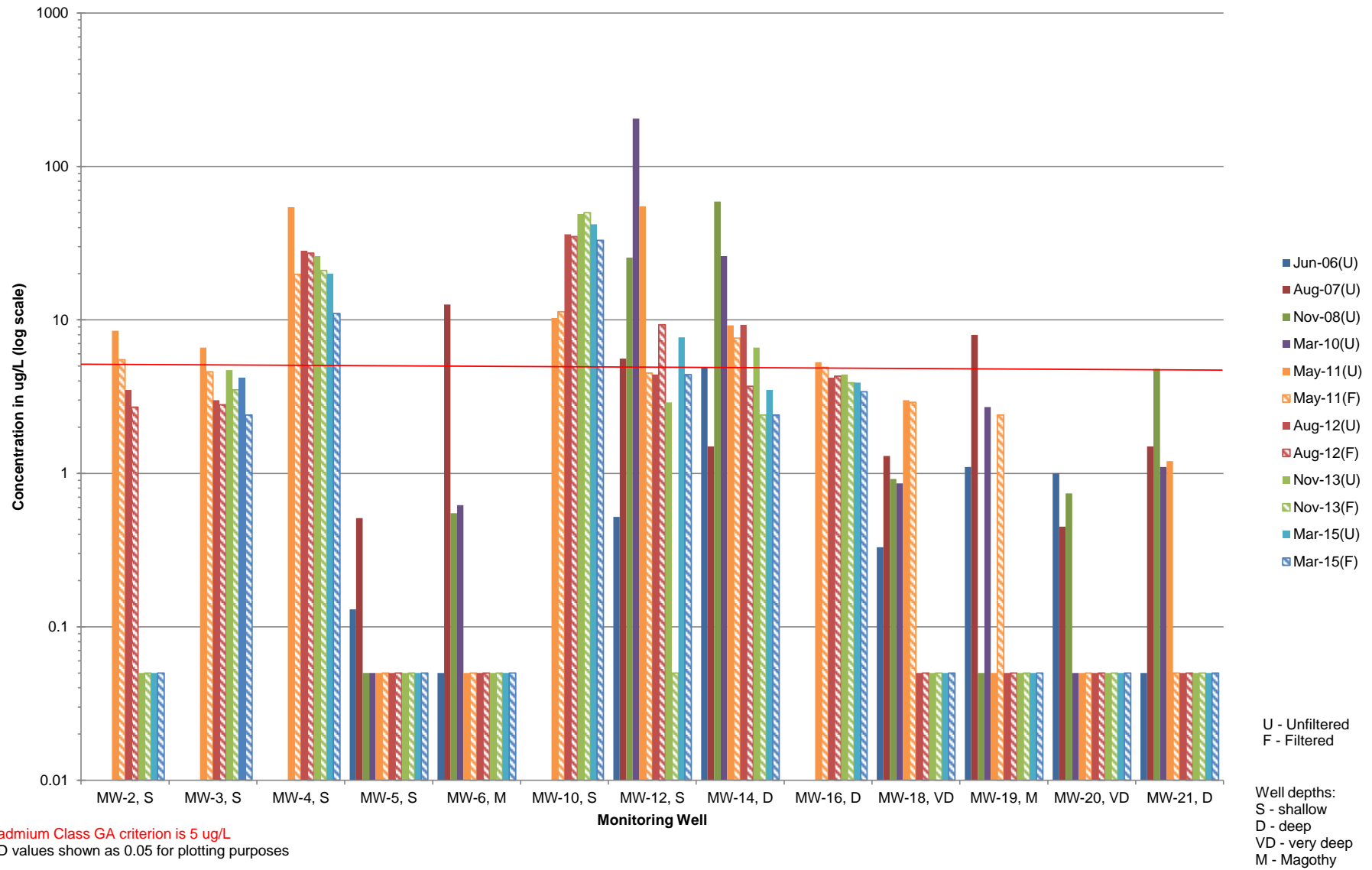


Figure 4D
Liberty Industrial Finishing Site (1-52-108)
Groundwater Hydrograph, Magothy Wells





**CADMIUM CONCENTRATIONS IN SELECTED MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)**



**CADMIUM CONCENTRATIONS IN SHALLOW MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)**

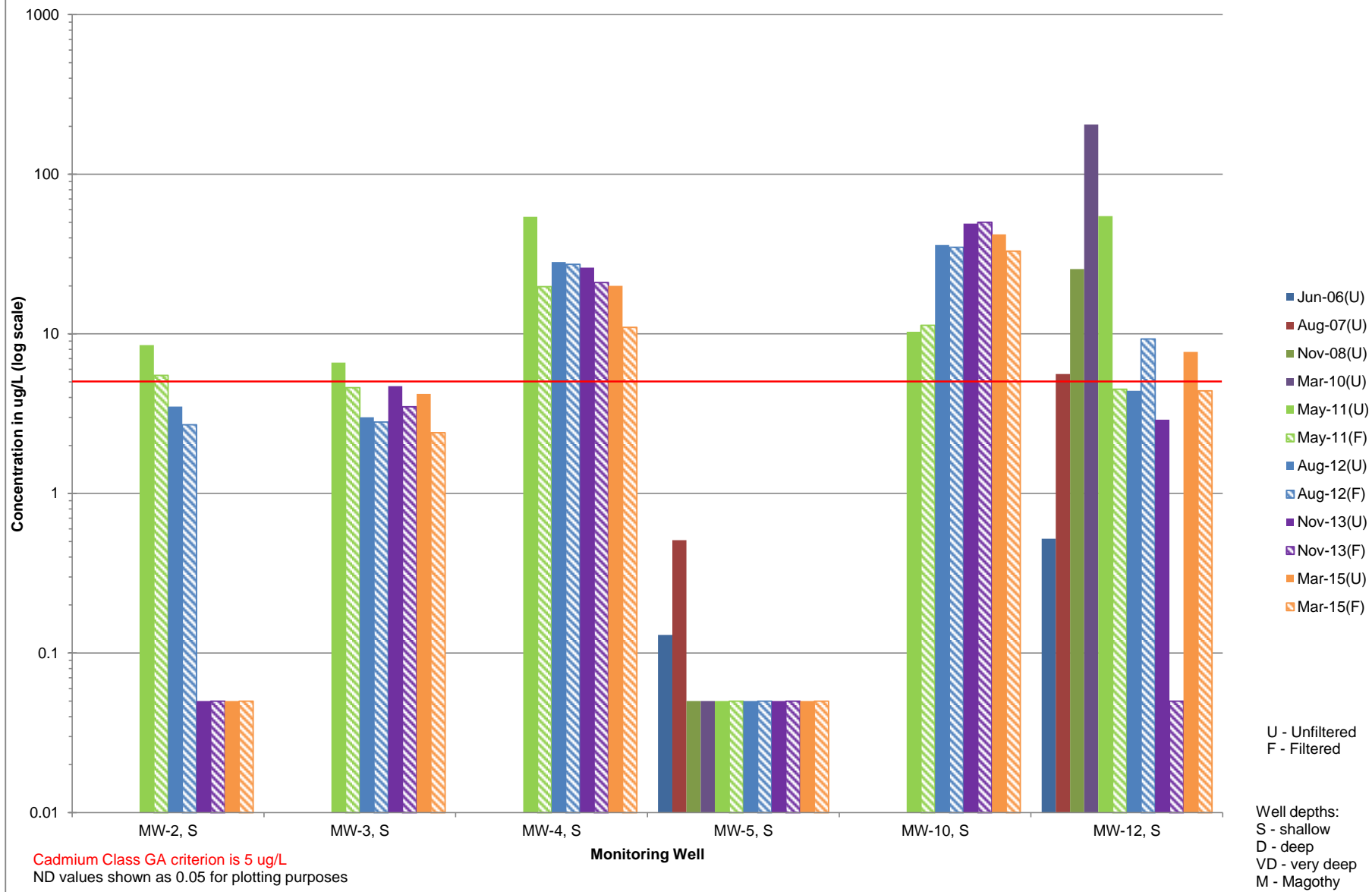
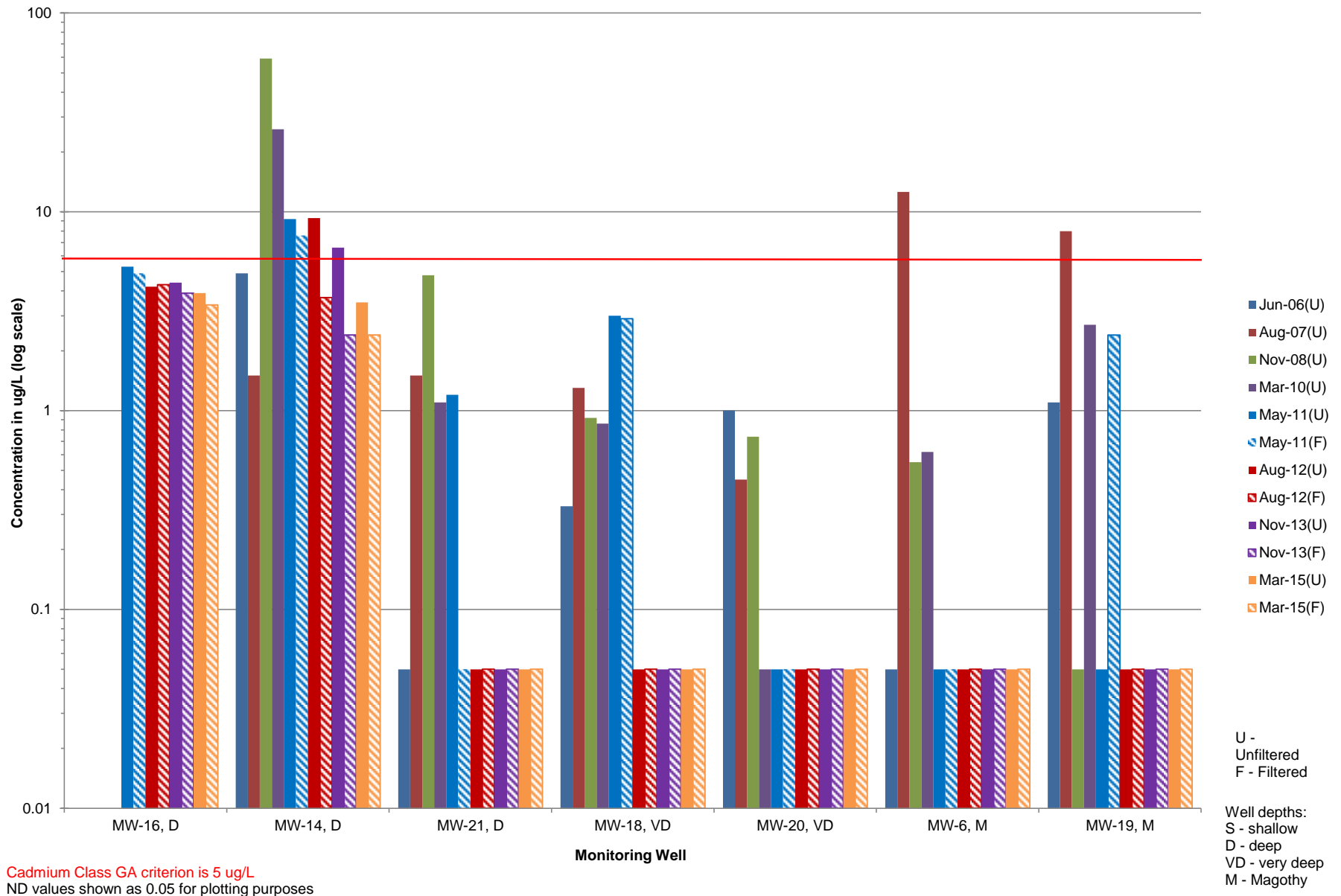
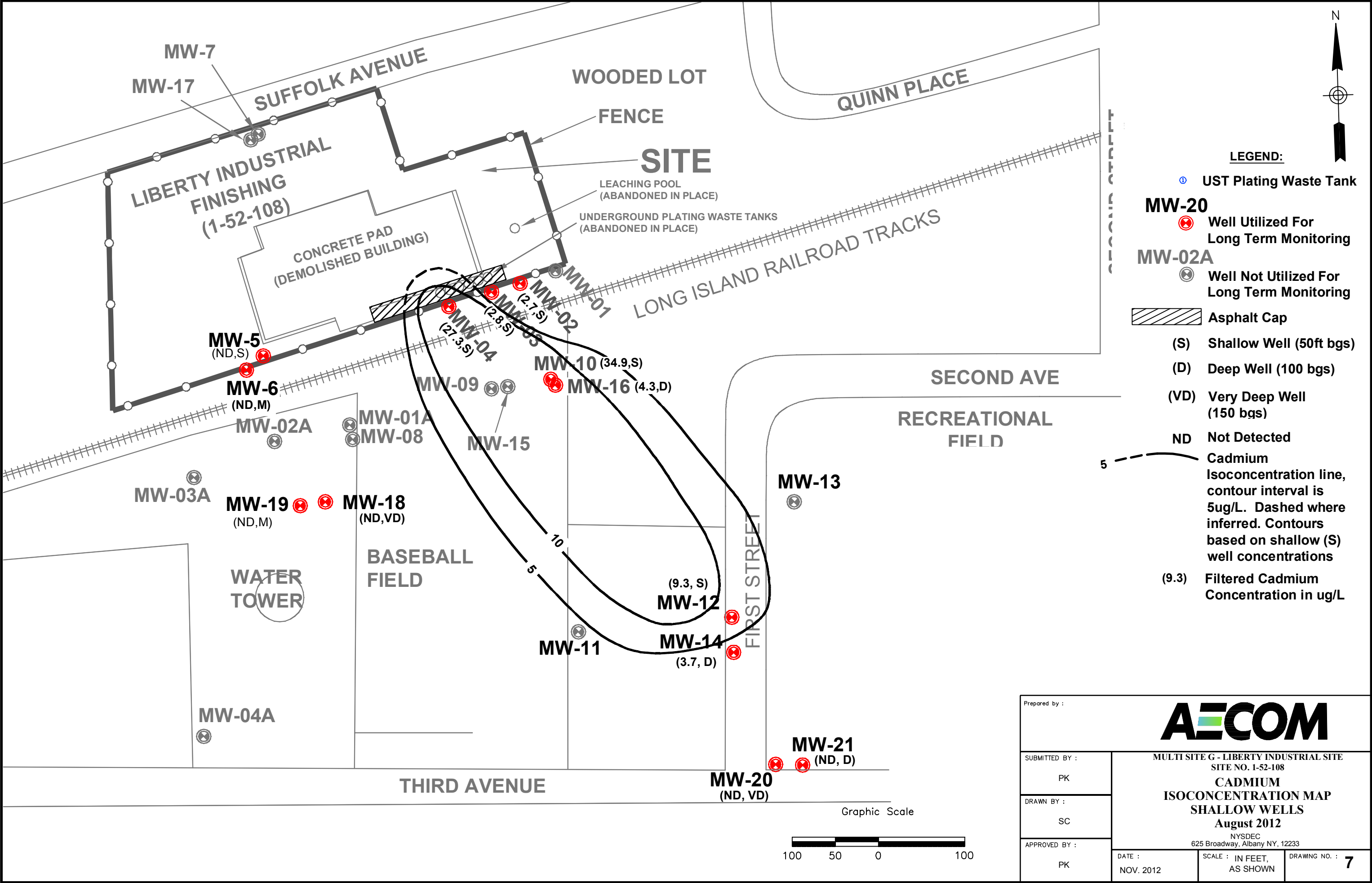


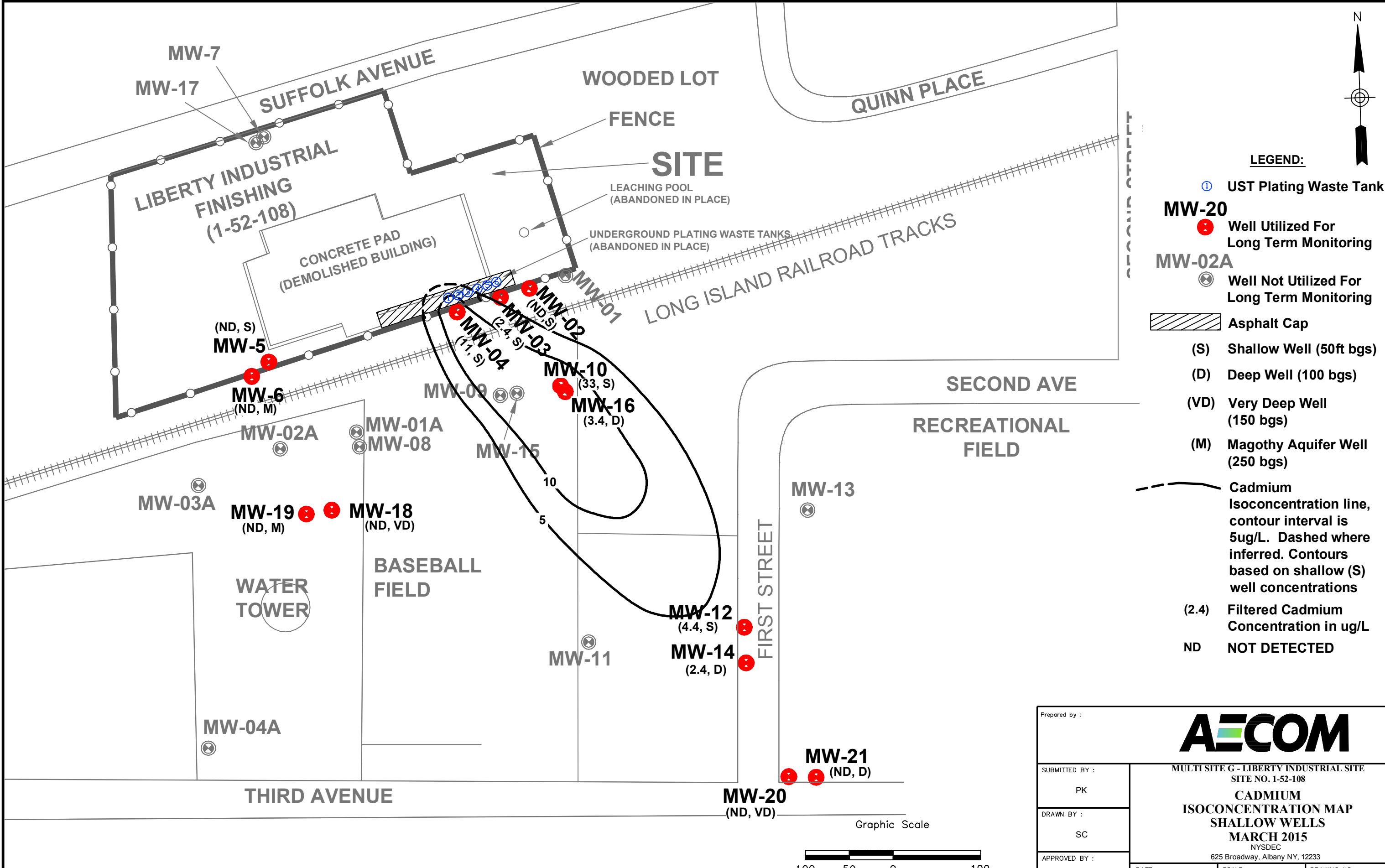
FIGURE 6B
CADMIUM CONCENTRATIONS IN DEEP, VERY DEEP & MAGOTHY MONITORING WELLS
LIBERTY INDUSTRIAL SITE (1-52-108)



L:\work\60277021_Multi_Site_G03 - Liberty Industrial Finishing\7.0 Deliverables\7.2 CADD



L:\work\60277021_Multi_Site_G\03 - Liberty Industrial Finishing\7.0 Deliverables\7.2 CADD



Prepared by :		<div>AECOM</div>		
SUBMITTED BY :		MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108		
DRAWN BY :		CADMIUM ISOCONCENTRATION MAP SHALLOW WELLS MARCH 2015 NYSDEC 625 Broadway, Albany NY, 12233		
APPROVED BY :		DATE :	SCALE :	DRAWING NO. :
PK		APRIL 2015	IN FEET, AS SHOWN	7B

FIGURE 8
CHROMIUM CONCENTRATIONS IN SELECTED MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING (1-52-108)

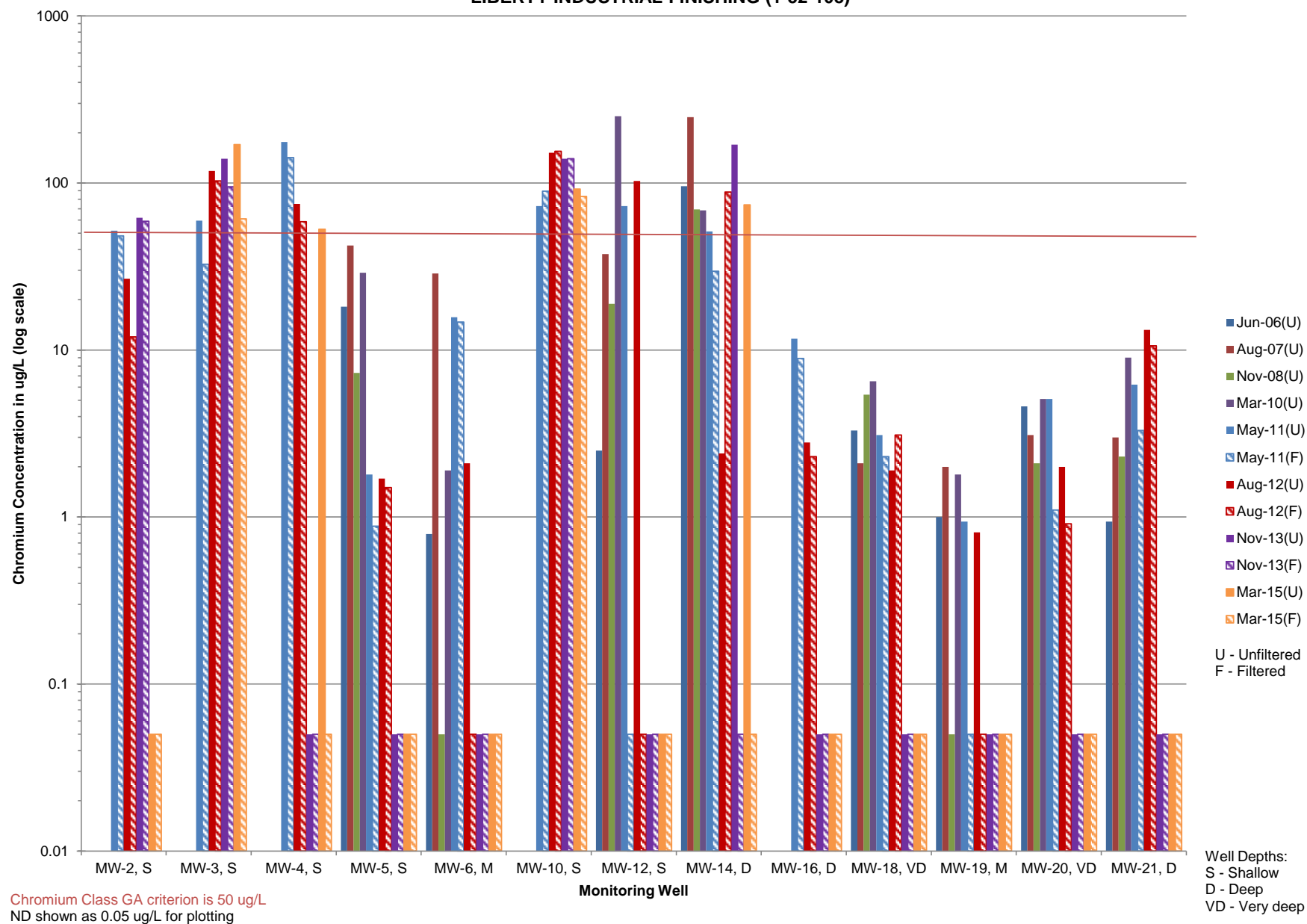


FIGURE 8A
CHROMIUM CONCENTRATIONS IN SHALLOW MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)

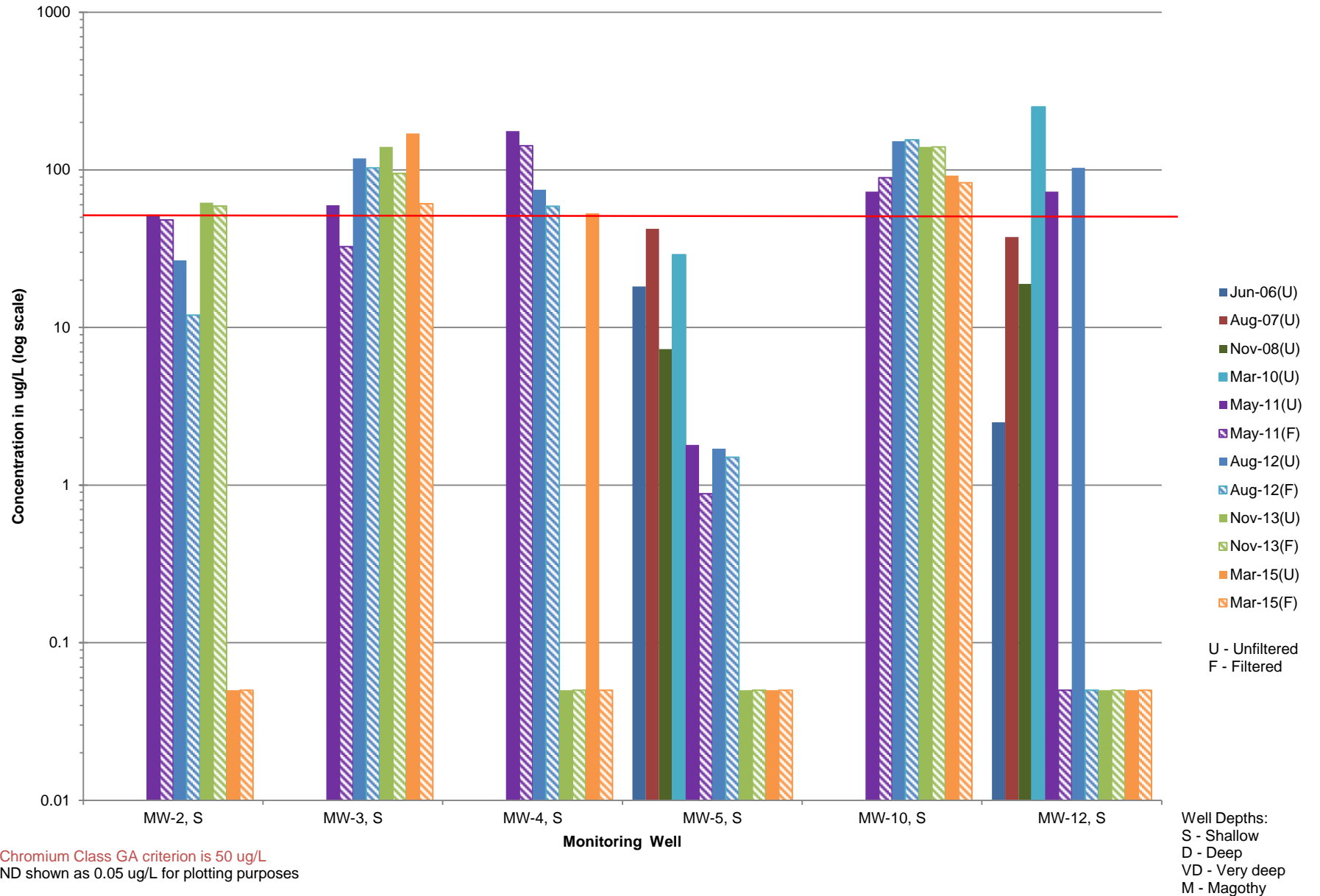
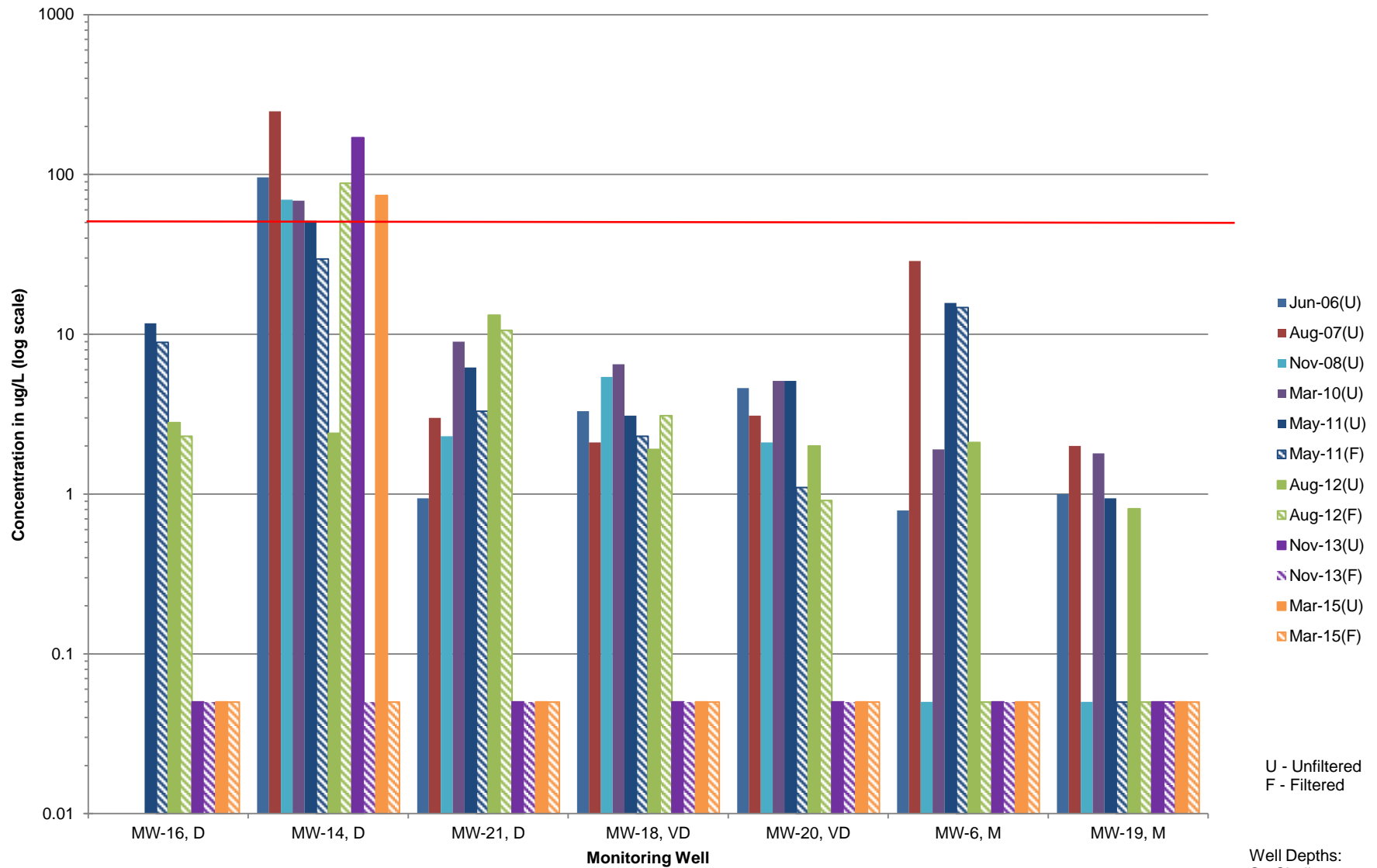
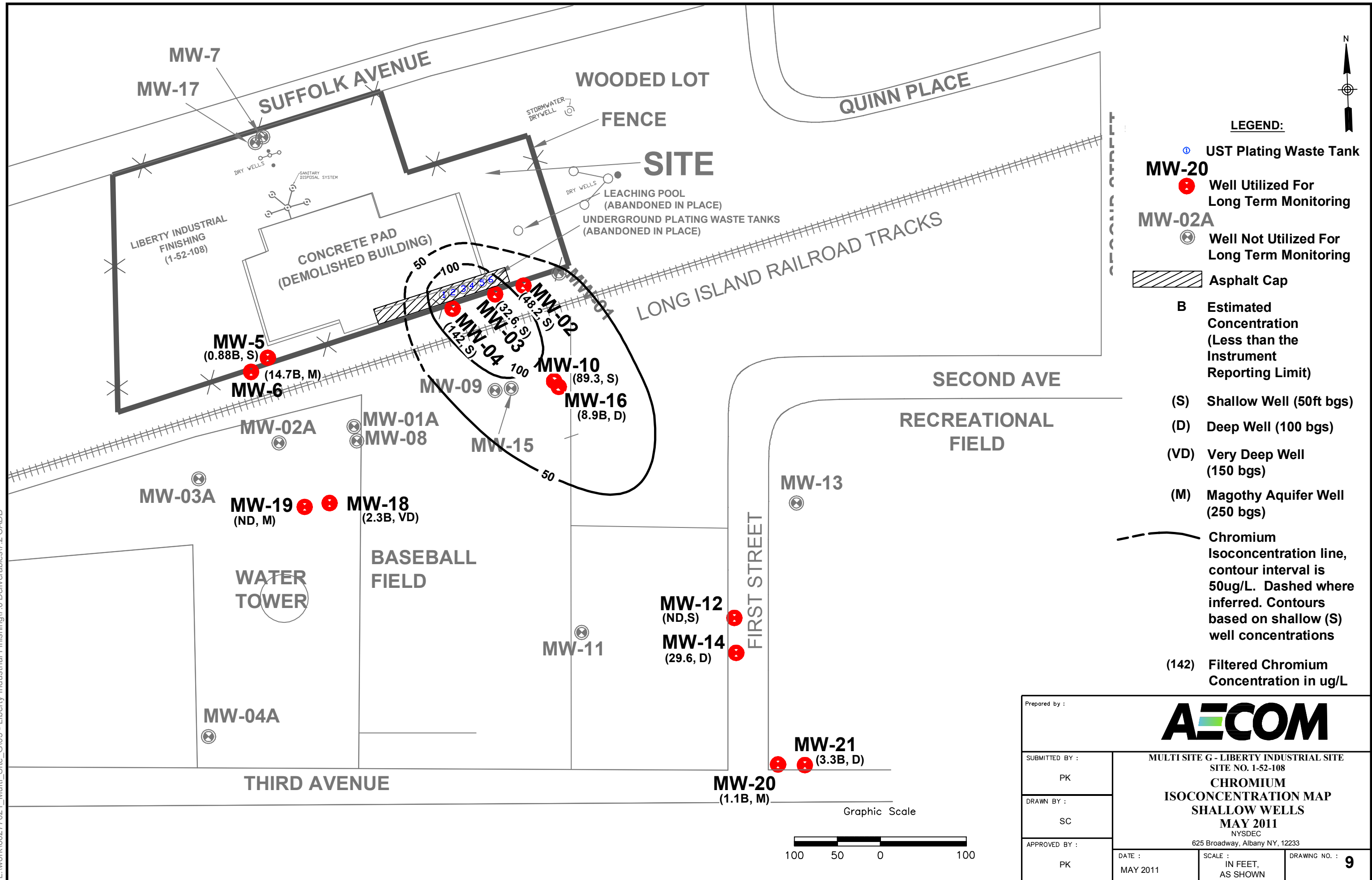



FIGURE 8B
CHROMIUM CONCENTRATIONS IN DEEP, VERY DEEP, AND MAGOTHY MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)



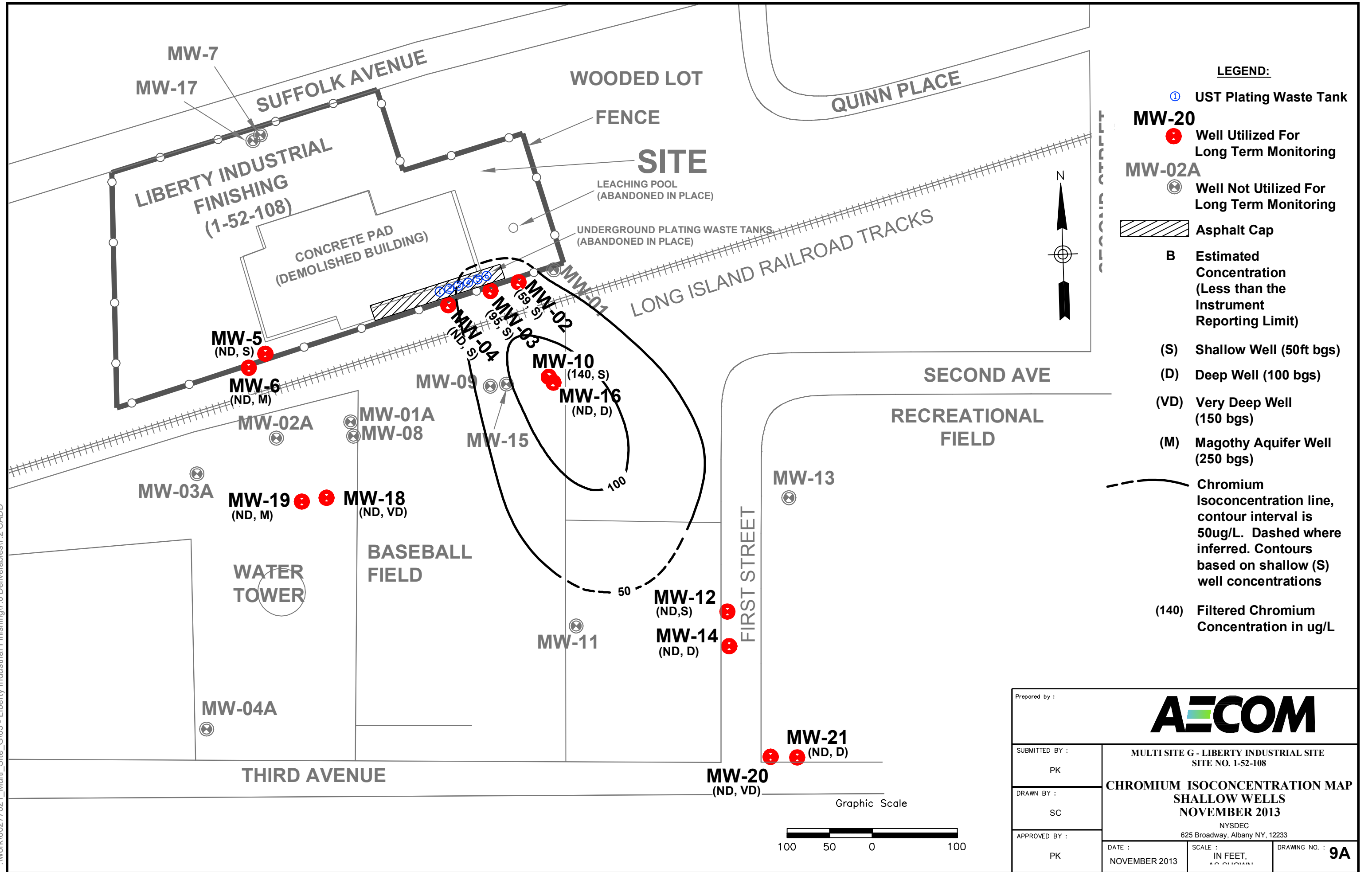
Chromium Class GA criterion is 50 ug/L
 ND shown as 0.05 ug/L for plotting purposes

L:\work\60277021_Multi_Site_G\03 - Liberty Industrial Finishing\7.0 Deliverables\7.2 CADD



Prepared by :				
SUBMITTED BY :		<div>MULTI SITE G - LIBERTY INDUSTRIAL SITE</div> <div>SITE NO. 1-52-108</div> <div>CHROMIUM</div> <div>ISOCONCENTRATION MAP</div> <div>SHALLOW WELLS</div> <div>MAY 2011</div> <div>NYSDEC</div> <div>625 Broadway, Albany NY, 12233</div>		
PK				
DRAWN BY :				
SC				
APPROVED BY :				
PK		DATE :	SCALE :	DRAWING NO. :
		MAY 2011	IN FEET, AS SHOWN	9

\\work\60277021_Multi_Site_G\03 - Liberty Industrial Finishing\7.0 Deliverables\7.2 CADD



:work\60277021_Multi_Site_G03 - Liberty Industrial Finishing\7.0 Deliverables\7.2 CADD

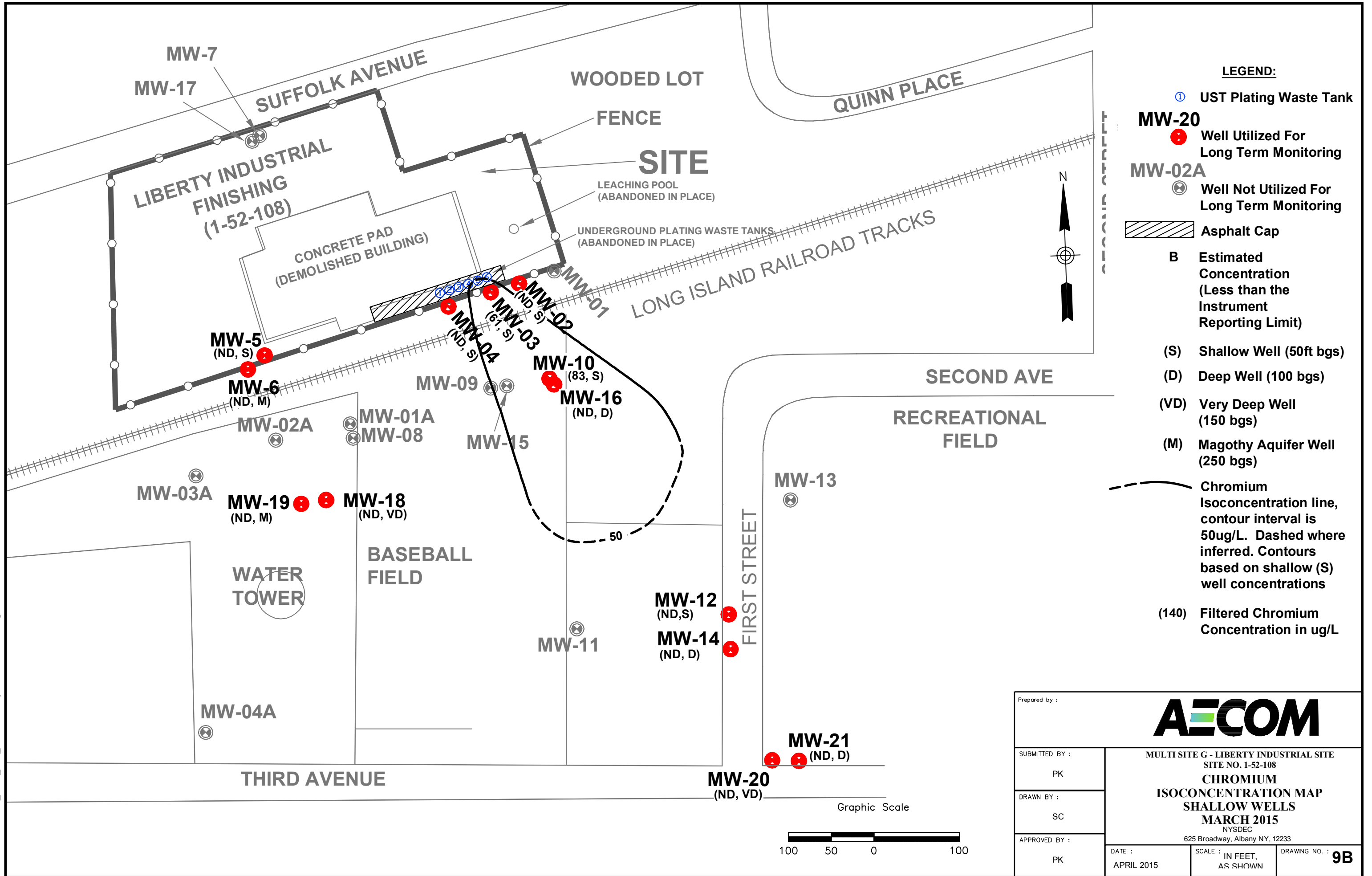


FIGURE 10
LEAD CONCENTRATIONS IN SELECTED MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)

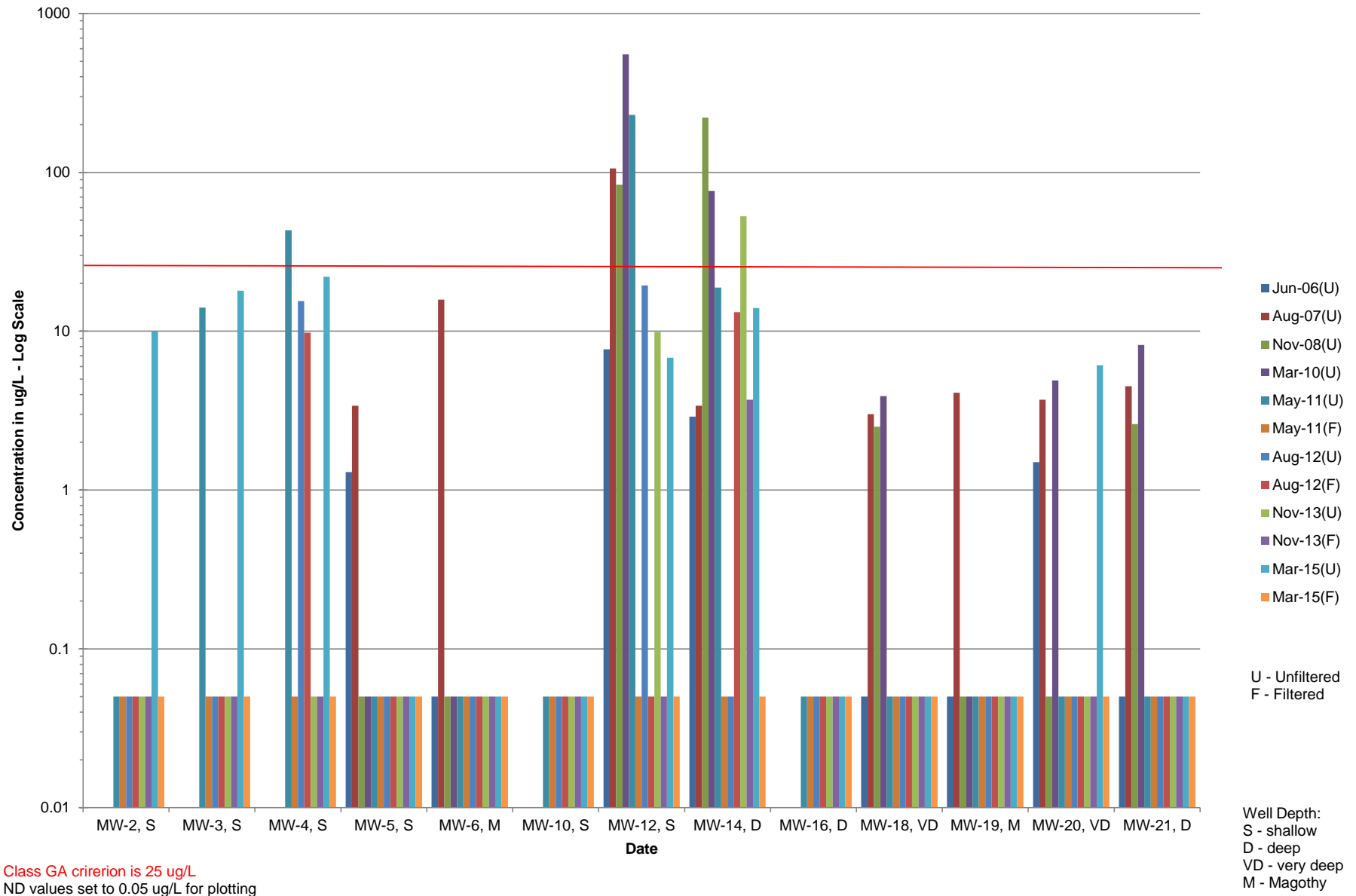


FIGURE 10A
LEAD CONCENTRATIONS IN SHALLOW MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)

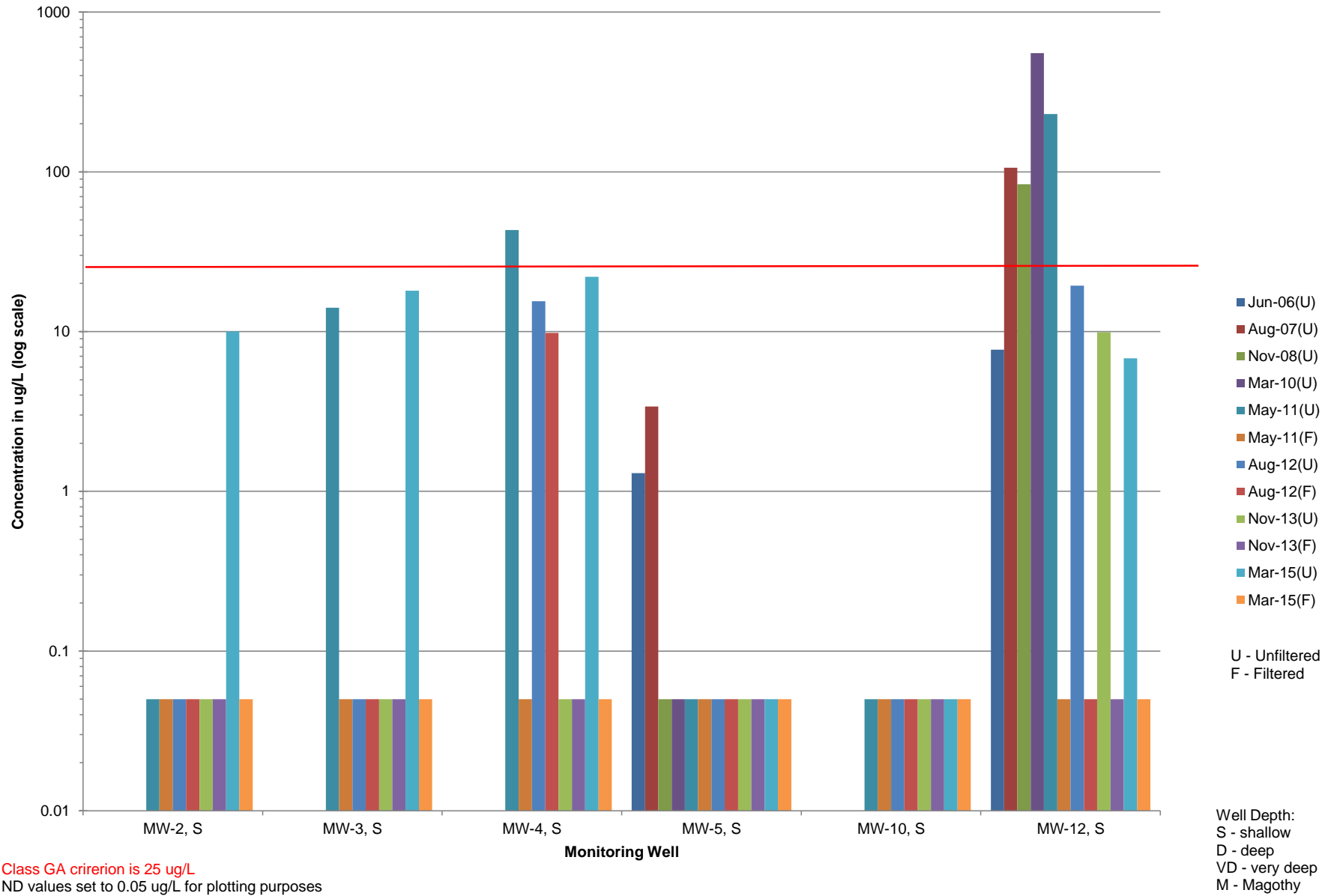


FIGURE 10B
LEAD CONCENTRATIONS IN DEEP, VERY DEEP AND MAGOTHY MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)

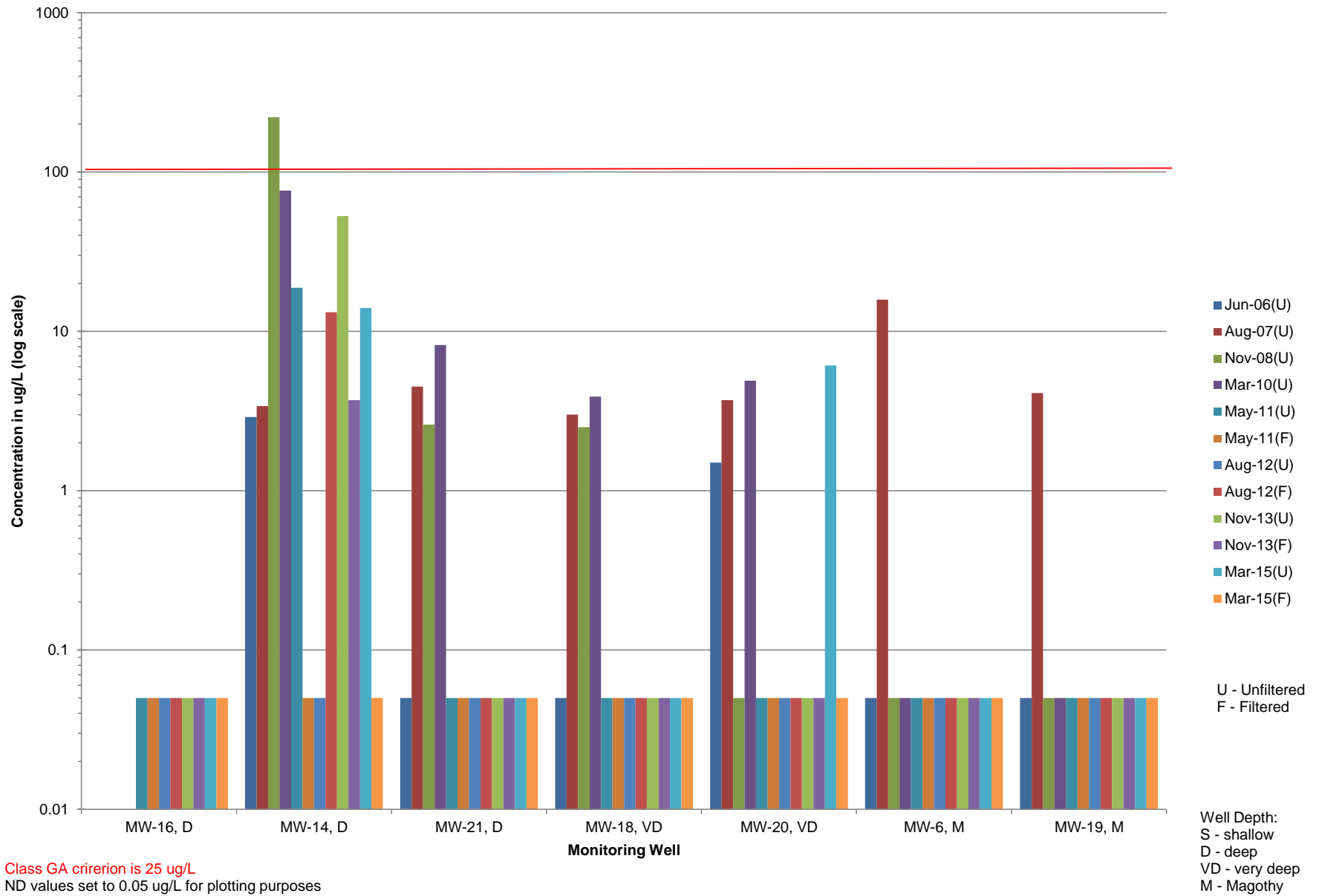
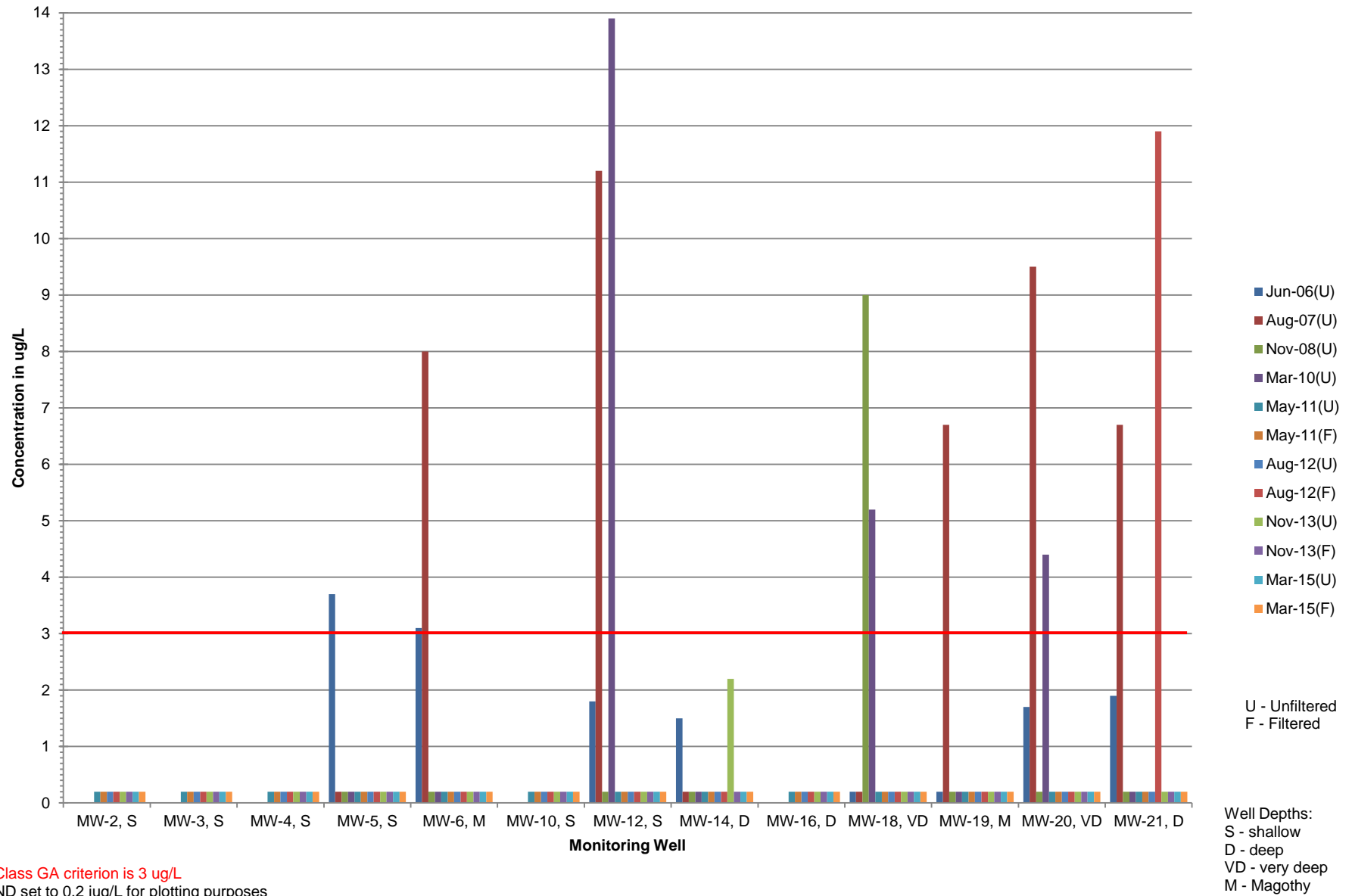
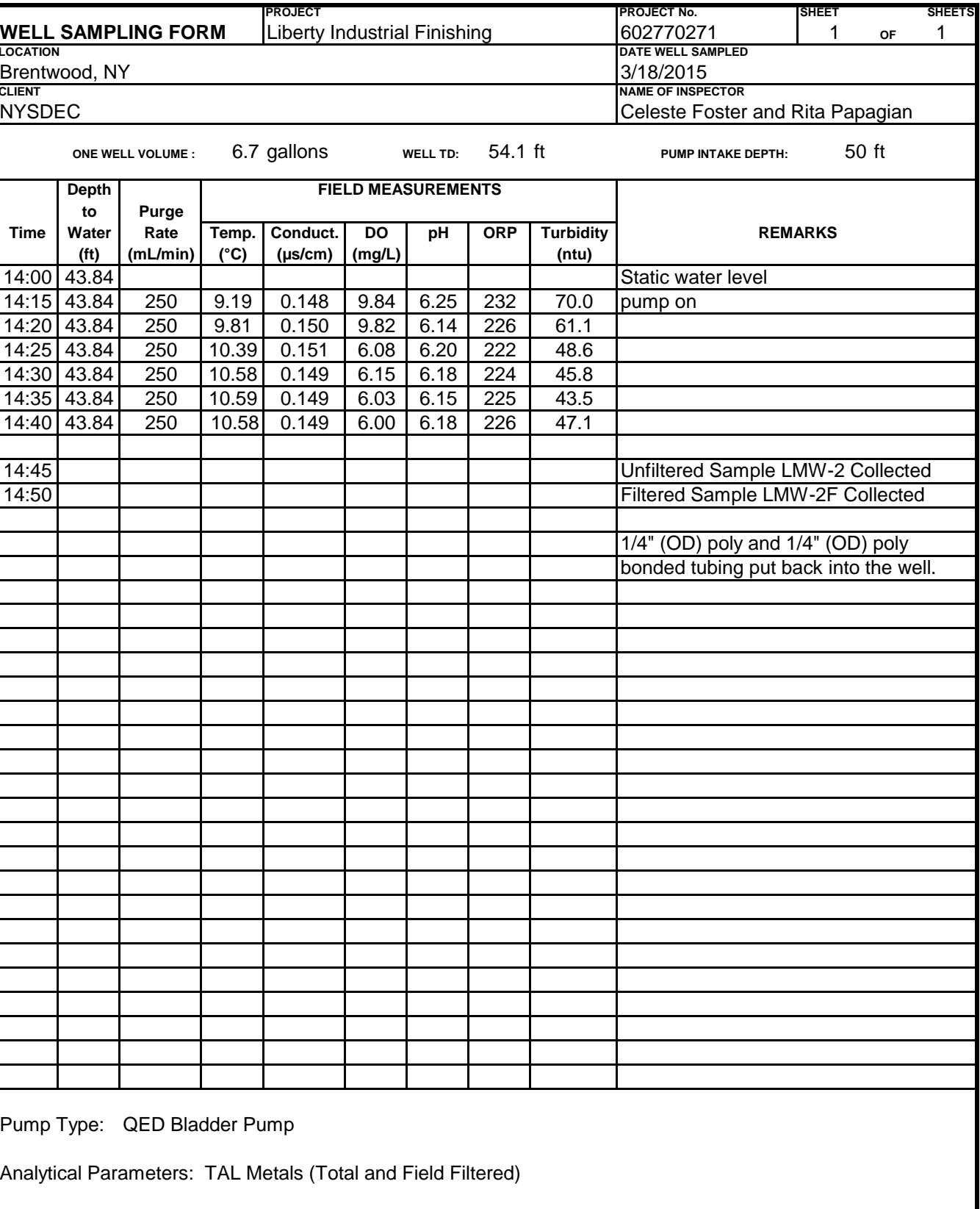


FIGURE 11
ANTIMONY CONCENTRATIONS IN SELECTED MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)



Appendix A

Monitoring Well Sampling Forms





WELL NO.

MW-3

[illegible]



WELL NO.

MW-4

[illegible]



WELL NO.

MW-5

[illegible]



WELL NO.

MW-6

[illegible]



MW-10

[illegible]



WELL NO.

MW-12

[illegible]



WELL NO.

MW-14

[illegible]



WELL NO.

MW-16

[illegible]



WELL NO.

MW-18

[illegible]



WELL NO.

MW-19

[illegible]



WELL NO.

MW-20

[illegible]



WELL NO.

MW-21

[illegible]

Appendix B

NYSDEC Monitoring Well Field Inspection Logs

SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/18/15 15:00

WELL ID.: LMW-1

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report

PDOP Reading from Trimble pathfinder: _____

Satellites: _____

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X
NA	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

SURFACE SEAL PRESENT?

YES	NO
NA	
NA	
NA	

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)

HEADSPACE READING (ppm) AND INSTRUMENT USED

NA

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

NA

PROTECTIVE CASING MATERIAL TYPE:

NA

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

NA

LOCK PRESENT?

YES	NO
NA	
NA	
NA	
NA	
NA	

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE?

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

NA

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

NA

MEASURE WELL DIAMETER (Inches):

NA

WELL CASING MATERIAL:

NA

PHYSICAL CONDITION OF VISIBLE WELL CASING:

NA

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

NA

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

NA

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Well was not located under debris and garbage. Known to be in between two fences, not accessible by truck.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)
AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Well is located between two fences (site fence and defunct fence section) currently full of vegetation, debris and garbage from vagrants.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

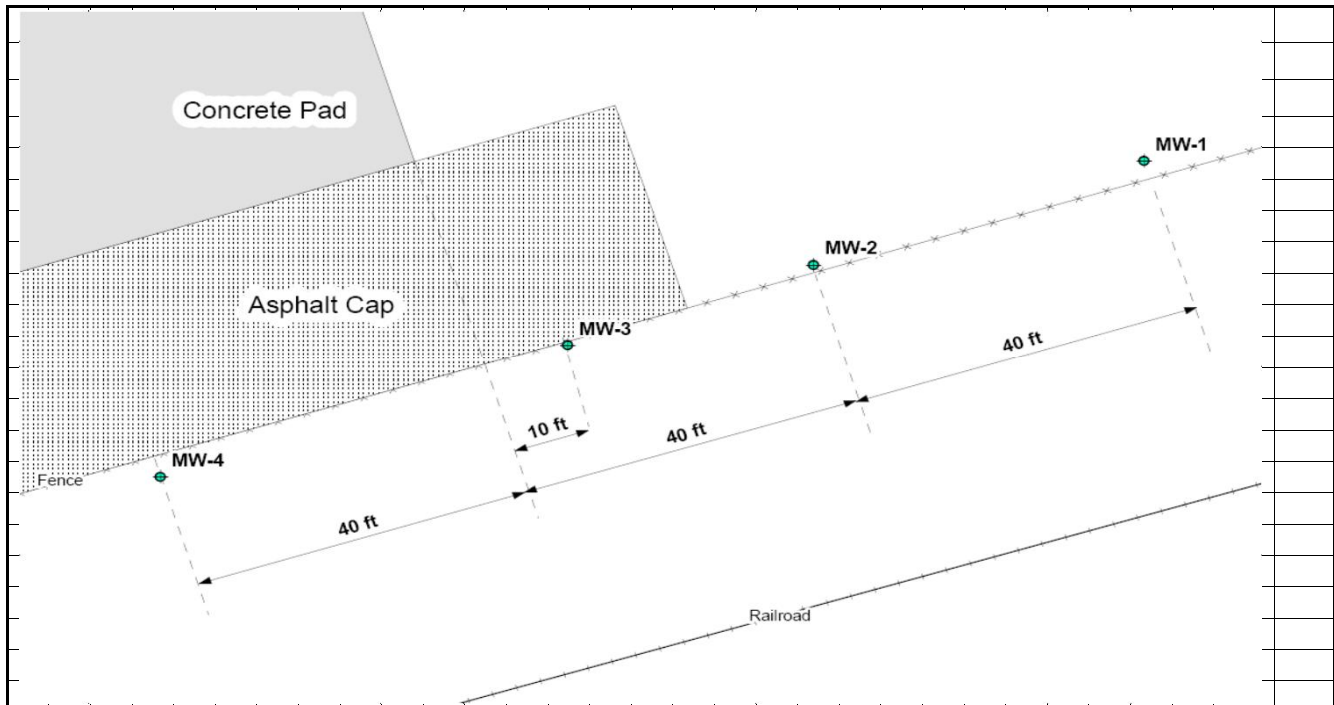
(e.g. Gas station, salt pile, etc.):

Capped area on-site. Gas station to the west of the Site. Railroad to south.

REMARKS:

Well not located

MONITORING WELL INSPECTION LOG
SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/18/15 15:00

WELL ID.: LMW-2

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? NYTM X 2,206,950.31 NYTM Y 201,798.35 See Report

PDOP Reading from Trimble pathfinder:

Satelites:

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X
X	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

SURFACE SEAL PRESENT?

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)

YES	NO
X	
X	
X	

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PID

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

6

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE?

YES	NO
X	
	X
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

54.1

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

43.84

MEASURE WELL DIAMETER (Inches):

4

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

CLOSE

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
overhead lines, close to fence and railroad property

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)
AND ASSESS THE TYPE OF RESTORATION REQUIRED.

within site fence, surrounded by overgrown vegetation

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

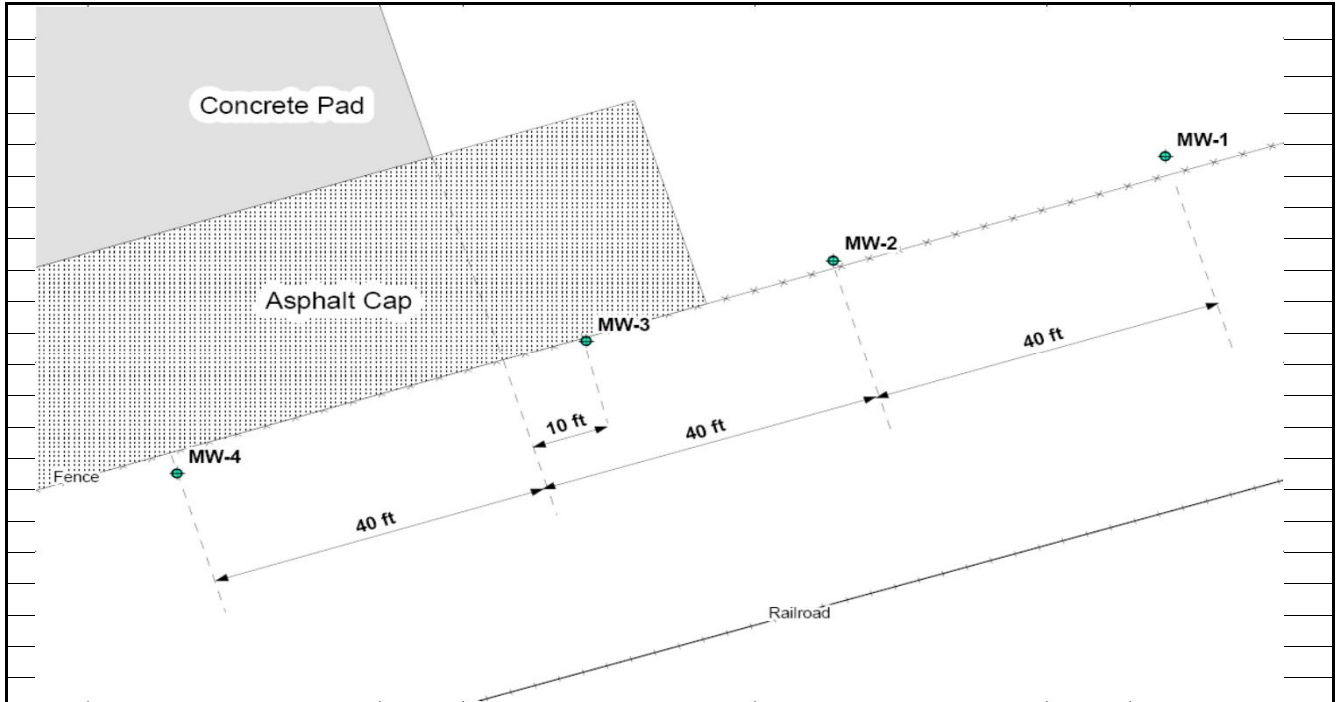
Capped area on-site. Gas station to the west of the Site. Railroad to south.

REMARKS:

New bolts needed, 1/4" poly bonded tubing left in well.

Previously fence was marked at location with spray paint to aid in locating the well.

MONITORING WELL INSPECTION LOG
SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/18/15 15:00

WELL ID.: LMW-3

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? NYTM X 2,206,950.31 NYTM Y 201,798.35 See Report

PDOP Reading from Trimble pathfinder:

Satellites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PID

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

6

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE?

YES	NO
X	
	X
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

54.0

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

44.10

MEASURE WELL DIAMETER (Inches):

4

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

CLOSE

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Not accessible, in between site fence and railroad fence. Overhead lines also present.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)
AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Between site fence and railroad fence, covered by vegetation.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

Capped area on-site. Gas station to the west of the Site. Railroad to south.

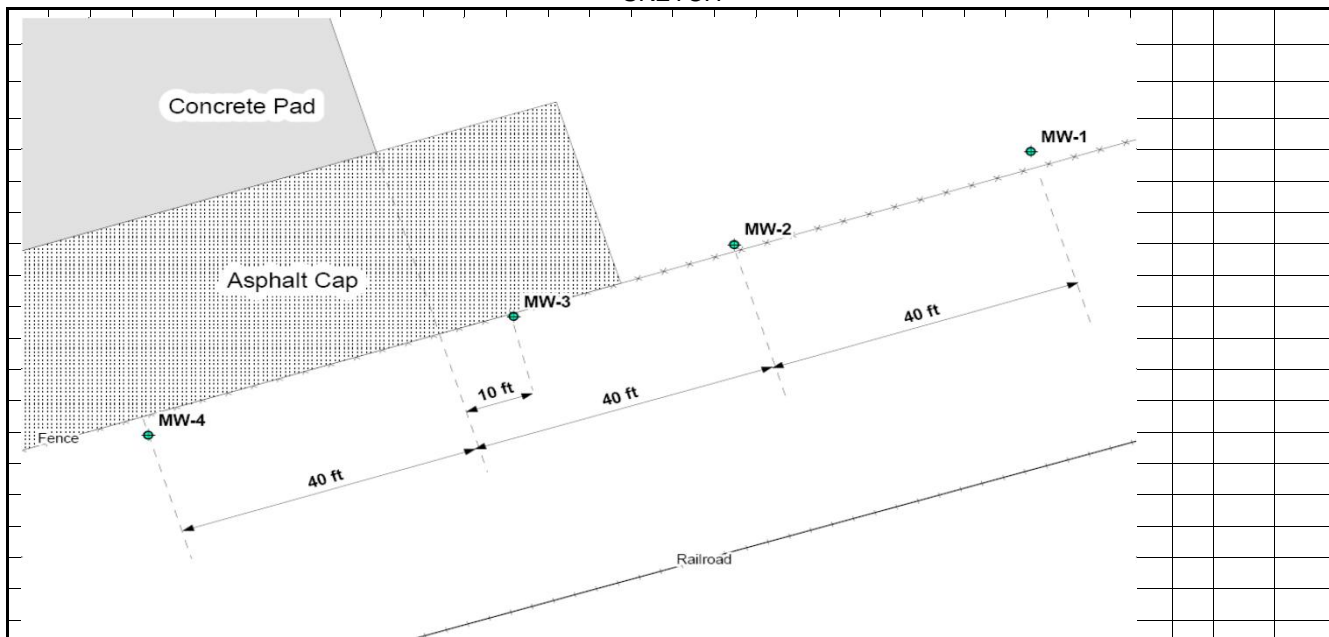
REMARKS:

New bolts needed, 1/4" poly bonded tubing left in well.

Previously fence was marked at location with spray paint to aid in locating the well.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/18/15 15:00

WELL ID.: LMW-4

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? NYTM X 2,206,950.31 NYTM Y 201,798.35 See Report

PDOP Reading from Trimble pathfinder:

Satellites:

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X
X	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

SURFACE SEAL PRESENT?

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)

YES	NO
X	
X	
X	

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PID

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

6

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE?

YES	NO
X	
	X
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

54.2

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

44.18

MEASURE WELL DIAMETER (Inches):

4

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

CLOSE

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Not accessible, in between site fence and railroad fence. Overhead lines also present.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)
 AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Between site fence and railroad fence, covered by vegetation.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

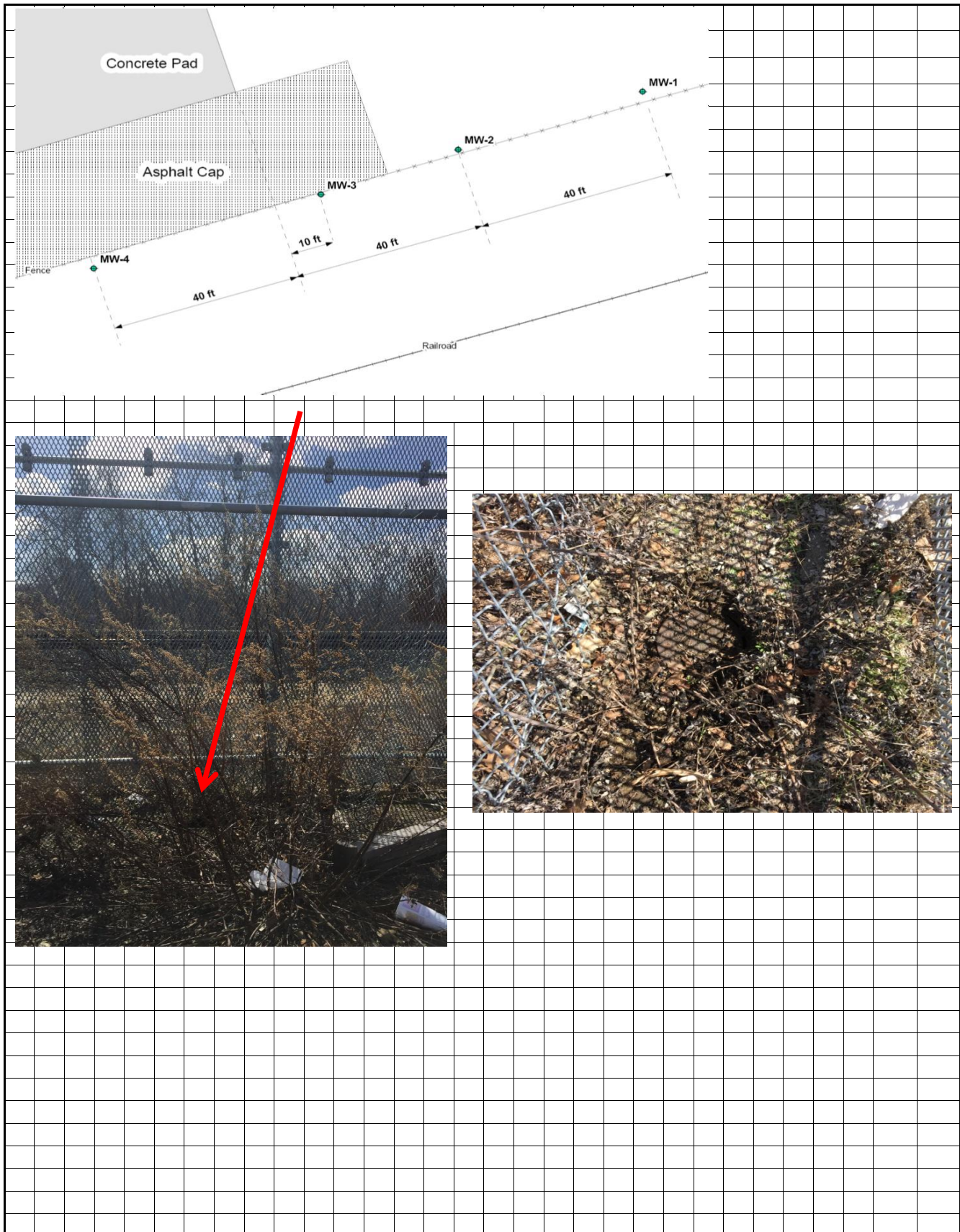
Capped area on-site. Gas station to the west of the Site. Railroad to south.

REMARKS:

New bolts needed, 1/4" poly bonded tubing left in well.

Previously fence was marked at location with spray paint to aid in locating the well.

MONITORING WELL INSPECTION LOG
SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/18/15 15:00

WELL ID.: LMW-5

WELL VISIBLE? (If not, provide directions below)
 WELL COORDINATES? NYTM X 2,206,350.98 NYTM Y 202,308.86 See Report
 PDOP Reading from Trimble pathfinder: Satelites:
 GPS Method (circle) Trimble And/Or Magellan

YES	NO
X	

WELL I.D. VISIBLE?
 WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)
 WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

YES	NO
	X
X	

SURFACE SEAL PRESENT?
 SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)
 PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)
 Cap does not close properly. Lid is not flush with casing.
 HEADSPACE READING (ppm) AND INSTRUMENT USED
 TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)
 PROTECTIVE CASING MATERIAL TYPE:
 MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

YES	NO
	X
	X
	X

0.0 PID
 2
 SS
 6

LOCK PRESENT?
 LOCK FUNCTIONAL?
 DID YOU REPLACE THE LOCK?
 IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)
 WELL MEASURING POINT VISIBLE?

YES	NO
	X
	X
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):
 MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
 MEASURE WELL DIAMETER (Inches):
 WELL CASING MATERIAL:
 PHYSICAL CONDITION OF VISIBLE WELL CASING:
 ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
 PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

57.8
 45.85
 4
 PVC
 GOOD
 -
 -

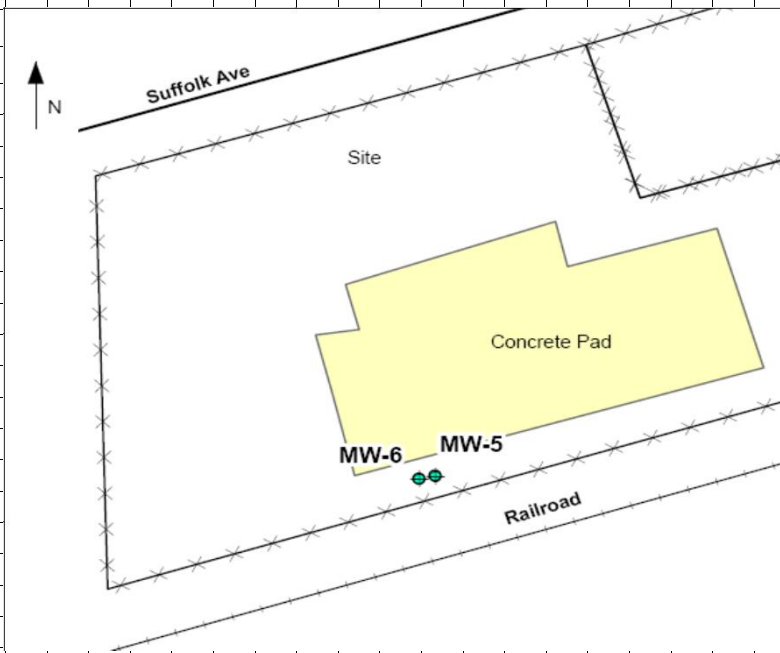
DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Overgrown vegetation, accessible by truck mounted rig with some clearing.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)
 AND ASSESS THE TYPE OF RESTORATION REQUIRED.
located in a wooded area between site concrete and fence, surrounded by overgrown vegetation

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT
 (e.g. Gas station, salt pile, etc.):
Capped area on-site. Gas station to the west of the Site. Railroad to south.

REMARKS:
Needs lock, protective casing lid needs to be fixed, should get a new well cap
1/4" poly bonded tubing left in well

MONITORING WELL INSPECTION LOG
SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/18/15 15:00

WELL ID.: LMW-6

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X 2,206,341.15 NYTM Y 202,306.77 See Report

PDOP Reading from Trimble pathfinder:

Satelites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

YES	NO
	X
	X
X	

SURFACE SEAL PRESENT?

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)

0.0 PID

HEADSPACE READING (ppm) AND INSTRUMENT USED

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

1

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

8

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE?

YES	NO
	X
	X
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

265

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

48.30

MEASURE WELL DIAMETER (Inches):

4

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

Average

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Overgrown vegetation, accessible by truck mounted rig with some clearing.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)
AND ASSESS THE TYPE OF RESTORATION REQUIRED.

located in a wooded area between site concrete and fence, surrounded by overgrown vegetation

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

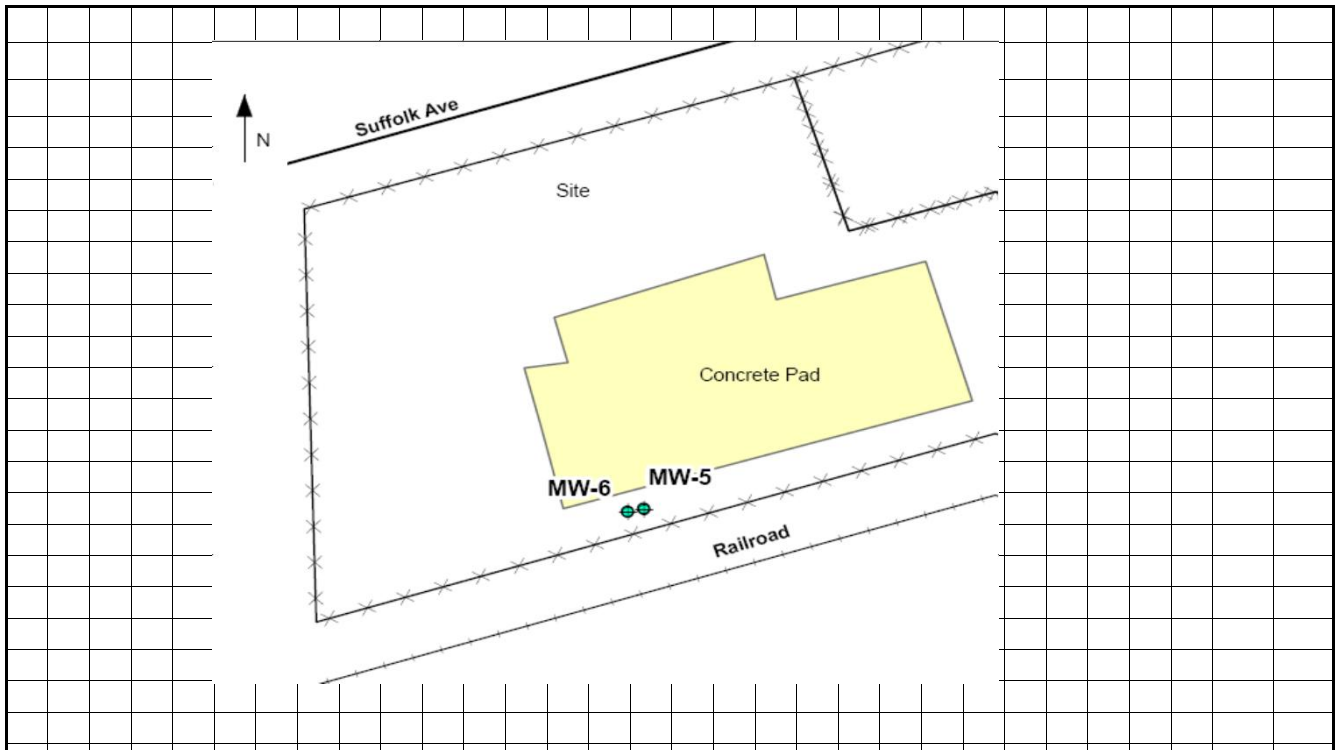
Capped area on-site. Gas station to the west of the Site. Railroad to south.

REMARKS:

Well cap is missing, needs a new one. Needs a lock.

1/4" poly bonded tubing left in well

MONITORING WELL INSPECTION LOG
SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/19/15 13:00

WELL ID.: LMW-10

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X 2,206,950.31 NYTM Y 201,798.35 See Report

PDOP Reading from Trimble pathfinder:

Satellites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)

0.0 PID

HEADSPACE READING (ppm) AND INSTRUMENT USED

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

6

YES	NO
X	
	X
	X
	X
X	

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE?

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

48.80

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

43.30

MEASURE WELL DIAMETER (Inches):

4

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

RUSTY

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig across ball fields.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

baseball field edge, grass

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

School bus parking lot, recharge Basin and railroad

REMARKS:

1/4" poly bonded tubing left in well

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/19/15 13:00

WELL ID.: LMW-16

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X 2,206,950.31 NYTM Y 201,798.35 See Report

PDOP Reading from Trimble pathfinder:

Satellites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
X	
X	

WELL I.D. VISIBLE?

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PID

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

6

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE?

YES	NO
X	
	X
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

99.1

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

43.21

MEASURE WELL DIAMETER (Inches):

2

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig across ball fields.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

baseball field edge, grass

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

School bus parking lot, recharge Basin and railroad

REMARKS:

1/4" poly bonded tubing left in well

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/19/15 13:30

WELL ID.: LMW-12

WELL VISIBLE? (If not, provide directions below)

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL COORDINATES? NYTM X 2,206,863.98 NYTM Y 201,973.43 See Report

PDOP Reading from Trimble pathfinder:

Satellites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL I.D. VISIBLE?

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

SURFACE SEAL PRESENT?

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)

0.0 PID

HEADSPACE READING (ppm) AND INSTRUMENT USED

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

6

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE?

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

49.0

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

42.52

MEASURE WELL DIAMETER (Inches):

2

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Located on the ROW along First Street on the corner of parking lot

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

Parking Lot, Street, Recharge basin across First St

REMARKS:

New bolts needed, 1/4" poly bonded tubing left in well

Well had a lot of sedimentation built up in and around the well.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/19/15 13:30

WELL ID.: LMW-14

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X 2,206,866.03 NYTM Y 201,966.33 See Report

PDOP Reading from Trimble pathfinder:

Satelites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)

0.0 PID

HEADSPACE READING (ppm) AND INSTRUMENT USED

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

6

YES	NO
X	
	X
	X
	X
X	

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE?

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

99.5

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

42.77

MEASURE WELL DIAMETER (Inches):

2

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

Cracked

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Located on the ROW along First Street on the corner of parking lot

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

Parking Lot, Street, Recharge basin across First St

REMARKS:

PVC cracked and new bolts needed, 1/4" poly bonded tubing left in well

Well had a lot of sedimentation built up in and around the well.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/19/15 11:00

WELL ID.: LMW-18

WELL VISIBLE? (If not, provide directions below)

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL COORDINATES? NYTM X 2,206,386.65 NYTM Y 202,102.30

See Report

PDOP Reading from Trimble pathfinder:

Satellites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL I.D. VISIBLE?

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

SURFACE SEAL PRESENT?

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PID

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

6

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE?

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

148.4

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

44.46

MEASURE WELL DIAMETER (Inches):

2

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Not accessible by truck mounted rig due to partly opening fence gate, trees and not enough turning radius for truck

Accessed through second gate.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Located in the grassy area behind the water tower, within fence that surrounds the recharge basin.

Due to overgrown grass, wells were located with some difficulty.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

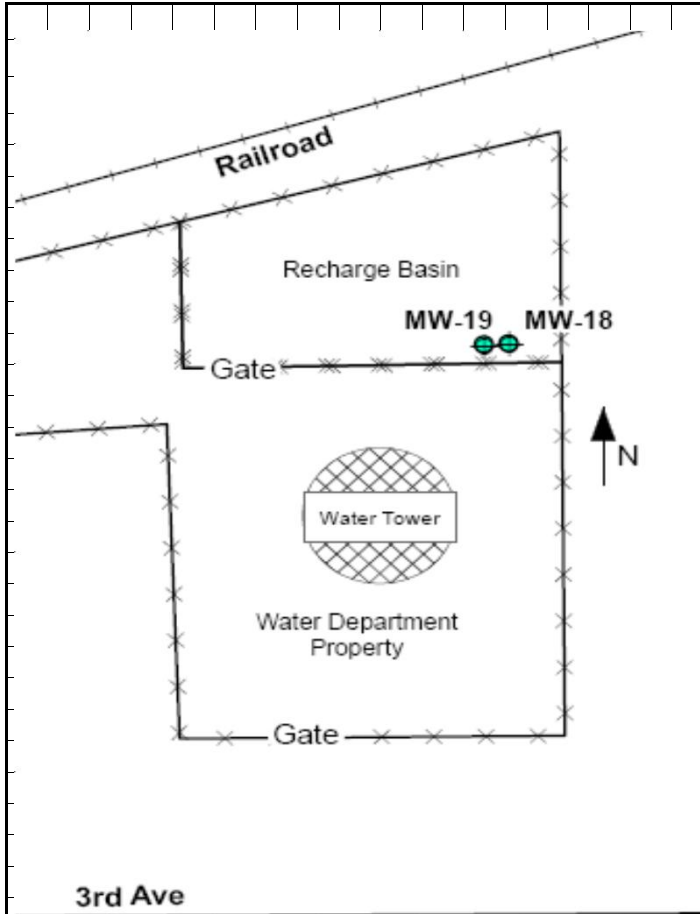
Recharge/Discharge Basin. Railroad to north.

REMARKS:

1/4" poly bonded tubing left in well

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/19/15 11:00

WELL ID.: LMW-19

WELL VISIBLE? (If not, provide directions below)

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL COORDINATES? NYTM X 2,206,373.86 NYTM Y 202,101.70 See Report

PDOP Reading from Trimble pathfinder:

Satellites:

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

SURFACE SEAL PRESENT?

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PID

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

8

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE?

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

265

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

45.2

MEASURE WELL DIAMETER (Inches):

2

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Not accessible by truck mounted rig due to partly opening fence gate, trees and not enough turning radius for truck

Accessed through second gate.

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Located in the grassy area behind the water tower, within fence that surrounds the recharge basin.

Due to overgrown grass, wells were located with some difficulty.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

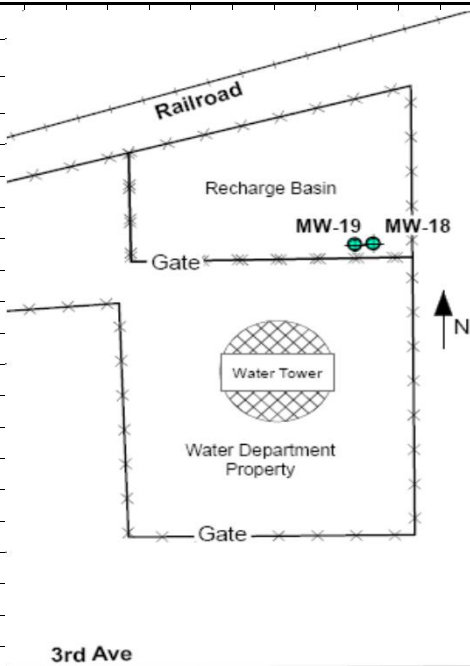
Recharge/Discharge Basin. Railroad to north.

REMARKS:

No tubing left in the well.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/19/15 13:30

WELL ID.: LMW-20

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X 2,206,946.09 NYTM Y 201,798.92 See Report

PDOP Reading from Trimble pathfinder:

Satelites:

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X
X	

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PID

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

6

LOCK PRESENT?

YES	NO
X	
	X
	X
	X
X	

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE?

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

146.8

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

41.81

MEASURE WELL DIAMETER (Inches):

2

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Grassy area in right of way along 3rd Ave

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

Road, Recharge Basin

REMARKS:

New bolts needed

1/4" poly bonded tubing left in well

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/RP

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 3/19/15 13:30

WELL ID.: LMW-21

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X 2,206,950.31 NYTM Y 201,798.35 See Report

PDOP Reading from Trimble pathfinder:

Satellites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
X	
X	

WELL I.D. VISIBLE?

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)

PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)

0.0 PID	
NA	
SS	
6	

HEADSPACE READING (ppm) AND INSTRUMENT USED

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)

PROTECTIVE CASING MATERIAL TYPE:

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

YES	NO
X	
	X
	X
	X
X	

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)

WELL MEASURING POINT VISIBLE?

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

MEASURE WELL DIAMETER (Inches):

WELL CASING MATERIAL:

PHYSICAL CONDITION OF VISIBLE WELL CASING:

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

109.50	
41.79	
2	
PVC	
GOOD	
-	
-	

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Grassy area in right of way along 3rd Ave

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

(e.g. Gas station, salt pile, etc.):

Road, Recharge Basin

REMARKS:

New bolts needed

1/4" poly bonded tubing left in well

MONITORING WELL INSPECTION LOG

SKETCH



Appendix C

Laboratory Data Summary Package

Project: Liberty

Client PO: 60277021 03.01

Report To: AECOM
100 Red School House Rd.
Suite B-1
Chestnut Ridge, NY 10977

Attn: Paul Kareth

Received Date: 3/20/2015

Report Date: 4/3/2015

Deliverables: NYDOH-CATB

Lab ID: AC83866

Lab Project No: 5032012

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.



Robin Cousineau - Quality Assurance Director

OR

Jean Revolus - Laboratory Director

NJ (07071)
PA (68-00463)

NY (ELAP11408)
KY (90124)

CT (PH-0671)





Table of Contents

SDG Narrative.....	1
Reporting Limit Definitions.....	4
Data Package Summary Forms.....	6
Chain of Custody Forms.....	126
Metal Data.....	134

SDG Narrative

HC Case Narrative

Client: AECOM
Project: Liberty

HC Project: 5032012

Hampton-Clarke (HC) received the following samples on 3/20/2015:

<u>Client ID</u>	<u>HC Sample ID</u>	<u>Matrix</u>	<u>Analysis</u>
LMW-2	AC83866-001	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-2F	AC83866-002	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-3	AC83866-003	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-3F	AC83866-004	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-4	AC83866-005	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-4F	AC83866-006	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-5	AC83866-007	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-5F	AC83866-008	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-6	AC83866-009	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-6F	AC83866-010	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-19	AC83866-011	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-19 MS	AC83866-012	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-19 MSD	AC83866-013	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-19F	AC83866-014	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-19F MS	AC83866-015	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-19F MSD	AC83866-016	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-69	AC83866-017	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-69F	AC83866-018	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-18	AC83866-019	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-18F	AC83866-020	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-10	AC83866-021	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-10F	AC83866-022	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-16	AC83866-023	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-16F	AC83866-024	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-21	AC83866-025	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-21F	AC83866-026	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-20	AC83866-027	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-20F	AC83866-028	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-12	AC83866-029	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-12F	AC83866-030	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-14	AC83866-031	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LMW-14F	AC83866-032	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LFB	AC83866-033	Aqueous	Metals (6010C/6020A), Mercury (7470A)
LFB-F	AC83866-034	Aqueous	Metals (6010C/6020A), Mercury (7470A)

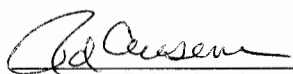
This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Metals Analysis:

Batch reset due to K failure on LCS.

The serial dilution for batches 42362 and 42363 are outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

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 has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Robin Cousineau
Quality Assurance Director

Or

Jean Revolus
Laboratory Director

4/3/2015
Date

Reporting Limit Definitions

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

MDL = Method Detection Limit

RL* = Reporting Limit

ND = Not Detected

RT = Retention Time

NA = Not Applicable

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

- B-** Indicates analyte was present in the Method Blank and sample.
- d-** For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.
- E-** Indicates the concentration exceeded the upper calibration range of the instrument.
- J-** Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

Data Package Summary Forms

HC Report of Analysis

Client: AECOM

HC Project #: 5032012

Project: Liberty

Sample ID: LMW-2

Collection Date: 3/18/2015

Lab#: AC83866-001

Receipt Date: 3/20/2015

Matrix: Aqueous

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	1200
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	16000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	1700
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	9600
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	10
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-2F
 Lab#: AC83866-002
 Matrix: Aqueous

Collection Date: 3/18/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	15000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	9700
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-3
 Lab#: AC83866-003
 Matrix: Aqueous

Collection Date: 3/18/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	1400
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	16000
Chromium	1	ug/l	50	170
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	1800
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	24000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	61

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	4.2
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	18
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-3F
 Lab#: AC83866-004
 Matrix: Aqueous

Collection Date: 3/18/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	16000
Chromium	1	ug/l	50	61
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	26000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	2.4
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-4
 Lab#: AC83866-005
 Matrix: Aqueous

Collection Date: 3/18/2015

Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	2200
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	8400
Chromium	1	ug/l	50	53
Copper	1	ug/l	50	60
Iron	1	ug/l	300	2200
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	ND
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	220

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	20
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	22
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-4F
 Lab#: AC83866-006
 Matrix: Aqueous

Collection Date: 3/18/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	8300
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	ND
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	97

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	11
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-5
 Lab#: AC83866-007
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	500
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	16000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	14000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-5F
 Lab#: AC83866-008
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	17000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	14000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-6
 Lab#: AC83866-009
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	8300
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	8600
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-6F
 Lab#: AC83866-010
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	7900
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	8400
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-19
 Lab#: AC83866-011
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	15000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	5100
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	17000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-19 MS
 Lab#: AC83866-012
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	10

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	4600
Barium	1	ug/l	50	480
Calcium	1	ug/l	5000	62000
Chromium	1	ug/l	50	460
Copper	1	ug/l	50	460
Iron	1	ug/l	300	4700
Magnesium	1	ug/l	5000	51000
Manganese	1	ug/l	40	460
Nickel	1	ug/l	50	450
Potassium	1	ug/l	5000	48000
Silver	1	ug/l	20	89
Sodium	1	ug/l	5000	66000
Vanadium	1	ug/l	50	450
Zinc	1	ug/l	50	460

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	510
Arsenic	1	ug/l	2.0	480
Beryllium	1	ug/l	1.0	520
Cadmium	1	ug/l	2.0	490
Cobalt	1	ug/l	2.0	470
Lead	1	ug/l	3.0	490
Selenium	1	ug/l	10	480
Thallium	1	ug/l	2.0	460

Sample ID: LMW-19 MSD

Lab#: AC83866-013

Matrix: Aqueous

Collection Date: 3/19/2015

Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	10

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	4500
Barium	1	ug/l	50	470
Calcium	1	ug/l	5000	59000
Chromium	1	ug/l	50	450
Copper	1	ug/l	50	460
Iron	1	ug/l	300	4600
Magnesium	1	ug/l	5000	50000
Manganese	1	ug/l	40	460
Nickel	1	ug/l	50	450
Potassium	1	ug/l	5000	47000
Silver	1	ug/l	20	88
Sodium	1	ug/l	5000	64000
Vanadium	1	ug/l	50	450
Zinc	1	ug/l	50	460

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	550
Arsenic	1	ug/l	2.0	530
Beryllium	1	ug/l	1.0	560
Cadmium	1	ug/l	2.0	530
Cobalt	1	ug/l	2.0	530
Lead	1	ug/l	3.0	530
Selenium	1	ug/l	10	540
Thallium	1	ug/l	2.0	500

Sample ID: LMW-19F
 Lab#: AC83866-014
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	13000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	16000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-19F MS
 Lab#: AC83866-015
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	9.8

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	4500
Barium	1	ug/l	50	460
Calcium	1	ug/l	5000	58000
Chromium	1	ug/l	50	440
Copper	1	ug/l	50	440
Iron	1	ug/l	300	4500
Magnesium	1	ug/l	5000	49000
Manganese	1	ug/l	40	450
Nickel	1	ug/l	50	450
Potassium	1	ug/l	5000	47000
Silver	1	ug/l	20	87
Sodium	1	ug/l	5000	59000
Vanadium	1	ug/l	50	430
Zinc	1	ug/l	50	460

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	490
Arsenic	1	ug/l	2.0	480
Beryllium	1	ug/l	1.0	480
Cadmium	1	ug/l	2.0	480
Cobalt	1	ug/l	2.0	500
Lead	1	ug/l	3.0	470
Selenium	1	ug/l	10	460
Thallium	1	ug/l	2.0	450

Sample ID: LMW-19F MSD

Lab#: AC83866-016

Matrix: Aqueous

Collection Date: 3/19/2015

Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	9.5

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	4500
Barium	1	ug/l	50	460
Calcium	1	ug/l	5000	58000
Chromium	1	ug/l	50	450
Copper	1	ug/l	50	450
Iron	1	ug/l	300	4500
Magnesium	1	ug/l	5000	49000
Manganese	1	ug/l	40	450
Nickel	1	ug/l	50	450
Potassium	1	ug/l	5000	47000
Silver	1	ug/l	20	87
Sodium	1	ug/l	5000	59000
Vanadium	1	ug/l	50	440
Zinc	1	ug/l	50	460

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	460
Arsenic	1	ug/l	2.0	460
Beryllium	1	ug/l	1.0	460
Cadmium	1	ug/l	2.0	450
Cobalt	1	ug/l	2.0	480
Lead	1	ug/l	3.0	440
Selenium	1	ug/l	10	430
Thallium	1	ug/l	2.0	420

Sample ID: LMW-69
 Lab#: AC83866-017
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	13000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	17000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-69F
 Lab#: AC83866-018
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	13000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	17000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-18
 Lab#: AC83866-019
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	18000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	950
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	19000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-18F
 Lab#: AC83866-020
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	16000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	18000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-10
 Lab#: AC83866-021
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	22000
Chromium	1	ug/l	50	92
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	410
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	12000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	42
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-10F
 Lab#: AC83866-022
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	20000
Chromium	1	ug/l	50	83
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	13000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	33
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-16
 Lab#: AC83866-023
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	180
Calcium	1	ug/l	5000	14000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	380
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	10000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	3.9
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-16F
 Lab#: AC83866-024
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	160
Calcium	1	ug/l	5000	12000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	350
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	10000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	3.4
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-21
 Lab#: AC83866-025
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	870
Barium	1	ug/l	50	68
Calcium	1	ug/l	5000	32000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	900
Magnesium	1	ug/l	5000	7600
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	37000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	78

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	7.7
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	6.8
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-21F
 Lab#: AC83866-026
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	56
Calcium	1	ug/l	5000	12000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	15000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-20
 Lab#: AC83866-027
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	2000
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	16000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	2700
Magnesium	1	ug/l	5000	7700
Manganese	1	ug/l	40	64
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	18000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	6.1
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-20F
 Lab#: AC83866-028
 Matrix: Aqueous

Collection Date: 3/19/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	13000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	6200
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	16000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-12
 Lab#: AC83866-029
 Matrix: Aqueous

Collection Date: 3/20/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	56
Calcium	1	ug/l	5000	12000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	15000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-12F
 Lab#: AC83866-030
 Matrix: Aqueous

Collection Date: 3/20/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	58
Calcium	1	ug/l	5000	29000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	6700
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	37000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	4.4
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-14
 Lab#: AC83866-031
 Matrix: Aqueous

Collection Date: 3/20/2015

Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	1500
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	9700
Chromium	1	ug/l	50	74
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	1800
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	130
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	110000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	77

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	3.5
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	14
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-14F
 Lab#: AC83866-032
 Matrix: Aqueous

Collection Date: 3/20/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	8900
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	110
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	100000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	2.4
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LFB
 Lab#: AC83866-033
 Matrix: Aqueous

Collection Date: 3/20/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	ND
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LFB-F
 Lab#: AC83866-034
 Matrix: Aqueous

Collection Date: 3/20/2015
 Receipt Date: 3/20/2015

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	ND
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-001
 Client Id: LMW-2
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7439-92-1	Lead	3.0	10	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-001
 Client Id: LMW-2
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	1200	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7439-89-6	Iron	300	1700	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	18	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	23	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-23-5	Sodium	5000	9600	1	50	50	03/27/15	42362	W17599C2	23	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-002
 Client Id: LMW-2F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-002
 Client Id: LMW-2F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	24	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	24	P	PEICP2A
7440-70-2	Calcium	5000	15000	1	50	50	03/31/15	42363	W17600F2	24	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	24	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	24	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	24	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	24	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	24	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	H17600SW	18	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	24	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	24	P	PEICP2A
7440-23-5	Sodium	5000	9700	1	50	50	03/30/15	42363	W17600E2	23	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	24	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	24	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-002
Client Id: LMW-2F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	23	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-003
 Client Id: LMW-3
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	4.2	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	18	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-003
 Client Id: LMW-3
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	1400	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-47-3	Chromium	50	170	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7439-89-6	Iron	300	1800	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	19	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	24	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-23-5	Sodium	5000	24000	1	50	50	03/27/15	42362	W17599C2	24	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-66-6	Zinc	50	61	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-004
 Client Id: LMW-3F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	2.4	1	50	100	03/30/15	42363	SW33015A	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	32	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-004
 Client Id: LMW-3F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-47-3	Chromium	50	61	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	H17600SW	19	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-23-5	Sodium	5000	26000	1	50	50	03/30/15	42363	W17600E2	24	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-004
Client Id: LMW-3F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	24	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-005
 Client Id: LMW-4
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	20	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7439-92-1	Lead	3.0	22	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-005
 Client Id: LMW-4
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	2200	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-70-2	Calcium	5000	8400	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-47-3	Chromium	50	53	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-50-8	Copper	50	60	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7439-89-6	Iron	300	2200	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	22	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	25	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	03/27/15	42362	W17599C2	25	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-66-6	Zinc	50	220	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-006
 Client Id: LMW-4F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	11	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-006
 Client Id: LMW-4F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	26	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	26	P	PEICP2A
7440-70-2	Calcium	5000	8300	1	50	50	03/31/15	42363	W17600F2	26	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	26	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	26	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	26	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	26	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	26	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	H17600SW	20	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	26	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	26	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	03/30/15	42363	W17600E2	25	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	26	P	PEICP2A
7440-66-6	Zinc	50	97	1	50	50	03/31/15	42363	W17600F2	26	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-006
Client Id: LMW-4F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	25	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-007
 Client Id: LMW-5
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-007
 Client Id: LMW-5
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	500	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	23	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	26	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	03/27/15	42362	W17599C2	26	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-008
 Client Id: LMW-5F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	34	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-008
 Client Id: LMW-5F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	27	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	27	P	PEICP2A
7440-70-2	Calcium	5000	17000	1	50	50	03/31/15	42363	W17600F2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	27	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	27	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	27	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	27	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	27	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	11	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	27	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	27	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	03/30/15	42363	W17600E2	26	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	27	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	27	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-008
Client Id: LMW-5F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	26	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-009
 Client Id: LMW-6
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-009
 Client Id: LMW-6
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-70-2	Calcium	5000	8300	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	24	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	27	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-23-5	Sodium	5000	8600	1	50	50	03/27/15	42362	W17599C2	27	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-010
 Client Id: LMW-6F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	35	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-010
 Client Id: LMW-6F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-70-2	Calcium	5000	7900	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	12	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-23-5	Sodium	5000	8400	1	50	50	03/30/15	42363	W17600E2	27	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-010
Client Id: LMW-6F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399W17600G2		27	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-011
 Client Id: LMW-19
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-011
 Client Id: LMW-19
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-70-2	Calcium	5000	15000	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7439-95-4	Magnesium	5000	5100	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	14	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	100	100	03/27/15	42362	W17599C2	14	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-23-5	Sodium	5000	17000	1	100	100	03/27/15	42362	W17599C2	14	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-012
 Client Id: LMW-19 MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	510	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	480	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	520	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	490	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	470	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7439-92-1	Lead	3.0	490	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7782-49-2	Selenium	10	480	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	460	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-012
 Client Id: LMW-19 MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	4600	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-39-3	Barium	50	480	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-70-2	Calcium	5000	62000	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-47-3	Chromium	50	460	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-50-8	Copper	50	460	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7439-89-6	Iron	300	4700	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7439-95-4	Magnesium	5000	51000	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7439-96-5	Manganese	40	460	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7439-97-6	Mercury	0.70	10	1	25	25	03/27/15	42362	H17599SW	16	CV	HGCV2A
7440-02-0	Nickel	50	450	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-09-7	Potassium	5000	48000	1	50	50	03/27/15	42362	W17599C2	16	P	PEICPRAD2A
7440-22-4	Silver	20	89	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-23-5	Sodium	5000	66000	1	50	50	03/27/15	42362	W17599C2	16	P	PEICPRAD2A
7440-62-2	Vanadium	50	450	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-66-6	Zinc	50	460	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV - ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-013
 Client Id: LMW-19 MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	550	1	50	100	04/01/15	42362	SW33115A	23		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	530	1	50	100	04/01/15	42362	SW33115A	23		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	560	1	50	100	04/01/15	42362	SW33115A	23		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	530	1	50	100	04/01/15	42362	SW33115A	23		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	530	1	50	100	04/01/15	42362	SW33115A	23		MSMS2_7500SWA
7439-92-1	Lead	3.0	530	1	50	100	04/01/15	42362	SW33115A	23		MSMS2_7500SWA
7782-49-2	Selenium	10	540	1	50	100	04/01/15	42362	SW33115A	23		MSMS2_7500SWA
7440-28-0	Thallium	2.0	500	1	50	100	04/01/15	42362	SW33115A	23		MSMS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-013
 Client Id: LMW-19 MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	4500	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-39-3	Barium	50	470	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-70-2	Calcium	5000	59000	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-47-3	Chromium	50	450	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-50-8	Copper	50	460	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7439-89-6	Iron	300	4600	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7439-95-4	Magnesium	5000	50000	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7439-96-5	Manganese	40	460	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7439-97-6	Mercury	0.70	10	1	25	25	03/27/15	42362	H17599SW	17	CV	HGCV2A
7440-02-0	Nickel	50	450	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-09-7	Potassium	5000	47000	1	50	50	03/27/15	42362	W17599C2	17	P	PEICPRAD2A
7440-22-4	Silver	20	88	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-23-5	Sodium	5000	64000	1	50	50	03/27/15	42362	W17599C2	17	P	PEICPRAD2A
7440-62-2	Vanadium	50	450	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-66-6	Zinc	50	460	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-014
 Client Id: LMW-19F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-014
 Client Id: LMW-19F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	H17600SW	14	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-22-4	Silver	20	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-23-5	Sodium	5000	16000	1	100	100	03/30/15	42363	W17600E2	14	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-014
Client Id: LMW-19F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	100	100	03/31/15	42399	W17600G2	14	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-015
 Client Id: LMW-19F MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	490	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	480	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	480	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	480	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	500	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7439-92-1	Lead	3.0	470	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7782-49-2	Selenium	10	460	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	450	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-015
 Client Id: LMW-19F MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	4500	1	50	50	03/31/15	42363	W17600F2	17	P	PEICP2A
7440-39-3	Barium	50	460	1	50	50	03/31/15	42363	W17600F2	17	P	PEICP2A
7440-70-2	Calcium	5000	58000	1	50	50	03/31/15	42363	W17600F2	17	P	PEICP2A
7440-47-3	Chromium	50	440	1	50	50	03/31/15	42363	W17600F2	17	P	PEICP2A
7440-50-8	Copper	50	440	1	50	50	03/31/15	42363	W17600F2	17	P	PEICP2A
7439-89-6	Iron	300	4500	1	50	50	03/31/15	42363	W17600F2	17	P	PEICP2A
7439-95-4	Magnesium	5000	49000	1	50	50	03/31/15	42363	W17600F2	17	P	PEICP2A
7439-96-5	Manganese	40	450	1	50	50	03/31/15	42363	W17600F2	17	P	PEICP2A
7439-97-6	Mercury	0.70	9.8	1	25	25	03/27/15	42363	H17600SW	16	CV	HGCV1A
7440-02-0	Nickel	50	450	1	50	50	03/31/15	42363	W17600F2	17	P	PEICP2A
7440-22-4	Silver	20	87	1	50	50	03/31/15	42363	W17600F2	17	P	PEICP2A
7440-23-5	Sodium	5000	59000	1	50	50	03/30/15	42363	W17600E2	16	P	PEICPRAD2A
7440-62-2	Vanadium	50	430	1	50	50	03/31/15	42363	W17600F2	17	P	PEICP2A
7440-66-6	Zinc	50	460	1	50	50	03/31/15	42363	W17600F2	17	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-015
Client Id: LMW-19F MS
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	47000	1	50	50	03/31/15	42399W17600G2		16	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-016
 Client Id: LMW-19F MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	460	1	50	100	03/30/15	42363	SW33015A	23		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	460	1	50	100	03/30/15	42363	SW33015A	23		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	460	1	50	100	03/30/15	42363	SW33015A	23		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	450	1	50	100	03/30/15	42363	SW33015A	23		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	480	1	50	100	03/30/15	42363	SW33015A	23		MSMS2_7500SWA
7439-92-1	Lead	3.0	440	1	50	100	03/30/15	42363	SW33015A	23		MSMS2_7500SWA
7782-49-2	Selenium	10	430	1	50	100	03/30/15	42363	SW33015A	23		MSMS2_7500SWA
7440-28-0	Thallium	2.0	420	1	50	100	03/30/15	42363	SW33015A	23		MSMS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV - Cold Vapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-016
 Client Id: LMW-19F MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	4500	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-39-3	Barium	50	460	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-70-2	Calcium	5000	58000	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-47-3	Chromium	50	450	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-50-8	Copper	50	450	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7439-89-6	Iron	300	4500	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7439-95-4	Magnesium	5000	49000	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7439-96-5	Manganese	40	450	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7439-97-6	Mercury	0.70	9.5	1	25	25	03/27/15	42363	H17600SW	17	CV	HGCV1A
7440-02-0	Nickel	50	450	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-22-4	Silver	20	87	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-23-5	Sodium	5000	59000	1	50	50	03/30/15	42363	W17600E2	17	P	PEICPRAD2A
7440-62-2	Vanadium	50	440	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-66-6	Zinc	50	460	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-016
Client Id: LMW-19F MSD
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	47000	1	50	50	03/31/15	42399	W17600G2	17	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-017
 Client Id: LMW-69
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-017
 Client Id: LMW-69
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	25	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	28	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-23-5	Sodium	5000	17000	1	50	50	03/27/15	42362	W17599C2	28	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-018
 Client Id: LMW-69F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-018
 Client Id: LMW-69F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	13	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-23-5	Sodium	5000	17000	1	50	50	03/30/15	42363	W17600E2	28	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-018
Client Id: LMW-69F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399W	17600G2	28	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-019
 Client Id: LMW-18
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	35	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-019
 Client Id: LMW-18
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-70-2	Calcium	5000	18000	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7439-96-5	Manganese	40	950	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	26	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599D2	11	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-23-5	Sodium	5000	19000	1	50	50	03/27/15	42362	W17599D2	11	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-020
 Client Id: LMW-18F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-020
 Client Id: LMW-18F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	35	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	35	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	03/31/15	42363	W17600F2	35	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	35	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	35	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	35	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	35	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	35	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	14	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	35	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	35	P	PEICP2A
7440-23-5	Sodium	5000	18000	1	50	50	03/30/15	42363	W17600E2	34	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	35	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	35	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-020
Client Id: LMW-18F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	34	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-021
 Client Id: LMW-10
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	42	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-021
 Client Id: LMW-10
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-70-2	Calcium	5000	22000	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-47-3	Chromium	50	92	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7439-89-6	Iron	300	410	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	27	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	35	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-23-5	Sodium	5000	12000	1	50	50	03/27/15	42362	W17599C2	35	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-022
 Client Id: LMW-10F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	42	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	42	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	42	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	33	1	50	100	03/30/15	42363	SW33015A	42	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	42	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	42	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	42	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	42	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-022
 Client Id: LMW-10F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-70-2	Calcium	5000	20000	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-47-3	Chromium	50	83	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	15	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	03/30/15	42363	W17600E2	35	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-022
Client Id: LMW-10F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399W17600G2		35	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-023
 Client Id: LMW-16
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.9	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-023
 Client Id: LMW-16
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-39-3	Barium	50	180	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7439-96-5	Manganese	40	380	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	28	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	36	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-23-5	Sodium	5000	10000	1	50	50	03/27/15	42362	W17599C2	36	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-024
 Client Id: LMW-16F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	43	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	43	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	43	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.4	1	50	100	03/30/15	42363	SW33015A	43	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	43	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	43	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	43	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	43	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-024
 Client Id: LMW-16F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-39-3	Barium	50	160	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7439-96-5	Manganese	40	350	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	16	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-23-5	Sodium	5000	10000	1	50	50	03/30/15	42363	W17600E2	36	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-024
Client Id: LMW-16F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399W17600G2		36	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-025
 Client Id: LMW-21
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	7.7	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7439-92-1	Lead	3.0	6.8	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-025
 Client Id: LMW-21
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	870	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-39-3	Barium	50	68	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-70-2	Calcium	5000	32000	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7439-89-6	Iron	300	900	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7439-95-4	Magnesium	5000	7600	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	29	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	37	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-23-5	Sodium	5000	37000	1	50	50	03/27/15	42362	W17599C2	37	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-66-6	Zinc	50	78	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-026
 Client Id: LMW-21F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363SW33015A		44	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363SW33015A		44	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363SW33015A		44	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363SW33015A		44	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363SW33015A		44	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363SW33015A		44	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363SW33015A		44	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363SW33015A		44	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-026
 Client Id: LMW-21F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	38	P	PEICP2A
7440-39-3	Barium	50	56	1	50	50	03/31/15	42363	W17600F2	38	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	03/31/15	42363	W17600F2	38	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	38	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	38	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	38	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	38	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	38	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	17	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	38	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	38	P	PEICP2A
7440-23-5	Sodium	5000	15000	1	50	50	03/30/15	42363	W17600E2	37	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	38	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	38	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-026
Client Id: LMW-21F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	37	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-027
 Client Id: LMW-20
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	43	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	43	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	43	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	43	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	43	MSMS2_7500SWA	
7439-92-1	Lead	3.0	6.1	1	50	100	04/01/15	42362	SW33115A	43	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	43	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	43	MSMS2_7500SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-027
 Client Id: LMW-20
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	2000	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7439-89-6	Iron	300	2700	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7439-95-4	Magnesium	5000	7700	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7439-96-5	Manganese	40	64	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	30	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	38	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-23-5	Sodium	5000	18000	1	50	50	03/27/15	42362	W17599C2	38	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV - ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-028
 Client Id: LMW-20F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-028
 Client Id: LMW-20F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7439-95-4	Magnesium	5000	6200	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	18	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-23-5	Sodium	5000	16000	1	50	50	03/30/15	42363	W17600E2	38	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-028
Client Id: LMW-20F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	38	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-029
 Client Id: LMW-12
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-029
 Client Id: LMW-12
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-39-3	Barium	50	56	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	33	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	39	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-23-5	Sodium	5000	15000	1	50	50	03/27/15	42362	W17599C2	39	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-030
 Client Id: LMW-12F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	46	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	46	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	46	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	4.4	1	50	100	03/30/15	42363	SW33015A	46	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	46	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	46	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	46	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	46	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-030
 Client Id: LMW-12F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-39-3	Barium	50	58	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-70-2	Calcium	5000	29000	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7439-95-4	Magnesium	5000	6700	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	19	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-23-5	Sodium	5000	37000	1	50	50	03/30/15	42363	W17600E2	39	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-030
Client Id: LMW-12F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	39	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-031
 Client Id: LMW-14
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	45		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	45		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	45		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	3.5	1	50	100	04/01/15	42362	SW33115A	45		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	45		MSMS2_7500SWA
7439-92-1	Lead	3.0	14	1	50	100	04/01/15	42362	SW33115A	45		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	45		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	45		MSMS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-031
 Client Id: LMW-14
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	1500	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-70-2	Calcium	5000	9700	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-47-3	Chromium	50	74	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7439-89-6	Iron	300	1800	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7439-96-5	Manganese	40	130	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	34	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	40	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-23-5	Sodium	5000	110000	1	50	50	03/27/15	42362	W17599C2	40	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-66-6	Zinc	50	77	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-032
 Client Id: LMW-14F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	47	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	47	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	47	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	2.4	1	50	100	03/30/15	42363	SW33015A	47	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	47	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	47	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	47	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	47	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-032
 Client Id: LMW-14F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-70-2	Calcium	5000	8900	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7439-96-5	Manganese	40	110	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	20	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-23-5	Sodium	5000	100000	1	50	50	03/30/15	42363	W17600E2	40	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-032
Client Id: LMW-14F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	40	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-033
 Client Id: LFB
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	46	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	46	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	46	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	46	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	46	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	46	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	46	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	46	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-033
 Client Id: LFB
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	35	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	41	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	03/27/15	42362	W17599C2	41	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV - ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-034
 Client Id: LFB-F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	48	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV - ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-034
 Client Id: LFB-F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	23	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	03/30/15	42363	W17600E2	41	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-034
Client Id: LFB-F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399W17600G2		41	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Chain of Custody Forms

Customer Information		Project Information	
1a) Customer: <u>AcCom</u>	2a) Project: <u>Liberty</u>	1 Business Day (100%)	Turnaround
Address: <u>100 Red Schoenberger Rd</u>	2b) Project Mgr: <u>Ravi Keshan</u>	2 Business Days (75%)	Report Type
<u>Box B-1 Chestnut Ridge, NY</u>	2c) Project Location (City/State): <u>Brentwood, NY</u>	3 Business Days (50%)	Electronic Deliv.
1b) Email/Cell/Fax/Ph: <u>Ravi.Keshan@accomm.com</u>		4 Business Days (35%)	
1c) Send Invoice to: <u>Ravi Keshan</u>		1 Week (25%)	
1d) Send Report to: <u>Ravi Keshan</u>		10 Calendar Days (10%)	
		2 Weeks	
		Other: _____	
		Expedited TAT Not Always Available. Please Check with Lab.	

FOR LAB USE ONLY	Matrix Codes DW - Drinking Water S - Soil A - Air GW - Ground Water SL - Sludge WW - Waste Water OL - Oil OT - Other (please specify under item 9, Comments)	Check If Contingent ==>		7) Analysis Request		Check If Contingent	
		Sample Type	Grab (G)				

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample	Composite (C)	Grab (G)	8) # of Bottles	9) Comments
-001	LMW-2	GW	3-18-15 1445		X	1	
-002	LMW-2F	GW	1750		X	1	
-003	LMW-3	GW	1510		X	1	
-004	LMW-3F	GW	1515		X	1	
-005	LMW-4	GW	1520		X	1	
-006	LMW-4F	GW	1555		X	1	
-007	LMW-5	GW	3-19-15 0830		X	1	
-008	LMW-5F	GW	0835		X	1	
-009	LMW-6	GW	0840		X	1	
-010	LMW-6F	GW	0845		X	1	

10) Relinquished by: _____	Accepted by: _____	Date	Time
		3/20/15	11:36
Note: Check if low-level groundwater methods required to meet current standards: BN or BNA (8270C SIM) VOC (8260B SIM or 8011)			
Note: Check if applicable: Project-Specific Reporting Limits High Contaminant Concentrations NJ LSRP Project			

Additional Notes		11) Sampler (print name): <u>Celeste Foster</u> Date: <u>3/20/15</u>
		Please note NUMBERED items. If not completed your analytical work may be delayed. A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.
		Cooler Temperature 31.2-8

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
 Ph: 800-426-9992 / 973-244-9770 Fax: 973-244-9787 / 973-439-1458
 Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
 Ph (Service Center): 856-780-6057 Fax: 856-780-6056

HC.V
 HAMPTON CLARK VENTURE
 WAREHOUSE 800-426-9992
 A Women-Owned, Disadvantaged, Small Business Enterprise

CHAIN OF CUSTODY RECORD

Page 2 of 5

3) Reporting Requirements (Please Circle)

Customer Information 1a) Customer: <u>AECOM</u> Address: <u>150 Red Bank Avenue Rd Ste 3.1 Chestnut Edge NY</u> 1b) Email/Cell/Fax/Ph: <u>Paul.Kaseth@AECOM.com</u> 1c) Send Invoice to: <u>Paul Kaseth</u> 1d) Send Report to: <u>Same</u>		Project Information 2a) Project: <u>Liberty</u> 2b) Project Mgr: <u>Paul Kaseth</u> 2c) Project Location (City/State): <u>Grantwood</u> 2d) Quote/PO # (If Applicable): <u>60277021</u>		Turnaround 1 Business Day (100%) 2 Business Days (75%) 3 Business Days (50%) 4 Business Days (35%) 1 Week (25%) 10 Calendar Days (10%) 2 Weeks Other: _____		Report Type Data Summary Results + QC (Waste) NY Reduced PA Reduced Full / Category B Category A Other: _____		Electronic Deliv. Hazle/CNV EnviroData Excel - NJ Regulatory Excel - NY Regulatory Excel - PA Regulatory EQUIS (specify below): <u>4File/2Z/NYS/Reg. 2 or 5</u> Other: _____	
---	--	--	--	--	--	---	--	---	--

Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY		Check If Contingent ==>		7) Analysis Request		8) # of Bottles		9) Comments						
Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	Time	Composite (C)	Grab (G)	None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:
-01/-012/013	LMW-19 (contaminants)	GW	3-19-15	10:20		X							3	MS/MS
014/015/-016	LMW-19 F (contaminants)	GW	3-19-15	10:25		X							3	MS/MS
-017	LMW-69	GW	3-19-15	10:30		X							1	
-018	LMW-69 F	GW	3-19-15	10:35		X							1	
-019	LMW-18			11:00		X							1	
-020	LMW-18 F			11:05		X							1	
-021	LMW-10			13:50		X							1	
-022	LMW-10 F			13:55		X							1	
-023	LMW-16			14:00		X							1	
-024	LMW-16 F			14:05		X							1	

10) Relinquished by:

Accepted by:

Date: 3/20/15 Time: 11:30

Comments, Notes, Special Requirements, HAZARDS

Note: Check if low-level groundwater methods required to meet current standards:

BN or BNA (8270C SIM)

VOC (8260B SIM or 8011)

Note: Check if applicable:

Project-Specific Reporting Limits

High Contaminant Concentrations

NJ LSRP Project

Cooler Temperature

Additional Notes

11) Sampler (print name): Celeste Foster Date: 3/20/15

Please note NUMBERED items. If not completed your analytical work may be delayed.

A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
 Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
 Service Center: 137-D Gailher Drive, Mount Laurel, New Jersey 08054
 Ph (Service Center): 856-780-6057 Fax: 856-780-6056



CHAIN OF CUSTODY
RECORD

5032012

Page 5 of 5

3) Reporting Requirements (Please Circle)

Customer Information 1a) Customer: <u>AEOM</u> Address: <u>100 Red Schoolhouse Rd</u> <u>Cheshut Ridge NY 10977</u> 1b) Email/Cell/Fax/Ph: <u>Paul.Kareth@aeom.com</u> 1c) Send Invoice to: <u>Same</u> 1d) Send Report to: <u>Same</u>		Project Information 2a) Project: <u>LIBERTY</u> 2b) Project W#: <u>PAUL KARETH</u> 2c) Project Location (City/State): <u>Bentwood NY</u> 2d) Quote/PO # (if Applicable): <u>60877021</u>		When Available: 1 Business Day (100%)* 2 Business Days (75%)* 3 Business Days (50%)* 4 Business Days (35%)* 5 Business Days (25%)* 10 Business Days (Stand.) Other: _____		Report Type Data Summary Results + QC (Waste) NY Reduced PA Reduced Full / Category B Category A Electronic (PDF) 4-File/B2/NYS/Reg. 2 or 5 Other: _____		Electronic Deliv. HazSite/CSV EnviroData Excel - NJ Regulatory Excel - NY Regulatory Excel - PA Regulatory EQUIS (specify below): Other: _____	
--	--	---	--	---	--	--	--	--	--

* Expedited TAT Not Always Available. Please Check with Lab.

AC8386

FOR LAB USE ONLY
 Batch # _____
 Matrix Codes:
 DW - Drinking Water S - Soil A - Air
 GW - Ground Water SL - Sludge
 WW - Waste Water OL - Oil
 OT - Other (Please specify under item 9, Comments)

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample		Composite (C)	Grab (G)	7) Analysis (specify methods & parameter lists)							8) # of Bottles						9) Comments
			Date	Time																

None
 MeOH
 En Core
 NaOH
 HCl
 H2SO4
 HNO3
 Other: _____

9) Comments

-025	LMW-21	GW	3/9/15	1550																
-026	LMW-21F			1555																
-027	LMW-20			1600																
-028	LMW-20F			1605																
-029	LMW-12		3/20/16	1010																
-030	LMW-12F			1015																
-031	LMW-14			1007																
-032	LMW-14F			1008																
-033	LFB			1030																
-034	LFB-F			1035																

10) Relinquished by:

Accepted by:

Date

Time

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
 BN or BNA (8270D SIM)
 VOC (8260C SIM or 8011)
 SPLP (BN, BNA, Metals)
 Check if applicable: _____

For NNU LSRP projects, indicate which standards need to be met:
 NUDEP GWQS
 NUDEP SRS
 NUDEP SPLP
 Other (specify): _____

Additional Notes

Cooler Temperature

11) Sampler (print name): Celeste Foster Date: 3/20/15

Please note NUMBERED items. If not completed your analytical work may be delayed.
 A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.

CONDITION UPON RECEIPT

Batch Number AC83866

Entered By: Frantz

Date Entered 3/20/2015 3:09:00 PM

- 1 Yes Is there a corresponding COC included with the samples?
- 2 Yes Are the samples in a container such as a cooler or Ice chest?
- 3 Yes Are the COC seals intact?
- 4 Yes Please specify the Temperature inside the container (in degC)
3.1,2.8
- 5 Yes Are the samples refrigerated (where required)/have they arrived on ice?
- 6 Yes Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
- 7 Yes Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
- 8 Yes Are all of the sample labels or numbers legible? If no specify:
- 9 Yes Do the contents match the COC? If no, specify
- 10 Yes Is there enough sample sent for the analyses listed on the COC? If no, specify:
- 11 Yes Are samples preserved correctly?
- 12 Yes Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
- 13 NA Other comments ...Specify
- 14 NA Corrective actions (Specify item number and corrective action taken).

PRESERVATION DOCUMENT

Batch Number AC83866

Entered By: Frantz

Date Entered 3/20/2015 3:10:00 PM

Lab#:	Container Siz	Container Typ	Parameter	Preservative	PH
AC83866-001	1L	P	METALS	HNO3	1
AC83866-002	1L	P	DISS-METALS	HNO3	1
AC83866-003	1L	P	METALS	HNO3	1
AC83866-004	1L	P	DISS-METALS	HNO3	1
AC83866-005	1L	P	METALS	HNO3	1
AC83866-006	1L	P	DISS-METALS	HNO3	1
AC83866-007	1L	P	METALS	HNO3	1
AC83866-008	1L	P	DISS-METALS	HNO3	1
AC83866-009	1L	P	METALS	HNO3	1
AC83866-010	1L	P	DISS-METALS	HNO3	1
AC83866-011	1L	P	METALS	HNO3	1
AC83866-012	1L	P	METALS	HNO3	1
AC83866-013	1L	P	METALS	HNO3	1
AC83866-014	1L	P	DISS-METALS	HNO3	1
AC83866-015	1L	P	DISS-METALS	HNO3	1
AC83866-016	1L	P	DISS-METALS	HNO3	1
AC83866-017	1L	P	METALS	HNO3	1
AC83866-018	1L	P	DISS-METALS	HNO3	1
AC83866-019	1L	P	METALS	HNO3	1
AC83866-020	1L	P	DISS-METALS	HNO3	1
AC83866-021	1L	P	METALS	HNO3	1
AC83866-022	1L	P	DISS-METALS	HNO3	1
AC83866-023	1L	P	METALS	HNO3	1
AC83866-024	1L	P	DISS-METALS	HNO3	1
AC83866-025	1L	P	METALS	HNO3	1
AC83866-026	1L	P	DISS-METALS	HNO3	1
AC83866-027	1L	P	METALS	HNO3	1
AC83866-028	1L	P	DISS-METALS	HNO3	1
AC83866-029	1L	P	METALS	HNO3	1
AC83866-030	1L	P	DISS-METALS	HNO3	1
AC83866-031	1L	P	METALS	HNO3	1
AC83866-032	1L	P	DISS-METALS	HNO3	1
AC83866-033	1L	P	METALS	HNO3	1
AC83866-034	1L	P	DISS-METALS	HNO3	1

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis	Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AC83866-001	03/20/15 14:45	FRAN	0	M	Received	AC83866-011	03/25/15 09:52	AM	1	A	TDWI
AC83866-001	03/20/15 15:09	FRAN	0	M	Login	AC83866-011	03/25/15 09:54	R12	1	A	NONE
AC83866-001	03/20/15 16:17	R12	2	A	NONE	AC83866-012	03/20/15 14:45	FRAN	0	M	Received
AC83866-001	03/23/15 10:24	RAMO	2	A	hg	AC83866-012	03/20/15 15:09	FRAN	0	M	Login
AC83866-001	03/23/15 10:24	RAMO	2	A	r12	AC83866-012	03/20/15 16:17	R12	1	A	NONE
AC83866-001	03/25/15 09:52	AM	2	A	TDWI	AC83866-012	03/23/15 11:46	RAMO	1	A	r12
AC83866-001	03/25/15 09:54	R12	2	A	NONE	AC83866-012	03/23/15 11:46	RAMO	1	A	hg
AC83866-002	03/20/15 14:45	FRAN	0	M	Received	AC83866-012	03/25/15 09:52	AM	1	A	TDWI
AC83866-002	03/20/15 15:09	FRAN	0	M	Login	AC83866-012	03/25/15 09:54	R12	1	A	NONE
AC83866-002	03/20/15 16:17	R12	1	A	NONE	AC83866-013	03/20/15 14:45	FRAN	0	M	Received
AC83866-002	03/25/15 09:53	AM	1	A	TDWI/HG	AC83866-013	03/20/15 15:09	FRAN	0	M	Login
AC83866-002	03/25/15 09:54	R12	1	A	NONE	AC83866-013	03/20/15 16:17	R12	1	A	NONE
AC83866-002	03/30/15 09:19	AM	1	A	TDWI	AC83866-013	03/23/15 10:24	RAMO	1	A	hg
AC83866-002	03/30/15 09:20	R12	1	A	NONE	AC83866-013	03/23/15 10:24	RAMO	1	A	r12
AC83866-003	03/20/15 14:45	FRAN	0	M	Received	AC83866-013	03/25/15 09:52	AM	1	A	TDWI
AC83866-003	03/20/15 15:09	FRAN	0	M	Login	AC83866-013	03/25/15 09:54	R12	1	A	NONE
AC83866-003	03/20/15 16:17	R12	1	A	NONE	AC83866-014	03/20/15 14:45	FRAN	0	M	Received
AC83866-003	03/23/15 10:24	RAMO	1	A	r12	AC83866-014	03/20/15 15:09	FRAN	0	M	Login
AC83866-003	03/23/15 10:24	RAMO	1	A	hg	AC83866-014	03/20/15 16:17	R12	1	A	NONE
AC83866-003	03/25/15 09:52	AM	1	A	TDWI	AC83866-014	03/25/15 09:53	AM	1	A	TDWI/HG
AC83866-003	03/25/15 09:54	R12	1	A	NONE	AC83866-014	03/25/15 09:54	R12	1	A	NONE
AC83866-004	03/20/15 14:45	FRAN	0	M	Received	AC83866-014	03/30/15 09:19	AM	1	A	TDWI
AC83866-004	03/20/15 15:09	FRAN	0	M	Login	AC83866-014	03/30/15 09:20	R12	1	A	NONE
AC83866-004	03/20/15 16:17	R12	1	A	NONE	AC83866-015	03/20/15 14:45	FRAN	0	M	Received
AC83866-004	03/25/15 09:53	AM	1	A	TDWI/HG	AC83866-015	03/20/15 15:09	FRAN	0	M	Login
AC83866-004	03/25/15 09:54	R12	1	A	NONE	AC83866-015	03/20/15 16:17	R12	1	A	NONE
AC83866-004	03/30/15 09:19	AM	1	A	TDWI	AC83866-015	03/23/15 10:24	RAMO	1	A	r12
AC83866-004	03/30/15 09:20	R12	1	A	NONE	AC83866-015	03/23/15 10:24	RAMO	1	A	hg
AC83866-005	03/20/15 14:45	FRAN	0	M	Received	AC83866-015	03/25/15 09:53	AM	1	A	TDWI/HG
AC83866-005	03/20/15 15:09	FRAN	0	M	Login	AC83866-015	03/25/15 09:54	R12	1	A	NONE
AC83866-005	03/20/15 16:17	R12	1	A	NONE	AC83866-015	03/30/15 09:19	AM	1	A	TDWI
AC83866-005	03/23/15 10:24	RAMO	1	A	hg	AC83866-015	03/30/15 09:20	R12	1	A	NONE
AC83866-005	03/23/15 10:24	RAMO	1	A	r12	AC83866-016	03/20/15 14:45	FRAN	0	M	Received
AC83866-005	03/25/15 09:52	AM	1	A	TDWI	AC83866-016	03/20/15 15:09	FRAN	0	M	Login
AC83866-005	03/25/15 09:54	R12	1	A	NONE	AC83866-016	03/20/15 16:17	R12	1	A	NONE
AC83866-006	03/20/15 14:45	FRAN	0	M	Received	AC83866-016	03/25/15 09:53	AM	1	A	TDWI/HG
AC83866-006	03/20/15 15:09	FRAN	0	M	Login	AC83866-016	03/25/15 09:54	R12	1	A	NONE
AC83866-006	03/20/15 16:17	R12	1	A	NONE	AC83866-016	03/30/15 09:19	AM	1	A	TDWI
AC83866-006	03/25/15 09:53	AM	1	A	TDWI/HG	AC83866-016	03/30/15 09:20	R12	1	A	NONE
AC83866-006	03/25/15 09:54	R12	1	A	NONE	AC83866-017	03/20/15 14:45	FRAN	0	M	Received
AC83866-006	03/30/15 09:19	AM	1	A	TDWI	AC83866-017	03/20/15 15:09	FRAN	0	M	Login
AC83866-006	03/30/15 09:20	R12	1	A	NONE	AC83866-017	03/20/15 16:17	R12	1	A	NONE
AC83866-007	03/20/15 14:45	FRAN	0	M	Received	AC83866-017	03/23/15 10:24	RAMO	1	A	hg
AC83866-007	03/20/15 15:09	FRAN	0	M	Login	AC83866-017	03/23/15 10:24	RAMO	1	A	r12
AC83866-007	03/20/15 16:17	R12	1	A	NONE	AC83866-017	03/25/15 09:52	AM	1	A	TDWI
AC83866-007	03/23/15 10:24	RAMO	1	A	r12	AC83866-017	03/25/15 09:54	R12	1	A	NONE
AC83866-007	03/23/15 10:24	RAMO	1	A	hg	AC83866-018	03/20/15 14:45	FRAN	0	M	Received
AC83866-007	03/25/15 09:52	AM	1	A	TDWI	AC83866-018	03/20/15 15:09	FRAN	0	M	Login
AC83866-007	03/25/15 09:54	R12	1	A	NONE	AC83866-018	03/20/15 16:17	R12	1	A	NONE
AC83866-008	03/20/15 14:45	FRAN	0	M	Received	AC83866-018	03/25/15 09:53	AM	1	A	TDWI/HG
AC83866-008	03/20/15 15:09	FRAN	0	M	Login	AC83866-018	03/25/15 09:54	R12	1	A	NONE
AC83866-008	03/20/15 16:17	R12	1	A	NONE	AC83866-018	03/30/15 09:19	AM	1	A	TDWI
AC83866-008	03/25/15 09:53	AM	1	A	TDWI/HG	AC83866-018	03/30/15 09:20	R12	1	A	NONE
AC83866-008	03/25/15 09:54	R12	1	A	NONE	AC83866-019	03/20/15 14:45	FRAN	0	M	Received
AC83866-008	03/30/15 09:19	AM	1	A	TDWI	AC83866-019	03/20/15 15:09	FRAN	0	M	Login
AC83866-008	03/30/15 09:20	R12	1	A	NONE	AC83866-019	03/20/15 16:17	R12	1	A	NONE
AC83866-009	03/20/15 14:45	FRAN	0	M	Received	AC83866-019	03/23/15 10:24	RAMO	1	A	r12
AC83866-009	03/20/15 15:09	FRAN	0	M	Login	AC83866-019	03/23/15 10:24	RAMO	1	A	hg
AC83866-009	03/20/15 16:17	R12	1	A	NONE	AC83866-019	03/25/15 09:52	AM	1	A	TDWI
AC83866-009	03/23/15 10:24	RAMO	1	A	hg	AC83866-019	03/25/15 09:54	R12	1	A	NONE
AC83866-009	03/23/15 10:24	RAMO	1	A	r12	AC83866-020	03/20/15 14:45	FRAN	0	M	Received
AC83866-009	03/25/15 09:52	AM	1	A	TDWI	AC83866-020	03/20/15 15:09	FRAN	0	M	Login
AC83866-009	03/25/15 09:54	R12	1	A	NONE	AC83866-020	03/20/15 16:17	R12	1	A	NONE
AC83866-010	03/20/15 14:45	FRAN	0	M	Received	AC83866-020	03/25/15 09:53	AM	1	A	TDWI/HG
AC83866-010	03/20/15 15:09	FRAN	0	M	Login	AC83866-020	03/25/15 09:54	R12	1	A	NONE
AC83866-010	03/20/15 16:17	R12	1	A	NONE	AC83866-020	03/30/15 09:19	AM	1	A	TDWI
AC83866-010	03/25/15 09:53	AM	1	A	TDWI/HG	AC83866-020	03/30/15 09:20	R12	1	A	NONE
AC83866-010	03/25/15 09:54	R12	1	A	NONE	AC83866-021	03/20/15 14:45	FRAN	0	M	Received
AC83866-010	03/30/15 09:19	AM	1	A	TDWI	AC83866-021	03/20/15 15:09	FRAN	0	M	Login
AC83866-010	03/30/15 09:20	R12	1	A	NONE	AC83866-021	03/20/15 16:17	R12	1	A	NONE
AC83866-011	03/20/15 14:45	FRAN	0	M	Received	AC83866-021	03/23/15 10:24	RAMO	1	A	hg
AC83866-011	03/20/15 15:09	FRAN	0	M	Login	AC83866-021	03/23/15 10:24	RAMO	1	A	r12
AC83866-011	03/20/15 16:17	R12	1	A	NONE	AC83866-021	03/25/15 09:52	AM	1	A	TDWI
AC83866-011	03/23/15 10:24	RAMO	1	A	hg	AC83866-021	03/25/15 09:54	R12	1	A	NONE
AC83866-011	03/23/15 10:24	RAMO	1	A	r12	AC83866-022	03/20/15 14:45	FRAN	0	M	Received

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis	Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AC83866-022	03/20/15 15:09	FRAN	0	M	Login	AC83866-032	03/30/15 09:20	R12	1	A	NONE
AC83866-022	03/20/15 16:17	R12	1	A	NONE	AC83866-033	03/20/15 14:45	FRAN	0	M	Received
AC83866-022	03/25/15 09:53	AM	1	A	TDWI/HG	AC83866-033	03/20/15 15:09	FRAN	0	M	Login
AC83866-022	03/25/15 09:54	R12	1	A	NONE	AC83866-033	03/20/15 16:17	R12	1	A	NONE
AC83866-022	03/30/15 09:19	AM	1	A	TDWI	AC83866-033	03/23/15 10:24	RAMO	1	A	hg
AC83866-022	03/30/15 09:20	R12	1	A	NONE	AC83866-033	03/23/15 10:24	RAMO	1	A	r12
AC83866-023	03/20/15 14:45	FRAN	0	M	Received	AC83866-033	03/25/15 09:52	AM	1	A	TDWI
AC83866-023	03/20/15 15:09	FRAN	0	M	Login	AC83866-033	03/25/15 09:54	R12	1	A	NONE
AC83866-023	03/20/15 16:17	R12	1	A	NONE	AC83866-034	03/20/15 14:45	FRAN	0	M	Received
AC83866-023	03/23/15 10:24	RAMO	1	A	hg	AC83866-034	03/20/15 15:09	FRAN	0	M	Login
AC83866-023	03/23/15 10:24	RAMO	1	A	r12	AC83866-034	03/20/15 16:17	R12	1	A	NONE
AC83866-023	03/25/15 09:52	AM	1	A	TDWI	AC83866-034	03/25/15 09:53	AM	1	A	TDWI/HG
AC83866-023	03/25/15 09:54	R12	1	A	NONE	AC83866-034	03/25/15 09:54	R12	1	A	NONE
AC83866-024	03/20/15 14:45	FRAN	0	M	Received	AC83866-034	03/30/15 09:19	AM	1	A	TDWI
AC83866-024	03/20/15 15:09	FRAN	0	M	Login	AC83866-034	03/30/15 09:20	R12	1	A	NONE
AC83866-024	03/20/15 16:17	R12	1	A	NONE						
AC83866-024	03/25/15 09:53	AM	1	A	TDWI/HG						
AC83866-024	03/25/15 09:54	R12	1	A	NONE						
AC83866-024	03/30/15 09:19	AM	1	A	TDWI						
AC83866-024	03/30/15 09:20	R12	1	A	NONE						
AC83866-025	03/20/15 14:45	FRAN	0	M	Received						
AC83866-025	03/20/15 15:09	FRAN	0	M	Login						
AC83866-025	03/20/15 16:17	R12	1	A	NONE						
AC83866-025	03/23/15 10:24	RAMO	1	A	hg						
AC83866-025	03/23/15 10:24	RAMO	1	A	r12						
AC83866-025	03/25/15 09:52	AM	1	A	TDWI						
AC83866-025	03/25/15 09:54	R12	1	A	NONE						
AC83866-026	03/20/15 14:45	FRAN	0	M	Received						
AC83866-026	03/20/15 15:09	FRAN	0	M	Login						
AC83866-026	03/20/15 16:17	R12	1	A	NONE						
AC83866-026	03/25/15 09:53	AM	1	A	TDWI/HG						
AC83866-026	03/25/15 09:54	R12	1	A	NONE						
AC83866-026	03/30/15 09:19	AM	1	A	TDWI						
AC83866-026	03/30/15 09:20	R12	1	A	NONE						
AC83866-027	03/20/15 14:45	FRAN	0	M	Received						
AC83866-027	03/20/15 15:09	FRAN	0	M	Login						
AC83866-027	03/20/15 16:17	R12	1	A	NONE						
AC83866-027	03/23/15 10:24	RAMO	1	A	hg						
AC83866-027	03/23/15 10:24	RAMO	1	A	r12						
AC83866-027	03/25/15 09:52	AM	1	A	TDWI						
AC83866-027	03/25/15 09:54	R12	1	A	NONE						
AC83866-028	03/20/15 14:45	FRAN	0	M	Received						
AC83866-028	03/20/15 15:09	FRAN	0	M	Login						
AC83866-028	03/20/15 16:17	R12	1	A	NONE						
AC83866-028	03/25/15 09:53	AM	1	A	TDWI/HG						
AC83866-028	03/25/15 09:54	R12	1	A	NONE						
AC83866-028	03/30/15 09:19	AM	1	A	TDWI						
AC83866-028	03/30/15 09:20	R12	1	A	NONE						
AC83866-029	03/20/15 14:45	FRAN	0	M	Received						
AC83866-029	03/20/15 15:09	FRAN	0	M	Login						
AC83866-029	03/20/15 16:17	R12	1	A	NONE						
AC83866-029	03/23/15 10:24	RAMO	1	A	hg						
AC83866-029	03/23/15 10:24	RAMO	1	A	r12						
AC83866-029	03/25/15 09:52	AM	1	A	TDWI						
AC83866-029	03/25/15 09:54	R12	1	A	NONE						
AC83866-030	03/20/15 14:45	FRAN	0	M	Received						
AC83866-030	03/20/15 15:09	FRAN	0	M	Login						
AC83866-030	03/20/15 16:17	R12	1	A	NONE						
AC83866-030	03/25/15 09:53	AM	1	A	TDWI/HG						
AC83866-030	03/25/15 09:54	R12	1	A	NONE						
AC83866-030	03/30/15 09:19	AM	1	A	TDWI						
AC83866-030	03/30/15 09:20	R12	1	A	NONE						
AC83866-031	03/20/15 14:45	FRAN	0	M	Received						
AC83866-031	03/20/15 15:09	FRAN	0	M	Login						
AC83866-031	03/20/15 16:17	R12	1	A	NONE						
AC83866-031	03/23/15 10:24	RAMO	1	A	hg						
AC83866-031	03/23/15 10:24	RAMO	1	A	r12						
AC83866-031	03/25/15 09:52	AM	1	A	TDWI						
AC83866-031	03/25/15 09:54	R12	1	A	NONE						
AC83866-032	03/20/15 14:45	FRAN	0	M	Received						
AC83866-032	03/20/15 15:09	FRAN	0	M	Login						
AC83866-032	03/20/15 16:17	R12	1	A	NONE						
AC83866-032	03/25/15 09:53	AM	1	A	TDWI/HG						
AC83866-032	03/25/15 09:54	R12	1	A	NONE						
AC83866-032	03/30/15 09:19	AM	1	A	TDWI						

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Metal Data

Metal Data
Sample Data

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-001
 Client Id: LMW-2
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7439-92-1	Lead	3.0	10	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	29	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-001
 Client Id: LMW-2
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	1200	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7439-89-6	Iron	300	1700	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	18	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	23	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-23-5	Sodium	5000	9600	1	50	50	03/27/15	42362	W17599C2	23	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599A2	24	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-002
 Client Id: LMW-2F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	30	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-002
 Client Id: LMW-2F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363;W17600F2		24	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363;W17600F2		24	P	PEICP2A
7440-70-2	Calcium	5000	15000	1	50	50	03/31/15	42363;W17600F2		24	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363;W17600F2		24	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363;W17600F2		24	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363;W17600F2		24	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363;W17600F2		24	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363;W17600F2		24	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363;H17600SW		18	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363;W17600F2		24	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363;W17600F2		24	P	PEICP2A
7440-23-5	Sodium	5000	9700	1	50	50	03/30/15	42363;W17600E2		23	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363;W17600F2		24	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363;W17600F2		24	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-002
Client Id: LMW-2F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	23	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-003
 Client Id: LMW-3
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	4.2	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	18	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	30	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-003
 Client Id: LMW-3
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	1400	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-47-3	Chromium	50	170	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7439-89-6	Iron	300	1800	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	19	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	24	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-23-5	Sodium	5000	24000	1	50	50	03/27/15	42362	W17599C2	24	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A
7440-66-6	Zinc	50	61	1	50	50	03/26/15	42362	W17599A2	25	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-004
 Client Id: LMW-3F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	32		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	32		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	32		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	2.4	1	50	100	03/30/15	42363	SW33015A	32		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	32		MSMS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	32		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	32		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	32		MSMS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-004
 Client Id: LMW-3F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-47-3	Chromium	50	61	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	H17600SW	19	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-23-5	Sodium	5000	26000	1	50	50	03/30/15	42363	W17600E2	24	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	25	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-004
Client Id: LMW-3F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	24	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-005
 Client Id: LMW-4
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	20	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7439-92-1	Lead	3.0	22	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	31	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-005
 Client Id: LMW-4
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	2200	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-70-2	Calcium	5000	8400	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-47-3	Chromium	50	53	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-50-8	Copper	50	60	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7439-89-6	Iron	300	2200	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	22	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	25	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	03/27/15	42362	W17599C2	25	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A
7440-66-6	Zinc	50	220	1	50	50	03/26/15	42362	W17599A2	26	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-006
 Client Id: LMW-4F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	11	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	33	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-006
 Client Id: LMW-4F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363;W17600F2		26	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363;W17600F2		26	P	PEICP2A
7440-70-2	Calcium	5000	8300	1	50	50	03/31/15	42363;W17600F2		26	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363;W17600F2		26	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363;W17600F2		26	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363;W17600F2		26	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363;W17600F2		26	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363;W17600F2		26	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363;H17600SW		20	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363;W17600F2		26	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363;W17600F2		26	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	03/30/15	42363;W17600E2		25	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363;W17600F2		26	P	PEICP2A
7440-66-6	Zinc	50	97	1	50	50	03/31/15	42363;W17600F2		26	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-006
Client Id: LMW-4F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	25	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-007
 Client Id: LMW-5
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	32	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-007
 Client Id: LMW-5
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	500	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	23	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	26	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	03/27/15	42362	W17599C2	26	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599A2	27	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-008
 Client Id: LMW-5F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	34	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	34	MSMS2_7500SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-008
 Client Id: LMW-5F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363;W17600F2		27	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363;W17600F2		27	P	PEICP2A
7440-70-2	Calcium	5000	17000	1	50	50	03/31/15	42363;W17600F2		27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363;W17600F2		27	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363;W17600F2		27	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363;W17600F2		27	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363;W17600F2		27	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363;W17600F2		27	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363;17600SWB		11	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363;W17600F2		27	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363;W17600F2		27	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	03/30/15	42363;W17600E2		26	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363;W17600F2		27	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363;W17600F2		27	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-008
Client Id: LMW-5F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399W17600G2		26	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-009
 Client Id: LMW-6
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	33	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-009
 Client Id: LMW-6
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-70-2	Calcium	5000	8300	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	24	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	27	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-23-5	Sodium	5000	8600	1	50	50	03/27/15	42362	W17599C2	27	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599A2	28	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-010
 Client Id: LMW-6F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	35	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	35	MSMS2_7500SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-010
 Client Id: LMW-6F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-70-2	Calcium	5000	7900	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	12	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-23-5	Sodium	5000	8400	1	50	50	03/30/15	42363	W17600E2	27	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	28	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-010
Client Id: LMW-6F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	27	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-011
 Client Id: LMW-19
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	04/01/15	42362	SW33115A	19	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-011
 Client Id: LMW-19
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-70-2	Calcium	5000	15000	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7439-95-4	Magnesium	5000	5100	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	14	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	100	100	03/27/15	42362	W17599C2	14	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-23-5	Sodium	5000	17000	1	100	100	03/27/15	42362	W17599C2	14	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	03/26/15	42362	W17599A2	15	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-012
 Client Id: LMW-19 MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	510	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	480	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	520	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	490	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	470	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7439-92-1	Lead	3.0	490	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7782-49-2	Selenium	10	480	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	460	1	50	100	04/01/15	42362	SW33115A	22	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-012
 Client Id: LMW-19 MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	4600	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-39-3	Barium	50	480	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-70-2	Calcium	5000	62000	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-47-3	Chromium	50	460	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-50-8	Copper	50	460	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7439-89-6	Iron	300	4700	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7439-95-4	Magnesium	5000	51000	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7439-96-5	Manganese	40	460	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7439-97-6	Mercury	0.70	10	1	25	25	03/27/15	42362	H17599SW	16	CV	HGCV2A
7440-02-0	Nickel	50	450	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-09-7	Potassium	5000	48000	1	50	50	03/27/15	42362	W17599C2	16	P	PEICPRAD2A
7440-22-4	Silver	20	89	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-23-5	Sodium	5000	66000	1	50	50	03/27/15	42362	W17599C2	16	P	PEICPRAD2A
7440-62-2	Vanadium	50	450	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A
7440-66-6	Zinc	50	460	1	50	50	03/26/15	42362	W17599A2	17	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-013
 Client Id: LMW-19 MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	550	1	50	100	04/01/15	42362	SW33115A	23	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	530	1	50	100	04/01/15	42362	SW33115A	23	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	560	1	50	100	04/01/15	42362	SW33115A	23	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	530	1	50	100	04/01/15	42362	SW33115A	23	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	530	1	50	100	04/01/15	42362	SW33115A	23	MS	MS2_7500SWA
7439-92-1	Lead	3.0	530	1	50	100	04/01/15	42362	SW33115A	23	MS	MS2_7500SWA
7782-49-2	Selenium	10	540	1	50	100	04/01/15	42362	SW33115A	23	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	500	1	50	100	04/01/15	42362	SW33115A	23	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-013
 Client Id: LMW-19 MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	4500	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-39-3	Barium	50	470	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-70-2	Calcium	5000	59000	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-47-3	Chromium	50	450	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-50-8	Copper	50	460	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7439-89-6	Iron	300	4600	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7439-95-4	Magnesium	5000	50000	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7439-96-5	Manganese	40	460	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7439-97-6	Mercury	0.70	10	1	25	25	03/27/15	42362	H17599SW	17	CV	HGCV2A
7440-02-0	Nickel	50	450	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-09-7	Potassium	5000	47000	1	50	50	03/27/15	42362	W17599C2	17	P	PEICPRAD2A
7440-22-4	Silver	20	88	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-23-5	Sodium	5000	64000	1	50	50	03/27/15	42362	W17599C2	17	P	PEICPRAD2A
7440-62-2	Vanadium	50	450	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A
7440-66-6	Zinc	50	460	1	50	50	03/26/15	42362	W17599A2	18	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-014
 Client Id: LMW-19F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	03/30/15	42363	SW33015A	19	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-014
 Client Id: LMW-19F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	H17600SW	14	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-22-4	Silver	20	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-23-5	Sodium	5000	16000	1	100	100	03/30/15	42363	W17600E2	14	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	03/31/15	42363	W17600F2	15	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-014
Client Id: LMW-19F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	100	100	03/31/15	42399	W17600G2	14	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV - ColdVapor
MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-015
 Client Id: LMW-19F MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	490	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	480	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	480	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	480	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	500	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7439-92-1	Lead	3.0	470	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7782-49-2	Selenium	10	460	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	450	1	50	100	03/30/15	42363	SW33015A	22	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-015
 Client Id: LMW-19F MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	4500	1	50	50	03/31/15	42363;W17600F2		17	P	PEICP2A
7440-39-3	Barium	50	460	1	50	50	03/31/15	42363;W17600F2		17	P	PEICP2A
7440-70-2	Calcium	5000	58000	1	50	50	03/31/15	42363;W17600F2		17	P	PEICP2A
7440-47-3	Chromium	50	440	1	50	50	03/31/15	42363;W17600F2		17	P	PEICP2A
7440-50-8	Copper	50	440	1	50	50	03/31/15	42363;W17600F2		17	P	PEICP2A
7439-89-6	Iron	300	4500	1	50	50	03/31/15	42363;W17600F2		17	P	PEICP2A
7439-95-4	Magnesium	5000	49000	1	50	50	03/31/15	42363;W17600F2		17	P	PEICP2A
7439-96-5	Manganese	40	450	1	50	50	03/31/15	42363;W17600F2		17	P	PEICP2A
7439-97-6	Mercury	0.70	9.8	1	25	25	03/27/15	42363;H17600SW		16	CV	HGCV1A
7440-02-0	Nickel	50	450	1	50	50	03/31/15	42363;W17600F2		17	P	PEICP2A
7440-22-4	Silver	20	87	1	50	50	03/31/15	42363;W17600F2		17	P	PEICP2A
7440-23-5	Sodium	5000	59000	1	50	50	03/30/15	42363;W17600E2		16	P	PEICPRAD2A
7440-62-2	Vanadium	50	430	1	50	50	03/31/15	42363;W17600F2		17	P	PEICP2A
7440-66-6	Zinc	50	460	1	50	50	03/31/15	42363;W17600F2		17	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-015
Client Id: LMW-19F MS
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	47000	1	50	50	03/31/15	42399	W17600G2	16	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-016
 Client Id: LMW-19F MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	460	1	50	100	03/30/15	42363 SW33015A		23	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	460	1	50	100	03/30/15	42363 SW33015A		23	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	460	1	50	100	03/30/15	42363 SW33015A		23	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	450	1	50	100	03/30/15	42363 SW33015A		23	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	480	1	50	100	03/30/15	42363 SW33015A		23	MS	MS2_7500SWA
7439-92-1	Lead	3.0	440	1	50	100	03/30/15	42363 SW33015A		23	MS	MS2_7500SWA
7782-49-2	Selenium	10	430	1	50	100	03/30/15	42363 SW33015A		23	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	420	1	50	100	03/30/15	42363 SW33015A		23	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-016
 Client Id: LMW-19F MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	4500	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-39-3	Barium	50	460	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-70-2	Calcium	5000	58000	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-47-3	Chromium	50	450	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-50-8	Copper	50	450	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7439-89-6	Iron	300	4500	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7439-95-4	Magnesium	5000	49000	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7439-96-5	Manganese	40	450	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7439-97-6	Mercury	0.70	9.5	1	25	25	03/27/15	42363	H17600SW	17	CV	HGCV1A
7440-02-0	Nickel	50	450	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-22-4	Silver	20	87	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-23-5	Sodium	5000	59000	1	50	50	03/30/15	42363	W17600E2	17	P	PEICPRAD2A
7440-62-2	Vanadium	50	440	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A
7440-66-6	Zinc	50	460	1	50	50	03/31/15	42363	W17600F2	18	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC83866-016	% Solid:	0	Lab Name:	Veritech	Nras No:
Client Id:	LMW-19F MSD	Units:	UG/L	Lab Code:		Sdg No:
Matrix:	AQUEOUS	Date Rec:	3/20/2015	Contract:		Case No:
Level:	LOW					

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	47000	1	50	50	03/31/15	42399	W17600G2	17	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-017
 Client Id: LMW-69
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	34	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-017
 Client Id: LMW-69
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	25	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	28	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-23-5	Sodium	5000	17000	1	50	50	03/27/15	42362	W17599C2	28	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599A2	29	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-018
 Client Id: LMW-69F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	36	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-018
 Client Id: LMW-69F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	13	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-23-5	Sodium	5000	17000	1	50	50	03/30/15	42363	W17600E2	28	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	29	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-018
Client Id: LMW-69F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	28	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-019
 Client Id: LMW-18
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	35	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	35	MSMS2_7500SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-019
 Client Id: LMW-18
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-70-2	Calcium	5000	18000	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7439-96-5	Manganese	40	950	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	26	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599D2	11	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-23-5	Sodium	5000	19000	1	50	50	03/27/15	42362	W17599D2	11	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599B2	12	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-020
 Client Id: LMW-18F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	37	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-020
 Client Id: LMW-18F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363;W17600F2		35	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363;W17600F2		35	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	03/31/15	42363;W17600F2		35	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363;W17600F2		35	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363;W17600F2		35	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363;W17600F2		35	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363;W17600F2		35	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363;W17600F2		35	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363;17600SWB		14	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363;W17600F2		35	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363;W17600F2		35	P	PEICP2A
7440-23-5	Sodium	5000	18000	1	50	50	03/30/15	42363;W17600E2		34	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363;W17600F2		35	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363;W17600F2		35	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-020
Client Id: LMW-18F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	34	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-021
 Client Id: LMW-10
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	42	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	36	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-021
 Client Id: LMW-10
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-70-2	Calcium	5000	22000	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-47-3	Chromium	50	92	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7439-89-6	Iron	300	410	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	27	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	35	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-23-5	Sodium	5000	12000	1	50	50	03/27/15	42362	W17599C2	35	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599B2	13	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV - ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-022
 Client Id: LMW-10F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	42	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	42	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	42	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	33	1	50	100	03/30/15	42363	SW33015A	42	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	42	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	42	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	42	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	42	MSMS2_7500SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-022
 Client Id: LMW-10F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-70-2	Calcium	5000	20000	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-47-3	Chromium	50	83	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	15	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	03/30/15	42363	W17600E2	35	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	36	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-022
Client Id: LMW-10F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	35	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-023
 Client Id: LMW-16
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.9	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	37	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-023
 Client Id: LMW-16
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-39-3	Barium	50	180	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7439-96-5	Manganese	40	380	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	28	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	36	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-23-5	Sodium	5000	10000	1	50	50	03/27/15	42362	W17599C2	36	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599B2	14	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-024
 Client Id: LMW-16F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	43	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	43	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	43	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	3.4	1	50	100	03/30/15	42363	SW33015A	43	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	43	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	43	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	43	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	43	MSMS2_7500SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-024
 Client Id: LMW-16F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-39-3	Barium	50	160	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7439-96-5	Manganese	40	350	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	16	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-23-5	Sodium	5000	10000	1	50	50	03/30/15	42363	W17600E2	36	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	37	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-024
Client Id: LMW-16F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	36	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-025
 Client Id: LMW-21
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	7.7	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7439-92-1	Lead	3.0	6.8	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	42	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-025
 Client Id: LMW-21
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	870	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-39-3	Barium	50	68	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-70-2	Calcium	5000	32000	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7439-89-6	Iron	300	900	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7439-95-4	Magnesium	5000	7600	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	29	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	37	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-23-5	Sodium	5000	37000	1	50	50	03/27/15	42362	W17599C2	37	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A
7440-66-6	Zinc	50	78	1	50	50	03/26/15	42362	W17599B2	15	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-026
 Client Id: LMW-21F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363SW33015A		44		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363SW33015A		44		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363SW33015A		44		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363SW33015A		44		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363SW33015A		44		MSMS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363SW33015A		44		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363SW33015A		44		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363SW33015A		44		MSMS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-026
 Client Id: LMW-21F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363;W17600F2		38	P	PEICP2A
7440-39-3	Barium	50	56	1	50	50	03/31/15	42363;W17600F2		38	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	03/31/15	42363;W17600F2		38	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363;W17600F2		38	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363;W17600F2		38	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363;W17600F2		38	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363;W17600F2		38	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363;W17600F2		38	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363;17600SWB		17	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363;W17600F2		38	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363;W17600F2		38	P	PEICP2A
7440-23-5	Sodium	5000	15000	1	50	50	03/30/15	42363;W17600E2		37	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363;W17600F2		38	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363;W17600F2		38	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-026
Client Id: LMW-21F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	37	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-027
 Client Id: LMW-20
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	43	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	43	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	43	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	43	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	43	MS	MS2_7500SWA
7439-92-1	Lead	3.0	6.1	1	50	100	04/01/15	42362	SW33115A	43	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	43	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	43	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-027
 Client Id: LMW-20
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	2000	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7439-89-6	Iron	300	2700	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7439-95-4	Magnesium	5000	7700	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7439-96-5	Manganese	40	64	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	30	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	38	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-23-5	Sodium	5000	18000	1	50	50	03/27/15	42362	W17599C2	38	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599B2	19	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-028
 Client Id: LMW-20F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	45	MSMS2_7500SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-028
 Client Id: LMW-20F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7439-95-4	Magnesium	5000	6200	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	18	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-23-5	Sodium	5000	16000	1	50	50	03/30/15	42363	W17600E2	38	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	39	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV - Cold Vapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-028
Client Id: LMW-20F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	38	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-029
 Client Id: LMW-12
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	44	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-029
 Client Id: LMW-12
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-39-3	Barium	50	56	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	33	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	39	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-23-5	Sodium	5000	15000	1	50	50	03/27/15	42362	W17599C2	39	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599B2	20	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-030
 Client Id: LMW-12F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	46	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	46	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	46	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	4.4	1	50	100	03/30/15	42363	SW33015A	46	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	46	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	46	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	46	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	46	MSMS2_7500SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-030
 Client Id: LMW-12F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-39-3	Barium	50	58	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-70-2	Calcium	5000	29000	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7439-95-4	Magnesium	5000	6700	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	19	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-23-5	Sodium	5000	37000	1	50	50	03/30/15	42363	W17600E2	39	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	40	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC83866-030	% Solid:	0	Lab Name:	Veritech	Nras No:	
Client Id:	LMW-12F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	3/20/2015	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	39	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-031 % Solid: 0 Lab Name: Veritech Nras No:
 Client Id: LMW-14 Units: UG/L Lab Code: Sdg No:
 Matrix: AQUEOUS Date Rec: 3/20/2015 Contract: Case No:
 Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	45	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	45	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	45	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.5	1	50	100	04/01/15	42362	SW33115A	45	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	45	MS	MS2_7500SWA
7439-92-1	Lead	3.0	14	1	50	100	04/01/15	42362	SW33115A	45	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	45	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	45	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-031
 Client Id: LMW-14
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	1500	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-70-2	Calcium	5000	9700	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-47-3	Chromium	50	74	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7439-89-6	Iron	300	1800	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7439-96-5	Manganese	40	130	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	34	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	40	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-23-5	Sodium	5000	110000	1	50	50	03/27/15	42362	W17599C2	40	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A
7440-66-6	Zinc	50	77	1	50	50	03/26/15	42362	W17599B2	21	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-032
 Client Id: LMW-14F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	47	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	47	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	47	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	2.4	1	50	100	03/30/15	42363	SW33015A	47	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	47	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	47	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	47	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	47	MSMS2_7500SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-032
 Client Id: LMW-14F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-70-2	Calcium	5000	8900	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7439-96-5	Manganese	40	110	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	20	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-23-5	Sodium	5000	100000	1	50	50	03/30/15	42363	W17600E2	40	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	41	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-032
Client Id: LMW-14F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	40	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-033
 Client Id: LFB
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	46		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	46		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	46		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	46		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	46		MSMS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	46		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	46		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	46		MSMS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV -ColdVapor
 MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-033
 Client Id: LFB
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362	H17599SW	35	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362	W17599C2	41	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	03/27/15	42362	W17599C2	41	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362	W17599B2	22	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-034
 Client Id: LFB-F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	48	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	48	MSMS2_7500SWA	

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC83866-034
 Client Id: LFB-F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 3/20/2015

Lab Name: Veritech
 Lab Code:
 Contract:

Nras No:
 Sdg No:
 Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363	17600SWB	23	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	03/30/15	42363	W17600E2	41	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363	W17600F2	42	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: AC83866-034
Client Id: LFB-F
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L
Date Rec: 3/20/2015

Lab Name: Veritech
Lab Code:
Contract:

Nras No:
Sdg No:
Case No:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	42399	W17600G2	41	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV - ColdVapor
MS - ICP-MS

Metal Data
QC Data

FORM 2 (ICV/CCV Summary)

Date Analyzed: 03/26/15
 Data File: SW17599A2
 Prep Batch: 42362
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICP2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-202964-7 Rec	CCV V-202964-20 Rec	CCV V-202964-32 Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	10/5	4.98986	100	4.88684	98	4.84536	97									
Barium	1/.5	0.49796	100	0.48630	97	0.48385	97									
Calcium	100/50	49.08540	98	48.34710	97	47.93040	96									
Chromium	1/.5	0.49766	100	0.48452	97	0.48268	97									
Copper	1/.5	0.49912	100	0.48881	98	0.48324	97									
Iron	10/5	5.03979	101	4.90638	98	4.89057	98									
Magnesium	100/50	49.76980	100	48.92170	98	48.45940	97									
Manganese	1/.5	0.49207	98	0.47920	96	0.47697	95									
Nickel	1/.5	0.49382	99	0.48092	96	0.47791	96									
Silver	0.2/0.1	0.10752	108	0.10450	104	0.10371	104									
Vanadium	1/.5	0.48772	98	0.47396	95	0.47128	94									
Zinc	1/.5	0.50187	100	0.48531	97	0.48564	97									

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120)
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

CLP ICP ICV/CCV: 90-110
 CLP Hg ICV/CCV: 80-120

FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 03/26/15
 Data File: SW17599A2
 Prep Batch: 42362
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICP2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV [aq] V- 206357-8 Rec	LLCCV [aq] V- 206357- 21 Rec	LLCCV [aq] V- 206357- 33 Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	0.2/0.2	0.177869	89	0.185293	93	0.177530	89								
Barium	0.05/0.05	0.0482655	97	0.0486113	97	0.0469598	94								
Calcium	5.0/5	4.88890	98	4.86960	97	4.79909	96								
Chromium	0.05/0.05	0.0477355	95	0.0484349	97	0.0467544	94								
Copper	0.05/0.05	0.0480406	96	0.0485324	97	0.0469783	94								
Iron	0.3/0.3	0.268250	89	0.270966	90	0.263011	88								
Magnesium	5.0/5	4.92219	98	4.94146	99	4.78278	96								
Manganese	0.04/0.04	0.0366349	92	0.0368852	92	0.0355272	89								
Nickel	0.05/0.05	0.0461761	92	0.0458020	92	0.0440581	88								
Silver	0.02/0.02	0.0183317	92	0.0187059	94	0.0178434	89								
Vanadium	0.05/0.05	0.0459408	92	0.0464377	93	0.0442127	88								
Zinc	0.05/0.05	0.0480856	96	0.0480111	96	0.0466145	93								

Notes: a-indicates analyte failed the LLICV limits for 6010B, 6010C, 6020, 6020A
 c-indicates analyte failed the LLCCV limits for 6010B, 6010C, 6020, 6020A

Qc Limits: LLCCV- 6010B/6010C/6020/6020A (70-130)
 LLICV -6010B/6010C/6020/6020A :70-130

FORM 2 (ICV/CCV Summary)

Date Analyzed: 03/26/15
 Data File: SW17599B2
 Prep Batch: 42362
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICP2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V- 202964-7		CCV V- 202964- 16		CCV V- 202964- 25											
		Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	10/5	5.05766	101	5.03992	101	5.02783	101										
Barium	1/5	0.50336	101	0.50099	100	0.49821	100										
Calcium	100/50	49.97620	100	49.79210	100	49.59490	99										
Chromium	1/5	0.50389	101	0.50104	100	0.49781	100										
Copper	1/5	0.50476	101	0.50246	100	0.50196	100										
Iron	10/5	5.07991	102	5.05787	101	5.03556	101										
Magnesium	100/50	50.48230	101	50.26340	101	50.07480	100										
Manganese	1/5	0.49510	99	0.49257	99	0.49014	98										
Nickel	1/5	0.50207	100	0.49798	100	0.49549	99										
Silver	0.2/0.1	0.10905	109	0.10844	108	0.10758	108										
Vanadium	1/5	0.49577	99	0.49366	99	0.49130	98										
Zinc	1/5	0.50453	101	0.50202	100	0.49632	99										

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105 CLP ICP ICV/CCV: 90-110
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120) CLP Hg ICV/CCV: 80-120
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 03/26/15
 Data File: SW17599B2
 Prep Batch: 42362
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICP2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV [aq] V- 206357-8	Rec	LLCCV [aq] V- 206357- 17	Rec	LLCCV [aq] V- 206357- 26	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	0.2/0.2	0.156204	78	0.152017	76	0.158413	79								
Barium	0.05/0.05	0.0497818	100	0.0483290	97	0.0487359	97								
Calcium	5.0/5	4.95856	99	4.94354	99	4.94506	99								
Chromium	0.05/0.05	0.0495370	99	0.0484055	97	0.0490565	98								
Copper	0.05/0.05	0.0495858	99	0.0482907	97	0.0488325	98								
Iron	0.3/0.3	0.266114	89	0.260047	87	0.263824	88								
Magnesium	5.0/5	5.12676	103	5.00205	100	5.05301	101								
Manganese	0.04/0.04	0.0378000	94	0.0369095	92	0.0373683	93								
Nickel	0.05/0.05	0.0476599	95	0.0468239	94	0.0471565	94								
Silver	0.02/0.02	0.0194761	97	0.0191999	96	0.0193774	97								
Vanadium	0.05/0.05	0.0496012	99	0.0483220	97	0.0484629	97								
Zinc	0.05/0.05	0.0482562	97	0.0473746	95	0.0474603	95								

Notes: a-indicates analyte failed the LLICV limits for 6010B, 6010C, 6020, 6020A
 c-indicates analyte failed the LLCCV limits for 6010B, 6010C, 6020, 6020A

Qc Limits: LLCCV- 6010B/6010C/6020/6020A (70-130)
 LLICV -6010B/6010C/6020/6020A :70-130

FORM 2 (ICV/CCV Summary)

Date Analyzed: 03/27/15
 Data File: SW17599C2
 Prep Batch: 42362
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V- 202964-6		CCV V- 202964- 19		CCV V- 202964- 31		CCV V- 202964- 44									
		Rec		Rec		Rec		Rec		Rec		Rec		Rec		Rec	
Potassium	100/50	49.47640	99	49.48200	99	48.33660	97	45.89110	92								
Sodium	100/50	50.00350	100	50.06930	100	48.79090	98	46.62910	93								

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120)
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

CLP ICP ICV/CCV: 90-110
 CLP Hg ICV/CCV: 80-120

FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 03/27/15
 Data File: SW17599C2
 Prep Batch: 42362
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV [aq] V- 206357-7 Rec	LLCCV [aq] V- 206357- 20 Rec	LLCCV [aq] V- 206357- 32 Rec	LLCCV [aq] V- 206357- 45 Rec	LLCCV [aq] V- 206357- 45 Rec	LLCCV [aq] V- 206357- 45 Rec	LLCCV [aq] V- 206357- 45 Rec	LLCCV [aq] V- 206357- 45 Rec	LLCCV [aq] V- 206357- 45 Rec	LLCCV [aq] V- 206357- 45 Rec	LLCCV [aq] V- 206357- 45 Rec	LLCCV [aq] V- 206357- 45 Rec	LLCCV [aq] V- 206357- 45 Rec	LLCCV [aq] V- 206357- 45 Rec	LLCCV [aq] V- 206357- 45 Rec	LLCCV [aq] V- 206357- 45 Rec
Potassium	5.0/5	5.07887	102	5.02868	101	4.92268	98	4.65243	93								
Sodium	5.0/5	5.14077	103	5.11685	102	4.98195	100	4.80454	96								

Notes: a-indicates analyte failed the LLICV limits for 6010B, 6010C, 6020, 6020A
 c-indicates analyte failed the LLCCV limits for 6010B, 6010C, 6020, 6020A

Qc Limits: LLCCV- 6010B/6010C/6020/6020A (70-130)
 LLICV -6010B/6010C/6020/6020A :70-130

FORM 2 (ICV/CCV Summary)

Date Analyzed: 03/27/15
 Data File: SW17599D2
 Prep Batch: 42362
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V- 202964-6		CCV V- 202964- 14													
		Rec		Rec		Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	100/50	49.56640	99	49.07190	98												
Sodium	100/50	49.68000	99	49.45440	99												

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105 CLP ICP ICV/CCV: 90-110
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120) CLP Hg ICV/CCV: 80-120
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 03/27/15
 Data File: SW17599D2
 Prep Batch: 42362
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV [aq] V- 206357-7 Rec	LLCCV [aq] V- 206357- 15 Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	5.0/5	5.05288	101	4.98775	100											
Sodium	5.0/5	5.10473	102	5.08499	102											

Notes: a-indicates analyte failed the LLICV limits for 6010B, 6010C, 6020, 6020A
 c-indicates analyte failed the LLCCV limits for 6010B, 6010C, 6020, 6020A

Qc Limits: LLCCV- 6010B/6010C/6020/6020A (70-130)
 LLICV -6010B/6010C/6020/6020A :70-130

FORM 2 (ICV/CCV Summary)

Date Analyzed: 03/30/15
 Data File: SW17600E2
 Prep Batch: 42363
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CC V Amt	ICV V- 202964- 6	Rec	CCV V- 202964- 19	Rec	CCV V- 202964- 31	Rec	CCV V- 202964- 44	Rec	Rec	Rec	Rec	Rec	Rec
Sodium	100/50	49.39520	99	48.78350	98	48.92850	98	48.55480	97					

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105 CLP ICP ICV/CCV: 90-110
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120) CLP Hg ICV/CCV: 80-120
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 03/30/15
 Data File: SW17600E2
 Prep Batch: 42363
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV [aq] V- 206357- 7	Rec	LLCCV [aq] V- 206357- 20	Rec	LLCCV [aq] V- 206357- 32	Rec	LLCCV [aq] V- 206357- 45	Rec	Rec	Rec	Rec	Rec
Sodium	5.0/5	5.22962	105	5.20251	104	5.13589	103	5.09304	102				

Notes: a-indicates analyte failed the LLICV limits for 6010B, 6010C, 6020, 6020A
 c-indicates analyte failed the LLCCV limits for 6010B, 6010C, 6020, 6020A

Qc Limits: LLCCV- 6010B/6010C/6020/6020A (70-130)
 LLICV -6010B/6010C/6020/6020A :70-130

FORM 2 (ICV/CCV Summary)

Date Analyzed: 03/30/15
 Data File: SW33015A
 Prep Batch: 42363
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: MS2_7500SWA
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CC V Amt	ICV V- 206943- 8	Rec	CCV V- 206947- 13	Rec	CCV V- 206947- 26	Rec	CCV V- 206947- 39	Rec	CCV V- 206947- 50	Rec	Rec	Rec	Rec	Rec
Antimony	50/30	47.31000	95	50.03000	100	49.19000	98	48.16000	96	48.48000	97				
Arsenic	50/30	47.25000	94	49.86000	100	50.45000	101	48.96000	98	50.00000	100				
Beryllium	50/30	47.52000	95	50.53000	101	49.26000	99	48.31000	97	48.16000	96				
Cadmium	50/30	47.50000	95	50.46000	101	49.70000	99	48.73000	97	48.82000	98				
Cobalt	50/30	47.84000	96	53.77000	108	51.86000	104	52.36000	105	52.17000	104				
Lead	50/30	47.45000	95	49.90000	100	48.20000	96	47.03000	94	47.36000	95				
Selenium	50/30	47.50000	95	241.50000	97	243.50000	97	232.00000	93	236.10000	94				
Thallium	50/30	47.55000	95	50.69000	101	49.13000	98	48.49000	97	48.70000	97				

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105 CLP ICP ICV/CCV: 90-110
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120) CLP Hg ICV/CCV: 80-120
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 03/30/15
 Data File: SW33015A
 Prep Batch: 42363
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: MS2_7500SWA
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV V- 206949- 9	Rec	LLCCV V- 206949- 14	Rec	LLCCV V- 206949- 27	Rec	LLCCV V- 206949- 40	Rec	LLCCV V- 206949- 51	Rec		Rec		Rec		Rec
Antimony	1.5/1.5	1.342	89	1.325	88	1.338	89	1.248	83	1.271	85						
Arsenic	1/1	9.742E-01	97	9.693E-01	97	9.806E-01	98	9.403E-01	94	9.126E-01	91						
Beryllium	0.5/0.5	5.062E-01	101	4.913E-01	98	4.923E-01	98	4.797E-01	96	4.846E-01	97						
Cadmium	1/1	9.937E-01	99	9.726E-01	97	9.772E-01	98	9.378E-01	94	9.542E-01	95						
Cobalt	1/1	1.010	101	1.044	104	1.011	101	1.023	102	1.028	103						
Lead	1.5/1.5	1.451	97	1.428	95	1.378	92	1.353	90	1.347	90						
Selenium	5/5	4.772	95	4.368	87	4.646	93	4.573	91	4.587	92						
Thallium	1/1	8.904E-01	89	8.802E-01	88	9.128E-01	91	8.404E-01	84	8.421E-01	84						

Notes: a-indicates analyte failed the LLICV limits for 6010B, 6010C, 6020, 6020A
 c-indicates analyte failed the LLCCV limits for 6010B, 6010C, 6020, 6020A

Qc Limits: LLCCV- 6010B/6010C/6020/6020A (70-130)
 LLICV -6010B/6010C/6020/6020A :70-130

FORM 2 (ICV/CCV Summary)

Date Analyzed: 03/31/15
 Data File: SW17600F2
 Prep Batch: 42363
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICP2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CC V Amt	ICV V- 202964- 7	Rec	CCV V- 202964- 20	Rec	CCV V- 202964- 32	Rec	CCV V- 202964- 45	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	10/5	5.08833	102	5.01344	100	4.92854	99	4.86650	97					
Barium	1/5	0.50596	101	0.49740	99	0.48949	98	0.48164	96					
Calcium	100/50	50.55150	101	49.82710	100	47.89280	96	47.78080	96					
Chromium	1/5	0.50630	101	0.49714	99	0.49016	98	0.48255	97					
Copper	1/5	0.50737	101	0.49484	99	0.48582	97	0.47787	96					
Iron	10/5	5.09548	102	5.02335	100	4.96271	99	4.88620	98					
Magnesium	100/50	51.04870	102	50.44340	101	48.45420	97	48.37370	97					
Manganese	1/5	0.49721	99	0.48922	98	0.47055	94	0.46939	94					
Nickel	1/5	0.50531	101	0.49659	99	0.48639	97	0.47983	96					
Silver	0.2/0.1	0.10298	103	0.10113	101	0.09990	100	0.09792	98					
Vanadium	1/5	0.49402	99	0.47968	96	0.47069	94	0.46119	92					
Zinc	1/5	0.50664	101	0.50083	100	0.49366	99	0.48600	97					

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105 CLP ICP ICV/CCV: 90-110
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120) CLP Hg ICV/CCV: 80-120
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 03/31/15
 Data File: SW17600F2
 Prep Batch: 42363
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICP2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV [aq] V- 206357- 8	Rec	LLCCV [aq] V- 206357- 21	Rec	LLCCV [aq] V- 206357- 33	Rec	LLCCV [aq] V- 206357- 46	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	0.2/0.2	0.251819	126	0.247180	124	0.230735	115	0.233781	117					
Barium	0.05/0.05	0.0507721	102	0.0493144	99	0.0472231	94	0.0476605	95					
Calcium	5.0/5	5.23162	105	5.06186	101	4.88751	98	4.88994	98					
Chromium	0.05/0.05	0.0507590	102	0.0493475	99	0.0467093	93	0.0471933	94					
Copper	0.05/0.05	0.0509618	102	0.0500798	100	0.0471842	94	0.0483936	97					
Iron	0.3/0.3	0.290162	97	0.281120	94	0.268362	89	0.272424	91					
Magnesium	5.0/5	5.16580	103	4.99234	100	4.76296	95	4.82726	97					
Manganese	0.04/0.04	0.0390513	98	0.0377574	94	0.0358666	90	0.0363091	91					
Nickel	0.05/0.05	0.0504812	101	0.0485346	97	0.0453553	91	0.0461889	92					
Silver	0.02/0.02	0.0200933	100	0.0194934	97	0.0183548	92	0.0186551	93					
Vanadium	0.05/0.05	0.0495630	99	0.0473172	95	0.0435534	87	0.0442974	89					
Zinc	0.05/0.05	0.0506856	101	0.0486228	97	0.0463740	93	0.0467888	94					

Notes: a-indicates analyte failed the LLICV limits for 6010B, 6010C, 6020, 6020A
 c-indicates analyte failed the LLCCV limits for 6010B, 6010C, 6020, 6020A

Qc Limits: LLCCV- 6010B/6010C/6020/6020A (70-130)
 LLICV -6010B/6010C/6020/6020A :70-130

FORM 2 (ICV/CCV Summary)

Date Analyzed: 03/31/15
 Data File: SW17600G2
 Prep Batch: 42399
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CC V Amt	ICV V- 202964- 6 Rec	CCV V- 202964- 19 Rec	CCV V- 202964- 31 Rec	CCV V- 202964- 44 Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	100/50	50.26490	101	50.16820	100	50.07330	100	51.24760	102		

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120)
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

CLP ICP ICV/CCV: 90-110
 CLP Hg ICV/CCV: 80-120

FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 03/31/15
 Data File: SW17600G2
 Prep Batch: 42399
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV [aq] V- 206357- 7	Rec	LLCCV [aq] V- 206357- 20	Rec	LLCCV [aq] V- 206357- 32	Rec	LLCCV [aq] V- 206357- 45	Rec	Rec	Rec	Rec	Rec
Potassium	5.0/5	5.47220	109	5.32739	107	5.29984	106	5.43759	109				

Notes: a-indicates analyte failed the LLICV limits for 6010B, 6010C, 6020, 6020A
 c-indicates analyte failed the LLCCV limits for 6010B, 6010C, 6020, 6020A

Qc Limits: LLCCV- 6010B/6010C/6020/6020A (70-130)
 LLICV -6010B/6010C/6020/6020A :70-130

FORM 2 (ICV/CCV Summary)

Date Analyzed: 04/01/15
 Data File: SW33115A
 Prep Batch: 42362
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: MS2_7500SWA
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V- 206943-8	Rec	CCV V- 206947- 13	Rec	CCV V- 206947- 26	Rec	CCV V- 206947- 39	Rec	CCV V- 206947- 48	Rec	Rec	Rec	Rec	Rec
Antimony	50/30	46.83000	94	51.33000	103	50.69000	101	49.33000	99	50.30000	101				
Arsenic	50/30	47.69000	95	51.18000	102	49.60000	99	49.57000	99	49.47000	99				
Beryllium	50/30	47.64000	95	52.35000	105	53.19000	106	52.27000	105	53.12000	106				
Cadmium	50/30	47.79000	96	51.37000	103	50.73000	101	50.17000	100	50.51000	101				
Cobalt	50/30	47.62000	95	51.89000	104	51.38000	103	50.74000	101	50.69000	101				
Lead	50/30	46.44000	93	50.22000	100	50.08000	100	48.33000	97	49.66000	99				
Selenium	50/30	49.68000	99	257.10000	103	251.50000	101	252.70000	101	248.50000	99				
Thallium	50/30	46.82000	94	51.92000	104	51.38000	103	50.69000	101	50.76000	102				

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120)
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

CLP ICP ICV/CCV: 90-110
 CLP Hg ICV/CCV: 80-120

FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 04/01/15
 Data File: SW33115A
 Prep Batch: 42362
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: MS2_7500SWA
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV V- 206949-9 Rec	LLCCV V- 206949- 14 Rec	LLCCV V- 206949- 27 Rec	LLCCV V- 206949- 40 Rec	LLCCV V- 206949- 49 Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Antimony	1.5/1.5	1.468	98	1.505	100	1.495	100	1.497	100	1.507	100					
Arsenic	1/1	9.885E-01	99	9.760E-01	98	9.865E-01	99	9.617E-01	96	9.871E-01	99					
Beryllium	0.5/0.5	5.318E-01	106	4.952E-01	99	5.192E-01	104	5.520E-01	110	5.472E-01	109					
Cadmium	1/1	9.894E-01	99	9.879E-01	99	9.790E-01	98	1.000	100	1.012	101					
Cobalt	1/1	9.943E-01	99	1.025	102	1.017	102	1.017	102	1.035	104					
Lead	1.5/1.5	1.417	94	1.443	96	1.425	95	1.414	94	1.425	95					
Selenium	5/5	4.773	95	5.445	109	5.036	101	4.942	99	5.103	102					
Thallium	1/1	9.474E-01	95	9.469E-01	95	1.011	101	9.559E-01	96	9.508E-01	95					

Notes: a-indicates analyte failed the LLICV limits for 6010B, 6010C, 6020, 6020A
 c-indicates analyte failed the LLCCV limits for 6010B, 6010C, 6020, 6020A

Qc Limits: LLCCV- 6010B/6010C/6020/6020A (70-130)
 LLICV -6010B/6010C/6020/6020A :70-130

FORM 2 (ICV/CCV Summary)

Date Analyzed: 03/27/15
 Data File: H17599SW
 Prep Batch: 42362
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: HGCV2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV (2)-9		CCV-20		CCV-31		CCV-36									
	Amt	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Mercury	20/10	20.53000	103	10.02000	100	10.11000	101	10.38000	104							

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120)
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

CLP ICP ICV/CCV: 90-110
 CLP Hg ICV/CCV: 80-120

FORM 2 (ICV/CCV Summary)

Date Analyzed: 03/27/15
 Data File: H17600SW
 Prep Batch: 42363
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: HGCV1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV (2)-9		CCV-21		CCV-33											
	ICV/CC V Amt	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Mercury	20/10	20.09963	100	9.57403	96	8.92812	89 c									

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105 CLP ICP ICV/CCV: 90-110
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120) CLP Hg ICV/CCV: 80-120
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

FORM 2 (ICV/CCV Summary)

Date Analyzed: 03/27/15
 Data File: H17600SWB
 Prep Batch: 42363
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: HGCV1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV (2)-9		CCV-21		CCV-24											
	ICV/CC V Amt	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Mercury	20/10	19.54622	98	9.71186	97	10.42363	104									

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105 CLP ICP ICV/CCV: 90-110
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120) CLP Hg ICV/CCV: 80-120
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 03/26/15

Data File: SW17599A2

Prep Batch: 42362

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICP2A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 5032012

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-205362- 9	CCB-22	CCB-34	MB 42362 (1)- 12				
Aluminum	.2 U	.2 U	.2 U	.2 U				
Barium	.05 U	.05 U	.05 U	.05 U				
Calcium	5 U	5 U	5 U	5 U				
Chromium	.05 U	.05 U	.05 U	.05 U				
Copper	.05 U	.05 U	.05 U	.05 U				
Iron	.3 U	.3 U	.3 U	.3 U				
Magnesium	5 U	5 U	5 U	5 U				
Manganese	.04 U	.04 U	.04 U	.04 U				
Nickel	.05 U	.05 U	.05 U	.05 U				
Silver	.02 U	.02 U	.02 U	.02 U				
Vanadium	.05 U	.05 U	.05 U	.05 U				
Zinc	.05 U	.05 U	.05 U	.05 U				

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 03/26/15

Data File: SW17599B2

Prep Batch: 42362

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICP2A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 5032012

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-205362- 9	CCB-18	CCB-27					
Aluminum	.2 U	.2 U	.2 U					
Barium	.05 U	.05 U	.05 U					
Calcium	5 U	5 U	5 U					
Chromium	.05 U	.05 U	.05 U					
Copper	.05 U	.05 U	.05 U					
Iron	.3 U	.3 U	.3 U					
Magnesium	5 U	5 U	5 U					
Manganese	.04 U	.04 U	.04 U					
Nickel	.05 U	.05 U	.05 U					
Silver	.02 U	.02 U	.02 U					
Vanadium	.05 U	.05 U	.05 U					
Zinc	.05 U	.05 U	.05 U					

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3

(ICB/CCB/MB Summary)

Date Analyzed: 03/27/15

Data File: SW17599C2

Prep Batch: 42362

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICPRAD2A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 5032012

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-205362- 8	CCB-21	CCB-33	CCB-46	MB 42362 (1)- 11			
Potassium	5 U	5 U	5 U	5 U	5 U			
Sodium	5 U	5 U	5 U	5 U	5 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3

(ICB/CCB/MB Summary)

Date Analyzed: 03/27/15

Data File: SW17599D2

Prep Batch: 42362

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICPRAD2A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 5032012

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-205362-		CCB-16					
	8							
Potassium	5 U		5 U					
Sodium	5 U		5 U					

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 03/30/15
Data File: SW17600E2
Prep Batch: 42363
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICPRAD2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 5032012

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-205362- 8	CCB-21	CCB-33	CCB-46	MB 42363 (1)- 11
Sodium	5 U	5 U	5 U	5 U	5 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 03/30/15
 Data File: SW33015A
 Prep Batch: 42363
 Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: MS2_7500SWA
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:

Analyte	ICB V-206944-10	CCB V-206944-15	CCB V-206944-28	CCB V-206944-41	CCB V-206944-52	MB 42363-16
Antimony	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3U
Arsenic	1 U	1 U	1 U	1 U	1 U	2U
Beryllium	.5 U	.5 U	.5 U	.5 U	.5 U	1 U
Cadmium	1 U	1 U	1 U	1 U	1 U	2 U
Cobalt	1 U	1 U	1 U	1 U	1 U	2 U
Lead	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3U
Selenium	5 U	5 U	5 U	5 U	5 U	10U
Thallium	1 U	1 U	1 U	1 U	1 U	2U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
 u-indicates result below reporting limit

FORM 3 (ICB/CCB/MB Summary)

Date Analyzed: 03/31/15

Data File: SW17600F2

Prep Batch: 42363

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICP2A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 5032012

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-205362- 9	CCB-22	CCB-34	CCB-47	MB 42363 (1)- 12			
Aluminum	.2 U	.2 U	.2 U	.2 U	.2 U			
Barium	.05 U	.05 U	.05 U	.05 U	.05 U			
Calcium	5 U	5 U	5 U	5 U	5 U			
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U			
Copper	.05 U	.05 U	.05 U	.05 U	.05 U			
Iron	.3 U	.3 U	.3 U	.3 U	.3 U			
Magnesium	5 U	5 U	5 U	5 U	5 U			
Manganese	.04 U	.04 U	.04 U	.04 U	.04 U			
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U			
Silver	.02 U	.02 U	.02 U	.02 U	.02 U			
Vanadium	.05 U	.05 U	.05 U	.05 U	.05 U			
Zinc	.05 U	.05 U	.05 U	.05 U	.05 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3

(ICB/CCB/MB Summary)

Date Analyzed: 03/31/15
Data File: SW17600G2
Prep Batch: 42399
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICPRAD2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 5032012

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-205362- 8	CCB-21	CCB-33	CCB-46	MB 42399 (1)- 11
Potassium	5 U	5 U	5 U	5 U	5 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3

(ICB/CCB/MB Summary)

Date Analyzed: 04/01/15

Data File: SW33115A

Prep Batch: 42362

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: MS2_7500SWA

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 5032012

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-206944- 10	CCB V-206944- 15	CCB V-206944- 28	CCB V-206944- 41	CCB V-206944- 50	MB 42362-16		
Antimony	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3U		
Arsenic	1 U	1 U	1 U	1 U	1 U	2U		
Beryllium	.5 U	.5 U	.5 U	.5 U	.5 U	1U		
Cadmium	1 U	1 U	1 U	1 U	1 U	2U		
Cobalt	1 U	1 U	1 U	1 U	1 U	2U		
Lead	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3U		
Selenium	5 U	5 U	5 U	5 U	5 U	10U		
Thallium	1 U	1 U	1 U	1 U	1 U	2U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 03/27/15

Data File: H17599SW

Prep Batch: 42362

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: HGCV2A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 5032012

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB-10	CCB-21	CCB-32	CCB-37	MB 42362 (1)- 11			
Mercury	.7 U	.7 U	.7 U	.7 U	.7 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3

(ICB/CCB/MB Summary)

Date Analyzed: 03/27/15
Data File: H17600SW
Prep Batch: 42363
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 5032012

Lab Name: Veritech
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	MB 42363 (1)- 11
Mercury	.7 U	.7 U	.7 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 03/27/15

Data File: H17600SWB

Prep Batch: 42363

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: HGCV1A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 5032012

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB-10	CCB-22	CCB-25
Mercury	.7 U	.7 U	.7 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 4

(ICSA/ICSAB Summary)

Date Analyzed: 03/26/15

Data File: SW17599A2

Prep Batch: 42362

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICP2A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 5032012

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 202074-10	Rec	ICSAB V- 202076-11	Rec	ICSA V- 202074-30	Rec	ICSAB V- 202076-31	Rec	Rec	Rec	Rec	Rec
Aluminum	500	510.017	102	508.23800	102	503.516	101	494.39700	99				
Barium	.5	U		0.50872	102	U		0.49286	99				
Calcium	500	479.004	96	475.27400	95	468.758	94	461.88800	92				
Chromium	.5	U		0.48010	96	U		0.46538	93				
Copper	.5	U		0.53622	107	U		0.51878	104				
Iron	200	187.333	94	186.97500	93	180.789	90	181.72800	91				
Magnesium	500	492.401	98	490.33200	98	472.893	95	475.46500	95				
Manganese	.5	U		0.47812	96	U		0.46346	93				
Nickel	1	U		0.87991	88	U		0.84980	85				
Silver	1	U		1.06439	106	U		1.03058	103				
Vanadium	.5	U		0.45600	91	U		0.44311	89				
Zinc	1	U		0.92776	93	U		0.89404	89				

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA

b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA

c-indicates the recovery failed the Qc Criteria in the ICSAB

u-indicates the absolute value of the concentration was below the reporting limit

FORM 4 **(ICSA/ICSAB Summary)**

Date Analyzed: 03/26/15

Data File: SW17599B2

Prep Batch: 42362

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICP2A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 5032012

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 202074-10		ICSAB V- 202076-11		ICSA V- 202074-23		ICSAB V- 202076-24		Rec	Rec	Rec	Rec
			Rec		Rec		Rec		Rec				
Aluminum	500	531.241	106	535.57600	107	531.924	106	533.28900	107				
Barium	.5	U		0.53226	106	U		0.52145	104				
Calcium	500	498.154	100	502.52700	101	496.711	99	497.71600	100				
Chromium	.5	U		0.50278	101	U		0.49436	99				
Copper	.5	U		0.56070	112	U		0.55339	111				
Iron	200	195.929	98	195.68200	98	194.249	97	193.71200	97				
Magnesium	500	512.625	103	511.95200	102	508.015	102	505.12000	101				
Manganese	.5	U		0.49804	100	U		0.48862	98				
Nickel	1	U		0.92432	92	U		0.91889	92				
Silver	1	U		1.11350	111	U		1.10017	110				
Vanadium	.5	U		0.48489	97	U		0.47708	95				
Zinc	1	U		0.97512	98	U		0.96470	96				

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA

b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA

c-indicates the recovery failed the Qc Criteria in the ICSAB

u-indicates the absolute value of the concentration was below the reporting limit

FORM 4 **(ICSA/ICSAB Summary)**

Date Analyzed: 03/27/15

Data File: SW17599C2

Prep Batch: 42362

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICPRAD2A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 5032012

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 202074-9		ICSAB V- 202076-10		ICSA V- 202074-29		ICSAB V- 202076-30		ICSA V- 202074-42		ICSAB V- 202076-43		Rec	Rec
			Rec		Rec		Rec		Rec		Rec		Rec		
Aluminum	500	529.152	106	531.57900	106	516.365	103	512.79700	103	500.011	100	499.52000	100		
Calcium	500	495.762	99	495.49000	99	482.599	97	479.87200	96	466.439	93	466.78500	93		
Iron	200	194.634	97	194.98400	97	189.52	95	188.99900	94	183.247	92	183.94300	92		
Magnesium	500	503.587	101	503.93900	101	490.146	98	488.17900	98	473.518	95	474.92600	95		

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA

b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA

c-indicates the recovery failed the Qc Criteria in the ICSAB

u-indicates the absolute value of the concentration was below the reporting limit

FORM 4

(ICSA/ICSAB Summary)

Date Analyzed: 03/27/15

Data File: SW17599D2

Prep Batch: 42362

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICPRAD2A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 5032012

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 202074-9		ICSAB V- 202076-10		ICSA V- 202074-12		ICSAB V- 202076-13		Rec	Rec	Rec	Rec
Aluminum	500	520.48	104	525.18500	105	520.517	104	523.01200	105				
Calcium	500	491.307	98	495.34300	99	493.556	99	494.90600	99				
Iron	200	191.774	96	194.00200	97	192.753	96	193.68800	97				
Magnesium	500	498.46	100	503.16100	101	502.08	100	503.64000	101				

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA

b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA

c-indicates the recovery failed the Qc Criteria in the ICSAB

u-indicates the absolute value of the concentration was below the reporting limit

FORM 4

(ICSA/ICSAB Summary)

Date Analyzed: 03/30/15
 Data File: SW17600E2
 Prep Batch: 42363
 Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD2A
 Units: All units in ppm except Hg and lcp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-202074-9		ICSAB V-202076-10		ICSA V-202074-29		ICSAB V-202076-30		ICSA V-202074-42		ICSAB V-202076-43		Rec	Rec
			Rec		Rec		Rec		Rec		Rec		Rec		
Aluminum	500	531.033	106	531.65600	106	528.984	106	533.28900	107	518.07	104	521.12500	104		
Calcium	500	497.79	100	498.01700	100	495.434	99	500.20400	100	486.567	97	488.76000	98		
Iron	200	196.711	98	197.27800	99	195.38	98	197.64400	99	191.69	96	192.78500	96		
Magnesium	500	505.256	101	505.65900	101	502.667	101	508.29700	102	494.363	99	496.87400	99		

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
 b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
 c-indicates the recovery failed the Qc Criteria in the ICSAB
 u-indicates the absolute value of the concentration was below the reporting limit

FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 03/30/15
 Data File: SW33015A
 Prep Batch: 42363
 Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: MS2_7500SWA
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V-206945-11		ICSAB V-206946-12							
			Rec		Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	44750	90	46490.00000	93						
Arsenic	100	U		97.92000	98						
Cadmium	100	1.413b		93.79000	94						
Calcium	150000	142700	95	47800.00000	99						
Cobalt	200	U		191.70000	96						
Iron	125000	112700	90	16800.00000	93						
Magnesium	50000	45710	91	47650.00000	95						
Selenium	100	U		90.95000	91						

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
 b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
 c-indicates the recovery failed the Qc Criteria in the ICSAB
 u-indicates the absolute value of the concentration was below the reporting limit

FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 03/31/15
 Data File: SW17600F2
 Prep Batch: 42363
 Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICP2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 202074-10	Rec	ICSAB V- 202076-11	Rec	ICSA V- 202074-30	Rec	ICSAB V- 202076-31	Rec	ICSA V- 202074-43	Rec	ICSAB V- 202076-44	Rec	Rec	Rec
Aluminum	500	533.14	107	535.40200	107	500.392	100	503.06300	101	496.698	99	499.99900	100		
Barium	.5	U		0.54893	110	U		0.51579	103	U		0.51547	103		
Calcium	500	511.593	102	510.19300	102	478.459	96	481.56800	96	475.296	95	478.27100	96		
Chromium	.5	U		0.51738	103	U		0.48784	98	U		0.48605	97		
Copper	.5	U		0.56081	112	U		0.52504	105	U		0.52263	105		
Iron	200	201.759	101	202.05800	101	191.541	96	190.92700	95	190.035	95	190.64500	95		
Magnesium	500	524.721	105	521.57700	104	490.631	98	493.82300	99	487.404	97	490.06500	98		
Manganese	.5	U		0.51554	103	U		0.48489	97	U		0.48427	97		
Nickel	1	U		0.96445	96	U		0.91143	91	U		0.90812	91		
Silver	1	U		1.12678	113	U		1.06072	106	U		1.05634	106		
Vanadium	.5	U		0.48720	97	U		0.45313	91	U		0.44986	90		
Zinc	1	U		1.01714	102	U		0.96514	97	U		0.96285	96		

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
 b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
 c-indicates the recovery failed the Qc Criteria in the ICSAB
 u-indicates the absolute value of the concentration was below the reporting limit

FORM 4

(ICSA/ICSAB Summary)

Date Analyzed: 03/31/15
 Data File: SW17600G2
 Prep Batch: 42399
 Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD2A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 5032012

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VHJ LABS

Analyte	Spk Amt	ICSA V-202074-9		ICSAB V-202076-10		ICSA V-202074-29		ICSAB V-202076-30		ICSA V-202074-42		ICSAB V-202076-43		Rec	Rec
			Rec		Rec		Rec		Rec		Rec		Rec		
Aluminum	500	511.992	102	525.29100	105	518.273	104	519.25600	104	531.489	106	538.70500	108		
Calcium	500	494.075	99	506.42200	101	486.315	97	487.66500	98	497.461	99	506.83300	101		
Iron	200	191.891	96	197.42500	99	189.046	95	189.53500	95	193.933	97	197.57900	99		
Magnesium	500	496.018	99	509.75800	102	482.903	97	485.11600	97	494.619	99	505.26600	101		

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
 b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
 c-indicates the recovery failed the Qc Criteria in the ICSAB
 u-indicates the absolute value of the concentration was below the reporting limit

FORM 4 **(ICSA/ICSAB Summary)**

Date Analyzed: 04/01/15

Data File: SW33115A

Prep Batch: 42362

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: MS2_7500SWA

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 5032012

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 206945-11	Rec	ICSAB V- 206946-12	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	46130	92	46180.00000	92						
Arsenic	100	U		99.29000	99						
Cadmium	100	1.45b		94.94000	95						
Calcium	150000	152300	102	51300.00000	101						
Cobalt	200	U		184.10000	92						
Iron	125000	116500	93	17300.00000	94						
Magnesium	50000	47300	95	47430.00000	95						
Selenium	100	U		92.86000	93						

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA

b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA

c-indicates the recovery failed the Qc Criteria in the ICSAB

u-indicates the absolute value of the concentration was below the reporting limit

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 42362

5032012 0264

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS		Matrix: AQUEOUS		SampleID: LCSW 42362							
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim	
Aluminum	42362	1	SW17599	13	4.5149	5.000	90		80	120	
Arsenic	42362	1	SW17599	13	0.4451	0.500	89		80	120	
Calcium	42362	1	SW17599	13	46.2016	50.00	92		80	120	
Chromium	42362	1	SW17599	13	0.4557	0.500	91		80	120	
Copper	42362	1	SW17599	13	0.4574	0.500	91		80	120	
Iron	42362	1	SW17599	13	4.6697	5.000	93		80	120	
Magnesium	42362	1	SW17599	13	44.9567	50.00	90		80	120	
Manganese	42362	1	SW17599	13	0.4566	0.500	91		80	120	
Mercury	42362	1	H17599S	12	10.0300	10	100		80	120	
Nickel	42362	1	SW17599	13	0.4580	0.500	92		80	120	
Potassium	42362	1	SW17599	12	45.9101	50	92		80	120	
Silver	42362	1	SW17599	13	0.0882	0.100	88		80	120	
Sodium	42362	1	SW17599	12	46.8466	50	94		80	120	
Vanadium	42362	1	SW17599	13	0.4504	0.500	90		80	120	
Zinc	42362	1	SW17599	13	0.4626	0.500	93		80	120	

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 42362							
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim	
Aluminum	42362	1	SW17599	14	4.3634	5.000	87		80	120	
Arsenic	42362	1	SW17599	14	0.4285	0.500	86		80	120	
Calcium	42362	1	SW17599	14	44.9495	50.00	90		80	120	
Chromium	42362	1	SW17599	14	0.4404	0.500	88		80	120	
Copper	42362	1	SW17599	14	0.4428	0.500	89		80	120	
Iron	42362	1	SW17599	14	4.5178	5.000	90		80	120	
Magnesium	42362	1	SW17599	14	43.7154	50.00	87		80	120	
Manganese	42362	1	SW17599	14	0.4415	0.500	88		80	120	
Mercury	42362	1	H17599S	13	10.0300	10	100		80	120	
Nickel	42362	1	SW17599	14	0.4422	0.500	88		80	120	
Potassium	42362	1	SW17599	13	45.7110	50	91		80	120	
Silver	42362	1	SW17599	14	0.0854	0.100	85		80	120	
Sodium	42362	1	SW17599	13	46.1631	50	92		80	120	
Vanadium	42362	1	SW17599	14	0.4357	0.500	87		80	120	
Zinc	42362	1	SW17599	14	0.4464	0.500	89		80	120	

TxtQcType: MS		Matrix: AQUEOUS			SampleID: AC83866-012								
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	42362	1	SW17599	17	SW17599	15	4.5601	0.2U	5.00	91		75	125
Arsenic	42362	1	SW17599	17	SW17599	15	0.4615	0.02U	0.50	92		75	125
Calcium	42362	1	SW17599	17	SW17599	15	61.5790	14.9439	50.0	93		75	125
Chromium	42362	1	SW17599	17	SW17599	15	0.4581	0.05U	0.50	92		75	125
Copper	42362	1	SW17599	17	SW17599	15	0.4614	0.05U	0.50	92		75	125
Iron	42362	1	SW17599	17	SW17599	15	4.6623	0.3U	5.00	93		75	125
Magnesium	42362	1	SW17599	17	SW17599	15	51.3807	5.0858	50.0	93		75	125
Manganese	42362	1	SW17599	17	SW17599	15	0.4642	0.04U	0.50	93		75	125
Mercury	42362	1	H17599S	16	H17599S	14	10.1900	.70U	10	102		75	125
Nickel	42362	1	SW17599	17	SW17599	15	0.4534	0.05U	0.50	91		75	125
Potassium	42362	1	SW17599	16	SW17599	14	47.7010	5U	50.00	95		75	125
Silver	42362	1	SW17599	17	SW17599	15	0.0892	0.02U	.100	89		75	125
Sodium	42362	1	SW17599	16	SW17599	14	65.7658	17.1845	50.00	97		75	125
Vanadium	42362	1	SW17599	17	SW17599	15	0.4532	0.05U	0.50	91		75	125
Zinc	42362	1	SW17599	17	SW17599	15	0.4625	0.05U	0.50	93		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 42362

5032012 0265

Instrument Type: ICP/HG

Analytical Method(s): 6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD		Matrix: AQUEOUS			SampleID: AC83866-013								
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Aluminum	42362	1	SW17599	18	SW17599	15	4.5300	0.2U	5.00	91		75	125
Arsenic	42362	1	SW17599	18	SW17599	15	0.4500	0.02U	0.50	90		75	125
Calcium	42362	1	SW17599	18	SW17599	15	58.7104	14.9439	50.0	88		75	125
Chromium	42362	1	SW17599	18	SW17599	15	0.4548	0.05U	0.50	91		75	125
Copper	42362	1	SW17599	18	SW17599	15	0.4588	0.05U	0.50	92		75	125
Iron	42362	1	SW17599	18	SW17599	15	4.6170	0.3U	5.00	92		75	125
Magnesium	42362	1	SW17599	18	SW17599	15	49.5970	5.0858	50.0	89		75	125
Manganese	42362	1	SW17599	18	SW17599	15	0.4615	0.04U	0.50	92		75	125
Mercury	42362	1	H17599S	17	H17599S	14	10.2000	.70U	10	102		75	125
Nickel	42362	1	SW17599	18	SW17599	15	0.4507	0.05U	0.50	90		75	125
Potassium	42362	1	SW17599	17	SW17599	14	46.6286	5U	50.0	93		75	125
Silver	42362	1	SW17599	18	SW17599	15	0.0884	0.02U	.100	88		75	125
Sodium	42362	1	SW17599	17	SW17599	14	63.7593	17.1845	50	93		75	125
Vanadium	42362	1	SW17599	18	SW17599	15	0.4501	0.05U	0.50	90		75	125
Zinc	42362	1	SW17599	18	SW17599	15	0.4596	0.05U	0.50	92		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 42362

5032012 0266

Instrument Type: ICPMS

Analytical Method(s): 6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: AQUEOUS SampleID: LCSW 42362											
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim	
Antimony	42362	1	SW33115	17	260.3000	250	104	80	120		
Arsenic	42362	1	SW33115	17	255.5000	250	102	80	120		
Beryllium	42362	1	SW33115	17	270.6000	250	108	80	120		
Cadmium	42362	1	SW33115	17	252.1000	250	101	80	120		
Cobalt	42362	1	SW33115	17	258.9000	250	104	80	120		
Lead	42362	1	SW33115	17	259.4000	250	104	80	120		
Selenium	42362	1	SW33115	17	257.8000	250	103	80	120		
Thallium	42362	1	SW33115	17	244.7000	250	98	80	120		

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 42362											
Analyte	BatchId	DF	Data File	Seq#:	Spk Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim	
Antimony	42362	1	SW33115	18	249.0000	250	100	80	120		
Arsenic	42362	1	SW33115	18	246.3000	250	99	80	120		
Beryllium	42362	1	SW33115	18	260.0000	250	104	80	120		
Cadmium	42362	1	SW33115	18	240.8000	250	96	80	120		
Cobalt	42362	1	SW33115	18	244.7000	250	98	80	120		
Lead	42362	1	SW33115	18	243.6000	250	97	80	120		
Selenium	42362	1	SW33115	18	245.3000	250	98	80	120		
Thallium	42362	1	SW33115	18	230.6000	250	92	80	120		

TxtQcType: MS					Matrix: AQUEOUS		SampleID: AC83866-012						
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	42362	1	SW33115	22	SW33115	19	253.5000	1.5U	250	101	75	125	
Arsenic	42362	1	SW33115	22	SW33115	19	242.3000	1U	250	97	75	125	
Beryllium	42362	1	SW33115	22	SW33115	19	260.5000	0.5U	250	104	75	125	
Cadmium	42362	1	SW33115	22	SW33115	19	244.2000	1U	250	98	75	125	
Cobalt	42362	1	SW33115	22	SW33115	19	235.1000	1U	250	94	75	125	
Lead	42362	1	SW33115	22	SW33115	19	246.2000	1.5U	250	98	75	125	
Selenium	42362	1	SW33115	22	SW33115	19	241.9000	5U	250	97	75	125	
Thallium	42362	1	SW33115	22	SW33115	19	231.8000	1U	250	93	75	125	

TxtQcType: MSD			Matrix: AQUEOUS			SampleID: AC83866-013							
Analyte	BatchId	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	42362	1	SW33115	23	SW33115	19	273.2000	1.5U	250	109	75	125	
Arsenic	42362	1	SW33115	23	SW33115	19	265.0000	1U	250	106	75	125	
Beryllium	42362	1	SW33115	23	SW33115	19	281.4000	0.5U	250	113	75	125	
Cadmium	42362	1	SW33115	23	SW33115	19	265.4000	1U	250	106	75	125	
Cobalt	42362	1	SW33115	23	SW33115	19	264.4000	1U	250	106	75	125	
Lead	42362	1	SW33115	23	SW33115	19	265.6000	1.5U	250	106	75	125	
Selenium	42362	1	SW33115	23	SW33115	19	269.8000	5U	250	108	75	125	
Thallium	42362	1	SW33115	23	SW33115	19	249.6000	1U	250	100	75	125	

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 42362

5032012 0267

Instrument Type: ICPMS

Analytical Method(s): 6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: AQUEOUS		SampleID: AC83866-011								
Analyte	DF	Data File	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Added	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	SW33115	24	SW33115	19	54.5800	1.5U	50	109		80	120
Arsenic	1	SW33115	24	SW33115	19	54.2500	1U	50	108		80	120
Beryllium	1	SW33115	24	SW33115	19	55.6900	0.5U	50	111		80	120
Cadmium	1	SW33115	24	SW33115	19	54.3900	1U	50	109		80	120
Cobalt	1	SW33115	24	SW33115	19	53.4600	1U	50	107		80	120
Lead	1	SW33115	24	SW33115	19	52.7800	1.5U	50	106		80	120
Selenium	1	SW33115	24	SW33115	19	263.7000	5U	250	105		80	120
Thallium	1	SW33115	24	SW33115	19	54.2000	1U	50	108		80	120

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 42363

5032012 0268

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS		Matrix: AQUEOUS		SampleID: LCSW 42363						
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	42363	1	SW17600	13	4.2080	5.000	84		80	120
Barium	42363	1	SW17600	13	0.4217	0.500	84		80	120
Calcium	42363	1	SW17600	13	42.5004	50.00	85		80	120
Chromium	42363	1	SW17600	13	0.4207	0.500	84		80	120
Copper	42363	1	SW17600	13	0.4198	0.500	84		80	120
Iron	42363	1	SW17600	13	4.2457	5.000	85		80	120
Magnesium	42363	1	SW17600	13	42.1869	50.00	84		80	120
Manganese	42363	1	SW17600	13	0.4197	0.500	84		80	120
Mercury	42363	1	H17600S	12	9.9322	10	99		80	120
Nickel	42363	1	SW17600	13	0.4251	0.500	85		80	120
Silver	42363	1	SW17600	13	0.0822	0.100	82		80	120
Sodium	42363	1	SW17600	12	40.1591	50	80		80	120
Vanadium	42363	1	SW17600	13	0.4102	0.500	82		80	120
Zinc	42363	1	SW17600	13	0.4298	0.500	86		80	120

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 42363						
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	42363	1	SW17600	14	4.2146	5.000	84		80	120
Barium	42363	1	SW17600	14	0.4217	0.500	84		80	120
Calcium	42363	1	SW17600	14	42.7108	50.00	85		80	120
Chromium	42363	1	SW17600	14	0.4216	0.500	84		80	120
Copper	42363	1	SW17600	14	0.4284	0.500	86		80	120
Iron	42363	1	SW17600	14	4.2399	5.000	85		80	120
Magnesium	42363	1	SW17600	14	42.8620	50.00	86		80	120
Manganese	42363	1	SW17600	14	0.4204	0.500	84		80	120
Mercury	42363	1	H17600S	13	9.9869	10	100		80	120
Nickel	42363	1	SW17600	14	0.4270	0.500	85		80	120
Silver	42363	1	SW17600	14	0.0818	0.100	82		80	120
Sodium	42363	1	SW17600	13	41.3493	50	83		80	120
Vanadium	42363	1	SW17600	14	0.4098	0.500	82		80	120
Zinc	42363	1	SW17600	14	0.4411	0.500	88		80	120

TxtQcType: MS		Matrix: AQUEOUS			SampleID: AC83866-015								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	42363	1	SW17600	17	SW17600	15	4.4962	0.2U	5.00	90		75	125
Barium	42363	1	SW17600	17	SW17600	15	0.4618	0.05U	0.50	92		75	125
Calcium	42363	1	SW17600	17	SW17600	15	57.8378	13.4349	50.0	89		75	125
Chromium	42363	1	SW17600	17	SW17600	15	0.4449	0.05U	0.50	89		75	125
Copper	42363	1	SW17600	17	SW17600	15	0.4441	0.05U	0.50	89		75	125
Iron	42363	1	SW17600	17	SW17600	15	4.5256	0.3U	5.00	91		75	125
Magnesium	42363	1	SW17600	17	SW17600	15	49.2804	5U	50.0	99		75	125
Manganese	42363	1	SW17600	17	SW17600	15	0.4493	0.04U	0.50	90		75	125
Mercury	42363	1	H17600S	16	H17600S	14	9.8144	.70U	10	98		75	125
Nickel	42363	1	SW17600	17	SW17600	15	0.4460	0.05U	0.50	89		75	125
Silver	42363	1	SW17600	17	SW17600	15	0.0867	0.02U	.100	87		75	125
Sodium	42363	1	SW17600	16	SW17600	14	59.4093	16.1967	50.00	86		75	125
Vanadium	42363	1	SW17600	17	SW17600	15	0.4344	0.05U	0.50	87		75	125
Zinc	42363	1	SW17600	17	SW17600	15	0.4557	0.05U	0.50	91		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 42363

5032012 0269

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD		Matrix: AQUEOUS			SampleID: AC83866-016								
Analyte	BatchId	DF	Data Fil	Seq#	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	42363	1	SW17600	18	SW17600	15	4.4775	0.2U	5.00	90		75	125
Barium	42363	1	SW17600	18	SW17600	15	0.4641	0.05U	0.50	93		75	125
Calcium	42363	1	SW17600	18	SW17600	15	57.5279	13.4349	50.0	88		75	125
Chromium	42363	1	SW17600	18	SW17600	15	0.4455	0.05U	0.50	89		75	125
Copper	42363	1	SW17600	18	SW17600	15	0.4466	0.05U	0.50	89		75	125
Iron	42363	1	SW17600	18	SW17600	15	4.5389	0.3U	5.00	91		75	125
Magnesium	42363	1	SW17600	18	SW17600	15	49.1172	5U	50.0	98		75	125
Manganese	42363	1	SW17600	18	SW17600	15	0.4518	0.04U	0.50	90		75	125
Mercury	42363	1	H17600S	17	H17600S	14	9.4811	.70U	10	95		75	125
Nickel	42363	1	SW17600	18	SW17600	15	0.4474	0.05U	0.50	89		75	125
Silver	42363	1	SW17600	18	SW17600	15	0.0869	0.02U	.100	87		75	125
Sodium	42363	1	SW17600	17	SW17600	14	59.0857	16.1967	50	86		75	125
Vanadium	42363	1	SW17600	18	SW17600	15	0.4368	0.05U	0.50	87		75	125
Zinc	42363	1	SW17600	18	SW17600	15	0.4587	0.05U	0.50	92		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 42399

5032012 0270

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS		Matrix: AQUEOUS			SampleID: LCSW 42399					
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Potassium	42399	1	SW17600	12	44.4081	50	89		80	120

TxtQcType: LCSMR		Matrix: AQUEOUS			SampleID: LCSW MR 42399					
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Potassium	42399	1	SW17600	13	44.3905	50	89		80	120

TxtQcType: MS		Matrix: AQUEOUS			SampleID: AC83866-015								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Potassium	42399	1	SW17600	16	SW17600	14	46.9893	5U	50.00	94		75	125

TxtQcType: MSD		Matrix: AQUEOUS			SampleID: AC83866-016								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Potassium	42399	1	SW17600	17	SW17600	14	46.6735	5U	50.0	93		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 42363

5032012 0271

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS		Matrix: AQUEOUS			SampleID: LCSW 42363					
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	42363	1	SW33015	17	212.3000	250	85		80	120
Arsenic	42363	1	SW33015	17	206.2000	250	82		80	120
Beryllium	42363	1	SW33015	17	216.3000	250	87		80	120
Cadmium	42363	1	SW33015	17	207.3000	250	83		80	120
Cobalt	42363	1	SW33015	17	223.8000	250	90		80	120
Lead	42363	1	SW33015	17	209.6000	250	84		80	120
Selenium	42363	1	SW33015	17	200.8000	250	80		80	120
Thallium	42363	1	SW33015	17	199.0000	250	80		80	120

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 42363						
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	42363	1	SW33015	31	211.2000	250	84		80	120
Arsenic	42363	1	SW33015	31	209.8000	250	84		80	120
Beryllium	42363	1	SW33015	31	217.7000	250	87		80	120
Cadmium	42363	1	SW33015	31	206.9000	250	83		80	120
Cobalt	42363	1	SW33015	31	222.6000	250	89		80	120
Lead	42363	1	SW33015	31	209.4000	250	84		80	120
Selenium	42363	1	SW33015	31	202.5000	250	81		80	120
Thallium	42363	1	SW33015	31	198.9000	250	80		80	120

TxtQcType: MS		Matrix: AQUEOUS			SampleID: AC83866-015								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	42363	1	SW33015	22	SW33015	19	243.5000	1.5U	250	97		75	125
Arsenic	42363	1	SW33015	22	SW33015	19	242.2000	1U	250	97		75	125
Beryllium	42363	1	SW33015	22	SW33015	19	241.5000	0.5U	250	97		75	125
Cadmium	42363	1	SW33015	22	SW33015	19	239.3000	1U	250	96		75	125
Cobalt	42363	1	SW33015	22	SW33015	19	252.1000	1U	250	101		75	125
Lead	42363	1	SW33015	22	SW33015	19	237.0000	1.5U	250	95		75	125
Selenium	42363	1	SW33015	22	SW33015	19	228.6000	5U	250	91		75	125
Thallium	42363	1	SW33015	22	SW33015	19	224.1000	1U	250	90		75	125

TxtQcType: MSD		Matrix: AQUEOUS			SampleID: AC83866-016								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	42363	1	SW33015	23	SW33015	19	229.6000	1.5U	250	92		75	125
Arsenic	42363	1	SW33015	23	SW33015	19	228.1000	1U	250	91		75	125
Beryllium	42363	1	SW33015	23	SW33015	19	228.2000	0.5U	250	91		75	125
Cadmium	42363	1	SW33015	23	SW33015	19	222.9000	1U	250	89		75	125
Cobalt	42363	1	SW33015	23	SW33015	19	238.5000	1U	250	95		75	125
Lead	42363	1	SW33015	23	SW33015	19	220.3000	1.5U	250	88		75	125
Selenium	42363	1	SW33015	23	SW33015	19	217.1000	5U	250	87		75	125
Thallium	42363	1	SW33015	23	SW33015	19	210.8000	1U	250	84		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
 PREP BATCH: 42363

5032012 0272

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: AQUEOUS		SampleID: AC83866-014								
Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	SW33015	24	SW33015	19	50.8500	1.5U	50	102		80	120
Arsenic	1	SW33015	24	SW33015	19	51.3000	1U	50	103		80	120
Beryllium	1	SW33015	24	SW33015	19	50.8300	0.5U	50	102		80	120
Cadmium	1	SW33015	24	SW33015	19	50.9100	1U	50	102		80	120
Cobalt	1	SW33015	24	SW33015	19	53.9300	1U	50	108		80	120
Lead	1	SW33015	24	SW33015	19	48.9900	1.5U	50	98		80	120
Selenium	1	SW33015	24	SW33015	19	236.5000	5U	250	95		80	120
Thallium	1	SW33015	24	SW33015	19	49.9200	1U	50	100		80	120

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

5032012 0273

RPD/%Difference Data

PREP BATCH: 42362

Instrument Type: ICP/HG

Analytical Method(s): 6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 42362					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	42362	SW17599	14	SW17599	13	4.3634	4.5149	3.4	20
Arsenic	42362	SW17599	14	SW17599	13	0.4285	0.4451	3.8	20
Calcium	42362	SW17599	14	SW17599	13	44.9495	46.2016	2.7	20
Chromium	42362	SW17599	14	SW17599	13	0.4404	0.4557	3.4	20
Copper	42362	SW17599	14	SW17599	13	0.4428	0.4574	3.2	20
Iron	42362	SW17599	14	SW17599	13	4.5178	4.6697	3.3	20
Magnesium	42362	SW17599	14	SW17599	13	43.7154	44.9567	2.8	20
Manganese	42362	SW17599	14	SW17599	13	0.4415	0.4566	3.4	20
Mercury	42362	H17599S	13	H17599S	12	10.0300	10.0300	0	20
Nickel	42362	SW17599	14	SW17599	13	0.4422	0.4580	3.5	20
Potassium	42362	SW17599	13	SW17599	12	45.7110	45.9101	.43	20
Silver	42362	SW17599	14	SW17599	13	0.0854	0.0882	3.2	20
Sodium	42362	SW17599	13	SW17599	12	46.1631	46.8466	1.5	20
Vanadium	42362	SW17599	14	SW17599	13	0.4357	0.4504	3.3	20
Zinc	42362	SW17599	14	SW17599	13	0.4464	0.4626	3.5	20

TxtQcType: MR		Matrix: AQUEOUS		SampleID: AC83866-011					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	42362	SW17599	16	SW17599	15	0.2U	0.2U	---	20
Arsenic	42362	SW17599	16	SW17599	15	0.02U	0.02U	---	20
Calcium	42362	SW17599	16	SW17599	15	14.1821	14.9439	5.2	20
Chromium	42362	SW17599	16	SW17599	15	0.05U	0.05U	---	20
Copper	42362	SW17599	16	SW17599	15	0.05U	0.05U	---	20
Iron	42362	SW17599	16	SW17599	15	0.3U	0.3U	---	20
Magnesium	42362	SW17599	16	SW17599	15	5U	5.0858	---	20
Manganese	42362	SW17599	16	SW17599	15	0.04U	0.04U	---	20
Mercury	42362	H17599S	15	H17599S	14	.70U	.70U	---	20
Nickel	42362	SW17599	16	SW17599	15	0.05U	0.05U	---	20
Potassium	42362	SW17599	15	SW17599	14	5U	5U	---	20
Silver	42362	SW17599	16	SW17599	15	0.02U	0.02U	---	20
Sodium	42362	SW17599	15	SW17599	14	16.7373	17.1845	2.6	20
Vanadium	42362	SW17599	16	SW17599	15	0.05U	0.05U	---	20
Zinc	42362	SW17599	16	SW17599	15	0.05U	0.05U	---	20

TxtQcType: MSD		Matrix: AQUEOUS		SampleID: AC83866-013					
Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	42362	SW17599	18	SW17599	17	4.5300	4.5601	.66	20
Arsenic	42362	SW17599	18	SW17599	17	0.4500	0.4615	2.5	20
Calcium	42362	SW17599	18	SW17599	17	58.7104	61.5790	4.8	20
Chromium	42362	SW17599	18	SW17599	17	0.4548	0.4581	.73	20
Copper	42362	SW17599	18	SW17599	17	0.4588	0.4614	.57	20
Iron	42362	SW17599	18	SW17599	17	4.6170	4.6623	.97	20
Magnesium	42362	SW17599	18	SW17599	17	49.5970	51.3807	3.5	20
Manganese	42362	SW17599	18	SW17599	17	0.4615	0.4642	.58	20
Mercury	42362	H17599S	17	H17599S	16	10.2000	10.1900	.098	20
Nickel	42362	SW17599	18	SW17599	17	0.4507	0.4534	.59	20
Potassium	42362	SW17599	17	SW17599	16	46.6286	47.7010	2.3	20
Silver	42362	SW17599	18	SW17599	17	0.0884	0.0892	.94	20
Sodium	42362	SW17599	17	SW17599	16	63.7593	65.7658	3.1	20
Vanadium	42362	SW17599	18	SW17599	17	0.4501	0.4532	.68	20
Zinc	42362	SW17599	18	SW17599	17	0.4596	0.4625	.64	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9
RPD/%Difference Data
 PREP BATCH: 42362

5032012 0274

Instrument Type: ICP/HG

Analytical Method(s): 6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: SD		Matrix: AQUEOUS		SampleID: AC83866-011						
Analyte	BatchId	Data File	Seq#:	NS File	Seq# DF	Result 1	Result 2	%Diff	Limit	
Aluminum	42362	SW17599	23	SW17599	15 5	-0.0141	0.0099	---	10	
Arsenic	42362	SW17599	23	SW17599	15 5	0.0010	0.0009	---	10	
Calcium	42362	SW17599	23	SW17599	15 5	2.8341	14.9439	5.2	10	
Chromium	42362	SW17599	23	SW17599	15 5	-0.0013	-0.0007	---	10	
Copper	42362	SW17599	23	SW17599	15 5	-0.0006	0.0003	---	10	
Iron	42362	SW17599	23	SW17599	15 5	-0.0254	-0.0018	---	10	
Magnesium	42362	SW17599	23	SW17599	15 5	0.9011	5.0858	11 a	10	
Manganese	42362	SW17599	23	SW17599	15 5	-0.0024	-0.0008	---	10	
Nickel	42362	SW17599	23	SW17599	15 5	-0.0043	-0.0034	---	10	
Potassium	42362	SW17599	22	SW17599	14 5	0.1841	0.8584	7.2	10	
Silver	42362	SW17599	23	SW17599	15 5	-0.0008	-0.0005	---	10	
Sodium	42362	SW17599	22	SW17599	14 5	3.4869	17.1845	1.5	10	
Vanadium	42362	SW17599	23	SW17599	15 5	-0.0037	-0.0008	---	10	
Zinc	42362	SW17599	23	SW17599	15 5	0.0001	0.0036	---	10	

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9
RPD/%Difference Data
 PREP BATCH: 42362

5032012 0275

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 42362					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	42362	SW33115	18	SW33115	17	249.0000	260.3000	4.4	20
Arsenic	42362	SW33115	18	SW33115	17	246.3000	255.5000	3.7	20
Beryllium	42362	SW33115	18	SW33115	17	260.0000	270.6000	4	20
Cadmium	42362	SW33115	18	SW33115	17	240.8000	252.1000	4.6	20
Cobalt	42362	SW33115	18	SW33115	17	244.7000	258.9000	5.6	20
Lead	42362	SW33115	18	SW33115	17	243.6000	259.4000	6.3	20
Selenium	42362	SW33115	18	SW33115	17	245.3000	257.8000	5	20
Thallium	42362	SW33115	18	SW33115	17	230.6000	244.7000	5.9	20

TxtQcType: MR		Matrix: AQUEOUS		SampleID: AC83866-011					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	42362	SW33115	20	SW33115	19	1.5U	1.5U	---	20
Arsenic	42362	SW33115	20	SW33115	19	1U	1U	---	20
Beryllium	42362	SW33115	20	SW33115	19	0.5U	0.5U	---	20
Cadmium	42362	SW33115	20	SW33115	19	1U	1U	---	20
Cobalt	42362	SW33115	20	SW33115	19	1U	1U	---	20
Lead	42362	SW33115	20	SW33115	19	1.5U	1.5U	---	20
Selenium	42362	SW33115	20	SW33115	19	5U	5U	---	20
Thallium	42362	SW33115	20	SW33115	19	1U	1U	---	20

TxtQcType: MSD		Matrix: AQUEOUS		SampleID: AC83866-013					
Analyte	BatchId	Data File	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	42362	SW33115	23	SW33115	22	273.2000	253.5000	7.5	20
Arsenic	42362	SW33115	23	SW33115	22	265.0000	242.3000	8.9	20
Beryllium	42362	SW33115	23	SW33115	22	281.4000	260.5000	7.7	20
Cadmium	42362	SW33115	23	SW33115	22	265.4000	244.2000	8.3	20
Cobalt	42362	SW33115	23	SW33115	22	264.4000	235.1000	12	20
Lead	42362	SW33115	23	SW33115	22	265.6000	246.2000	7.6	20
Selenium	42362	SW33115	23	SW33115	22	269.8000	241.9000	11	20
Thallium	42362	SW33115	23	SW33115	22	249.6000	231.8000	7.4	20

TxtQcType: SD		Matrix: AQUEOUS		SampleID: AC83866-011						
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Antimony	42362	SW33115	21	SW33115	19	5	0.0438	0.2516	13 c	10
Arsenic	42362	SW33115	21	SW33115	19	5	0.0499	0.3868	35 c	10
Beryllium	42362	SW33115	21	SW33115	19	5	0.0256	0.1816	---	10
Cadmium	42362	SW33115	21	SW33115	19	5	0.0338	0.1691	0.059	10
Cobalt	42362	SW33115	21	SW33115	19	5	0.0287	0.2188	---	10
Lead	42362	SW33115	21	SW33115	19	5	0.1220	0.2885	---	10
Selenium	42362	SW33115	21	SW33115	19	5	-0.0536	0.3998	---	10
Thallium	42362	SW33115	21	SW33115	19	5	0.0786	0.4136	4.9	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9
RPD/%Difference Data
 PREP BATCH: 42363

5032012 0276

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 42363					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	42363	SW17600	14	SW17600	13	4.2146	4.2080	.16	20
Barium	42363	SW17600	14	SW17600	13	0.4217	0.4217	.0014	20
Calcium	42363	SW17600	14	SW17600	13	42.7108	42.5004	.49	20
Chromium	42363	SW17600	14	SW17600	13	0.4216	0.4207	.21	20
Copper	42363	SW17600	14	SW17600	13	0.4284	0.4198	2	20
Iron	42363	SW17600	14	SW17600	13	4.2399	4.2457	.14	20
Magnesium	42363	SW17600	14	SW17600	13	42.8620	42.1869	1.6	20
Manganese	42363	SW17600	14	SW17600	13	0.4204	0.4197	.18	20
Mercury	42363	H17600S	13	H17600S	12	9.9869	9.9322	.55	20
Nickel	42363	SW17600	14	SW17600	13	0.4270	0.4251	.45	20
Silver	42363	SW17600	14	SW17600	13	0.0818	0.0822	.47	20
Sodium	42363	SW17600	13	SW17600	12	41.3493	40.1591	2.9	20
Vanadium	42363	SW17600	14	SW17600	13	0.4098	0.4102	.084	20
Zinc	42363	SW17600	14	SW17600	13	0.4411	0.4298	2.6	20

TxtQcType: MR		Matrix: AQUEOUS		SampleID: AC83866-014					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	42363	SW17600	16	SW17600	15	0.2U	0.2U	---	20
Barium	42363	SW17600	16	SW17600	15	0.05U	0.05U	---	20
Calcium	42363	SW17600	16	SW17600	15	13.7715	13.4349	2.5	20
Chromium	42363	SW17600	16	SW17600	15	0.05U	0.05U	---	20
Copper	42363	SW17600	16	SW17600	15	0.05U	0.05U	---	20
Iron	42363	SW17600	16	SW17600	15	0.3U	0.3U	---	20
Magnesium	42363	SW17600	16	SW17600	15	5U	5U	---	20
Manganese	42363	SW17600	16	SW17600	15	0.04U	0.04U	---	20
Mercury	42363	H17600S	15	H17600S	14	.70U	.70U	---	20
Nickel	42363	SW17600	16	SW17600	15	0.05U	0.05U	---	20
Silver	42363	SW17600	16	SW17600	15	0.02U	0.02U	---	20
Sodium	42363	SW17600	15	SW17600	14	16.4257	16.1967	1.4	20
Vanadium	42363	SW17600	16	SW17600	15	0.05U	0.05U	---	20
Zinc	42363	SW17600	16	SW17600	15	0.05U	0.05U	---	20

TxtQcType: MSD		Matrix: AQUEOUS		SampleID: AC83866-016					
Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	42363	SW17600	18	SW17600	17	4.4775	4.4962	.42	20
Barium	42363	SW17600	18	SW17600	17	0.4641	0.4618	.49	20
Calcium	42363	SW17600	18	SW17600	17	57.5279	57.8378	.54	20
Chromium	42363	SW17600	18	SW17600	17	0.4455	0.4449	.15	20
Copper	42363	SW17600	18	SW17600	17	0.4466	0.4441	.55	20
Iron	42363	SW17600	18	SW17600	17	4.5389	4.5256	.29	20
Magnesium	42363	SW17600	18	SW17600	17	49.1172	49.2804	.33	20
Manganese	42363	SW17600	18	SW17600	17	0.4518	0.4493	.54	20
Mercury	42363	H17600S	17	H17600S	16	9.4811	9.8144	3.5	20
Nickel	42363	SW17600	18	SW17600	17	0.4474	0.4460	.33	20
Silver	42363	SW17600	18	SW17600	17	0.0869	0.0867	.25	20
Sodium	42363	SW17600	17	SW17600	16	59.0857	59.4093	.55	20
Vanadium	42363	SW17600	18	SW17600	17	0.4368	0.4344	.54	20
Zinc	42363	SW17600	18	SW17600	17	0.4587	0.4557	.65	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9
RPD/%Difference Data
 PREP BATCH: 42363

5032012 0277

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: SD		Matrix: AQUEOUS		SampleID: AC83866-014						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Aluminum	42363	SW17600	23	SW17600	15	5	-0.0065	0.0030	---	10
Barium	42363	SW17600	23	SW17600	15	5	0.0011	0.0124	55 c	10
Calcium	42363	SW17600	23	SW17600	15	5	2.6906	13.4349	0.13	10
Chromium	42363	SW17600	23	SW17600	15	5	-0.0018	-0.0014	---	10
Copper	42363	SW17600	23	SW17600	15	5	0.0001	0.0004	---	10
Iron	42363	SW17600	23	SW17600	15	5	-0.0045	-0.0025	---	10
Magnesium	42363	SW17600	23	SW17600	15	5	0.7895	4.6749	16 a	10
Manganese	42363	SW17600	23	SW17600	15	5	-0.0020	-0.0009	---	10
Nickel	42363	SW17600	23	SW17600	15	5	-0.0036	-0.0028	---	10
Silver	42363	SW17600	23	SW17600	15	5	-0.0002	0.0001	---	10
Sodium	42363	SW17600	22	SW17600	14	5	3.4856	16.1967	7.6	10
Vanadium	42363	SW17600	23	SW17600	15	5	-0.0026	-0.0016	---	10
Zinc	42363	SW17600	23	SW17600	15	5	-0.0004	0.0021	---	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9
RPD/%Difference Data
 PREP BATCH: 42399

5032012 0277A

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 42399						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit	
Potassium	42399	SW17600	13	SW17600	12	44.3905	44.4081	.04	20	
TxtQcType: MR		Matrix: AQUEOUS		SampleID: AC83866-014						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit	
Potassium	42399	SW17600	15	SW17600	14	5U	5U	---	20	
TxtQcType: MSD		Matrix: AQUEOUS		SampleID: AC83866-016						
Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit	
Potassium	42399	SW17600	17	SW17600	16	46.6735	46.9893	.67	20	
TxtQcType: SD		Matrix: AQUEOUS		SampleID: AC83866-014						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Potassium	42399	SW17600	22	SW17600	14	5	0.3455	0.9858	75 c	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9
RPD/%Difference Data
 PREP BATCH: 42363

5032012 0277E

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 42363					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	42363	SW33015	31	SW33015	17	211.2000	212.3000	.52	20
Arsenic	42363	SW33015	31	SW33015	17	209.8000	206.2000	1.7	20
Beryllium	42363	SW33015	31	SW33015	17	217.7000	216.3000	.65	20
Cadmium	42363	SW33015	31	SW33015	17	206.9000	207.3000	.19	20
Cobalt	42363	SW33015	31	SW33015	17	222.6000	223.8000	.54	20
Lead	42363	SW33015	31	SW33015	17	209.4000	209.6000	.095	20
Selenium	42363	SW33015	31	SW33015	17	202.5000	200.8000	.84	20
Thallium	42363	SW33015	31	SW33015	17	198.9000	199.0000	.05	20

TxtQcType: MR		Matrix: AQUEOUS		SampleID: AC83866-014					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	42363	SW33015	20	SW33015	19	1.5U	1.5U	---	20
Arsenic	42363	SW33015	20	SW33015	19	1U	1U	---	20
Beryllium	42363	SW33015	20	SW33015	19	0.5U	0.5U	---	20
Cadmium	42363	SW33015	20	SW33015	19	1U	1U	---	20
Cobalt	42363	SW33015	20	SW33015	19	1U	1U	---	20
Lead	42363	SW33015	20	SW33015	19	1.5U	1.5U	---	20
Selenium	42363	SW33015	20	SW33015	19	5U	5U	---	20
Thallium	42363	SW33015	20	SW33015	19	1U	1U	---	20

TxtQcType: MSD		Matrix: AQUEOUS		SampleID: AC83866-016					
Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	42363	SW33015	23	SW33015	22	229.6000	243.5000	5.9	20
Arsenic	42363	SW33015	23	SW33015	22	228.1000	242.2000	6	20
Beryllium	42363	SW33015	23	SW33015	22	228.2000	241.5000	5.7	20
Cadmium	42363	SW33015	23	SW33015	22	222.9000	239.3000	7.1	20
Cobalt	42363	SW33015	23	SW33015	22	238.5000	252.1000	5.5	20
Lead	42363	SW33015	23	SW33015	22	220.3000	237.0000	7.3	20
Selenium	42363	SW33015	23	SW33015	22	217.1000	228.6000	5.2	20
Thallium	42363	SW33015	23	SW33015	22	210.8000	224.1000	6.1	20

TxtQcType: SD		Matrix: AQUEOUS		SampleID: AC83866-014						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Antimony	42363	SW33015	21	SW33015	19	5	-0.0788	0.0685	---	10
Arsenic	42363	SW33015	21	SW33015	19	5	0.1299	0.3434	89 c	10
Beryllium	42363	SW33015	21	SW33015	19	5	0.0276	0.1161	---	10
Cadmium	42363	SW33015	21	SW33015	19	5	0.0307	0.1212	27 c	10
Cobalt	42363	SW33015	21	SW33015	19	5	0.0399	0.1307	---	10
Lead	42363	SW33015	21	SW33015	19	5	0.8431	0.2038	1970 c	10
Selenium	42363	SW33015	21	SW33015	19	5	-0.2009	0.1497	---	10
Thallium	42363	SW33015	21	SW33015	19	5	0.0100	0.3176	---	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Metal Data
Verification of Instrument Parameters

INTERELEMENT CORRECTION SUMMARY PEICP2

Interfered Elements	Interfering Elements							
	Al	Ca	Fe	Mg	Mn	Mo	Ti	Zn
Al	N/A	0	0	0	0	0	0	0
Sb	0.0523	0.0109	0.0804	0.00457	0	0	0.437	0
As	0.0229	0	-0.0773	0.00304	0	0	-0.314	0
Ba	0	0	0.0349	0	0	0	0	0
Be	0	0	0	0	0	0	0.459	0
Cd	-0.00304	0	-0.0246	0	0	0	0	0
Ca	0	N/A	0	0	0	0	0	0
Cr	0	0	-0.0328	-0.00515	-0.728	0	0	0
Co	0	0	0	-0.00978	0	0	2.07	0
Cu	0.00111	-0.031	-0.0765	0	0	0	-2.68	0
Fe	0	0	N/A	0	0	0	0	0
Pb	-0.105	-0.0636	0.0352	0.00966	0	-1.25	-0.527	0
Mg	0	0	0	N/A	0	0	0	0
Mn	0	0	-0.072	0.0351	N/A	0	0	0
Mo	-0.00304	0.042	0	0	0	N/A	0.329	0.271
Ni	0	0	0.0403	0	0	-0.302	0	0
Se	-0.388	0.0467	-0.443	-0.0109	0.525	0.355	0	-0.261
Ag	0	0	-0.0499	0	0	0	0	0
Tl	0.0032	-0.015	-0.00221	-0.000718	1.1	0	-2.85	0.0511
Sn	0.0115	-0.0384	0	0	0	0	-0.32	0
Ti	0	0	0	0	0	0	N/A	0
V	0	0	0.0569	0.124	-0.278	-1.39	-0.331	0
Zn	-0.0007	0	0.0371	0	0	0	0	N/A

IEC'S RUN 09/26/14. Ba mod 12/04/14; Mo mod 12/16/14; Mn mod 01/07/15; As, Cd, Zn mod 01/13/15; Mo, Pb, Sn mod 02/18/15; Cr, Cu, Sb, Se, Ti, V mod 03/12/15.

LINEAR RANGES
PE ICP 2 Axial

ELEMENT	Linear Range (mg/L)
Al	900
Sb	45
As	45
Ba	45
Be	4.5
Cd	45
Ca	450
Cr	45
Co	45
Cu	45
Fe	450
Pb	45
Mg	810
Mn	36
Mo	45
Ni	45
Se	45
Ag	1.8
Tl	45
Sn	45
Ti	36
V	45
Zn	45

Ca analyzed 08/06/14. All other elements analyzed 08/05/14.

LINEAR RANGES
PE ICP 2 Radial

<u>ELEMENT</u>	<u>LINEAR RANGE</u>
	(PPM)
Al	900
Ca	900
Fe	900
Mg	900
K	900
Na	900
Mn	45
Ti	45

Fe analyzed 01/22/15. All other elements analyzed on 4/30/14.

LINEAR RANGES
ICP-MS 2
MS_7500

<u>ELEMENT</u>	<u>LINEAR RANGE</u>
	(ppb)
Al	137700
Sb	2700
As	2700
Ba	2700
Be	2700
Ca	225000
Cd	2700
Cr	2700
Co	2700
Cu	2700
Fe	180000
Pb	2700
Mg	225000
Mn	2700
Mo	2700
Na	225000
Ni	2700
K	225000
Se	2700
Ag	225
Tl	2700
V	2700
Zn	2700

All elements except Mg, Na, Mo, Ag analyzed on 6/11/2014. Mg, Na, Mo, Ag analyzed on 6/18/2014.

MDL / RL SUMMARY
6010 WATER
PE ICP 2 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/L)
AL	0.0329174	0.2
SB	0.0027346	0.02
AS	0.0011051	0.02
BA	0.0006384	0.05
BE	0.0001013	0.012
CD	0.0001548	0.012
CA	0.169834	5
CR	0.0004969	0.05
CO	0.0003077	0.02
CU	0.0003462	0.05
FE	0.0142205	0.3
PB	0.0011104	0.012
MG	0.0193222	5
MN	0.0004267	0.04
MO	0.000617	0.02
NI	0.0011656	0.05
SE	0.0048173	0.04
AG	0.0005215	0.02
TL	0.0021912	0.02
SN	0.0012688	0.05
TI	0.0001929	0.05
V	0.0009828	0.05
ZN	0.0036046	0.05

Be, Ca, Ni analyzed 09/29/14. All others analyzed 09/26/14.

MDL / RL SUMMARY
6010 WATER
PE ICP 2 RADIAL

ELEMENT	MDL	Reporting Limits (Mg/L)
Al	0.052854	0.2
Ca	0.07021	5
Fe	0.026132	0.3
Mg	0.03108	5
Mn	0.00685	0.04
K	0.079632	5
Na	0.041971	5
Ti	0.001283	0.05

Ca, Na analyzed 07/15/14. All other elements analyzed 07/14/14.

HGCV2 MDL/RL SUMMARY

Element: *Mercury*
Instrument: *PE FIMS 100*
Technique: *CV*

Instrument ID: *HgCV2*
Analyst *Paul Cousineau*

200 Series	METHOD	MDL (ppb)	Completed	RL (ppb)
<u>H₂O</u>	245.1	0.0882	7/22/2014	0.20
SW846				
<u>H₂O</u>	7470A	0.0303	7/22/2014	0.70
<u>SOIL</u>	7471 B	0.0188 (0.00314 mg/kg)	7/24/2014	0.50 (0.0833 mg/kg)

MDL/RL
Method 6020/6020A
MS2_7500
Aqueous

ELEMENT	MDL (ug/L)	Reporting Limits (ug/L)
Al	8.30	200
Sb	0.0153	3
As	0.025	2
Ba	0.090	5
Be	0.0172	1
Ca	5.10	500
Cd	0.0058	2
Cr	0.125	2
Co	0.0049	2
Cu	0.702	10
Fe	7.12	300
Pb	0.066	3
Mg	2.32	500
Mn	0.22	6
Mo	0.057	2
Na	7.41	500
Ni	0.178	3
K	17.50	500
Se	0.299	10
Ag	0.0119	1
Tl	0.0217	2
V	0.040	2
Zn	1.07	20

Al, Fe, Mo, Ni, K,Na, V 9/29/14 All others 10/25/14.

INTERELEMENT CORRECTION SUMMARY PEICP2

	Interfering Elements							
	Al	Ca	Fe	Mg	Mn	Mo	Ti	Zn
Interfered Elements								
Al	N/A	0	0	0	0	0	0	0
Sb	0.0523	0.0109	0.0804	0.00457	0	0	0.437	0
As	0.0229	0	-0.0773	0.00304	0	0	-0.314	0
Ba	0	0	0.0349	0	0	0	0	0
Be	0	0	0	0	0	0	0.459	0
Cd	-0.00304	0	-0.0246	0	0	0	0	0
Ca	0	N/A	0	0	0	0	0	0
Cr	0	0	-0.0328	-0.00515	-0.728	0	0	0
Co	0	0	0	-0.00978	0	0	2.07	0
Cu	0.00111	-0.031	-0.0765	0	0	0	-2.68	0
Fe	0	0	N/A	0	0	0	0	0
Pb	-0.105	-0.0636	0.0352	0.00966	0	-1.25	-0.527	0
Mg	0	0	0	N/A	0	0	0	0
Mn	0	0	-0.072	0.0351	N/A	0	0	0
Mo	-0.00304	0.042	0	0	0	N/A	0.329	0.271
Ni	0	0	0.0403	0	0	-0.302	0	0
Se	-0.388	0.0467	-0.443	-0.0109	0.525	0.355	0	-0.261
Ag	0	0	-0.0499	0	0	0	0	0
Tl	0.0032	-0.015	-0.00221	-0.000718	1.1	0	-2.85	0.0511
Sn	0.0115	-0.0384	0	0	0	0	-0.32	0
Ti	0	0	0	0	0	0	N/A	0
V	0	0	0.0569	0.124	-0.278	-1.39	-0.331	0
Zn	-0.0007	0	0.0371	0	0	0	0	N/A

IEC'S RUN 09/26/14. Ba mod 12/04/14; Mo mod 12/16/14; Mn mod 01/07/15; As, Cd, Zn mod 01/13/15; Mo, Pb, Sn mod 02/18/15; Cr, Cu, Sb, Se, Ti, V mod 03/12/15.

LINEAR RANGES
PE ICP 2 Axial

ELEMENT	Linear Range (mg/L)
Al	900
Sb	45
As	45
Ba	45
Be	4.5
Cd	45
Ca	450
Cr	45
Co	45
Cu	45
Fe	450
Pb	45
Mg	810
Mn	36
Mo	45
Ni	45
Se	45
Ag	1.8
Tl	45
Sn	45
Ti	36
V	45
Zn	45

Ca analyzed 08/06/14. All other elements analyzed 08/05/14.

LINEAR RANGES
PE ICP 2 Radial

<u>ELEMENT</u>	<u>LINEAR RANGE</u>
	(PPM)
Al	900
Ca	900
Fe	900
Mg	900
K	900
Na	900
Mn	45
Ti	45

Fe analyzed 01/22/15. All other elements analyzed on 4/30/14.

LINEAR RANGES
ICP-MS 2
MS_7500

<u>ELEMENT</u>	<u>LINEAR RANGE</u> (ppb)
Al	137700
Sb	2700
As	2700
Ba	2700
Be	2700
Ca	225000
Cd	2700
Cr	2700
Co	2700
Cu	2700
Fe	180000
Pb	2700
Mg	225000
Mn	2700
Mo	2700
Na	225000
Ni	2700
K	225000
Se	2700
Ag	225
Tl	2700
V	2700
Zn	2700

All elements except Mg, Na, Mo, Ag analyzed on 6/11/2014. Mg, Na, Mo, Ag analyzed on 6/18/2014.

MDL / RL SUMMARY
6010 WATER
PE ICP 2 AXIAL

ELEMENT	MDL	Reporting Limits (Mg/L)
AL	0.0329174	0.2
SB	0.0027346	0.02
AS	0.0011051	0.02
BA	0.0006384	0.05
BE	0.0001013	0.012
CD	0.0001548	0.012
CA	0.169834	5
CR	0.0004969	0.05
CO	0.0003077	0.02
CU	0.0003462	0.05
FE	0.0142205	0.3
PB	0.0011104	0.012
MG	0.0193222	5
MN	0.0004267	0.04
MO	0.000617	0.02
NI	0.0011656	0.05
SE	0.0048173	0.04
AG	0.0005215	0.02
TL	0.0021912	0.02
SN	0.0012688	0.05
TI	0.0001929	0.05
V	0.0009828	0.05
ZN	0.0036046	0.05

Be, Ca, Ni analyzed 09/29/14. All others analyzed 09/26/14.

**MDL / RL SUMMARY
6010 WATER
PE ICP 2 RADIAL**

ELEMENT	MDL	Reporting Limits (Mg/L)
Al	0.052854	0.2
Ca	0.07021	5
Fe	0.026132	0.3
Mg	0.03108	5
Mn	0.00685	0.04
K	0.079632	5
Na	0.041971	5
Ti	0.001283	0.05

Ca, Na analyzed 07/15/14. All other elements analyzed 07/14/14.

HGCV1 MDL / RL SUMMARY

Element: *Mercury*
Instrument: *PE FIMS 100*
Technique: *CV*

Instrument ID *HgCV1*
Analyst *Paul Cousineau*

200 Series	METHOD	MDL (ppb)	Completed	RL (ppb)
<u>H₂O</u>	245.1	0.080134	7/24/2014	0.20
SW846				
<u>H₂O</u>	7470A	0.040653	7/21/2014	0.70
<u>SOIL</u>	7471 B	0.0262530 (0.004384mg/kg)	7/22/2014	0.50 (0.0833 mg/kg)

MDL/RL
Method 6020/6020A
MS2_7500
Aqueous

ELEMENT	MDL (ug/L)	Reporting Limits (ug/L)
Al	8.30	200
Sb	0.0153	3
As	0.025	2
Ba	0.090	5
Be	0.0172	1
Ca	5.10	500
Cd	0.0058	2
Cr	0.125	2
Co	0.0049	2
Cu	0.702	10
Fe	7.12	300
Pb	0.066	3
Mg	2.32	500
Mn	0.22	6
Mo	0.057	2
Na	7.41	500
Ni	0.178	3
K	17.50	500
Se	0.299	10
Ag	0.0119	1
Tl	0.0217	2
V	0.040	2
Zn	1.07	20

Al, Fe, Mo, Ni, K,Na, V 9/29/14 All others 10/25/14.

Metal Data
Raw Data

Form1

Inorganic Analysis Data Sheet

Sample ID: MB 42362
 Client Id: MB 42362
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L

Lab Name: Veritech
 Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	04/01/15	42362	SW33115A	16	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	04/01/15	42362	SW33115A	16	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	04/01/15	42362	SW33115A	16	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	16	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	04/01/15	42362	SW33115A	16	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	04/01/15	42362	SW33115A	16	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	04/01/15	42362	SW33115A	16	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	04/01/15	42362	SW33115A	16	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: MB 42362 (1)
 Client Id: MB 42362 (1)
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L

Lab Name: Veritech
 Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-36-0	Antimony	20	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-38-2	Arsenic	20	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-41-7	Beryllium	12	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-43-9	Cadmium	12	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-48-4	Cobalt	20	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7439-92-1	Lead	12	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42362 H17599SW		11	CV	HGCV2A
7439-98-7	Molybdenum	20	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-02-0	Nickel	50	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	03/27/15	42362SW17599C2		11	P	PEICPRAD2A
7782-49-2	Selenium	40	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	03/27/15	42362SW17599C2		11	P	PEICPRAD2A
7440-28-0	Thallium	20	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-31-5	Tin	50	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-32-6	Titanium	50	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-62-2	Vanadium	50	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/26/15	42362SW17599A2		12	P	PEICP2A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: MB 42363
 Client Id: MB 42363
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L

Lab Name: Veritech
 Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	03/30/15	42363	SW33015A	16	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	03/30/15	42363	SW33015A	16	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	03/30/15	42363	SW33015A	16	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	16	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	03/30/15	42363	SW33015A	16	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	03/30/15	42363	SW33015A	16	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	03/30/15	42363	SW33015A	16	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	03/30/15	42363	SW33015A	16	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: MB 42363 (1)
 Client Id: MB 42363 (1)
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L

Lab Name: Veritech
 Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	03/27/15	42363 H17600SW		11	CV	HGCV1A
7439-98-7	Molybdenum	20	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7440-02-0	Nickel	50	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	03/30/15	42363SW17600E2		11	P	PEICPRAD2A
7440-31-5	Tin	50	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7440-32-6	Titanium	50	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7440-62-2	Vanadium	50	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	03/31/15	42363SW17600F2		12	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
 P - ICP-AES
 CV - Cold Vapor
 MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 42399 (1)
Client Id: MB 42399 (1)
Matrix: AQUEOUS
Level: LOW

% Solid: 0
Units: UG/L

Lab Name: Veritech
Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-09-7	Potassium	5000	ND	1	50	50	03/31/15	423995	W17600G2	11	P	PEICPRAD2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV - ColdVapor
MS - ICP-MS

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\SW17599A2.txt

Analysis Date: 03/26/15

Instrument: PEICP2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-205362	1	CAL	12:31	1							V-205362(ICB/CCB)
CALST1 V-203732	1	CAL	12:34	2							V-203732(ICS1 Lowest std)
CALST2 V-202401	1	CAL	12:37	3							V-202401(ICS2- Low Std)
CALST3 V-202402	1	CAL	12:40	4							V-202402(ICS3 - Middle Std)
CALST4 V-203077	1	CAL	12:44	5							V-203077(ICS4 High std)
ICS3 V-202402	1	ICS	12:48	6							V-202402(ICS3 - Middle Std)
ICV V-202964	1	ICV	12:52	7							V-202964(CCV)
LLICV [aq] V-206357	1	LLICV	12:55	8		AQUEO	AQUEO	SW846	42362		V-206357(LLICV/LLCCV aq)
ICB V-205362	1	ICB	12:58	9							V-205362(ICB/CCB)
ICSA V-202074	1	ICSA	13:02	10							V-202074(ICSAB)
ICSAB V-202076	1	ICSAB	13:07	11							V-202076(ICSAB)
MB 42362 (1)	1	MB	13:12	12		AQUEO	AQUEO	SW846	42362		0
LCSW 42362	1	LCS	13:15	13		AQUEO	AQUEO	SW846	42362		0
LCSW MR 42362	1	LCS	13:18	14		AQUEO	AQUEO	SW846	42362		0
AC83866-011	1	SMP	13:22	15	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-011	1	MR	13:25	16	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-012	1	MS	13:28	17	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-013	1	MSD	13:32	18	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-011	1	PS	13:35	19	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
CCV V-202964	1	CCV	13:39	20							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	13:42	21		AQUEO	AQUEO	SW846	42362		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	13:45	22							0
AC83866-011	5	SD	13:49	23	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-001	1	SMP	13:52	24	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-003	1	SMP	13:55	25	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-005	1	SMP	13:59	26	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-007	1	SMP	14:02	27	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-009	1	SMP	14:05	28	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-017	1	SMP	14:09	29	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
ICSA V-202074	1	ICSA	14:12	30							V-202074(ICSAB)
ICSAB V-202076	1	ICSAB	14:17	31							V-202076(ICSAB)
CCV V-202964	1	CCV	14:22	32							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	14:25	33		AQUEO	AQUEO	SW846	42362		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	14:28	34							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

sean
192.168.1.78 3/26/2015 3:05:47 PM

OK

80-3/31/15

Run Log

5032012 0302

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\SW17599B2.txt

Analysis Date: 03/26/15

Instrument: PEICP2A

Sample Id	Qc DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-205362	1	CAL	15:42	1							V-205362(ICB/CCB)
CALST1 V-203732	1	CAL	15:45	2							V-203732(ICS1 Lowest std)
CALST2 V-202401	1	CAL	15:48	3							V-202401(ICS2- Low Std)
CALST3 V-202402	1	CAL	15:51	4							V-202402(ICS3 - Middle Std)
CALST4 V-203077	1	CAL	15:55	5							V-203077(ICS4 High std)
ICS3 V-202402	1	ICS	15:59	6							V-202402(ICS3 - Middle Std)
ICV V-202964	1	ICV	16:03	7							V-202964(CCV)
LLICV [aq] V-206357	1	LLICV	16:06	8		AQUEO	AQUEO	SW846	42362		V-206357(LLICV/LLCCV aq)
ICB V-205362	1	ICB	16:09	9							V-205362(ICB/CCB)
ICSA V-202074	1	ICSA	16:13	10							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	16:18	11							V-202076(ICSAB)
AC83866-019	1	SMP	16:22	12	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-021	1	SMP	16:26	13	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-023	1	SMP	16:29	14	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-025	1	SMP	16:32	15	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
CCV V-202964	1	CCV	16:36	16							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	16:39	17		AQUEO	AQUEO	SW846	42362		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	16:42	18							0
AC83866-027	1	SMP	16:46	19	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-029	1	SMP	16:49	20	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-031	1	SMP	16:52	21	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-033	1	SMP	16:56	22	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
ICSA V-202074	1	ICSA	16:59	23							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	17:04	24							V-202076(ICSAB)
CCV V-202964	1	CCV	17:09	25							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	17:12	26		AQUEO	AQUEO	SW846	42362		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	17:15	27							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

sean
192.168.1.78 3/26/2015 5:29:52 PM

OK

e 3/31/15

Run Log

5032012.0303
Tag: 1011

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD2A\SW17599C2.txt

Analysis Date: 03/27/15

Instrument: PEICPRAD2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-205362	1	CAL	10:31	1							V-205362(ICB/CCB)
CALST2 V-202401	1	CAL	10:35	2							V-202401(ICS2- Low Std)
CALST3 V-202402	1	CAL	10:38	3							V-202402(ICS3 - Middle Std)
CALST4 V-203077	1	CAL	10:41	4							V-203077(ICS4 High std)
ICS3 V-202402	1	ICS	10:43	5							V-202402(ICS3 - Middle Std)
ICV V-202964	1	ICV	10:46	6							V-202964(CCV)
LLICV [aq] V-206357	1	LLICV	10:49	7		AQUEO	AQUEO	SW846	42362		V-206357(LLICV/LLCCV aq)
ICB V-205362	1	ICB	10:52	8							V-205362(ICB/CCB)
ICSA V-202074	1	ICSA	10:55	9							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	10:59	10							V-202076(ICSAB)
MB 42362 (1)	1	MB	11:02	11		AQUEO	AQUEO	SW846	42362		0
LCSW 42362	1	LCS	11:05	12		AQUEO	AQUEO	SW846	42362		0
LCSW MR 42362	1	LCS	11:08	13		AQUEO	AQUEO	SW846	42362		0
AC83866-011	1	SMP	11:11	14	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-011	1	MR	11:14	15	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-012	1	MS	11:17	16	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-013	1	MSD	11:20	17	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-011	1	PS	11:23	18	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
CCV V-202964	1	CCV	11:25	19							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	11:28	20		AQUEO	AQUEO	SW846	42362		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	11:31	21							0
AC83866-011	5	SD	11:35	22	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-001	1	SMP	11:38	23	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-003	1	SMP	11:41	24	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-005	1	SMP	11:45	25	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-007	1	SMP	11:48	26	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-009	1	SMP	11:51	27	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-017	1	SMP	11:54	28	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
ICSA V-202074	1	ICSA	11:58	29							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	12:01	30							V-202076(ICSAB)
CCV V-202964	1	CCV	12:04	31							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	12:07	32		AQUEO	AQUEO	SW846	42362		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	12:10	33							0
AC83866-019	1	NA	12:13	34	MET-TAL6010W	AQUEO	AQUEO	SW846	42362	missed cup	0
AC83866-021	1	SMP	12:17	35	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-023	1	SMP	12:20	36	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-025	1	SMP	12:23	37	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-027	1	SMP	12:26	38	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-029	1	SMP	12:30	39	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-031	1	SMP	12:33	40	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
AC83866-033	1	SMP	12:36	41	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		0
CSA V-202074	1	ICSA	12:39	42							V-202074(ICSA)
CSAB V-202076	1	ICSAB	12:43	43							V-202076(ICSAB)
CCV V-202964	1	CCV	12:46	44							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	12:49	45		AQUEO	AQUEO	SW846	42362		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	12:52	46							0

Comments/Reviewed by:

Standard/Batch/Sn C12 Lot #:

Sean
192.168.1.78 3/27/2015 1:37:49 PM

OK

Sh 3/31/15

Run Log

5032012.0304
Page 1 of 1

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD2A\SW17599D2.txt

Analysis Date: 03/27/15

Instrument: PEICPRAD2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-205362	1	CAL	13:28	1							V-205362(ICB/CCB)
CALST2 V-202401	1	CAL	13:32	2							V-202401(ICS2- Low Std)
CALST3 V-202402	1	CAL	13:35	3							V-202402(ICS3 - Middle Std)
CALST4 V-203077	1	CAL	13:38	4							V-203077(ICS4 High std)
ICS3 V-202402	1	ICS	13:41	5							V-202402(ICS3 - Middle Std)
ICV V-202964	1	ICV	13:43	6							V-202964(CCV)
LLICV [aq] V-206357	1	LLICV	13:46	7		AQUEO	AQUEO	SW846	42362		V-206357(LLICV/LLCCV aq)
ICB V-205362	1	ICB	13:49	8							V-205362(ICB/CCB)
ICSA V-202074	1	ICSA	13:53	9							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	13:56	10							V-202076(ICSAB)
AC83866-019	1	SMP	13:59	11	MET-TAL6010W	AQUEO	AQUEO	SW846	42362		()
ICSA V-202074	1	ICSA	14:02	12							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	14:05	13							V-202076(ICSAB)
CCV V-202964	1	CCV	14:08	14							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	14:11	15		AQUEO	AQUEO	SW846	42362		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	14:14	16							()

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

scan
192.168.1.78 3/27/2015 2:37:15 PM

OK

8-3/31/15

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV2A\HI17599SW.txt

Analysis Date: 03/27/15

Instrument: HGCV2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	13:07	1							0
2 PPB	1	CAL	13:09	2							0
5 PPB	1	CAL	13:10	3							0
1 PPB	1	CAL	13:12	4							0
2 PPB	1	CAL	13:13	5							0
5 PPB	1	CAL	13:15	6							0
10 PPB	1	CAL	13:16	7							0
25 PPB	1	CAL	13:18	8							0
ICV (2)	1	ICV	13:19	9							0
ICB	1	ICB	13:21	10							0
MB 42362 (1)	1	MB	13:22	11	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
LCS 42362	1	LCS	13:24	12	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
LCS MR 42362	1	LCS	13:25	13	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-011	1	SMP	13:27	14	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-011	1	MR	13:28	15	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-012	1	MS	13:29	16	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-013	1	MSD	13:31	17	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-001	1	SMP	13:32	18	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-003	1	SMP	13:34	19	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
CCV	1	CCV	13:36	20							0
CCB	1	CCB	13:37	21							0
AC83866-005	1	SMP	13:38	22	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-007	1	SMP	13:40	23	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-009	1	SMP	13:41	24	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-017	1	SMP	13:43	25	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-019	1	SMP	13:44	26	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-021	1	SMP	13:46	27	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-023	1	SMP	13:47	28	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-025	1	SMP	13:49	29	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-027	1	SMP	13:50	30	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
CCV	1	CCV	13:52	31							0
CCB	1	CCB	13:53	32							0
AC83866-029	1	SMP	13:55	33	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-031	1	SMP	13:56	34	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
AC83866-033	1	SMP	13:58	35	HG-W-7470	AQUEO	AQUEO	SW846	42362		0
CCV	1	CCV	13:59	36							0
CCB	1	CCB	14:01	37							0

Comments/Reviewed by:

carmela
192.168.1.89 3/27/2015 2:47:01 PM

OK

Standard/Batch/SnCl2 Lot #:

V-207084

8-3/27/15

Run Log

5032012.0306

Data File: W:\METALS.FRM\ICPDATA\New\HGC\V1A\H17600SW.txt

Analysis Date: 03/27/15

Instrument: HGC V1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	13:02	1							0
2 PPB	1	CAL	13:04	2							0
5 PPB	1	CAL	13:05	3							0
1 PPB	1	CAL	13:07	4							0
2 PPB	1	CAL	13:08	5							0
5 PPB	1	CAL	13:09	6							0
10 PPB	1	CAL	13:11	7							0
25 PPB	1	CAL	13:12	8							0
ICV (2)	1	ICV	13:13	9							0
ICB	1	ICB	13:15	10							0
MB 42363 (1)	1	MB	13:16	11	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
LCS 42363	1	LCS	13:17	12	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
LCS MR 42363	1	LCS	13:19	13	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-014	1	SMP	13:20	14	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-014	1	MR	13:21	15	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-015	1	MS	13:23	16	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-016	1	MSD	13:24	17	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-002	1	SMP	13:26	18	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-004	1	SMP	13:27	19	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-006	1	SMP	13:28	20	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
CCV	1	CCV	13:30	21							0
CCB	1	CCB	13:31	22							0
AC83866-008	1	NA	13:32	23	HG-W-7470	AQUEO	AQUEO	SW846	42363	CCV FAILED	0
AC83866-010	1	NA	13:34	24	HG-W-7470	AQUEO	AQUEO	SW846	42363	CCV FAILED	0
AC83866-018	1	NA	13:35	25	HG-W-7470	AQUEO	AQUEO	SW846	42363	CCV FAILED	0
AC83866-020	1	NA	13:36	26	HG-W-7470	AQUEO	AQUEO	SW846	42363	CCV FAILED	0
AC83866-022	1	NA	13:38	27	HG-W-7470	AQUEO	AQUEO	SW846	42363	CCV FAILED	0
AC83866-024	1	NA	13:39	28	HG-W-7470	AQUEO	AQUEO	SW846	42363	CCV FAILED	0
AC83866-026	1	NA	13:41	29	HG-W-7470	AQUEO	AQUEO	SW846	42363	CCV FAILED	0
AC83866-028	1	NA	13:42	30	HG-W-7470	AQUEO	AQUEO	SW846	42363	CCV FAILED	0
AC83866-030	1	NA	13:43	31	HG-W-7470	AQUEO	AQUEO	SW846	42363	CCV FAILED	0
AC83866-032	1	NA	13:45	32	HG-W-7470	AQUEO	AQUEO	SW846	42363	CCV FAILED	0
CCV	1	CCV	13:46	33						CCV FAILED	0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

carmela
192.168.1.89 3/27/2015 3:59:52 PM

V-207084

OK: LAST CCV FAILED

A 3/30/15

Run Log

5032012.0307

Data File: W:\METALS.FRM\ICPDATA\New\HGCVA1A\H17600SWB.txt

Analysis Date: 03/27/15

Instrument: HGCVA1A

Sample Id	Qc DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	14:43	1							0
2 PPB	1	CAL	14:44	2							0
5 PPB	1	CAL	14:46	3							0
1 PPB	1	CAL	14:47	4							0
2 PPB	1	CAL	14:48	5							0
5 PPB	1	CAL	14:50	6							0
10 PPB	1	CAL	14:51	7							0
25 PPB	1	CAL	14:52	8							0
ICV (2)	1	ICV	14:54	9							0
ICB	1	ICB	14:55	10							0
AC83866-008	1	SMP	14:57	11	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-010	1	SMP	14:58	12	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-018	1	SMP	14:59	13	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-020	1	SMP	15:01	14	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-022	1	SMP	15:02	15	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-024	1	SMP	15:03	16	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-026	1	SMP	15:05	17	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-028	1	SMP	15:06	18	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-030	1	SMP	15:07	19	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
AC83866-032	1	SMP	15:09	20	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
CCV	1	CCV	15:10	21							0
CCB	1	CCB	15:12	22							0
AC83866-034	1	SMP	15:13	23	HG-W-7470	AQUEO	AQUEO	SW846	42363		0
CCV	1	CCV	15:14	24							0
CCB	1	CCB	15:16	25							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

carmela
192.168.1.89 3/27/2015 4:01:10 PM

V-207084

OK

3/30/15

Run Log

5032012.0308

Data File: W:\METALS.FRM\ICPDATA\New\MS2_7500SWA\SW33015A.b\SW33015A.TXT

Analysis Date: 03/30/15

Instrument: MS2_7500SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Rinse	1	NA	10:45	1		AQUEO	AQUEO	SW846	42363		0
CalBlk V-206937	1	ISBLK	10:51	2		AQUEO	AQUEO				V-206937(Cal Blk)
CalStd1 V-206938	1	CAL	10:57	3							V-206938(Cal Std-1)
CalStd2 V-206939	1	CAL	11:03	4							V-206939(Cal Std-2)
CalStd3 V-206940	1	CAL	11:09	5							V-206940(Cal Std-3)
CalStd4 V-206941	1	CAL	11:15	6							V-206941(Cal Std-4)
CalStd5 V-206942	1	CAL	11:21	7							V-206942(Cal Std-5)
ICV V-206943	1	ICV	11:27	8							V-206943(ICV)
LLICV V-206949	1	LLICV	11:33	9		AQUEO	AQUEO	SW846	42363		V-206949(LL-ICV/CCV AQ.)
ICB V-206944	1	ICB	11:39	10							V-206944(ICB/CCB)
ICSA V-206945	1	ICSA	11:45	11							V-206945(ICSA)
ICSAB V-206946	1	ICSAB	11:51	12							V-206946(ICSAB)
CCV V-206947	1	CCV	11:57	13							V-206947(CCV)
LLCCV V-206949	1	LLCCV	12:03	14		AQUEO	AQUEO	SW846	42363		V-206949(LL-ICV/CCV AQ.)
CCB V-206944	1	CCB	12:09	15							V-206944(ICB/CCB)
MB 42363	1	MB	12:14	16		AQUEO	AQUEO	SW846	42363		0
LCSW 42363	1	LCS	12:20	17		AQUEO	AQUEO	SW846	42363		0
LCSW MR 42363	1	NA	12:26	18		AQUEO	AQUEO	SW846	42363		0
AC83866-014	1	SMP	12:32	19	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-014	1	MR	12:38	20	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-014	5	SD	12:44	21	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-015	1	MS	12:50	22	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-016	1	MSD	12:56	23	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-014	1	PS	13:02	24	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
RINSE	1	NA	13:08	25		AQUEO	AQUEO	SW846	42363		0
CCV V-206947	1	CCV	13:14	26							V-206947(CCV)
LLCCV V-206949	1	LLCCV	13:20	27		AQUEO	AQUEO	SW846	42363		V-206949(LL-ICV/CCV AQ.)
CCB V-206944	1	CCB	13:26	28							V-206944(ICB/CCB)
LCSW MR 42363	1	NA	13:32	29		AQUEO	AQUEO	SW846	42363		0
AC83866-002	1	SMP	13:38	30	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
LCSW MR 42363	1	LCS	13:44	31		AQUEO	AQUEO	SW846	42363		0
AC83866-004	1	SMP	13:50	32	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-006	1	SMP	13:56	33	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-008	1	SMP	14:02	34	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-010	1	SMP	14:08	35	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-018	1	SMP	14:14	36	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-020	1	SMP	14:20	37	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
RINSE	1	NA	14:26	38		AQUEO	AQUEO	SW846	42363		0
CCV V-206947	1	CCV	14:32	39							V-206947(CCV)
LLCCV V-206949	1	LLCCV	14:38	40		AQUEO	AQUEO	SW846	42363		V-206949(LL-ICV/CCV AQ.)
CCB V-206944	1	CCB	14:44	41							V-206944(ICB/CCB)
AC83866-022	1	SMP	14:50	42	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-024	1	SMP	14:56	43	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-026	1	SMP	15:02	44	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-028	1	SMP	15:08	45	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-030	1	SMP	15:14	46	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-032	1	SMP	15:20	47	MET-TAL6020W	AQUEO	AQUEO	SW846	42363		0
AC83866-034	1	SMP	15:26	48	MET-TAL6020W	AQUEO	AQUEO	SW846	42363	FB.	0
RINSE	1	NA	15:32	49		AQUEO	AQUEO	SW846	42363		0
CCV V-206947	1	CCV	15:38	50							V-206947(CCV)
LLCCV V-206949	1	LLCCV	15:44	51		AQUEO	AQUEO	SW846	42363		V-206949(LL-ICV/CCV AQ.)
CCB V-206944	1	CCB	15:50	52							V-206944(ICB/CCB)

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

gabrielle
192.168.1.39 3/30/2015 4:01:04 PM

RUN OK.

4/1/15

Run Log

5032012.0309

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD2A\SW17600E2.txt

Analysis Date: 03/30/15

Instrument: PEICPRAD2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-205362	1	CAL	19:32	1							V-205362(ICB/CCB)
CALST2 V-202401	1	CAL	19:36	2							V-202401(ICS2- Low Std)
CALST3 V-202402	1	CAL	19:39	3							V-202402(ICS3 - Middle Std)
CALST4 V-203077	1	CAL	19:42	4							V-203077(ICS4 High std)
ICS3 V-202402	1	ICS	19:44	5							V-202402(ICS3 - Middle Std)
ICV V-202964	1	ICV	19:47	6							V-202964(CCV)
LLICV [aq] V-206357	1	LLICV	19:50	7		AQUEO	AQUEO	SW846	42363		V-206357(LLICV/LLCCV aq)
ICB V-205362	1	ICB	19:53	8							V-205362(ICB/CCB)
ICSA V-202074	1	ICSA	19:56	9							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	20:00	10							V-202076(ICSAB)
MB 42363 (1)	1	MB	20:03	11		AQUEO	AQUEO	SW846	42363		0
LCSW 42363	1	LCS	20:06	12		AQUEO	AQUEO	SW846	42363	K failed	0
LCSW MR 42363	1	LCS	20:09	13		AQUEO	AQUEO	SW846	42363		0
AC83866-014	1	SMP	20:12	14	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-014	1	MR	20:15	15	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-015	1	MS	20:18	16	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-016	1	MSD	20:21	17	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-014	1	PS	20:24	18	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
CCV V-202964	1	CCV	20:26	19							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	20:29	20		AQUEO	AQUEO	SW846	42363		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	20:33	21							0
AC83866-014	5	SD	20:36	22	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-002	1	SMP	20:39	23	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-004	1	SMP	20:43	24	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-006	1	SMP	20:46	25	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-008	1	SMP	20:49	26	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-010	1	SMP	20:53	27	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-018	1	SMP	20:56	28	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
ICSA V-202074	1	ICSA	20:59	29							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	21:02	30							V-202076(ICSAB)
CCV V-202964	1	CCV	21:05	31							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	21:08	32		AQUEO	AQUEO	SW846	42363		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	21:11	33							0
AC83866-020	1	SMP	21:15	34	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-022	1	SMP	21:18	35	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-024	1	SMP	21:21	36	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-026	1	SMP	21:24	37	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-028	1	SMP	21:28	38	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-030	1	SMP	21:31	39	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-032	1	SMP	21:34	40	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-034	1	SMP	21:38	41	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
ICSA V-202074	1	ICSA	21:41	42							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	21:44	43							V-202076(ICSAB)
CCV V-202964	1	CCV	21:47	44							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	21:50	45		AQUEO	AQUEO	SW846	42363		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	21:53	46							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

sean
192 168 1.78 3/31/2015 9:35:07 AMNa OK
K failed LCSW

sl 4/1/15

Run Log

5032012.0310

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\SW17600F2.txt

Analysis Date: 03/31/15

Instrument: PEICP2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-205362	1	CAL	10:05	1							V-205362(ICB/CCB)
CALST1 V-203732	1	CAL	10:08	2							V-203732(ICS1 Lowest std)
CALST2 V-202401	1	CAL	10:12	3							V-202401(ICS2- Low Std)
CALST3 V-202402	1	CAL	10:15	4							V-202402(ICS3 - Middle Std)
CALST4 V-203077	1	CAL	10:18	5							V-203077(ICS4 High std)
ICS3 V-202402	1	ICS	10:23	6							V-202402(ICS3 - Middle Std)
ICV V-202964	1	ICV	10:26	7							V-202964(CCV)
LLICV [aq] V-206357	1	LLICV	10:30	8		AQUEO	AQUEO	SW846	42363		V-206357(LLICV/LLCCV aq)
ICB V-205362	1	ICB	10:33	9							V-205362(ICB/CCB)
ICSA V-202074	1	ICSA	10:36	10							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	10:41	11							V-202076(ICSAB)
MB 42363 (I)	1	MB	10:46	12		AQUEO	AQUEO	SW846	42363		0
LCSW 42363	1	LCS	10:50	13		AQUEO	AQUEO	SW846	42363		0
LCSW MR 42363	1	LCS	10:53	14		AQUEO	AQUEO	SW846	42363		0
AC83866-014	1	SMP	10:56	15	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-014	1	MR	11:00	16	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-015	1	MS	11:03	17	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-016	1	MSD	11:07	18	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-014	1	PS	11:10	19	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
CCV V-202964	1	CCV	11:13	20							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	11:17	21		AQUEO	AQUEO	SW846	42363		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	11:20	22							0
AC83866-014	5	SD	11:24	23	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-002	1	SMP	11:27	24	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-004	1	SMP	11:30	25	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-006	1	SMP	11:34	26	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-008	1	SMP	11:37	27	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-010	1	SMP	11:40	28	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-018	1	SMP	11:44	29	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
ICSA V-202074	1	ICSA	11:47	30							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	11:52	31							V-202076(ICSAB)
CCV V-202964	1	CCV	11:57	32							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	12:00	33		AQUEO	AQUEO	SW846	42363		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	12:04	34							0
AC83866-020	1	SMP	12:07	35	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-022	1	SMP	12:10	36	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-024	1	SMP	12:14	37	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-026	1	SMP	12:17	38	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-028	1	SMP	12:20	39	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-030	1	SMP	12:24	40	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-032	1	SMP	12:27	41	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
AC83866-034	1	SMP	12:30	42	MET-TAL6010W	AQUEO	AQUEO	SW846	42363		0
CSA V-202074	1	ICSA	12:34	43							V-202074(ICSA)
CSAB V-202076	1	ICSAB	12:39	44							V-202076(ICSAB)
CCV V-202964	1	CCV	12:44	45							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	12:47	46		AQUEO	AQUEO	SW846	42363		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	12:50	47							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

sean
192.168.1.78 3/31/2015 1:18:41 PM

OK

sh 4/1/15

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD2A\SW17600G2.txt

Analysis Date: 03/31/15

Instrument: PEICPRAD2A

Sample Id	Qc DF	Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-205362	1	CAL	18:09	1							V-205362(ICB/CCB)
CALST2 V-202401	1	CAL	18:13	2							V-202401(ICS2 - Low Std)
CALST3 V-202402	1	CAL	18:16	3							V-202402(ICS3 - Middle Std)
CALST4 V-203077	1	CAL	18:19	4							V-203077(ICS4 - High std)
ICS3 V-202402	1	ICS	18:21	5							V-202402(ICS3 - Middle Std)
ICV V-202964	1	ICV	18:24	6							V-202964(CCV)
LLICV [aq] V-206357	1	LLICV	18:27	7		AQUEO	AQUEO	SW846	42399		V-206357(LLICV/LLCCV aq)
ICB V-205362	1	ICB	18:30	8							V-205362(ICB/CCB)
ICSA V-202074	1	ICSA	18:33	9							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	18:37	10							V-202076(ICSAB)
MB 42399 (1)	1	MB	18:40	11		AQUEO	AQUEO	SW846	42399		0
LCSW 42399	1	LCS	18:43	12		AQUEO	AQUEO	SW846	42399		0
LCSW MR 42399	1	LCS	18:46	13		AQUEO	AQUEO	SW846	42399		0
AC83866-014	1	SMP	18:49	14	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-014	1	MR	18:52	15	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-015	1	MS	18:55	16	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-016	1	MSD	18:58	17	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-014	1	PS	19:01	18	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
CCV V-202964	1	CCV	19:03	19							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	19:06	20		AQUEO	AQUEO	SW846	42399		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	19:09	21							0
AC83866-014	5	SD	19:13	22	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-002	1	SMP	19:16	23	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-004	1	SMP	19:19	24	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-006	1	SMP	19:23	25	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-008	1	SMP	19:26	26	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-010	1	SMP	19:29	27	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-018	1	SMP	19:32	28	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
ICSA V-202074	1	ICSA	19:36	29							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	19:39	30							V-202076(ICSAB)
CCV V-202964	1	CCV	19:42	31							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	19:45	32		AQUEO	AQUEO	SW846	42399		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	19:48	33							0
AC83866-020	1	SMP	19:51	34	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-022	1	SMP	19:54	35	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-024	1	SMP	19:58	36	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-026	1	SMP	20:01	37	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-028	1	SMP	20:04	38	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-030	1	SMP	20:08	39	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-032	1	SMP	20:11	40	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
AC83866-034	1	SMP	20:14	41	MET-TAL6010W	AQUEO	AQUEO	SW846	42399		0
ICSA V-202074	1	ICSA	20:17	42							V-202074(ICSA)
ICSAB V-202076	1	ICSAB	20:21	43							V-202076(ICSAB)
CCV V-202964	1	CCV	20:24	44							V-202964(CCV)
LLCCV [aq] V-206357	1	LLCCV	20:26	45		AQUEO	AQUEO	SW846	42399		V-206357(LLICV/LLCCV aq)
CCB	1	CCB	20:30	46							0

Comments/Reviewedby:

Standard/Batch/SnCi2 Lot #:

sean
192.168.1.78 4/1/2015 10:02:03 AM

K OK

82 4/1/15

Run Log

5032012 0312

Data File: W:\METALS.FRM\ICPDATA\New\MS2_7500SWA\SW33115A.b\SW33115A.TXT

Analysis Date: 04/01/15

Instrument: MS2_7500SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Rinse	1	NA	02:49	1		AQUEO	AQUEO	SW846	42362		0
CalBlk V-206937	1	ISBLK	02:55	2		AQUEO	AQUEO				V-206937(Cal Blk)
CalStd1 V-206938	1	CAL	03:01	3							V-206938(Cal Std-1)
CalStd2 V-206939	1	CAL	03:07	4							V-206939(Cal Std-2)
CalStd3 V-206940	1	CAL	03:13	5							V-206940(Cal Std-3)
CalStd4 V-206941	1	CAL	03:19	6							V-206941(Cal Std-4)
CalStd5 V-206942	1	CAL	03:25	7							V-206942(Cal Std-5)
ICV V-206943	1	ICV	03:31	8							V-206943(ICV)
LLICV V-206949	1	LLICV	03:37	9		AQUEO	AQUEO	SW846	42362		V-206949(LL-ICV/CCV AQ.)
ICB V-206944	1	ICB	03:43	10							V-206944(ICB/CCB)
ICSA V-206945	1	ICSA	03:49	11							V-206945(ICSA)
ICSAB V-206946	1	ICSAB	03:55	12							V-206946(ICSAB)
CCV V-206947	1	CCV	04:01	13							V-206947(CCV)
LLCCV V-206949	1	LLCCV	04:07	14		AQUEO	AQUEO	SW846	42362		V-206949(LL-ICV/CCV AQ.)
CCB V-206944	1	CCB	04:13	15							V-206944(ICB/CCB)
MB 42362	1	MB	04:18	16		AQUEO	AQUEO	SW846	42362		0
LCSW 42362	1	LCS	04:24	17		AQUEO	AQUEO	SW846	42362		0
LCSW MR 42362	1	LCS	04:30	18		AQUEO	AQUEO	SW846	42362		0
AC83866-011	1	SMP	04:36	19	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-011	1	MR	04:42	20	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-011	5	SD	04:48	21	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-012	1	MS	04:54	22	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-013	1	MSD	05:00	23	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-011	1	PS	05:06	24	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
RINSE	1	NA	05:12	25		AQUEO	AQUEO	SW846	42362		0
CCV V-206947	1	CCV	05:18	26							V-206947(CCV)
LLCCV V-206949	1	LLCCV	05:24	27		AQUEO	AQUEO	SW846	42362		V-206949(LL-ICV/CCV AQ.)
CCB V-206944	1	CCB	05:30	28							V-206944(ICB/CCB)
AC83866-001	1	SMP	05:36	29	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-003	1	SMP	05:42	30	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-005	1	SMP	05:48	31	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-007	1	SMP	05:54	32	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-009	1	SMP	06:00	33	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-017	1	SMP	06:06	34	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-019	1	SMP	06:12	35	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-021	1	SMP	06:18	36	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-023	1	SMP	06:24	37	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
RINSE	1	NA	06:30	38		AQUEO	AQUEO	SW846	42362		0
CCV V-206947	1	CCV	06:36	39							V-206947(CCV)
LLCCV V-206949	1	LLCCV	06:42	40		AQUEO	AQUEO	SW846	42362		V-206949(LL-ICV/CCV AQ.)
CCB V-206944	1	CCB	06:48	41							V-206944(ICB/CCB)
AC83866-025	1	SMP	06:54	42	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-027	1	SMP	07:00	43	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-029	1	SMP	07:06	44	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-031	1	SMP	07:12	45	MET-TAL6020W	AQUEO	AQUEO	SW846	42362		0
AC83866-033	1	SMP	07:18	46	MET-TAL6020W	AQUEO	AQUEO	SW846	42362	FB.	0
RINSE	1	NA	07:24	47		AQUEO	AQUEO	SW846	42362		0
CCV V-206947	1	CCV	07:30	48							V-206947(CCV)
LLCCV V-206949	1	LLCCV	07:36	49		AQUEO	AQUEO	SW846	42362		V-206949(LL-ICV/CCV AQ.)
CCB V-206944	1	CCB	07:42	50							V-206944(ICB/CCB)

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

gabriele
192.168.1.39 4/1/2015 10:06:36 AM

RUN OK.

gh 4/1/15

ICPMS Internal Standard Summary Report

5032012 0313

TuneID: 1

Batch/FileID: SW33115A Sample ID: CalBik V-206937 Sample Date 04/01/15 Sample Time: 02:55

IS ID:	Area	Area Limit
Ho-1	499548.0	349683.6 - 749821.548
In-1	184952.6	129466.82 - 277613.8526
Sc-1	46034.33	32224.031 - 69097.52933
Tb-1	508548.1	355983.67 - 763330.6981

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBik V-206937	2	499548.0	184952.6	46034.33	508548.1				
SMP	Rinse	1	475632.5	168615.6	43412.14	484827.9				
CAL	CalStd1 V-20693	3	505212.9	188231.6	46469.92	518607.3				
CAL	CalStd2 V-20693	4	508286.3	189233.6	46544.47	517342.4				
CAL	CalStd3 V-20694	5	505335.9	189157.5	46614.65	519207.3				
CAL	CalStd4 V-20694	6	519871.1	192188.8	48560.75	527277.3				
CAL	CalStd5 V-20694	7	508679.9	188304.4	47729.44	518460.9				
ICV	ICV V-206943	8	514762.1	189839.8	47732.07	525708.3				
LLICV	LLICV V-206949	9	520072.0	192328.2	48311.59	530180.8				
ICB	ICB V-206944	10	510867.7	191614.1	47654.11	524778.6				
ICSA	ICSA V-206945	11	507138.6	176164.0	46468.50	513121.2				
ICSAB	ICSAB V-206946	12	505205.2	174936.7	46074.27	513158.3				
CCV	CCV V-206947	13	523802.4	190857.6	47896.70	530738.3				
LLCCV	LLCCV V-206949	14	515630.2	191245.4	46992.66	522966.4				
CCB	CCB V-206944	15	513357.1	189031.8	46733.06	512498.4				
MB	MB 42362	16	504311.3	181770.9	45671.94	505273.6				
LCS	LCSW 42362	17	495257.1	174465.9	45500.49	505535.3				
MR	LCSW MR 42362	18	487470.8	170867.0	44788.19	497628.0				
SMP	AC83866-011	19	451930.3	162001.8	40606.69	456356.3				
MR	AC83866-011	20	462094.7	167891.1	42320.24	467864.4				
SD	AC83866-011	21	502307.4	183752.8	45732.56	509742.4				
MS	AC83866-012	22	434631.5	153127.7	39658.00	440446.0				
MSD	AC83866-013	23	437801.0	153448.8	40141.25	445700.6				
PS	AC83866-011	24	459098.0	164895.2	41837.11	466231.2				
SMP	RINSE	25	480094.3	174398.3	43333.37	487570.1				
CCV	CCV V-206947	26	483908.8	175292.2	43673.67	487215.4				
LLCCV	LLCCV V-206949	27	476107.0	176164.5	43370.68	487225.1				
CCB	CCB V-206944	28	462413.2	169313.3	42080.17	474918.9				
SMP	AC83866-001	29	466142.7	168110.4	41973.16	472103.1				
SMP	AC83866-003	30	470549.1	168641.7	42563.46	477052.4				
SMP	AC83866-005	31	467574.0	166455.9	41912.25	475196.1				
SMP	AC83866-007	32	483216.2	172328.5	42723.99	487628.9				
SMP	AC83866-009	33	462551.5	166473.0	41255.76	466942.1				
SMP	AC83866-017	34	460218.1	164736.9	40682.54	469437.0				
SMP	AC83866-019	35	468143.3	167525.5	41813.00	473180.6				
SMP	AC83866-021	36	473645.6	171494.6	42693.27	485052.8				
SMP	AC83866-023	37	464129.0	167449.8	41534.39	470814.2				
SMP	RINSE	38	473270.4	170619.6	42076.98	482856.1				
CCV	CCV V-206947	39	483854.3	174740.2	43605.40	491448.8				
LLCCV	LLCCV V-206949	40	480398.6	176736.7	43393.90	490634.9				
CCB	CCB V-206944	41	461808.8	167806.0	41454.29	472749.9				
SMP	AC83866-025	42	458170.0	162140.8	40682.49	461706.0				
SMP	AC83866-027	43	461931.1	165385.2	41442.29	470777.9				
SMP	AC83866-029	44	465937.7	168204.8	41559.54	477683.1				
SMP	AC83866-031	45	461201.0	164831.4	41331.23	468211.2				
SMP	AC83866-033	46	466479.3	167597.7	41327.45	472834.4				
SMP	RINSE	47	469816.5	168204.0	41938.77	475972.5				
CCV	CCV V-206947	48	487240.9	177430.0	43933.00	493128.7				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

5032012 0314

TuneID: 1

LLCCV	LLCCV V-206949	49	448681.5	165263.5	40469.84	459996.8
CCB	CCB V-206944	50	442697.1	162215.6	39773.46	457558.9

ICPMS Internal Standard Summary Report

5032012 0315

TuneID:2

Batch/FileID: SW33115A Sample ID: CalBlk V-206937 Sample Date 04/01/15 Sample Time: 02:55

IS ID:	Area	Area Limit
Ho-2	1505114	1053579.8 - 2259176.114
In-2	992378.1	694664.67 - 1489559.5281
Sc-2	746249.9	522374.93 - 1120121.0999
Tb-2	1522400	1065680 - 2285122.4

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-206937	2	1505114	992378.1	746249.9	1522400				
SMP	Rinse	1	1487649	983805.2	735968.2	1507471				
CAL	CalStd1 V-20693	3	1479205	984799.1	738880.3	1505790				
CAL	CalStd2 V-20693	4	1528360	1005767	769432.3	1540873				
CAL	CalStd3 V-20694	5	1516420	1013549	754608.6	1544208				
CAL	CalStd4 V-20694	6	1505604	998575.3	768285.5	1540527				
CAL	CalStd5 V-20694	7	1500520	983571.6	761571.4	1528742				
ICV	ICV V-206943	8	1530269	1022603	782103.2	1556325				
LLICV	LLICV V-206949	9	1535314	1035442	769972.4	1565312				
ICB	ICB V-206944	10	1515819	1014114	771222.9	1538530				
ICSA	ICSA V-206945	11	1503077	955171.1	802422.4	1510663				
ICSAB	ICSAB V-206946	12	1511473	967365.2	826150.7	1541878				
CCV	CCV V-206947	13	1535326	1011735	773339.6	1564638				
LLCCV	LLCCV V-206949	14	1512189	1014299	799007.3	1546203				
CCB	CCB V-206944	15	1530422	996252.4	755098.8	1552532				
MB	MB 42362	16	1471486	984237.6	792199.9	1513415				
LCS	LCSW 42362	17	1456556	949313.1	768863.6	1488028				
MR	LCSW MR 42362	18	1431838	928299.4	746420.9	1469672				
SMP	AC83866-011	19	1347148	885787.9	699360.8	1374099				
MR	AC83866-011	20	1349317	883892.2	702127.3	1375222				
SD	AC83866-011	21	1460409	975484.8	745416.1	1491319				
MS	AC83866-012	22	1291072	813058.5	667592.0	1319194				
MSD	AC83866-013	23	1327189	830217.2	678533.1	1342774				
PS	AC83866-011	24	1336642	872949.8	702370.7	1374540				
SMP	RINSE	25	1443949	939603.8	737988.6	1460582				
CCV	CCV V-206947	26	1414007	917845.3	703598.6	1438250				
LLCCV	LLCCV V-206949	27	1410727	924306.1	696625.4	1446772				
CCB	CCB V-206944	28	1392318	899956.4	683610.1	1420935				
SMP	AC83866-001	29	1387669	894309.4	705368.6	1406411				
SMP	AC83866-003	30	1388955	901875.9	708636.9	1412973				
SMP	AC83866-005	31	1388953	891153.1	711438.1	1413838				
SMP	AC83866-007	32	1415251	915779.6	720696.4	1417555				
SMP	AC83866-009	33	1319958	863280.3	683875.8	1342334				
SMP	AC83866-017	34	1351698	888480.7	694556.1	1373882				
SMP	AC83866-019	35	1373199	889114.4	696523.9	1393368				
SMP	AC83866-021	36	1359618	887378.1	691126.3	1389151				
SMP	AC83866-023	37	1351194	880608.0	698356.6	1383637				
SMP	RINSE	38	1393470	905126.8	705386.3	1406685				
CCV	CCV V-206947	39	1443522	928220.6	711108.8	1454789				
LLCCV	LLCCV V-206949	40	1412460	916935.3	691632.0	1440863				
CCB	CCB V-206944	41	1355663	875582.5	659689.8	1383386				
SMP	AC83866-025	42	1346225	863146.6	685093.4	1361273				
SMP	AC83866-027	43	1348998	872577.6	700245.5	1379039				
SMP	AC83866-029	44	1359328	884277.7	706214.4	1390405				
SMP	AC83866-031	45	1365448	876975.5	708630.0	1387858				
SMP	AC83866-033	46	1376224	880006.3	684232.3	1383772				
SMP	RINSE	47	1387552	903956.6	699580.1	1416631				
CCV	CCV V-206947	48	1417107	913907.7	696006.0	1425017				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

5032012 0316

TuneID: 2

LLCCV	LLCCV V-206949	49	1326901	861546.1	642624.3	1362873
CCB	CCB V-206944	50	1319422	844571.7	641698.3	1347060

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

5032012 0317

TuneID: 1

Batch/FileID: SW33015A Sample ID: CalBlk V-206937 Sample Date 03/30/15 Sample Time: 10:51

IS ID:	Area	Area Limit
Ho-1	580759.2	406531.44 - 871719.5592
In-1	253217.3	177252.11 - 380079.1673
Sc-1	65758.55	46030.985 - 98703.58355
Tb-1	590996.1	413697.27 - 887085.1461

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-206937	2	580759.2	253217.3	65758.55	590996.1				
SMP	Rinse	1	526486.5	226863.7	61108.99	539539.6				
CAL	CalStd1 V-20693	3	595926.8	254904.7	65570.00	604107.1				
CAL	CalStd2 V-20693	4	620250.4	257332.6	66906.85	631056.1				
CAL	CalStd3 V-20694	5	621278.4	255090.6	65945.23	634361.5				
CAL	CalStd4 V-20694	6	643969.7	265266.8	70227.18	655585.4				
CAL	CalStd5 V-20694	7	642351.4	257693.9	68189.83	649240.7				
ICV	ICV V-206943	8	647323.5	256657.3	66501.52	651333.5				
LLICV	LLICV V-206949	9	644322.6	256537.2	66824.07	648656.1				
ICB	ICB V-206944	10	630167.6	251520.6	65617.43	636459.2				
ICSA	ICSA V-206945	11	606057.7	227618.2	62263.47	613059.3				
ICSAB	ICSAB V-206946	12	593519.1	220794.8	60293.23	597693.7				
CCV	CCV V-206947	13	589986.9	228282.4	58274.97	598388.9				
LLCCV	LLCCV V-206949	14	587690.7	226854.3	56603.52	598664.9				
CCB	CCB V-206944	15	577073.0	222427.6	55596.87	585605.4				
MB	MB 42363	16	546622.9	205246.7	51018.70	557657.9				
LCS	LCSW 42363	17	559127.4	203122.7	52253.44	565104.8				
MR	LCSW MR 42363	18	552274.2	201044.1	51894.43	559105.0				
SMP	AC83866-014	19	576975.1	218319.3	55654.27	585848.3				
MR	AC83866-014	20	583007.3	219603.1	55942.22	594761.6				
SD	AC83866-014	21	625392.0	245520.6	62557.66	639060.9				
MS	AC83866-015	22	589515.4	218420.9	58240.22	602771.5				
MSD	AC83866-016	23	605250.7	222285.4	59128.14	614809.0				
PS	AC83866-014	24	619156.9	232257.7	60953.10	628207.1				
SMP	RINSE	25	626622.8	240604.5	62128.24	631650.4				
CCV	CCV V-206947	26	642814.4	252744.2	67093.26	650397.7				
LLCCV	LLCCV V-206949	27	633309.6	250796.6	65402.04	640392.9				
CCB	CCB V-206944	28	590023.4	233062.3	61171.98	604151.5				
MR	LCSW MR 42363	29	591431.4	221002.8	59060.82	601348.4				
SMP	AC83866-002	30	597359.0	227681.8	58638.50	602206.9				
MR	LCSW MR 42363	31	576599.5	214855.8	56700.65	590707.8				
SMP	AC83866-004	32	609660.2	230590.7	60399.30	618514.5				
SMP	AC83866-006	33	610007.7	232281.0	60167.00	618949.4				
SMP	AC83866-008	34	606340.1	226865.0	58365.61	611043.1				
SMP	AC83866-010	35	595057.6	223587.6	57110.95	603828.6				
SMP	AC83866-018	36	609146.3	227054.5	57906.44	616498.4				
SMP	AC83866-020	37	613408.2	230868.0	58844.20	623712.8				
SMP	RINSE	38	606675.4	229680.1	59106.30	616830.5				
CCV	CCV V-206947	39	646220.1	249931.1	65163.95	656500.9				
LLCCV	LLCCV V-206949	40	630706.3	246718.0	63932.87	650597.0				
CCB	CCB V-206944	41	636288.9	249488.2	64690.68	655493.5				
SMP	AC83866-022	42	588535.7	220990.9	56164.66	594560.1				
SMP	AC83866-024	43	604424.1	225699.4	57671.57	614534.2				
SMP	AC83866-026	44	560162.1	210424.2	53257.34	568458.7				
SMP	AC83866-028	45	602218.6	225351.7	57815.37	609295.1				
SMP	AC83866-030	46	617361.5	231317.0	60137.70	627038.9				
SMP	AC83866-032	47	598338.8	223088.4	57920.70	607564.7				
SMP	AC83866-034	48	600560.9	227298.3	58100.66	615006.9				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

5032012 0318

TuneID: 1

SMP	RINSE	49	616253.9	233685.5	59895.89	630245.6
CCV	CCV V-206947	50	661896.0	255660.6	67734.45	672367.8
LLCCV	LLCCV V-206949	51	645764.6	253580.5	65200.42	652339.5
CCB	CCB V-206944	52	639095.2	251382.9	65686.70	656983.4

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

5032012 0319

TuneID: 2

Batch/FileID: SW33015A Sample ID: CalBlk V-206937 Sample Date 03/30/15 Sample Time: 10:51

IS ID:	Area	Area Limit
Ho-2	1322545	925781.5 - 1985140.045
In-2	856794.0	599755.8 - 1286047.794
Sc-2	655674.5	458972.15 - 984167.4245
Tb-2	1335152	934606.4 - 2004063.152

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-206937	2	1322545	856794.0	655674.5	1335152				
SMP	Rinse	1	1331742	848438.2	660019.5	1350228				
CAL	CalStd1 V-20693	3	1345058	855753.0	666514.2	1364151				
CAL	CalStd2 V-20693	4	1335083	867490.4	673243.6	1364505				
CAL	CalStd3 V-20694	5	1332588	864181.5	671518.4	1349563				
CAL	CalStd4 V-20694	6	1394764	886290.2	697527.4	1411831				
CAL	CalStd5 V-20694	7	1366263	862393.6	681121.2	1369687				
ICV	ICV V-206943	8	1377277	893529.9	686600.3	1406979				
LLICV	LLICV V-206949	9	1372479	902878.6	689715.9	1409274				
ICB	ICB V-206944	10	1352832	865944.6	666508.3	1368098				
ICSA	ICSA V-206945	11	1311058	810037.9	664860.2	1332663				
ICSAB	ICSAB V-206946	12	1330646	824184.8	682614.2	1349113				
CCV	CCV V-206947	13	1375653	883610.5	679219.4	1401524				
LLCCV	LLCCV V-206949	14	1360760	888042.2	680058.6	1386644				
CCB	CCB V-206944	15	1351840	881957.6	676699.6	1369986				
MB	MB 42363	16	1316194	845167.9	658688.2	1338537				
LCS	LCSW 42363	17	1319896	819719.8	664175.8	1340233				
MR	LCSW MR 42363	18	1324756	845463.5	671137.5	1341560				
SMP	AC83866-014	19	1357984	883483.3	704102.3	1372436				
MR	AC83866-014	20	1383961	882029.8	704605.1	1405656				
SD	AC83866-014	21	1463325	952012.1	740950.3	1484060				
MS	AC83866-015	22	1377974	862505.3	723813.1	1397548				
MSD	AC83866-016	23	1416912	882610.8	734189.8	1430291				
PS	AC83866-014	24	1440220	915266.9	752237.4	1462452				
SMP	RINSE	25	1415265	927938.8	730143.9	1437926				
CCV	CCV V-206947	26	1429888	928307.7	731508.5	1459872				
LLCCV	LLCCV V-206949	27	1453420	936882.4	728403.6	1469540				
CCB	CCB V-206944	28	1430664	935661.1	729890.6	1474462				
MR	LCSW MR 42363	29	1382860	860477.1	690808.9	1398535				
SMP	AC83866-002	30	1394851	905595.6	715775.1	1418765				
MR	LCSW MR 42363	31	1358664	864969.1	691763.2	1388752				
SMP	AC83866-004	32	1442414	925018.0	737948.7	1448479				
SMP	AC83866-006	33	1423961	916243.2	725310.8	1438909				
SMP	AC83866-008	34	1427058	928161.6	728881.1	1452778				
SMP	AC83866-010	35	1411801	916321.6	732181.2	1429310				
SMP	AC83866-018	36	1396612	911652.2	728789.9	1430593				
SMP	AC83866-020	37	1429613	926835.7	729643.4	1443327				
SMP	RINSE	38	1414130	913588.2	719264.6	1430042				
CCV	CCV V-206947	39	1471337	947853.2	744101.4	1496783				
LLCCV	LLCCV V-206949	40	1460429	958563.8	734928.6	1479603				
CCB	CCB V-206944	41	1474901	960190.5	740651.4	1497444				
SMP	AC83866-022	42	1375292	886378.3	695992.1	1394956				
SMP	AC83866-024	43	1424357	924429.1	735944.2	1459416				
SMP	AC83866-026	44	1408906	907298.9	724489.8	1428842				
SMP	AC83866-028	45	1396109	902293.6	724551.6	1407189				
SMP	AC83866-030	46	1447916	930065.2	741166.4	1471419				
SMP	AC83866-032	47	1412580	897928.1	720709.1	1437641				
SMP	AC83866-034	48	1424823	931103.0	728029.3	1440883				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

5032012 0320

TuneID: 2

SMP	RINSE	49	1462667	949897.2	748965.2	1482836
CCV	CCV V-206947	50	1508736	978640.5	773840.7	1543079
LLCCV	LLCCV V-206949	51	1475317	959009.4	739121.1	1505864
CCB	CCB V-206944	52	1482232	974043.8	740362.4	1510307

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-202074



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICSA		BatchNumber:	ApproveDate: 01/09/15	
Prep Date: 1/5/2015		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 4/4/2015		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9066	Nitric Acid	50 ml	neat neat	
9065	Hydrochloric Acid	50 ml	neat neat	
9026	ICSA	100 ml	MULTI multi	

Veritech Lot Number: V-202076



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICSAB		BatchNumber:	ApproveDate: 01/09/15	
Prep Date: 1/5/2015		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 4/4/2015		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9068	Nitric Acid	50 ml	neat neat	
9065	Hydrochloric Acid	50 ml	neat neat	
9173	ICSA	100 ml	NEAT ug/ml	
9174	ICSAB	10 ml	NEAT ug/ml	

Veritech Lot Number: V-202401



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS2- Low Std		BatchNumber:	ApproveDate: 01/12/15	
Prep Date: 1/9/2015		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 4/8/2015		Final Volume: 500 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9068	Nitric Acid	25 ml	neat neat	
9065	Hydrochloric Acid	25 ml	neat neat	
8934	ICP CALIBRATION STOCK 1	.05 ml	NEAT neat	
8935	ICP CALIBRATION STOCK 2	.05 ml	10000 ug/ml	

Veritech Lot Number: V-202402



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS3 - Middle Std		BatchNumber:	ApproveDate: 01/12/15	
Prep Date: 1/9/2015		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 4/8/2015		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9068	Nitric Acid	50 ml	neat neat	
9065	Hydrochloric Acid	50 ml	neat neat	
8934	ICP CALIBRATION STOCK 1	5 ml	NEAT neat	
8935	ICP CALIBRATION STOCK 2	5 ml	10000 ug/ml	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-202629

Prepared By: Aliano, Carmela		Department: Metals	ApprovedBy: shiamala	
Description: 1:1 HCl		BatchNumber:	ApproveDate: 01/15/15	
Prep Date: 1/14/2015		Concentration: Reagent	Checked: Yes	
Expiration Date: 7/13/2015		Final Volume: 2000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O	1000 ml		
9038	Hydrochloric Acid	1000 ml	neat neat	

Veritech Lot Number: V-202964

Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: CCV		BatchNumber:	ApproveDate: 01/21/15	
Prep Date: 1/19/2015		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 4/18/2015		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9068	Nitric Acid	50 ml	neat neat	
9065	Hydrochloric Acid	50 ml	neat neat	
9032	ICV1	10 ml	MULTI multi	
8798	ICV 2	10 ml	50 ug/ml	

Veritech Lot Number: V-203077

Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS4 High std		BatchNumber:	ApproveDate: 01/21/15	
Prep Date: 1/20/2015		Concentration: various mg/l	Checked: Yes	
Expiration Date: 4/19/2015		Final Volume: 500 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9068	Nitric Acid	25 ml	neat neat	
9065	Hydrochloric Acid	25 ml	neat neat	
8934	ICP CALIBRATION STOCK 1	5 ml	NEAT neat	
8935	ICP CALIBRATION STOCK 2	5 ml	10000 ug/ml	

Veritech Lot Number: V-203725

Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS 1 INTERMEDIATE		BatchNumber:	ApproveDate: 02/03/15	
Prep Date: 1/29/2015		Concentration: various mg/l	Checked: Yes	
Expiration Date: 4/28/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9066	Nitric Acid	5 ml	neat neat	
8487	BERYLLIUM	.3 ml	1000 ug/ml	3 mg/l
8488	CADMIUM	.3 ml	1000 ug/ml	3 mg/l

Veritech Lot Number: V-203732

Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS1 Lowest std		BatchNumber:	ApproveDate: 02/03/15	
Prep Date: 1/29/2015		Concentration: various mg/l	Checked: Yes	
Expiration Date: 4/28/2015		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9066	Nitric Acid	50 ml	neat neat	
9065	Hydrochloric Acid	50 ml	neat neat	
V-203725	ICS 1 INTERMEDIATE	1 ml	various mg/l	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-205362



Prepared By: Berls, Sean R.		Department: Metals		ApprovedBy: gabrielle	
Description: ICB/CCB		BatchNumber:		ApproveDate: 03/06/15	
Prep Date: 3/2/2015		Concentration: 0 mg/l		Checked: Yes	
Expiration Date: 6/1/2015		Final Volume: 1000 ml			

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9067	Nitric Acid	50 ml	neat neat	
9065	Hydrochloric Acid	50 ml	neat neat	

Veritech Lot Number: V-206357



Prepared By: Berls, Sean R.		Department: Metals		ApprovedBy: shiamala	
Description: LLICV/LLCCV aq		BatchNumber:		ApproveDate: 03/19/15	
Prep Date: 3/18/2015		Concentration: MULTI multi		Checked: Yes	
Expiration Date: 6/17/2015		Final Volume: 500 ml			

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9196	Nitric acid	25 ml	neat neat	
9065	Hydrochloric Acid	25 ml	neat neat	
8932	LLICV/CCV ICP AQUEOUS	5 ml	NEAT neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8487



Description

BERYLLIUM

ApprovedBy: gabrielle
 ApproveDate: 02/06/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-051-04x	S131107023	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	1000	ug/mL

Veritech Control/Receipt Number: 8488



Description

CADMIUM

ApprovedBy: gabrielle
 ApproveDate: 02/06/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-051-48x	S131206019	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	1000	ug/mL

Veritech Control/Receipt Number: 8798



Description

ICV 2

ApprovedBy: shiamala
 ApproveDate: 06/27/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S140619025	06/25/14	06/30/15	Kalin, Gabrielle	2	500m	50	ug/mL

Veritech Control/Receipt Number: 8932



Description

LLICV/CCV ICP AQUEOUS

ApprovedBy: shiamala
 ApproveDate: 10/03/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-24-500	26-070CR	09/04/14	09/30/15	Kalin, Gabrielle	1	500m	NEAT	NEAT

Veritech Control/Receipt Number: 8934



Description

ICP CALIBRATION STOCK 1

ApprovedBy: shiamala
 ApproveDate: 10/03/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	25-115CR	07/22/14	07/30/15	Kalin, Gabrielle	2	500m	NEAT	NEAT

Veritech Control/Receipt Number: 8935



Description

ICP CALIBRATION STOCK 2

ApprovedBy: shiamala
 ApproveDate: 10/03/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	25-116CR	07/22/14	07/30/15	Kalin, Gabrielle	2	500m	10000	ug/mL

Veritech Control/Receipt Number: 9026



Description

ICSA

ApprovedBy: shiamala
 ApproveDate: 10/22/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-104	S141014022	10/21/14	10/21/15	Kalin, Gabrielle	4	500 m	MULTI	MULTI

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9032



Description

ICV1

ApprovedBy: shiamala

ApproveDate: 11/18/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S141014020	10/20/14	10/31/15	Berls, Sean R.	2	500m	MULTI	MULTI

Veritech Control/Receipt Number: 9038



Description

Hydrochloric Acid

ApprovedBy: shiamala

ApproveDate: 11/18/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	85716	10/28/14	07/13/19	Lopez, Jose	12	4L	neat	neat

Veritech Control/Receipt Number: 9065



Description

Hydrochloric Acid

ApprovedBy: shiamala

ApproveDate: 11/18/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	888921	11/11/14	08/12/19	Lopez, Jose	24	2.5L	neat	neat

Veritech Control/Receipt Number: 9066



Description

Nitric Acid

ApprovedBy: shiamala

ApproveDate: 11/18/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	88969	11/11/14	08/18/19	Lopez, Jose	8	2.5L	neat	neat

Veritech Control/Receipt Number: 9067



Description

Nitric Acid

ApprovedBy: shiamala

ApproveDate: 11/18/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	84115	11/11/14	07/01/19	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 9068



Description

Nitric Acid

ApprovedBy: shiamala

ApproveDate: 11/18/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	50770	11/11/14	06/23/18	Lopez, Jose	1	2.5L	neat	neat

Veritech Control/Receipt Number: 9069



Description

DI H2O

ApprovedBy: shiamala

ApproveDate: 11/18/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemanns	1	1	11/11/14	11/10/15	Berls, Sean R.	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9173



Description
ICSA

ApprovedBy: shiamala
 ApproveDate: 02/13/15
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-104	S141216018	12/24/14	12/31/15	Kalin, Gabrielle	4	500m	NEAT	ug/mL

Veritech Control/Receipt Number: 9174



Description
ICSAB

ApprovedBy: shiamala
 ApproveDate: 02/13/15
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-103	S141216017	12/24/14	12/31/15	Kalin, Gabrielle	1	500m	NEAT	ug/mL

Veritech Control/Receipt Number: 9196



Description
Nitric acid

ApprovedBy: shiamala
 ApproveDate: 02/06/15
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	99263	01/20/15	12/04/19	Lopez, Jose	16	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-198008

Prepared By: Papazlatanova, Snezana		Department: Metals	ApprovedBy: shiamala	
Description: 5% Potassium Persulfate		BatchNumber:	ApproveDate: 10/30/14	
Prep Date: 10/30/2014		Concentration: reagent	Checked: Yes	
Expiration Date: 4/17/2015		Final Volume: 10 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7678	DI Water			
	POTASSIUM PERSULFATE	500 g	NEAT neat	

Veritech Lot Number: V-203662

Prepared By: Adelarte, Olufemi		Department: Metals	ApprovedBy: shiamala	
Description: 5% Potassium Permanganate		BatchNumber:	ApproveDate: 01/29/15	
Prep Date: 1/29/2015		Concentration: reagent	Checked: Yes	
Expiration Date: 5/13/2015		Final Volume: 20 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8390	Potassium Permanganate	1000 g	NEAT neat	

Veritech Lot Number: V-205975

Prepared By: a		Department: WetChem	ApprovedBy: shiamala	
Description: 3% HCL		BatchNumber:	ApproveDate: 03/18/15	
Prep Date: 3/12/2015		Concentration: 3 %	Checked: Yes	
Expiration Date: 9/11/2015		Final Volume: 10 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9038	Hydrochloric Acid	300 ml	neat neat	3 %
9069	DI H2O			

Veritech Lot Number: V-206098

Prepared By: a		Department: Metals	ApprovedBy: shiamala	
Description: Hydroxylamine Hydrochloride		BatchNumber:	ApproveDate: 03/18/15	
Prep Date: 3/13/2015		Concentration: reagent	Checked: Yes	
Expiration Date: 9/12/2015		Final Volume: 10 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9078	Sodium Chloride	1200 g	neat neat	
9189	Hydroxylamine Hydrochloride	1200 g	NEAT neat	

Veritech Lot Number: V-206586

Prepared By: Papazlatanova, Snezana		Department: Metals	ApprovedBy: shiamala	
Description: Hg Intermediate Standard		BatchNumber: B-18982	ApproveDate: 03/23/15	
Prep Date: 3/23/2015		Concentration: .25 ppm	Checked: Yes	
Expiration Date: 3/23/2015		Final Volume: 500 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9202	MERCURY	.125 ml	1000 mg/l	
9068	Nitric Acid	12.5 ml	neat neat	
9069	DI H2O			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-206587

Prepared By: Papazlatanova, Snezana		Department: Metals	ApprovedBy: shiamala	
Description: Hg intermediate Control		BatchNumber: B-18982	ApproveDate: 03/23/15	
Prep Date: 3/23/2015		Concentration: 1.0 ppm	Checked: Yes	
Expiration Date: 3/23/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8477	MERCURY	.1 ml	1000 ug/ml	
9068	Nitric Acid	2.5 ml	neat neat	
9069	DI H2O			

Veritech Lot Number: V-206642

Prepared By: Edgardo, Ramos		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ ICV 20 ppb		BatchNumber: B-18986	ApproveDate: 03/23/15	
Prep Date: 3/23/2015		Concentration: 20 ppb	Checked: Yes	
Expiration Date: 3/23/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206587	Hg intermediate Control	.5 ml	1.0 ppm	
9069	DI H2O			

Veritech Lot Number: V-206643

Prepared By: Edgardo, Ramos		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ CCV 10 ppb		BatchNumber: B-18986	ApproveDate: 03/23/15	
Prep Date: 3/23/2015		Concentration: 10 ppb	Checked: Yes	
Expiration Date: 3/23/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206587	Hg intermediate Control	.25 ml	1.0 ppm	
9069	DI H2O			

Veritech Lot Number: V-206644

Prepared By: Edgardo, Ramos		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard blk		BatchNumber: B-18986	ApproveDate: 03/23/15	
Prep Date: 3/23/2015		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 3/23/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			

Veritech Lot Number: V-206645

Prepared By: Edgardo, Ramos		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard .2 ppb		BatchNumber: B-18986	ApproveDate: 03/23/15	
Prep Date: 3/23/2015		Concentration: .2 ppb	Checked: Yes	
Expiration Date: 3/23/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206586	Hg Intermediate Standard	.02 ml	.25 ppm	
9069	DI H2O			

Veritech Lot Number: V-206646

Prepared By: Edgardo, Ramos		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard .5 ppb		BatchNumber: B-18986	ApproveDate: 03/23/15	
Prep Date: 3/23/2015		Concentration: .5 ppb	Checked: Yes	
Expiration Date: 3/23/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206586	Hg Intermediate Standard	.05 ml	.25 ppm	
9069	DI H2O			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-206647

Prepared By: Edgardo, Ramos		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 1 ppb		BatchNumber: B-18986	ApproveDate: 03/23/15	
Prep Date: 3/23/2015		Concentration: 1 ppb	Checked: Yes	
Expiration Date: 3/23/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206586 9069	Hg Intermediate Standard DI H2O	.1 ml	.25 ppm	

Veritech Lot Number: V-206648

Prepared By: Edgardo, Ramos		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 2 ppb		BatchNumber: B-18986	ApproveDate: 03/23/15	
Prep Date: 3/23/2015		Concentration: 2 ppb	Checked: Yes	
Expiration Date: 3/23/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206586 9069	Hg Intermediate Standard DI H2O	.2 ml	.25 ppm	

Veritech Lot Number: V-206649

Prepared By: Edgardo, Ramos		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 5 ppb		BatchNumber: B-18986	ApproveDate: 03/23/15	
Prep Date: 3/23/2015		Concentration: 5 ppb	Checked: Yes	
Expiration Date: 3/23/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206586 9069	Hg Intermediate Standard DI H2O	.5 ml	.25 ppm	

Veritech Lot Number: V-206650

Prepared By: Edgardo, Ramos		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 10 ppb		BatchNumber: B-18986	ApproveDate: 03/23/15	
Prep Date: 3/23/2015		Concentration: 10 ppb	Checked: Yes	
Expiration Date: 3/23/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206586 9069	Hg Intermediate Standard DI H2O	1 ml	.25 ppm	

Veritech Lot Number: V-206651

Prepared By: Edgardo, Ramos		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 25 ppb		BatchNumber: B-18986	ApproveDate: 03/23/15	
Prep Date: 3/23/2015		Concentration: 25 ppb	Checked: Yes	
Expiration Date: 3/23/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206586 9069	Hg Intermediate Standard DI H2O	2.5 ml	.25 ppm	

Veritech Lot Number: V-207084

Prepared By: Aliano, Carmela		Department: Metals	ApprovedBy: gabrielle	
Description: SnCl2		BatchNumber:	ApproveDate: 03/27/15	
Prep Date: 3/27/2015		Concentration: reagent I	Checked: Yes	
Expiration Date: 3/27/2015		Final Volume: 1 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9188	STANNOUS CHLORIDE	13.2 g	NEAT neat	
V-205975	3% HCL	1000 ml	3 %	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7678									
Description						ApprovedBy: shiamala ApproveDate: 12/03/13 Checked: Yes			
POTASSIUM PERSULFATE									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CCI	LC4445NG	200712215	02/11/13	02/10/18	Kalin, Gabrielle	1	2.5kg	NEAT	NEAT

Veritech Control/Receipt Number: 8390									
Description						ApprovedBy: gabrielle ApproveDate: 02/06/14 Checked: Yes			
Potassium Permanganate									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	LCT 10208	B033-01	01/13/14	01/12/24	Kalin, Gabrielle	1	2.5kg	NEAT	NEAT

Veritech Control/Receipt Number: 8477									
Description						ApprovedBy: gabrielle ApproveDate: 02/06/14 Checked: Yes			
MERCURY									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-051-80X	S140102033	01/31/14	04/30/15	Kalin, Gabrielle	2	125m	1000	ug/mL

Veritech Control/Receipt Number: 9038									
Description						ApprovedBy: shiamala ApproveDate: 11/18/14 Checked: Yes			
Hydrochloric Acid									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	85716	10/28/14	07/13/19	Lopez, Jose	12	4L	neat	neat

Veritech Control/Receipt Number: 9068									
Description						ApprovedBy: shiamala ApproveDate: 11/18/14 Checked: Yes			
Nitric Acid									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	50770	11/11/14	06/23/18	Lopez, Jose	1	2.5L	neat	neat

Veritech Control/Receipt Number: 9069									
Description						ApprovedBy: shiamala ApproveDate: 11/18/14 Checked: Yes			
DI H2O									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemanns	1	1	11/11/14	11/10/15	Berls, Sean R.	1			

Veritech Control/Receipt Number: 9078									
Description						ApprovedBy: ApproveDate: Checked: No			
Sodium Chloride									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	SX0420-5	VG11D	11/14/14	11/13/18	Lopez, Jose	1	12kg	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9188



Description

STANNOUS CHLORIDE

ApprovedBy: shiamala
 ApproveDate: 02/13/15
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem Inc	P33805	D231-26	01/12/15	01/11/25	Kalin, Gabrielle	1	3Kg	NEAT	NEAT

Veritech Control/Receipt Number: 9189



Description

Hydroxylamine Hydrochloride

ApprovedBy: shiamala
 ApproveDate: 02/13/15
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CCI	5470-11-1	2014012797	01/12/15	01/11/25	Kalin, Gabrielle	1	2.5Kg	NEAT	NEAT

Veritech Control/Receipt Number: 9202




Description


MERCURY

ApprovedBy: shiamala
 ApproveDate: 02/06/15
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLHG3-2Y	20-13HGY	01/20/15	01/16/16	Kalin, Gabrielle	1	125m	1000	mg/L

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9067										
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Description</div> <div style="border: 1px solid black; padding: 2px;">Nitric Acid</div>							<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApprovedBy: shiamala</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApproveDate: 11/18/14</div> <div style="border: 1px solid black; padding: 2px;">Checked: Yes</div>			
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:	
J.T.Baker	9598-34	84115	11/11/14	07/01/19	Lopez, Jose	4	2.5L	neat	neat	

Veritech Control/Receipt Number: 9081										
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Description</div> <div style="border: 1px solid black; padding: 2px;">Sulfuric Acid</div>							<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApprovedBy: shiamala</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApproveDate: 02/13/15</div> <div style="border: 1px solid black; padding: 2px;">Checked: Yes</div>			
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:	
Fisher	A510-P212	3113122	11/24/14	05/12/17	Lopez, Jose	6	2.5L	neat	neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-202629

Prepared By: Aliano, Carmela		Department: Metals	ApprovedBy: shiamala	
Description: 1:1 HCl		BatchNumber:	ApproveDate: 01/15/15	
Prep Date: 1/14/2015		Concentration: Reagent	Checked: Yes	
Expiration Date: 7/13/2015		Final Volume: 2000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O	1000 ml		
9038	Hydrochloric Acid	1000 ml	neat neat	

Veritech Lot Number: V-203597

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: 6020 CALIBRATION STOCK		BatchNumber:	ApproveDate: 01/29/15	
Prep Date: 1/28/2015		Concentration: VARIOUS pp	Checked: Yes	
Expiration Date: 4/29/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9067	Nitric Acid	2 ml	neat neat	
8471	ALUMINUM	.725 ml	10000 ug/ml	72.5
8490	SELENIUM	1 ml	1000 ug/ml	10
8474	CALCIUM	2.5 ml	10000 ug/ml	250
8476	IRON	2.5 ml	10000 ug/ml	250
8479	MAGNESIUM	2.5 ml	10000 ug/ml	250
8482	POTASSIUM	2.5 ml	10000 ug/ml	250
8483	SODIUM	2.5 ml	10000 ug/ml	250
8902	ICPMS CALIBRATION STOCK	12.5 ml	20 mg/l	2.5

Veritech Lot Number: V-203685

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Antimony Intermediate 1PPM		BatchNumber:	ApproveDate: 02/03/15	
Prep Date: 1/29/2015		Concentration: 1000 ppb	Checked: Yes	
Expiration Date: 5/29/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8624	nitric acid	2.5 ml	neat neat	
9206	ANTIMONY	.1 ml	1000 mg/l	

Veritech Lot Number: V-206937

Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: Cal Blk		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	2.5 ml	neat neat	

Veritech Lot Number: V-206938

Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: Cal Std-1		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	2.5 ml	neat neat	
V-203597	6020 CALIBRATION STOCK	.02 ml	VARIOUS pp	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-206939

Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: Cal Std-2		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8860	Nitric Acid	2.5 ml	neat neat	
9069	DI H2O			
V-203597	6020 CALIBRATION STOCK	.2 ml	VARIOUS pp	

Veritech Lot Number: V-206940

Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: Cal Std-3		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	2.5 ml	neat neat	
V-203597	6020 CALIBRATION STOCK	.4 ml	VARIOUS pp	

Veritech Lot Number: V-206941

Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: Cal Std-4		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	2.5 ml	neat neat	
V-203597	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-206942

Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: Cal Std-5		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8860	Nitric Acid	2.5 ml	neat neat	
9069	DI H2O			
V-203597	6020 CALIBRATION STOCK	4 ml	VARIOUS pp	

Veritech Lot Number: V-206943

Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: ICV		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8860	Nitric Acid	2.5 ml	neat neat	
9069	DI H2O			
8770	6020 ICV (ONLY Ag)	.1 ml	10 ug/ml	
8769	6020 ICV (no Ag)	.1 ml	NEAT ug/ml	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-206944



Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: ICB/CCB		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	2.5 ml	neat neat	

Veritech Lot Number: V-206945



Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: ICSA		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 50 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	1.25 ml	neat neat	
9170	INTERFERENTS A	2.5 ml	VARIOUS m	

Veritech Lot Number: V-206946



Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: ICSAB		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 50 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	1.25 ml	neat neat	2.5 %
9170	INTERFERENTS A	2.5	VARIOUS m	
9171	ANALYTES B	.5	VARIOUS m	

Veritech Lot Number: V-206947



Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: CCV		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	2.5 ml	neat neat	
V-203597	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-206949



Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: LL-ICV/CCV AQ.		BatchNumber:	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9087	Nitric Acid	2.5 ml	neat neat	
9167	ICPMS LLICV/CCV AQUEOUS	.5 ml	VARIOUS m	
V-203685	Antimony Intermediate 1PPM	.05 ml	1000 ppb	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8471									
Description						ApprovedBy: gabrielle ApproveDate: 02/06/14 Checked: Yes			
ALUMINUM									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-061-013x	S131219013	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	10000	ug/mL

Veritech Control/Receipt Number: 8474									
Description						ApprovedBy: gabrielle ApproveDate: 02/06/14 Checked: Yes			
CALCIUM									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-061-20x	S130924001	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	10000	ug/mL

Veritech Control/Receipt Number: 8476									
Description						ApprovedBy: gabrielle ApproveDate: 02/06/14 Checked: Yes			
IRON									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-061-26x	S130812002	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	10000	ug/mL

Veritech Control/Receipt Number: 8479									
Description						ApprovedBy: gabrielle ApproveDate: 02/06/14 Checked: Yes			
MAGNESIUM									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-061-12x	S130807017	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	10000	ug/mL

Veritech Control/Receipt Number: 8482									
Description						ApprovedBy: gabrielle ApproveDate: 02/06/14 Checked: Yes			
POTASSIUM									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-061-19x	S130715002	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	10000	ug/mL

Veritech Control/Receipt Number: 8483									
Description						ApprovedBy: gabrielle ApproveDate: 02/06/14 Checked: Yes			
SODIUM									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-061-11x	S130620015	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	10000	ug/mL

Veritech Control/Receipt Number: 8490									
Description						ApprovedBy: gabrielle ApproveDate: 02/06/14 Checked: Yes			
SELENIUM									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-051-34x	S140115015	02/05/14	05/31/15	Kalin, Gabrielle	1	125m	1000	ug/mL

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8624											
Description										ApprovedBy: shiamala	
nitric acid										ApproveDate: 06/05/14	
										Checked: Yes	
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:		
J.T.Baker	9598-34	67379	04/03/14	12/26/18	Lopez, Jose	16	2.5L	neat	neat		

Veritech Control/Receipt Number: 8769											
Description										ApprovedBy: shiamala	
6020 ICV (no Ag)										ApproveDate: 06/30/14	
										Checked: Yes	
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:		
SCP SCIENCE	600-225-110	S140612019	06/18/14	06/30/15	Kalin, Gabrielle	1	125m	NEAT	ug/mL		

Veritech Control/Receipt Number: 8770											
Description										ApprovedBy: shiamala	
6020 ICV (ONLY Ag)										ApproveDate: 06/30/14	
										Checked: Yes	
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:		
SCP SCIENCE	600-225-111	S140612006	06/18/14	06/30/15	Kalin, Gabrielle	1	125m	10	ug/mL		

Veritech Control/Receipt Number: 8860											
Description										ApprovedBy: jean	
Nitric Acid										ApproveDate: 08/05/14	
										Checked: Yes	
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:		
J.T.Baker	9598-34	77192	08/05/14	04/15/19	Lopez, Jose	12	2.5L	neat	neat		

Veritech Control/Receipt Number: 8902											
Description										ApprovedBy: shiamala	
ICPMS CALIBRATION STOCK										ApproveDate: 10/03/14	
										Checked: Yes	
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:		
SPEX	CL-CAL-1	CL11-57YPY	08/26/14	08/30/15	Kalin, Gabrielle	1	125m	20	mg/L		

Veritech Control/Receipt Number: 9038											
Description										ApprovedBy: shiamala	
Hydrochloric Acid										ApproveDate: 11/18/14	
										Checked: Yes	
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:		
J.T.Baker	9530-33	85716	10/28/14	07/13/19	Lopez, Jose	12	4L	neat	neat		

Veritech Control/Receipt Number: 9067											
Description										ApprovedBy: shiamala	
Nitric Acid										ApproveDate: 11/18/14	
										Checked: Yes	
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:		
J.T.Baker	9598-34	84115	11/11/14	07/01/19	Lopez, Jose	4	2.5L	neat	neat		

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9069



Description

DI H2O

ApprovedBy: shiamala

ApproveDate: 11/18/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemanns	1	1	11/11/14	11/10/15	Berls, Sean R.	1			

Veritech Control/Receipt Number: 9087



Description

Nitric Acid

ApprovedBy: aurora

ApproveDate: 12/08/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	88969	11/25/14	08/18/19	Lopez, Jose	3	4L	neat	neat

Veritech Control/Receipt Number: 9167



Description

ICPMS LLICV/CCV AQUEOUS

ApprovedBy: shiamala

ApproveDate: 02/13/15

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	ZHCV-14-100	8-13WL	12/17/14	06/30/15	Kalin, Gabrielle	1	100m	VARIOU	mg/L

Veritech Control/Receipt Number: 9170



Description

INTERFERENTS A

ApprovedBy: shiamala

ApproveDate: 02/13/15

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-A1	CL11-66YPY	12/17/14	12/30/15	Kalin, Gabrielle	2	125m	VARIOU	mg/L

Veritech Control/Receipt Number: 9171



Description

ANALYTES B

ApprovedBy: shiamala

ApproveDate: 02/13/15

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-B1	CL11-35YPY	12/17/14	12/30/15	Kalin, Gabrielle	1	125m	VARIOU	mg/L

Veritech Control/Receipt Number: 9206



Description

ANTIMONY

ApprovedBy: shiamala

ApproveDate: 02/06/15

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSB7-2Y	19-190SBY	01/20/15	01/30/16	Kalin, Gabrielle	1	125m	1000	mg/L

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8934



Description

ICP CALIBRATION STOCK 1

ApprovedBy: shiamala

ApproveDate: 10/03/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	25-115CR	07/22/14	07/30/15	Kalin, Gabrielle	2	500m	NEAT	NEAT

Veritech Control/Receipt Number: 8935



Description

ICP CALIBRATION STOCK 2

ApprovedBy: shiamala

ApproveDate: 10/03/14

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	25-116CR	07/22/14	07/30/15	Kalin, Gabrielle	2	500m	10000	ug/mL

Veritech Control/Receipt Number: 9196



Description

Nitric acid

ApprovedBy: shiamala

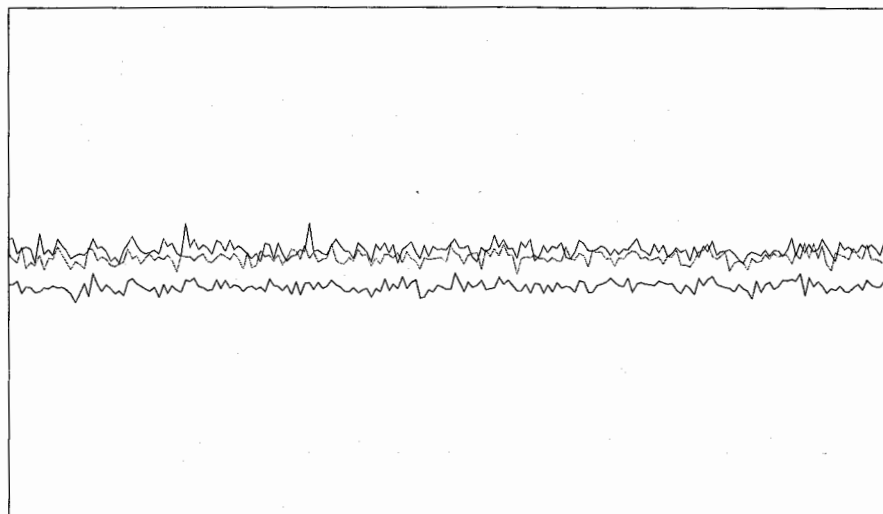
ApproveDate: 02/06/15

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	99263	01/20/15	12/04/19	Lopez, Jose	16	2.5L	neat	neat

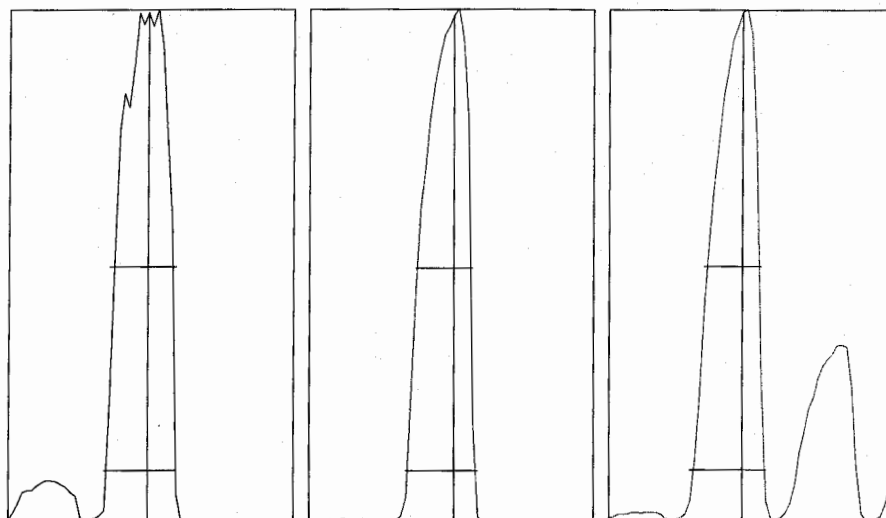
Tune Report

Tune File : ATUNE.U
 Comment : TN033115



Integration Time: 0.1000 sec
 Sampling Period: 0.6200 sec
 n: 200
 Oxide: 156/140 0.
 Doubly Charged: 70/140 1.

m/z	Range	Count	Mean	RSD%	Background
7	50,000	22370.0	22619.6	2.25	3.50
89	50,000	24772.0	26266.0	2.56	3.80
205	50,000	23805.0	25440.8	2.38	29.00
156/140	2	0.838%	0.852%	7.91	
70/140	5	1.632%	1.657%	6.60	



m/z: 7 89
 Height: 22,970 26,445
 Axis: 7.00 89.05
 W-50%: 0.70 0.60
 W-10%: 0.7500 0.7500

Integration Time: 0.1000 sec
 Acquisition Time: 22.7600 sec

Y axis : Linear

Tune Report

Tune File : ATUNE.U
 Comment : TN033115

Tuning Parameters

===Plasma Condition===

RF Power : 1450 W
 RF Matching : 1.76 V
 Smpl Depth : 4.5 mm
 Torch-H : -0.1 mm
 Torch-V : 0.2 mm
 Carrier Gas : 1 L/min
 Makeup Gas : 0.1 L/min
 Optional Gas : --- %
 Nebulizer Pump : 0.1 rps
 Sample Pump : --- rps
 S/C Temp : 2 degC

===Ion Lenses===

Extract 1 : 1.5 V
 Extract 2 : -135 V
 Omega Bias-ce : -24 V
 Omega Lens-ce : -1 V
 Cell Entrance : -40 V
 QP Focus : 4 V
 Cell Exit : -40 V

===Q-Pole Parameters===

AMU Gain : 114
 AMU Offset : 122
 Axis Gain : 1.0051
 Axis Offset : -0.3
 QP Bias : -8 V

===Detector Parameters===

Discriminator : 8.9 m
 Analog HV : 1890 V
 Pulse HV : 1280 V

===Octopole Parameters===

OctP RF : 180 V
 OctP Bias : -6 V

===Reaction Cell===

Reaction Mode : OFF
 H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

C:\ICPCHEM\1\DATA\T033115B.B\001TUNE.D

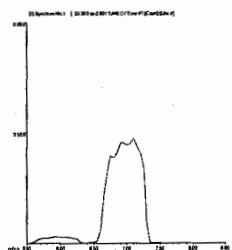
6020 Tune Check Sample

Data File: 001TUNE.D
 Date Acquired: Mar 31 2015 11:50 am
 Operator: GK
 Sample Name:
 Misc Info:
 Vial Number: 5
 Current Method: TN6020.M

QC Tune Summary:
Pass

RSD%

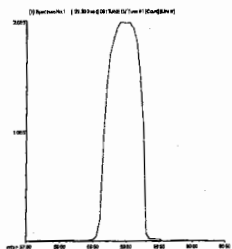
Element	Actual	Required	Flag
7 Li	1.62	5.00	0
59 Co	1.61	5.00	
115 In	2.41	5.00	
205 Tl	1.69	5.00	

**7 Li****Mass Calib.**

Actual: 7.00
 Required: 6.90 - 7.10
 Flag:

Peak Width

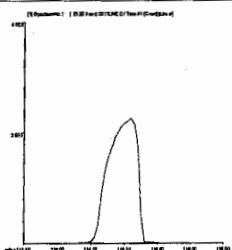
Actual: 0.70
 Required: 0.90
 Flag:

**59 Co****Mass Calib.**

Actual: 59.00
 Required: 58.90 - 59.10
 Flag:

Peak Width

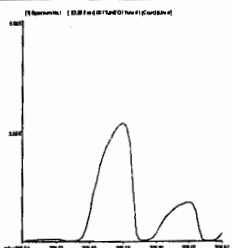
Actual: 0.60
 Required: 0.90
 Flag:

**115 In****Mass Calib.**

Actual: 115.05
 Required: 114.90 - 115.10
 Flag:

Peak Width

Actual: 0.65
 Required: 0.90
 Flag:

**205 Tl****Mass Calib.**

Actual: 204.95
 Required: 204.90 - 205.10
 Flag:

Peak Width

Actual: 0.60
 Required: 0.90
 Flag:

File SW17599AZ

5032012 0343
Batch 17599 SW846

Method: PE2 4300DV AXIAL

Page 1

Date: 3/26/2015 12:33:19 PM

Analyst *SLR* 3/26/15=====
Analysis Begun

Start Time: 3/26/2015 12:31:01 PM

Plasma On Time: 3/26/2015 9:29:16 AM

Logged In Analyst: shiamala

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030901 Autosampler Model: AS-93plus

Sample Information File: C:\pe\administrator\Sample Information\03.26.15.sif

Batch ID: PEICP 2

Results Data Set: SW17599AZ

Results Library: C:\pe\administrator\Results\Results.mdb

=====
Method Loaded

Method Name: PE2 4300DV AXIAL

Method Last Saved: 3/23/2015 4:35:58 PM

IEC File: IECax092614.iec

MSF File:

Method Description: 200.7/6010B/6010C

=====
Sequence No.: 1

Autosampler Location: 1

Sample ID: CALBLK V-205362

Date Collected: 3/26/2015 12:31:01 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CALBLK V-205362

Analyte	Mean Corrected		Std.Dev.	RSD	Conc.	Calib Units
	Intensity					
Sc 361.383	947036.5		4114.54	0.43%	100	%
Y 371.029	312517.0		888.62	0.28%	100	%
Ag 328.068†	1748.0		25.58	1.46%	[0.00]	mg/L
Al 308.215†	4832.3		105.67	2.19%	[0.00]	mg/L
As 188.979†	-5.5		0.83	15.20%	[0.00]	mg/L
Ba 233.527†	-421.3		13.75	3.26%	[0.00]	mg/L
Be 313.107†	1938.8		30.47	1.57%	[0.00]	mg/L
Ca 315.887†	1727.9		90.97	5.26%	[0.00]	mg/L
Cd 228.802†	143.5		0.09	0.07%	[0.00]	mg/L
Co 228.616†	-163.8		13.45	8.21%	[0.00]	mg/L
Cr 267.716†	-39.1		0.81	2.06%	[0.00]	mg/L
Cu 327.393†	2.0		22.05	>999.9%	[0.00]	mg/L
Fe 273.955†	19.3		0.36	1.86%	[0.00]	mg/L
K 404.721†	1394.1		16.01	1.15%	[0.00]	mg/L
Mg 279.077†	-394.3		18.50	4.69%	[0.00]	mg/L
Mn 257.610†	2351.5		6.17	0.26%	[0.00]	mg/L
Mo 202.031†	53.7		4.50	8.37%	[0.00]	mg/L
Na 330.237†	772.5		7.64	0.99%	[0.00]	mg/L
Ni 231.604†	893.5		10.90	1.22%	[0.00]	mg/L
Pb 220.353†	89.6		2.42	2.70%	[0.00]	mg/L
Sb 206.836†	62.2		0.06	0.10%	[0.00]	mg/L
Se 196.026†	0.7		2.25	330.48%	[0.00]	mg/L
Sn 189.927†	22.0		7.73	35.08%	[0.00]	mg/L
Ti 334.940†	-724.0		14.79	2.04%	[0.00]	mg/L
Tl 190.801†	-27.2		2.26	8.29%	[0.00]	mg/L
V 290.880†	4871.3		60.95	1.25%	[0.00]	mg/L
Zn 206.200†	126.7		4.49	3.54%	[0.00]	mg/L

17599
42362all elements reported
except Na, K

83866-019-033 not reported

Sequence No.: 2

Sample ID: CALST1 V-203732

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/26/2015 12:34:20 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST1 V-203732

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	960225.4	3268.45	0.34%	101 %
Y 371.029	313872.0	173.51	0.06%	100 %
Be 313.107†	7944.4	56.97	0.72%	[0.003] mg/L
Cd 228.802†	127.4	0.42	0.33%	[0.003] mg/L

Sequence No.: 3

Sample ID: CALST2 V-202401

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/26/2015 12:37:29 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST2 V-202401

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	954590.6	2283.53	0.24%	101	%
Y 371.029	313674.8	1134.07	0.36%	100	%
Ag 328.068†	289.2	70.13	24.25%	[0.002]	mg/L
Al 308.215†	2682.1	49.28	1.84%	[0.10]	mg/L
As 188.979†	9.7	1.04	10.68%	[0.010]	mg/L
Ba 233.527†	1121.3	6.60	0.59%	[0.010]	mg/L
Be 313.107†	26358.5	274.85	1.04%	[0.010]	mg/L
Ca 315.887†	84838.8	596.17	0.70%	[1.0]	mg/L
Cd 228.802†	414.7	6.85	1.65%	[0.010]	mg/L
Co 228.616†	387.6	6.25	1.61%	[0.010]	mg/L
Cr 267.716†	724.4	4.92	0.68%	[0.010]	mg/L
Cu 327.393†	1219.7	7.31	0.60%	[0.010]	mg/L
Fe 273.955†	2231.2	350.59	15.71%	[0.10]	mg/L
K 404.721†	103.8	19.86	19.13%	[1.0]	mg/L
Mg 279.077†	14363.4	67.08	0.47%	[1.0]	mg/L
Mn 257.610†	7187.2	69.56	0.97%	[0.010]	mg/L
Mo 202.031†	147.0	0.28	0.19%	[0.010]	mg/L
Na 330.237†	788.4	12.39	1.57%	[1.0]	mg/L
Ni 231.604†	383.7	0.30	0.08%	[0.010]	mg/L
Pb 220.353†	79.1	1.31	1.65%	[0.010]	mg/L
Sb 206.836†	22.0	0.24	1.11%	[0.010]	mg/L
Se 196.026†	13.3	1.24	9.32%	[0.010]	mg/L
Sn 189.927†	28.1	0.90	3.20%	[0.010]	mg/L
Ti 334.940†	6163.0	68.70	1.11%	[0.010]	mg/L
Tl 190.801†	16.3	1.71	10.45%	[0.010]	mg/L
V 290.880†	1151.7	55.77	4.84%	[0.010]	mg/L
Zn 206.200†	358.7	4.61	1.29%	[0.010]	mg/L

Sequence No.: 4

Sample ID: CALST3 V-202402

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/26/2015 12:40:49 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST3 V-202402

Analyte	Mean Corrected		RSD	Calib	
	Intensity	Std.Dev.		Conc.	Units
Sc 361.383	902238.9	3395.81	0.38%	95.3	%
Y 371.029	291500.6	1428.04	0.49%	93.3	%
Ag 328.068†	17808.1	170.20	0.96%	[0.10]	mg/L
Al 308.215†	142522.5	1766.82	1.24%	[5.0]	mg/L
As 188.979†	513.0	3.83	0.75%	[0.50]	mg/L
Ba 233.527†	54141.1	538.96	1.00%	[0.50]	mg/L
Be 313.107†	1397340.3	7026.98	0.50%	[0.50]	mg/L
Ca 315.887†	4240209.5	23079.90	0.54%	[50]	mg/L
Cd 228.802†	21013.8	213.46	1.02%	[0.50]	mg/L
Co 228.616†	18533.4	168.51	0.91%	[0.50]	mg/L
Cr 267.716†	36608.6	466.24	1.27%	[0.50]	mg/L
Cu 327.393†	61081.7	484.63	0.79%	[0.50]	mg/L
Fe 273.955†	98077.3	1321.37	1.35%	[5.0]	mg/L
K 404.721†	4484.1	85.21	1.90%	[50]	mg/L
Mg 279.077†	691672.3	3873.06	0.56%	[50]	mg/L
Mn 257.610†	353332.5	4587.90	1.30%	[0.50]	mg/L
Mo 202.031†	7673.8	18.71	0.24%	[0.50]	mg/L
Na 330.237†	49317.8	537.90	1.09%	[50]	mg/L
Ni 231.604†	19215.2	229.71	1.20%	[0.50]	mg/L
Pb 220.353†	4134.0	0.98	0.02%	[0.50]	mg/L
Sb 206.836†	1223.8	4.87	0.40%	[0.50]	mg/L
Se 196.026†	498.8	2.91	0.58%	[0.50]	mg/L
Sn 189.927†	1630.1	1.20	0.07%	[0.50]	mg/L
Ti 334.940†	311125.0	3155.53	1.01%	[0.50]	mg/L
Tl 190.801†	638.1	8.17	1.28%	[0.50]	mg/L
V 290.880†	63074.0	778.44	1.23%	[0.50]	mg/L
Zn 206.200†	18546.5	248.63	1.34%	[0.50]	mg/L

Sequence No.: 5

Sample ID: CALST4 V-203077

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/26/2015 12:44:13 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST4 V-203077

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	888576.7	1413.90	0.16%	93.8	%
Y 371.029	285440.7	1795.84	0.63%	91.3	%
Ag 328.068†	35424.3	68.01	0.19%	[0.20]	mg/L
Al 308.215†	280430.5	1312.66	0.47%	[10]	mg/L
As 188.979†	1014.9	9.71	0.96%	[1.0]	mg/L
Ba 233.527†	105782.6	265.59	0.25%	[1.0]	mg/L
Be 313.107†	2754855.4	2613.40	0.09%	[1.0]	mg/L
Ca 315.887†	8403957.4	7663.99	0.09%	[100]	mg/L
Cd 228.802†	41908.9	159.41	0.38%	[1.0]	mg/L
Co 228.616†	36156.3	116.06	0.32%	[1.0]	mg/L
Cr 267.716†	72014.7	208.37	0.29%	[1.0]	mg/L
Cu 327.393†	120829.7	752.82	0.62%	[1.0]	mg/L
Fe 273.955†	191148.5	685.02	0.36%	[10]	mg/L
K 404.721†	9890.5	25.98	0.26%	[100]	mg/L
Mg 279.077†	1368791.8	2346.82	0.17%	[100]	mg/L
Mn 257.610†	688932.0	1051.34	0.15%	[1.0]	mg/L
Mo 202.031†	15004.4	20.74	0.14%	[1.0]	mg/L
Na 330.237†	105423.5	459.92	0.44%	[100]	mg/L
Ni 231.604†	37447.9	64.32	0.17%	[1.0]	mg/L
Pb 220.353†	7990.2	0.79	0.01%	[1.0]	mg/L
Sb 206.836†	2415.0	3.42	0.14%	[1.0]	mg/L
Se 196.026†	999.9	9.65	0.97%	[1.0]	mg/L
Sn 189.927†	3232.6	1.52	0.05%	[1.0]	mg/L
Ti 334.940†	613661.2	1084.59	0.18%	[1.0]	mg/L
Tl 190.801†	1229.4	1.21	0.10%	[1.0]	mg/L
V 290.880†	123442.6	376.09	0.30%	[1.0]	mg/L
Zn 206.200†	36505.0	37.21	0.10%	[1.0]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-12.1	177400	0.00000	0.999993	
Al 308.215	3	Lin, Calc Int	364.4	28090	0.00000	0.999963	
As 188.979	3	Lin, Calc Int	0.8	1016	0.00000	0.999984	
Ba 233.527	3	Lin, Calc Int	256.3	106000	0.00000	0.999927	
Be 313.107	4	Lin, Calc Int	2009.5	2760000	0.00000	0.999975	
Ca 315.887	3	Lin, Calc Int	7320.9	84100	0.00000	0.999989	
Cd 228.802	4	Lin, Calc Int	6.6	41920	0.00000	0.999999	
Co 228.616	3	Lin, Calc Int	94.7	36220	0.00000	0.999918	
Cr 267.716	3	Lin, Calc Int	111.4	72120	0.00000	0.999963	
Cu 327.393	3	Lin, Calc Int	126.5	120900	0.00000	0.999984	
Fe 273.955	3	Lin, Calc Int	600.7	19140	0.00000	0.999913	
K 404.721	3	Lin, Calc Int	-81.7	98.05	0.00000	0.999811	
Mg 279.077	3	Lin, Calc Int	1631.0	13700	0.00000	0.999986	
Mn 257.610	3	Lin, Calc Int	1748.9	690400	0.00000	0.999913	
Mo 202.031	3	Lin, Calc Int	29.8	15040	0.00000	0.999930	
Na 330.237	3	Lin, Calc Int	-738.4	1050	0.00000	0.999460	
Ni 231.604	3	Lin, Calc Int	93.6	37530	0.00000	0.999909	
Pb 220.353	3	Lin, Calc Int	24.9	8016	0.00000	0.999839	
Sb 206.836	3	Lin, Calc Int	2.0	2419	0.00000	0.999974	
Se 196.026	3	Lin, Calc Int	1.3	997.9	0.00000	0.999994	
Sn 189.927	3	Lin, Calc Int	0.6	3237	0.00000	0.999988	
Ti 334.940	3	Lin, Calc Int	793.6	614400	0.00000	0.999974	
Tl 190.801	3	Lin, Calc Int	6.1	1231	0.00000	0.999819	
V 290.880	3	Lin, Calc Int	208.7	123700	0.00000	0.999934	
Zn 206.200	3	Lin, Calc Int	50.6	36560	0.00000	0.999965	

Analyte	Mean Corrected		Calib		Sample		RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	
Sc 361.383	937699.6	99.0	%	0.37			0.37%
Y 371.029	297434.3	95.2	%	0.67			0.70%
Ag 328.068†	17056.2	0.0964673	mg/L	0.00120231	0.0964673	mg/L	1.25%
QC value within limits for Ag	328.068	Recovery =	96.47%				
Al 308.215†	137030.8	4.86509	mg/L	0.061023	4.86509	mg/L	1.25%
QC value within limits for Al	308.215	Recovery =	97.30%				
As 188.979†	491.0	0.482686	mg/L	0.0009467	0.482686	mg/L	0.20%
QC value within limits for As	188.979	Recovery =	96.54%				
Ba 233.527†	52279.9	0.490741	mg/L	0.0047654	0.490741	mg/L	0.97%
QC value within limits for Ba	233.527	Recovery =	98.15%				
Be 313.107†	1363664.8	0.493063	mg/L	0.0029469	0.493063	mg/L	0.60%
QC value within limits for Be	313.107	Recovery =	98.61%				
Ca 315.887†	4146177.4	49.2111	mg/L	0.21197	49.2111	mg/L	0.43%
QC value within limits for Ca	315.887	Recovery =	98.42%				
Cd 228.802†	20261.1	0.483254	mg/L	0.0055438	0.483254	mg/L	1.15%
QC value within limits for Cd	228.802	Recovery =	96.65%				
Co 228.616†	17856.1	0.489798	mg/L	0.0047467	0.489798	mg/L	0.97%
QC value within limits for Co	228.616	Recovery =	97.96%				
Cr 267.716†	35236.2	0.487801	mg/L	0.0055979	0.487801	mg/L	1.15%
QC value within limits for Cr	267.716	Recovery =	97.56%				
Cu 327.393†	58565.2	0.486385	mg/L	0.0060262	0.486385	mg/L	1.24%
QC value within limits for Cu	327.393	Recovery =	97.28%				
Fe 273.955†	94623.0	4.91166	mg/L	0.050203	4.91166	mg/L	1.02%
QC value within limits for Fe	273.955	Recovery =	98.23%				
K 404.721†	4270.0	44.3837	mg/L	0.45620	44.3837	mg/L	1.03%
QC value less than the lower limit for K 404.721		Recovery =	88.77%				
Mg 279.077†	677653.8	49.3542	mg/L	0.24162	49.3542	mg/L	0.49%
QC value within limits for Mg	279.077	Recovery =	98.71%				
Mn 257.610†	340736.1	0.489646	mg/L	0.0051010	0.489646	mg/L	1.04%
QC value within limits for Mn	257.610	Recovery =	97.93%				
Mo 202.031†	7366.7	0.485572	mg/L	0.0035805	0.485572	mg/L	0.74%
QC value within limits for Mo	202.031	Recovery =	97.11%				
Na 330.237†	47462.9	45.9254	mg/L	0.50388	45.9254	mg/L	1.10%
QC value within limits for Na	330.237	Recovery =	91.85%				
Ni 231.604†	18481.2	0.489877	mg/L	0.0066704	0.489877	mg/L	1.36%
QC value within limits for Ni	231.604	Recovery =	97.98%				
Pb 220.353†	3968.8	0.493056	mg/L	0.0015435	0.493056	mg/L	0.31%
QC value within limits for Pb	220.353	Recovery =	98.61%				
Sb 206.836†	1173.3	0.482572	mg/L	0.0056769	0.482572	mg/L	1.18%
QC value within limits for Sb	206.836	Recovery =	96.51%				
Se 196.026†	486.8	0.486782	mg/L	0.0074291	0.486782	mg/L	1.53%
QC value within limits for Se	196.026	Recovery =	97.36%				
Sn 189.927†	1576.6	0.488799	mg/L	0.0033820	0.488799	mg/L	0.69%
QC value within limits for Sn	189.927	Recovery =	97.76%				
Ti 334.940†	299165.4	0.485615	mg/L	0.0057311	0.485615	mg/L	1.18%
QC value within limits for Ti	334.940	Recovery =	97.12%				
Tl 190.801†	618.8	0.499154	mg/L	0.0019015	0.499154	mg/L	0.38%
QC value within limits for Tl	190.801	Recovery =	99.83%				
V 290.880†	60592.9	0.482615	mg/L	0.0060071	0.482615	mg/L	1.24%
QC value within limits for V	290.880	Recovery =	96.52%				
Zn 206.200†	17899.8	0.488					

Sequence No.: 7

Sample ID: ICV V-202964

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/26/2015 12:52:10 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICV V-202964

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	938749.8	99.1 %	0.44			0.45%
Y 371.029	303335.4	97.1 %	0.64			0.65%
Ag 328.068†	19015.7	0.107520 mg/L	0.0011602	0.107520 mg/L	0.0011602	1.08%
QC value within limits for Ag	328.068	Recovery = 107.52%				
Al 308.215†	140535.8	4.98986 mg/L	0.064677	4.98986 mg/L	0.064677	1.30%
QC value within limits for Al	308.215	Recovery = 99.80%				
As 188.979†	489.8	0.481546 mg/L	0.0049936	0.481546 mg/L	0.0049936	1.04%
QC value within limits for As	188.979	Recovery = 96.31%				
Ba 233.527†	53045.3	0.497958 mg/L	0.0046942	0.497958 mg/L	0.0046942	0.94%
QC value within limits for Ba	233.527	Recovery = 99.59%				
Be 313.107†	1347564.7	0.487225 mg/L	0.0020179	0.487225 mg/L	0.0020179	0.41%
QC value within limits for Be	313.107	Recovery = 97.44%				
Ca 315.887†	4135603.6	49.0854 mg/L	0.18266	49.0854 mg/L	0.18266	0.37%
QC value within limits for Ca	315.887	Recovery = 98.17%				
Cd 228.802†	20680.6	0.493263 mg/L	0.0049352	0.493263 mg/L	0.0049352	1.00%
QC value within limits for Cd	228.802	Recovery = 98.65%				
Co 228.616†	18095.7	0.496392 mg/L	0.0057972	0.496392 mg/L	0.0057972	1.17%
QC value within limits for Co	228.616	Recovery = 99.28%				
Cr 267.716†	35946.3	0.497655 mg/L	0.0056965	0.497655 mg/L	0.0056965	1.14%
QC value within limits for Cr	267.716	Recovery = 99.53%				
Cu 327.393†	60101.1	0.499121 mg/L	0.0067974	0.499121 mg/L	0.0067974	1.36%
QC value within limits for Cu	327.393	Recovery = 99.82%				
Fe 273.955†	97075.8	5.03979 mg/L	0.060668	5.03979 mg/L	0.060668	1.20%
QC value within limits for Fe	273.955	Recovery = 100.80%				
K 404.721†	4343.5	45.1332 mg/L	0.22426	45.1332 mg/L	0.22426	0.50%
QC value within limits for K	404.721	Recovery = 90.27%				
Mg 279.077†	683347.2	49.7698 mg/L	0.20545	49.7698 mg/L	0.20545	0.41%
QC value within limits for Mg	279.077	Recovery = 99.54%				
Mn 257.610†	342411.8	0.492068 mg/L	0.0051884	0.492068 mg/L	0.0051884	1.05%
QC value within limits for Mn	257.610	Recovery = 98.41%				
Mo 202.031†	7422.2	0.489261 mg/L	0.0031505	0.489261 mg/L	0.0031505	0.64%
QC value within limits for Mo	202.031	Recovery = 97.85%				
Na 330.237†	48350.4	46.7709 mg/L	0.44475	46.7709 mg/L	0.44475	0.95%
QC value within limits for Na	330.237	Recovery = 93.54%				
Ni 231.604†	18629.3	0.493819 mg/L	0.0064069	0.493819 mg/L	0.0064069	1.30%
QC value within limits for Ni	231.604	Recovery = 98.76%				
Pb 220.353†	3895.0	0.483867 mg/L	0.0039629	0.483867 mg/L	0.0039629	0.82%
QC value within limits for Pb	220.353	Recovery = 96.77%				
Sb 206.836†	1193.3	0.490815 mg/L	0.0024278	0.490815 mg/L	0.0024278	0.49%
QC value within limits for Sb	206.836	Recovery = 98.16%				
Se 196.026†	469.3	0.469274 mg/L	0.0100847	0.469274 mg/L	0.0100847	2.15%
QC value within limits for Se	196.026	Recovery = 93.85%				
Sn 189.927†	1626.1	0.504100 mg/L	0.0051722	0.504100 mg/L	0.0051722	1.03%
QC value within limits for Sn	189.927	Recovery = 100.82%				
Ti 334.940†	306415.9	0.497416 mg/L	0.0026656	0.497416 mg/L	0.0026656	0.54%
QC value within limits for Ti	334.940	Recovery = 99.48%				
Tl 190.801†	598.5	0.482661 mg/L	0.0055553	0.482661 mg/L	0.0055553	1.15%
QC value within limits for Tl	190.801	Recovery = 96.53%				
V 290.880†	61230.2	0.487716 mg/L	0.0052848	0.487716 mg/L	0.0052848	1.08%
QC value within limits for V	290.880	Recovery = 97.54%				
Zn 206.200†	18406.4	0.501870 mg/L	0.0044509	0.501870 mg/L	0.0044509	0.89%
QC value within limits for Zn	206.200	Recovery = 100.37%				

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: LLICV [aq] V-206357

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/26/2015 12:55:34 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	984630.8	104 %	0.1			0.07%
Y 371.029	322392.1	103 %	0.0			0.00%
Ag 328.068†	3237.3	0.0183317 mg/L	0.00027205	0.0183317 mg/L	0.00027205	1.48%
QC value within limits for Ag		328.068 Recovery = 91.66%				
Al 308.215†	5361.0	0.177869 mg/L	0.0028735	0.177869 mg/L	0.0028735	1.62%
QC value within limits for Al		308.215 Recovery = 88.93%				
As 188.979†	19.9	0.0188036 mg/L	0.00058081	0.0188036 mg/L	0.00058081	3.09%
QC value within limits for As		188.979 Recovery = 94.02%				
Ba 233.527†	5372.1	0.0482655 mg/L	0.00049950	0.0482655 mg/L	0.00049950	1.03%
QC value within limits for Ba		233.527 Recovery = 96.53%				
Be 313.107†	30816.3	0.0104136 mg/L	0.00000465	0.0104136 mg/L	0.00000465	0.04%
QC value within limits for Be		313.107 Recovery = 86.78%				
Ca 315.887†	418497.9	4.88890 mg/L	0.035060	4.88890 mg/L	0.035060	0.72%
QC value within limits for Ca		315.887 Recovery = 97.78%				
Cd 228.802†	471.8	0.0111040 mg/L	0.00006628	0.0111040 mg/L	0.00006628	0.60%
QC value within limits for Cd		228.802 Recovery = 92.53%				
Co 228.616†	733.7	0.0175888 mg/L	0.00013468	0.0175888 mg/L	0.00013468	0.77%
QC value within limits for Co		228.616 Recovery = 87.94%				
Cr 267.716†	3549.7	0.0477355 mg/L	0.00029494	0.0477355 mg/L	0.00029494	0.62%
QC value within limits for Cr		267.716 Recovery = 95.47%				
Cu 327.393†	5900.3	0.0480406 mg/L	0.00012509	0.0480406 mg/L	0.00012509	0.26%
QC value within limits for Cu		327.393 Recovery = 96.08%				
Fe 273.955†	5735.7	0.268250 mg/L	0.0003733	0.268250 mg/L	0.0003733	0.14%
QC value within limits for Fe		273.955 Recovery = 89.42%				
K 404.721†	274.0	3.62765 mg/L	0.455435	3.62765 mg/L	0.455435	12.55%
QC value within limits for K		404.721 Recovery = 72.55%				
Mg 279.077†	69052.0	4.92219 mg/L	0.005583	4.92219 mg/L	0.005583	0.11%
QC value within limits for Mg		279.077 Recovery = 98.44%				
Mn 257.610†	27146.4	0.0366349 mg/L	0.00005106	0.0366349 mg/L	0.00005106	0.14%
QC value within limits for Mn		257.610 Recovery = 91.59%				
Mo 202.031†	298.3	0.0176216 mg/L	0.00021572	0.0176216 mg/L	0.00021572	1.22%
QC value within limits for Mo		202.031 Recovery = 88.11%				
Na 330.237†	3971.3	4.48734 mg/L	0.046844	4.48734 mg/L	0.046844	1.04%
QC value within limits for Na		330.237 Recovery = 89.75%				
Ni 231.604†	1826.8	0.0461761 mg/L	0.00027992	0.0461761 mg/L	0.00027992	0.61%
QC value within limits for Ni		231.604 Recovery = 92.35%				
Pb 220.353†	88.6	0.0079887 mg/L	0.00024533	0.0079887 mg/L	0.00024533	3.07%
QC value less than the lower limit for Pb		220.353 Recovery = 66.57%				
Sb 206.836†	39.4	0.0153576 mg/L	0.00095715	0.0153576 mg/L	0.00095715	6.23%
QC value within limits for Sb		206.836 Recovery = 76.79%				
Se 196.026†	36.1	0.0348401 mg/L	0.00070899	0.0348401 mg/L	0.00070899	2.03%
QC value within limits for Se		196.026 Recovery = 87.10%				
Sn 189.927†	162.4	0.0501744 mg/L	0.00095251	0.0501744 mg/L	0.00095251	1.90%
QC value within limits for Sn		189.927 Recovery = 100.35%				
Ti 334.940†	30456.1	0.0482773 mg/L	0.00002597	0.0482773 mg/L	0.00002597	0.05%
QC value within limits for Ti		334.940 Recovery = 96.55%				
Tl 190.801†	27.3	0.0173615 mg/L	0.00171250	0.0173615 mg/L	0.00171250	9.86%
QC value within limits for Tl		190.801 Recovery = 86.81%				
V 290.880†	5963.9	0.0459408 mg/L	0.00018341	0.0459408 mg/L	0.00018341	0.40%
QC value within limits for V		290.880 Recovery = 91.88%				
Zn 206.200†	1809.0	0.0480856 mg/L	0.00053026	0.0480856 mg/L	0.00053026	1.10%
QC value within limits for Zn		206.200 Recovery = 96.17%				

QC Failed. Continue with analysis.

Sequence No.: 9

Sample ID: ICB V-205362

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/26/2015 12:58:56 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB V-205362

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	965285.2	102 %	0.1			0.06%
Y 371.029	318415.9	102 %	0.5			0.52%
Ag 328.068†	-58.1 -0.0002610 mg/L		0.00035660	-0.0002610 mg/L	0.00035660	136.64%
QC value within limits for Ag 328.068	Recovery = Not calculated					
Al 308.215†	-152.2 -0.0183931 mg/L		0.00011467	-0.0183931 mg/L	0.00011467	0.62%
QC value within limits for Al 308.215	Recovery = Not calculated					
As 188.979†	2.2 0.0013525 mg/L		0.00263783	0.0013525 mg/L	0.00263783	195.03%
QC value within limits for As 188.979	Recovery = Not calculated					
Ba 233.527†	16.3 -0.0022630 mg/L		0.00004743	-0.0022630 mg/L	0.00004743	2.10%
QC value within limits for Ba 233.527	Recovery = Not calculated					
Be 313.107†	-4.6 -0.0007291 mg/L		0.00000826	-0.0007291 mg/L	0.00000826	1.13%
QC value within limits for Be 313.107	Recovery = Not calculated					
Ca 315.887†	-40.5 -0.0875280 mg/L		0.00098037	-0.0875280 mg/L	0.00098037	1.12%
QC value within limits for Ca 315.887	Recovery = Not calculated					
Cd 228.802†	-1.2 -0.0001872 mg/L		0.00002159	-0.0001872 mg/L	0.00002159	11.53%
QC value within limits for Cd 228.802	Recovery = Not calculated					
Co 228.616†	9.4 -0.0023535 mg/L		0.00002403	-0.0023535 mg/L	0.00002403	1.02%
QC value within limits for Co 228.616	Recovery = Not calculated					
Cr 267.716†	3.6 -0.0014979 mg/L		0.00001272	-0.0014979 mg/L	0.00001272	0.85%
QC value within limits for Cr 267.716	Recovery = Not calculated					
Cu 327.393†	54.5 -0.0006036 mg/L		0.00073723	-0.0006036 mg/L	0.00073723	122.14%
QC value within limits for Cu 327.393	Recovery = Not calculated					
Fe 273.955†	-9.9 -0.0318998 mg/L		0.00071256	-0.0318998 mg/L	0.00071256	2.23%
QC value within limits for Fe 273.955	Recovery = Not calculated					
K 404.721†	6.7 0.901934 mg/L		0.0384365	0.901934 mg/L	0.0384365	4.26%
QC value within limits for K 404.721	Recovery = Not calculated					
Mg 279.077†	33.3 -0.116641 mg/L		0.0049103	-0.116641 mg/L	0.0049103	4.21%
QC value within limits for Mg 279.077	Recovery = Not calculated					
Mn 257.610†	-43.4 -0.0025944 mg/L		0.00003065	-0.0025944 mg/L	0.00003065	1.18%
QC value within limits for Mn 257.610	Recovery = Not calculated					
Mo 202.031†	-3.6 -0.0022194 mg/L		0.00001544	-0.0022194 mg/L	0.00001544	0.70%
QC value within limits for Mo 202.031	Recovery = Not calculated					
Na 330.237†	31.8 0.733779 mg/L		0.0100168	0.733779 mg/L	0.0100168	1.37%
QC value within limits for Na 330.237	Recovery = Not calculated					
Ni 231.604†	-25.6 -0.0031745 mg/L		0.00032695	-0.0031745 mg/L	0.00032695	10.30%
QC value within limits for Ni 231.604	Recovery = Not calculated					
Pb 220.353†	-8.6 -0.0041914 mg/L		0.00001009	-0.0041914 mg/L	0.00001009	0.24%
QC value within limits for Pb 220.353	Recovery = Not calculated					
Sb 206.836†	-2.2 -0.0017264 mg/L		0.00149313	-0.0017264 mg/L	0.00149313	86.49%
QC value within limits for Sb 206.836	Recovery = Not calculated					
Se 196.026†	6.0 0.0046435 mg/L		0.00144454	0.0046435 mg/L	0.00144454	31.11%
QC value within limits for Se 196.026	Recovery = Not calculated					
Sn 189.927†	5.4 0.0014686 mg/L		0.00022537	0.0014686 mg/L	0.00022537	15.35%
QC value within limits for Sn 189.927	Recovery = Not calculated					
Ti 334.940†	51.2 -0.0012082 mg/L		0.00006802	-0.0012082 mg/L	0.00006802	5.63%
QC value within limits for Ti 334.940	Recovery = Not calculated					
Tl 190.801†	0.7 -0.0043616 mg/L		0.00041899	-0.0043616 mg/L	0.00041899	9.61%
QC value within limits for Tl 190.801	Recovery = Not calculated					
V 290.880†	-95.6 -0.0024472 mg/L		0.00001146	-0.0024472 mg/L	0.00001146	0.47%
QC value within limits for V 290.880	Recovery = Not calculated					
Zn 206.200†	2.4 -0.0013166 mg/L		0.00015935	-0.0013166 mg/L	0.00015935	12.10%
QC value within limits for Zn 206.200	Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICESA V-202074

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/26/2015 1:02:13 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICESA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	827101.7	87.3 %	0.24			0.27%
Y 371.029	266312.6	85.2 %	0.31			0.36%
Ag 328.068†	-1575.0	0.0005326 mg/L	0.00022026	0.0005326 mg/L	0.00022026	41.35%
Al 308.215†	14327359.6	510.017 mg/L	1.2200	510.017 mg/L	1.2200	0.24%
QC value within limits for Al 308.215 Recovery = 102.00%						
As 188.979†	0.8	0.0012876 mg/L	0.00007648	0.0012876 mg/L	0.00007648	5.94%
Ba 233.527†	1445.2	0.0046790 mg/L	0.00018537	0.0046790 mg/L	0.00018537	3.96%
Be 313.107†	-2277.6	-0.0015537 mg/L	0.00003462	-0.0015537 mg/L	0.00003462	2.23%
Ca 315.887†	40293502.9	479.004 mg/L	0.3104	479.004 mg/L	0.3104	0.06%
QC value within limits for Ca 315.887 Recovery = 95.80%						
Cd 228.802†	-355.6	-0.0024904 mg/L	0.00014139	-0.0024904 mg/L	0.00014139	5.68%
Co 228.616†	142.6	0.0061342 mg/L	0.00018051	0.0061342 mg/L	0.00018051	2.94%
Cr 267.716†	-413.3	0.0014133 mg/L	0.00021475	0.0014133 mg/L	0.00021475	15.20%
Cu 327.393†	-2629.4	0.0058264 mg/L	0.00012937	0.0058264 mg/L	0.00012937	2.22%
Fe 273.955†	3586655.1	187.333 mg/L	0.9700	187.333 mg/L	0.9700	0.52%
QC value within limits for Fe 273.955 Recovery = 93.67%						
K 404.721†	151.6	2.37990 mg/L	0.512409	2.37990 mg/L	0.512409	21.53%
Mg 279.077†	6746226.8	492.401 mg/L	2.2977	492.401 mg/L	2.2977	0.47%
QC value within limits for Mg 279.077 Recovery = 98.48%						
Mn 257.610†	7362.9	0.0043540 mg/L	0.00009337	0.0043540 mg/L	0.00009337	2.14%
Mo 202.031†	350.0	0.0026982 mg/L	0.00127514	0.0026982 mg/L	0.00127514	47.26%
Na 330.237†	348.1	1.03521 mg/L	0.046994	1.03521 mg/L	0.046994	4.54%
Ni 231.604†	134.9	-0.0064480 mg/L	0.00032237	-0.0064480 mg/L	0.00032237	5.00%
Pb 220.353†	-264.2	0.0093085 mg/L	0.00065806	0.0093085 mg/L	0.00065806	7.07%
Sb 206.836†	75.3	-0.0189004 mg/L	0.00057555	-0.0189004 mg/L	0.00057555	3.05%
Se 196.026†	-135.3	-0.0564051 mg/L	0.00602693	-0.0564051 mg/L	0.00602693	10.69%
Sn 189.927†	-114.8	-0.0231419 mg/L	0.00377586	-0.0231419 mg/L	0.00377586	16.32%
Ti 334.940†	1629.6	0.0013607 mg/L	0.00002638	0.0013607 mg/L	0.00002638	1.94%
Tl 190.801†	-9.2	-0.0061308 mg/L	0.00567003	-0.0061308 mg/L	0.00567003	92.48%
V 290.880†	7737.0	-0.0107275 mg/L	0.00082975	-0.0107275 mg/L	0.00082975	7.73%
Zn 206.200†	1119.3	0.0226199 mg/L	0.00049791	0.0226199 mg/L	0.00049791	2.20%

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: ICSAB V-202076

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/26/2015 1:07:06 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	825631.8	87.2 %	0.40			0.46%
Y 371.029	267159.4	85.5 %	0.00			0.01%
Ag 328.068†	187138.9	1.06439 mg/L	0.009232	1.06439 mg/L	0.009232	0.87%
QC value within limits for Ag	328.068	Recovery = 106.44%				
Al 308.215†	14277394.1	508.238 mg/L	4.1826	508.238 mg/L	4.1826	0.82%
QC value within limits for Al	308.215	Recovery = 101.65%				
As 188.979†	993.6	0.978358 mg/L	0.0081800	0.978358 mg/L	0.0081800	0.84%
QC value within limits for As	188.979	Recovery = 97.84%				
Ba 233.527†	54858.4	0.508716 mg/L	0.0044133	0.508716 mg/L	0.0044133	0.87%
QC value within limits for Ba	233.527	Recovery = 101.74%				
Be 313.107†	1343951.8	0.486144 mg/L	0.0001980	0.486144 mg/L	0.0001980	0.04%
QC value within limits for Be	313.107	Recovery = 97.23%				
Ca 315.887†	39979816.9	475.274 mg/L	3.9444	475.274 mg/L	3.9444	0.83%
QC value within limits for Ca	315.887	Recovery = 95.05%				
Cd 228.802†	42031.8	1.00853 mg/L	0.001449	1.00853 mg/L	0.001449	0.14%
QC value within limits for Cd	228.802	Recovery = 100.85%				
Co 228.616†	16445.6	0.456172 mg/L	0.0009615	0.456172 mg/L	0.0009615	0.21%
QC value within limits for Co	228.616	Recovery = 91.23%				
Cr 267.716†	34086.5	0.480098 mg/L	0.0041769	0.480098 mg/L	0.0041769	0.87%
QC value within limits for Cr	267.716	Recovery = 96.02%				
Cu 327.393†	61535.7	0.536223 mg/L	0.0049587	0.536223 mg/L	0.0049587	0.92%
QC value within limits for Cu	327.393	Recovery = 107.24%				
Fe 273.955†	3579805.1	186.975 mg/L	0.1353	186.975 mg/L	0.1353	0.07%
QC value within limits for Fe	273.955	Recovery = 93.49%				
K 404.721†	117.8	2.03484 mg/L	0.118570	2.03484 mg/L	0.118570	5.83%
Mg 279.077†	6717894.1	490.332 mg/L	0.1209	490.332 mg/L	0.1209	0.02%
QC value within limits for Mg	279.077	Recovery = 98.07%				
Mn 257.610†	334405.5	0.478123 mg/L	0.0041102	0.478123 mg/L	0.0041102	0.86%
QC value within limits for Mn	257.610	Recovery = 95.62%				
Mo 202.031†	349.2	0.0025450 mg/L	0.00000382	0.0025450 mg/L	0.00000382	0.15%
Na 330.237†	749.0	1.41711 mg/L	0.042104	1.41711 mg/L	0.042104	2.97%
Ni 231.604†	33400.5	0.879907 mg/L	0.0015946	0.879907 mg/L	0.0015946	0.18%
QC value within limits for Ni	231.604	Recovery = 87.99%				
Pb 220.353†	7203.1	0.940723 mg/L	0.0022040	0.940723 mg/L	0.0022040	0.23%
QC value within limits for Pb	220.353	Recovery = 94.07%				
Sb 206.836†	2490.9	0.979802 mg/L	0.0057930	0.979802 mg/L	0.0057930	0.59%
QC value within limits for Sb	206.836	Recovery = 97.98%				
Se 196.026†	818.7	0.899538 mg/L	0.0103434	0.899538 mg/L	0.0103434	1.15%
QC value within limits for Se	196.026	Recovery = 89.95%				
Sn 189.927†	-113.0	-0.0227225 mg/L	0.00225453	-0.0227225 mg/L	0.00225453	9.92%
Ti 334.940†	1642.6	0.0013818 mg/L	0.00022590	0.0013818 mg/L	0.00022590	16.35%
Tl 190.801†	1108.4	0.900783 mg/L	0.0038766	0.900783 mg/L	0.0038766	0.43%
QC value within limits for Tl	190.801	Recovery = 90.08%				
V 290.880†	65434.8	0.455997 mg/L	0.0036230	0.455997 mg/L	0.0036230	0.79%
QC value within limits for V	290.880	Recovery = 91.20%				
Zn 206.200†	34211.9	0.927756 mg/L	0.0001757	0.927756 mg/L	0.0001757	0.02%
QC value within limits for Zn	206.200	Recovery = 92.78%				

All analyte(s) passed QC.

Sequence No.: 12
 Sample ID: MB 42362 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 38
 Date Collected: 3/26/2015 1:12:03 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 42362 (1)

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1002359.8	106	%	0.0				0.03%
Y 371.029	328293.8	105	%	0.1				0.10%
Ag 328.068†	-106.5	-0.0005214	mg/L	0.00001468	-0.0005214	mg/L	0.00001468	2.82%
Al 308.215†	411.8	0.0016863	mg/L	0.00153501	0.0016863	mg/L	0.00153501	91.03%
As 188.979†	0.5	-0.0002979	mg/L	0.00324497	-0.0002979	mg/L	0.00324497	>999.9%
Ba 233.527†	108.6	-0.0014014	mg/L	0.00001372	-0.0014014	mg/L	0.00001372	0.98%
Be 313.107†	-127.2	-0.0007736	mg/L	0.00000826	-0.0007736	mg/L	0.00000826	1.07%
Ca 315.887†	105736.5	1.17016	mg/L	0.001666	1.17016	mg/L	0.001666	0.14%
Cd 228.802†	-0.3	-0.0001572	mg/L	0.00005851	-0.0001572	mg/L	0.00005851	37.22%
Co 228.616†	16.3	-0.0021606	mg/L	0.00006343	-0.0021606	mg/L	0.00006343	2.94%
Cr 267.716†	40.1	-0.0009822	mg/L	0.00002222	-0.0009822	mg/L	0.00002222	2.26%
Cu 327.393†	182.9	0.0005165	mg/L	0.00017101	0.0005165	mg/L	0.00017101	33.11%
Fe 273.955†	4786.9	0.218682	mg/L	0.0021813	0.218682	mg/L	0.0021813	1.00%
K 404.721†	-83.0	-0.0127590	mg/L	0.75529332	-0.0127590	mg/L	0.75529332	>999.9%
Mg 279.077†	381.8	-0.0911990	mg/L	0.00027934	-0.0911990	mg/L	0.00027934	0.31%
Mn 257.610†	1072.0	-0.0009616	mg/L	0.00004091	-0.0009616	mg/L	0.00004091	4.25%
Mo 202.031†	2.8	-0.0018466	mg/L	0.00060536	-0.0018466	mg/L	0.00060536	32.78%
Na 330.237†	31.0	0.733007	mg/L	0.0359724	0.733007	mg/L	0.0359724	4.91%
Ni 231.604†	-40.5	-0.0035814	mg/L	0.00029529	-0.0035814	mg/L	0.00029529	8.24%
Pb 220.353†	-14.2	-0.0048878	mg/L	0.00055025	-0.0048878	mg/L	0.00055025	11.26%
Sb 206.836†	-4.0	-0.0024937	mg/L	0.00234009	-0.0024937	mg/L	0.00234009	93.84%
Se 196.026†	0.6	-0.0007033	mg/L	0.00299164	-0.0007033	mg/L	0.00299164	425.35%
Sn 189.927†	-2.5	-0.0009236	mg/L	0.00022929	-0.0009236	mg/L	0.00022929	24.83%
Ti 334.940†	118.8	-0.0010982	mg/L	0.00001683	-0.0010982	mg/L	0.00001683	1.53%
Tl 190.801†	5.0	-0.0009097	mg/L	0.00079685	-0.0009097	mg/L	0.00079685	87.60%
V 290.880†	-146.6	-0.0028754	mg/L	0.00052083	-0.0028754	mg/L	0.00052083	18.11%
Zn 206.200†	276.2	0.0061628	mg/L	0.00033506	0.0061628	mg/L	0.00033506	5.44%

Sequence No.: 13

Sample ID: LCSW 42362

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 39

Date Collected: 3/26/2015 1:15:22 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCSW 42362

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	955682.8	101	%	1.8			1.74%
Y 371.029	311036.8	99.5	%	1.93			1.94%
Ag 328.068†	15597.8	0.0882334	mg/L	0.00081488	0.0882334 mg/L	0.00081488	0.92%
Al 308.215†	127193.1	4.51489	mg/L	0.053086	4.51489 mg/L	0.053086	1.18%
As 188.979†	452.8	0.445122	mg/L	0.0094158	0.445122 mg/L	0.0094158	2.12%
Ba 233.527†	48770.8	0.457636	mg/L	0.0042975	0.457636 mg/L	0.0042975	0.94%
Be 313.107†	1240433.3	0.448436	mg/L	0.0076716	0.448436 mg/L	0.0076716	1.71%
Ca 315.887†	3893062.9	46.2016	mg/L	0.69671	46.2016 mg/L	0.69671	1.51%
Cd 228.802†	18802.1	0.448446	mg/L	0.0039731	0.448446 mg/L	0.0039731	0.89%
Co 228.616†	16826.4	0.461399	mg/L	0.0048698	0.461399 mg/L	0.0048698	1.06%
Cr 267.716†	32927.2	0.455731	mg/L	0.0073961	0.455731 mg/L	0.0073961	1.62%
Cu 327.393†	55082.1	0.457381	mg/L	0.0057137	0.457381 mg/L	0.0057137	1.25%
Fe 273.955†	89992.0	4.66974	mg/L	0.050570	4.66974 mg/L	0.050570	1.08%
K 404.721†	3931.8	40.9341	mg/L	0.07855	40.9341 mg/L	0.07855	0.19%
Mg 279.077†	617420.0	44.9567	mg/L	0.66594	44.9567 mg/L	0.66594	1.48%
Mn 257.610†	317859.9	0.456647	mg/L	0.0049742	0.456647 mg/L	0.0049742	1.09%
Mo 202.031†	6782.0	0.446832	mg/L	0.0096874	0.446832 mg/L	0.0096874	2.17%
Na 330.237†	43736.6	42.3750	mg/L	0.47415	42.3750 mg/L	0.47415	1.12%
Ni 231.604†	17285.0	0.458003	mg/L	0.0040407	0.458003 mg/L	0.0040407	0.88%
Pb 220.353†	3666.4	0.455264	mg/L	0.0087050	0.455264 mg/L	0.0087050	1.91%
Sb 206.836†	1075.3	0.442169	mg/L	0.0067700	0.442169 mg/L	0.0067700	1.53%
Se 196.026†	446.1	0.446003	mg/L	0.0005844	0.446003 mg/L	0.0005844	0.13%
Sn 189.927†	1458.8	0.452284	mg/L	0.0085720	0.452284 mg/L	0.0085720	1.90%
Ti 334.940†	277866.2	0.450949	mg/L	0.0056098	0.450949 mg/L	0.0056098	1.24%
Tl 190.801†	573.9	0.462527	mg/L	0.0095468	0.462527 mg/L	0.0095468	2.06%
V 290.880†	56542.1	0.450360	mg/L	0.0053915	0.450360 mg/L	0.0053915	1.20%
Zn 206.200†	16968.7	0.462560	mg/L	0.0026980	0.462560 mg/L	0.0026980	0.58%

Sequence No.: 14
 Sample ID: LCSW MR 42362
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 40
 Date Collected: 3/26/2015 1:18:46 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW MR 42362

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	958166.5	101 %	0.5			0.53%
Y 371.029	309225.6	98.9 %	0.05			0.05%
Ag 328.068†	15100.2	0.0854206 mg/L	0.00020446	0.0854206 mg/L	0.00020446	0.24%
Al 308.215†	122936.3	4.36335 mg/L	0.008952	4.36335 mg/L	0.008952	0.21%
As 188.979†	435.9	0.428451 mg/L	0.0040541	0.428451 mg/L	0.0040541	0.95%
Ba 233.527†	47203.0	0.442847 mg/L	0.0009862	0.442847 mg/L	0.0009862	0.22%
Be 313.107†	1201848.7	0.434465 mg/L	0.0046231	0.434465 mg/L	0.0046231	1.06%
Ca 315.887†	3787759.9	44.9495 mg/L	0.44427	44.9495 mg/L	0.44427	0.99%
Cd 228.802†	18197.8	0.434027 mg/L	0.0011276	0.434027 mg/L	0.0011276	0.26%
Co 228.616†	16102.6	0.441438 mg/L	0.0049029	0.441438 mg/L	0.0049029	1.11%
Cr 267.716†	31820.4	0.440362 mg/L	0.0004879	0.440362 mg/L	0.0004879	0.11%
Cu 327.393†	53333.6	0.442834 mg/L	0.0007149	0.442834 mg/L	0.0007149	0.16%
Fe 273.955†	87083.4	4.51780 mg/L	0.004988	4.51780 mg/L	0.004988	0.11%
K 404.721†	3792.9	39.5179 mg/L	0.56758	39.5179 mg/L	0.56758	1.44%
Mg 279.077†	600416.8	43.7154 mg/L	0.46381	43.7154 mg/L	0.46381	1.06%
Mn 257.610†	307373.0	0.441489 mg/L	0.0005995	0.441489 mg/L	0.0005995	0.14%
Mo 202.031†	6552.3	0.431620 mg/L	0.0070038	0.431620 mg/L	0.0070038	1.62%
Na 330.237†	42595.7	41.2880 mg/L	0.15251	41.2880 mg/L	0.15251	0.37%
Ni 231.604†	16690.5	0.442164 mg/L	0.0007353	0.442164 mg/L	0.0007353	0.17%
Pb 220.353†	3551.8	0.440932 mg/L	0.0053732	0.440932 mg/L	0.0053732	1.22%
Sb 206.836†	1039.7	0.427503 mg/L	0.0039404	0.427503 mg/L	0.0039404	0.92%
Se 196.026†	428.3	0.428154 mg/L	0.0100187	0.428154 mg/L	0.0100187	2.34%
Sn 189.927†	1405.5	0.435792 mg/L	0.0052271	0.435792 mg/L	0.0052271	1.20%
Ti 334.940†	268812.0	0.436213 mg/L	0.0010359	0.436213 mg/L	0.0010359	0.24%
Tl 190.801†	551.8	0.444607 mg/L	0.0060708	0.444607 mg/L	0.0060708	1.37%
V 290.880†	54714.2	0.435718 mg/L	0.0012593	0.435718 mg/L	0.0012593	0.29%
Zn 206.200†	16379.1	0.446438 mg/L	0.0019446	0.446438 mg/L	0.0019446	0.44%

Sequence No.: 15
 Sample ID: 83866-011
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 41
 Date Collected: 3/26/2015 1:22:10 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-011

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	971559.1	103	%	2.2				2.10%
Y 371.029	316584.6	101	%	2.3				2.22%
Ag 328.068†	-101.8	-0.0005057	mg/L	0.00006450	-0.0005057	mg/L	0.00006450	12.75%
Al 308.215†	643.2	0.0099244	mg/L	0.00269386	0.0099244	mg/L	0.00269386	27.14%
As 188.979†	1.8	0.0009273	mg/L	0.00058092	0.0009273	mg/L	0.00058092	62.64%
Ba 233.527†	1703.5	0.0136565	mg/L	0.00026557	0.0136565	mg/L	0.00026557	1.94%
Be 313.107†	21.7	-0.0007197	mg/L	0.00002128	-0.0007197	mg/L	0.00002128	2.96%
Ca 315.887†	1264163.0	14.9439	mg/L	0.58377	14.9439	mg/L	0.58377	3.91%
Cd 228.802†	-0.2	-0.0001605	mg/L	0.00003104	-0.0001605	mg/L	0.00003104	19.34%
Co 228.616†	14.1	-0.0021717	mg/L	0.00036080	-0.0021717	mg/L	0.00036080	16.61%
Cr 267.716†	58.3	-0.0007101	mg/L	0.00012162	-0.0007101	mg/L	0.00012162	17.13%
Cu 327.393†	110.8	0.0003305	mg/L	0.00041033	0.0003305	mg/L	0.00041033	124.15%
Fe 273.955†	566.3	-0.0017968	mg/L	0.00077241	-0.0017968	mg/L	0.00077241	42.99%
K 404.721†	97.2	1.82446	mg/L	0.949737	1.82446	mg/L	0.949737	52.06%
Mg 279.077†	71293.0	5.08579	mg/L	0.077935	5.08579	mg/L	0.077935	1.53%
Mn 257.610†	1334.3	-0.0007791	mg/L	0.00009164	-0.0007791	mg/L	0.00009164	11.76%
Mo 202.031†	50.3	0.0007333	mg/L	0.00025925	0.0007333	mg/L	0.00025925	35.35%
Na 330.237†	14709.3	14.7183	mg/L	0.32977	14.7183	mg/L	0.32977	2.24%
Ni 231.604†	-33.1	-0.0033735	mg/L	0.00021897	-0.0033735	mg/L	0.00021897	6.49%
Pb 220.353†	-2.8	-0.0034096	mg/L	0.00078471	-0.0034096	mg/L	0.00078471	23.01%
Sb 206.836†	-5.2	-0.0031627	mg/L	0.00170114	-0.0031627	mg/L	0.00170114	53.79%
Se 196.026†	0.5	-0.0014484	mg/L	0.00534330	-0.0014484	mg/L	0.00534330	368.92%
Sn 189.927†	-21.0	-0.0061176	mg/L	0.00073546	-0.0061176	mg/L	0.00073546	12.02%
Ti 334.940†	247.5	-0.0008888	mg/L	0.00012972	-0.0008888	mg/L	0.00012972	14.60%
Tl 190.801†	5.0	-0.0006712	mg/L	0.00148883	-0.0006712	mg/L	0.00148883	221.81%
V 290.880†	185.7	-0.0008132	mg/L	0.00008262	-0.0008132	mg/L	0.00008262	10.16%
Zn 206.200†	181.3	0.0035735	mg/L	0.00018349	0.0035735	mg/L	0.00018349	5.13%

Sequence No.: 16
 Sample ID: 83866-011 MR
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 42
 Date Collected: 3/26/2015 1:25:29 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-011 MR

Mean Corrected		Calib	Sample			
Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	993579.7	105 %	0.2			0.19%
Y 371.029	322439.1	103 %	0.3			0.32%
Ag 328.068†	-132.4	-0.0006780 mg/L	0.00014160	-0.0006780 mg/L	0.00014160	20.88%
Al 308.215†	372.9	0.0003010 mg/L	0.00557926	0.0003010 mg/L	0.00557926	>999.9%
As 188.979†	-0.4	-0.0011665 mg/L	0.00139918	-0.0011665 mg/L	0.00139918	119.94%
Ba 233.527†	1616.2	0.0128325 mg/L	0.00013619	0.0128325 mg/L	0.00013619	1.06%
Be 313.107†	-69.2	-0.0007528 mg/L	0.00000542	-0.0007528 mg/L	0.00000542	0.72%
Ca 315.887†	1200093.8	14.1821 mg/L	0.01430	14.1821 mg/L	0.01430	0.10%
Cd 228.802†	-3.2	-0.0002324 mg/L	0.00001924	-0.0002324 mg/L	0.00001924	8.28%
Co 228.616†	19.9	-0.0020164 mg/L	0.00014264	-0.0020164 mg/L	0.00014264	7.07%
Cr 267.716†	110.8	0.0000160 mg/L	0.00000783	0.0000160 mg/L	0.00000783	48.98%
Cu 327.393†	51.0	-0.0001859 mg/L	0.00015582	-0.0001859 mg/L	0.00015582	83.80%
Fe 273.955†	725.6	0.0065239 mg/L	0.00011469	0.0065239 mg/L	0.00011469	1.76%
K 404.721†	39.8	1.23893 mg/L	0.544192	1.23893 mg/L	0.544192	43.92%
Mg 279.077†	67105.1	4.78005 mg/L	0.029058	4.78005 mg/L	0.029058	0.61%
Mn 257.610†	1177.2	-0.0009954 mg/L	0.00000454	-0.0009954 mg/L	0.00000454	0.46%
Mo 202.031†	44.1	0.0003544 mg/L	0.00014910	0.0003544 mg/L	0.00014910	42.07%
Na 330.237†	13802.6	13.8544 mg/L	0.16565	13.8544 mg/L	0.16565	1.20%
Ni 231.604†	-54.2	-0.0039383 mg/L	0.00034356	-0.0039383 mg/L	0.00034356	8.72%
Pb 220.353†	0.0	-0.0030662 mg/L	0.00015873	-0.0030662 mg/L	0.00015873	5.18%
Sb 206.836†	-4.9	-0.0030047 mg/L	0.00032034	-0.0030047 mg/L	0.00032034	10.66%
Se 196.026†	2.5	0.0005751 mg/L	0.00692958	0.0005751 mg/L	0.00692958	>999.9%
Sn 189.927†	-23.8	-0.0069838 mg/L	0.00120117	-0.0069838 mg/L	0.00120117	17.20%
Ti 334.940†	424.5	-0.0006007 mg/L	0.00049725	-0.0006007 mg/L	0.00049725	82.78%
Tl 190.801†	0.8	-0.0041268 mg/L	0.00142737	-0.0041268 mg/L	0.00142737	34.59%
V 290.880†	69.6	-0.0017151 mg/L	0.00000354	-0.0017151 mg/L	0.00000354	0.21%
Zn 206.200†	182.4	0.0036053 mg/L	0.00009891	0.0036053 mg/L	0.00009891	2.74%

Sequence No.: 17

Sample ID: 83866-012 MS 1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 43

Date Collected: 3/26/2015 1:28:49 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-012 MS 1

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	930976.4	98.3 %		0.39			0.39%
Y 371.029	297179.1	95.1 %		0.12			0.12%
Ag 328.068†	15769.6	0.0892018 mg/L		0.00057103	0.0892018 mg/L	0.00057103	0.64%
Al 308.215†	128462.6	4.56008 mg/L		0.047190	4.56008 mg/L	0.047190	1.03%
As 188.979†	469.5	0.461513 mg/L		0.0029813	0.461513 mg/L	0.0029813	0.65%
Ba 233.527†	50962.9	0.478322 mg/L		0.0037968	0.478322 mg/L	0.0037968	0.79%
Be 313.107†	1281379.2	0.463267 mg/L		0.0036381	0.463267 mg/L	0.0036381	0.79%
Ca 315.887†	5186368.3	61.5790 mg/L		0.35086	61.5790 mg/L	0.35086	0.57%
Cd 228.802†	18948.0	0.451926 mg/L		0.0041484	0.451926 mg/L	0.0041484	0.92%
Co 228.616†	16812.1	0.461060 mg/L		0.0030827	0.461060 mg/L	0.0030827	0.67%
Cr 267.716†	33094.4	0.458087 mg/L		0.0034355	0.458087 mg/L	0.0034355	0.75%
Cu 327.393†	55509.8	0.461405 mg/L		0.0037237	0.461405 mg/L	0.0037237	0.81%
Fe 273.955†	89848.7	4.66226 mg/L		0.037122	4.66226 mg/L	0.037122	0.80%
K 404.721†	4182.3	43.4887 mg/L		0.78586	43.4887 mg/L	0.78586	1.81%
Mg 279.077†	705412.3	51.3807 mg/L		0.32959	51.3807 mg/L	0.32959	0.64%
Mn 257.610†	323197.7	0.464153 mg/L		0.0035192	0.464153 mg/L	0.0035192	0.76%
Mo 202.031†	6912.0	0.454830 mg/L		0.0029292	0.454830 mg/L	0.0029292	0.64%
Na 330.237†	62944.1	60.6756 mg/L		0.56862	60.6756 mg/L	0.56862	0.94%
Ni 231.604†	17110.8	0.453363 mg/L		0.0027437	0.453363 mg/L	0.0027437	0.61%
Pb 220.353†	3725.5	0.462690 mg/L		0.0042374	0.462690 mg/L	0.0042374	0.92%
Sb 206.836†	1119.9	0.460397 mg/L		0.0067711	0.460397 mg/L	0.0067711	1.47%
Se 196.026†	452.3	0.451579 mg/L		0.0049110	0.451579 mg/L	0.0049110	1.09%
Sn 189.927†	1477.7	0.458712 mg/L		0.0012136	0.458712 mg/L	0.0012136	0.26%
Ti 334.940†	280496.8	0.455231 mg/L		0.0041201	0.455231 mg/L	0.0041201	0.91%
Tl 190.801†	573.3	0.462345 mg/L		0.0006603	0.462345 mg/L	0.0006603	0.14%
V 290.880†	56990.4	0.453203 mg/L		0.0030553	0.453203 mg/L	0.0030553	0.67%
Zn 206.200†	16967.7	0.462534 mg/L		0.0024805	0.462534 mg/L	0.0024805	0.54%

Sequence No.: 18
 Sample ID: 83866-013 MS 2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 44
 Date Collected: 3/26/2015 1:32:13 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-013 MS 2

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	947459.5	100 %		0.8			0.76%
Y 371.029	307078.3	98.3 %		0.43			0.44%
Ag 328.068†	15622.3	0.0883689 mg/L		0.00020102	0.0883689 mg/L	0.00020102	0.23%
Al 308.215†	127617.9	4.53001 mg/L		0.009965	4.53001 mg/L	0.009965	0.22%
As 188.979†	457.8	0.450005 mg/L		0.0056925	0.450005 mg/L	0.0056925	1.26%
Ba 233.527†	50579.8	0.474708 mg/L		0.0004387	0.474708 mg/L	0.0004387	0.09%
Be 313.107†	1248223.0	0.451257 mg/L		0.0003210	0.451257 mg/L	0.0003210	0.07%
Ca 315.887†	4945105.1	58.7104 mg/L		0.00521	58.7104 mg/L	0.00521	0.01%
Cd 228.802†	18861.3	0.449855 mg/L		0.0004729	0.449855 mg/L	0.0004729	0.11%
Co 228.616†	16504.8	0.452565 mg/L		0.0023537	0.452565 mg/L	0.0023537	0.52%
Cr 267.716†	32854.9	0.454754 mg/L		0.0003022	0.454754 mg/L	0.0003022	0.07%
Cu 327.393†	55202.8	0.458766 mg/L		0.0015562	0.458766 mg/L	0.0015562	0.34%
Fe 273.955†	88983.1	4.61704 mg/L		0.004662	4.61704 mg/L	0.004662	0.10%
K 404.721†	4131.3	42.9687 mg/L		0.14787	42.9687 mg/L	0.14787	0.34%
Mg 279.077†	680979.8	49.5970 mg/L		0.02591	49.5970 mg/L	0.02591	0.05%
Mn 257.610†	321312.0	0.461481 mg/L		0.0002395	0.461481 mg/L	0.0002395	0.05%
Mo 202.031†	6777.3	0.445999 mg/L		0.0035154	0.445999 mg/L	0.0035154	0.79%
Na 330.237†	61615.3	59.4094 mg/L		0.00177	59.4094 mg/L	0.00177	0.00%
Ni 231.604†	17011.2	0.450710 mg/L		0.0019481	0.450710 mg/L	0.0019481	0.43%
Pb 220.353†	3643.2	0.452410 mg/L		0.0037516	0.452410 mg/L	0.0037516	0.83%
Sb 206.836†	1097.3	0.451091 mg/L		0.0016307	0.451091 mg/L	0.0016307	0.36%
Se 196.026†	444.3	0.443644 mg/L		0.0031322	0.443644 mg/L	0.0031322	0.71%
Sn 189.927†	1447.6	0.449321 mg/L		0.0012675	0.449321 mg/L	0.0012675	0.28%
Ti 334.940†	278611.8	0.452163 mg/L		0.0005292	0.452163 mg/L	0.0005292	0.12%
Tl 190.801†	558.2	0.449972 mg/L		0.0031869	0.449972 mg/L	0.0031869	0.71%
V 290.880†	56582.7	0.450117 mg/L		0.0004898	0.450117 mg/L	0.0004898	0.11%
Zn 206.200†	16860.6	0.459606 mg/L		0.0016511	0.459606 mg/L	0.0016511	0.36%

Sequence No.: 19
 Sample ID: 83866-011 PS
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 45
 Date Collected: 3/26/2015 1:35:37 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-011 PS

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	950646.5	100 %		0.1			0.10%
Y 371.029	306720.9	98.1 %		1.33			1.35%
Ag 328.068†	12872.6	0.0728743 mg/L		0.00059830	0.0728743 mg/L	0.00059830	0.82%
Al 308.215†	132360.0	4.69882 mg/L		0.060621	4.69882 mg/L	0.060621	1.29%
As 188.979†	463.6	0.455783 mg/L		0.0051595	0.455783 mg/L	0.0051595	1.13%
Ba 233.527†	51431.3	0.482738 mg/L		0.0051036	0.482738 mg/L	0.0051036	1.06%
Be 313.107†	1266195.5	0.457721 mg/L		0.0024895	0.457721 mg/L	0.0024895	0.54%
Ca 315.887†	5052579.7	59.9882 mg/L		0.09460	59.9882 mg/L	0.09460	0.16%
Cd 228.802†	19292.0	0.460132 mg/L		0.0052114	0.460132 mg/L	0.0052114	1.13%
Co 228.616†	16950.5	0.464673 mg/L		0.0003493	0.464673 mg/L	0.0003493	0.08%
Cr 267.716†	33632.3	0.465549 mg/L		0.0047472	0.465549 mg/L	0.0047472	1.02%
Cu 327.393†	56950.4	0.473539 mg/L		0.0053654	0.473539 mg/L	0.0053654	1.13%
Fe 273.955†	91582.0	4.75280 mg/L		0.056649	4.75280 mg/L	0.056649	1.19%
K 404.721†	4223.7	43.9109 mg/L		0.87900	43.9109 mg/L	0.87900	2.00%
Mg 279.077†	704371.6	51.3048 mg/L		0.11650	51.3048 mg/L	0.11650	0.23%
Mn 257.610†	323235.7	0.464217 mg/L		0.0051010	0.464217 mg/L	0.0051010	1.10%
Mo 202.031†	8222.9	0.542042 mg/L		0.0010373	0.542042 mg/L	0.0010373	0.19%
Na 330.237†	62684.2	60.4279 mg/L		0.64188	60.4279 mg/L	0.64188	1.06%
Ni 231.604†	17313.2	0.458778 mg/L		0.0065521	0.458778 mg/L	0.0065521	1.43%
Pb 220.353†	3646.5	0.453004 mg/L		0.0005784	0.453004 mg/L	0.0005784	0.13%
Sb 206.836†	1229.8	0.505804 mg/L		0.0017206	0.505804 mg/L	0.0017206	0.34%
Se 196.026†	450.9	0.450270 mg/L		0.0079325	0.450270 mg/L	0.0079325	1.76%
Sn 189.927†	1837.7	0.569909 mg/L		0.0027572	0.569909 mg/L	0.0027572	0.48%
Ti 334.940†	341344.4	0.554263 mg/L		0.0014576	0.554263 mg/L	0.0014576	0.26%
Tl 190.801†	566.4	0.456939 mg/L		0.0005242	0.456939 mg/L	0.0005242	0.11%
V 290.880†	57163.6	0.454761 mg/L		0.0051961	0.454761 mg/L	0.0051961	1.14%
Zn 206.200†	17194.7	0.468738 mg/L		0.0057485	0.468738 mg/L	0.0057485	1.23%

Autosampler Location: 6
Date Collected: 3/26/2015 1:39:03 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analyte	Mean Corrected		Calib		Sample		RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	
Sc 361.383	947240.9	100	%	0.2			0.17%
Y 371.029	303458.9	97.1	%	0.58			0.60%
Ag 328.068†	18480.5	0.104497	mg/L	0.0014361	0.104497	mg/L	1.37%
QC value	within limits	for Ag	328.068	Recovery = 104.50%			
Al 308.215†	137641.8	4.88684	mg/L	0.076511	4.88684	mg/L	1.57%
QC value	within limits	for Al	308.215	Recovery = 97.74%			
As 188.979†	474.6	0.466543	mg/L	0.0018545	0.466543	mg/L	0.40%
QC value	within limits	for As	188.979	Recovery = 93.31%			
Ba 233.527†	51809.0	0.486297	mg/L	0.0052941	0.486297	mg/L	1.09%
QC value	within limits	for Ba	233.527	Recovery = 97.26%			
Be 313.107†	1328573.7	0.480350	mg/L	0.0038527	0.480350	mg/L	0.80%
QC value	within limits	for Be	313.107	Recovery = 96.07%			
Ca 315.887†	4073513.5	48.3471	mg/L	0.25393	48.3471	mg/L	0.53%
QC value	within limits	for Ca	315.887	Recovery = 96.69%			
Cd 228.802†	20146.6	0.480522	mg/L	0.0058693	0.480522	mg/L	1.22%
QC value	within limits	for Cd	228.802	Recovery = 96.10%			
Co 228.616†	17592.0	0.482500	mg/L	0.0059683	0.482500	mg/L	1.24%
QC value	within limits	for Co	228.616	Recovery = 96.50%			
Cr 267.716†	35000.0	0.484515	mg/L	0.0065564	0.484515	mg/L	1.35%
QC value	within limits	for Cr	267.716	Recovery = 96.90%			
Cu 327.393†	58861.6	0.488812	mg/L	0.0069096	0.488812	mg/L	1.41%
QC value	within limits	for Cu	327.393	Recovery = 97.76%			
Fe 273.955†	94521.8	4.90638	mg/L	0.067795	4.90638	mg/L	1.38%
QC value	within limits	for Fe	273.955	Recovery = 98.13%			
K 404.721†	4297.4	44.6632	mg/L	0.90178	44.6632	mg/L	2.02%
QC value	less than the lower limit	for K 404.721	Recovery = 89.33%				
Mg 279.077†	671729.9	48.9217	mg/L	0.28293	48.9217	mg/L	0.58%
QC value	within limits	for Mg	279.077	Recovery = 97.84%			
Mn 257.610†	333515.6	0.479202	mg/L	0.0068154	0.479202	mg/L	1.42%
QC value	within limits	for Mn	257.610	Recovery = 95.84%			
Mo 202.031†	7277.3	0.479667	mg/L	0.0005889	0.479667	mg/L	0.12%
QC value	within limits	for Mo	202.031	Recovery = 95.93%			
Na 330.237†	47432.3	45.8961	mg/L	0.74787	45.8961	mg/L	1.63%
QC value	within limits	for Na	330.237	Recovery = 91.79%			
Ni 231.604†	18145.0	0.480917	mg/L	0.0075066	0.480917	mg/L	1.56%
QC value	within limits	for Ni	231.604	Recovery = 96.18%			
Pb 220.353†	3829.2	0.475635	mg/L	0.0016481	0.475635	mg/L	0.35%
QC value	within limits	for Pb	220.353	Recovery = 95.13%			
Sb 206.836†	1183.6	0.486829	mg/L	0.0000409	0.486829	mg/L	0.01%
QC value	within limits	for Sb	206.836	Recovery = 97.37%			
Se 196.026†	459.2	0.459128	mg/L	0.0000420	0.459128	mg/L	0.01%
QC value	within limits	for Se	196.026	Recovery = 91.83%			
Sn 189.927†	1598.5	0.495521	mg/L	0.0000183	0.495521	mg/L	0.00%
QC value	within limits	for Sn	189.927	Recovery = 99.10%			
Ti 334.940†	300050.0	0.487055	mg/L	0.0071228			

Autosampler Location: 5
Date Collected: 3/26/2015 1:42:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analyte	Mean Corrected		Calib	Std.Dev.	Sample		RSD
	Intensity	Conc.	Units		Conc.	Units	
Sc 361.383	972204.3	103	%	1.4			1.41%
Y 371.029	318285.8	102	%	1.3			1.31%
Ag 328.068†	3303.6	0.0187059	mg/L	0.00019881	0.0187059	mg/L	0.00019881
QC value within limits for Ag		328.068	Recovery =	93.53%			
Al 308.215†	5569.6	0.185293	mg/L	0.0070125	0.185293	mg/L	0.0070125
QC value within limits for Al		308.215	Recovery =	92.65%			
As 188.979†	19.8	0.0186932	mg/L	0.00166312	0.0186932	mg/L	0.00166312
QC value within limits for As		188.979	Recovery =	93.47%			
Ba 233.527†	5408.8	0.0486113	mg/L	0.00046518	0.0486113	mg/L	0.00046518
QC value within limits for Ba		233.527	Recovery =	97.22%			
Be 313.107†	30962.2	0.0104664	mg/L	0.00016285	0.0104664	mg/L	0.00016285
QC value within limits for Be		313.107	Recovery =	87.22%			
Ca 315.887†	416874.6	4.86960	mg/L	0.009668	4.86960	mg/L	0.009668
QC value within limits for Ca		315.887	Recovery =	97.39%			
Cd 228.802†	469.3	0.0110436	mg/L	0.00002642	0.0110436	mg/L	0.00002642
QC value within limits for Cd		228.802	Recovery =	92.03%			
Co 228.616†	735.7	0.0176455	mg/L	0.00017403	0.0176455	mg/L	0.00017403
QC value within limits for Co		228.616	Recovery =	88.23%			
Cr 267.716†	3600.1	0.0484349	mg/L	0.00124484	0.0484349	mg/L	0.00124484
QC value within limits for Cr		267.716	Recovery =	96.87%			
Cu 327.393†	5959.8	0.0485324	mg/L	0.00051640	0.0485324	mg/L	0.00051640
QC value within limits for Cu		327.393	Recovery =	97.06%			
Fe 273.955†	5787.7	0.270966	mg/L	0.0034700	0.270966	mg/L	0.0034700
QC value within limits for Fe		273.955	Recovery =	90.32%			
K 404.721†	302.0	3.91306	mg/L	0.511106	3.91306	mg/L	0.511106
QC value within limits for K		404.721	Recovery =	78.26%			
Mg 279.077†	69316.0	4.94146	mg/L	0.058116	4.94146	mg/L	0.058116
QC value within limits for Mg		279.077	Recovery =	98.83%			
Mn 257.610†	27319.5	0.0368852	mg/L	0.00061073	0.0368852	mg/L	0.00061073
QC value within limits for Mn		257.610	Recovery =	92.21%			
Mo 202.031†	304.7	0.0180479	mg/L	0.00024967	0.0180479	mg/L	0.00024967
QC value within limits for Mo		202.031	Recovery =	90.24%			
Na 330.237†	4009.0	4.52317	mg/L	0.090146	4.52317	mg/L	0.090146
QC value within limits for Na		330.237	Recovery =	90.46%			
Ni 231.604†	1812.8	0.0458020	mg/L	0.00145648	0.0458020	mg/L	0.00145648
QC value within limits for Ni		231.604	Recovery =	91.60%			
Pb 220.353†	89.3	0.0080772	mg/L	0.00063429	0.0080772	mg/L	0.00063429
QC value less than the lower limit for Pb		220.353	Recovery =	67.31%			
Sb 206.836†	48.9	0.0192612	mg/L	0.00022132	0.0192612	mg/L	0.00022132
QC value within limits for Sb		206.836	Recovery =	96.31%			
Se 196.026†	35.8	0.0345090	mg/L	0.00249256	0.0345090	mg/L	0.00249256
QC value within limits for Se		196.026	Recovery =	86.27%			
Sn 189.927†	157.6	0.0487062	mg/L	0.00116273	0.0487062	mg/L	0.00116273
QC value within limits for Sn		189.927					

Sequence No.: 22

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/26/2015 1:45:48 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	989710.4	105 %		0.4			0.39%
Y 371.029	326329.9	104 %		0.3			0.25%
Ag 328.068†	-159.1	-0.0008302 mg/L	0.00007919	-0.0008302 mg/L	0.00007919	9.54%	
QC value within limits for Ag 328.068	Recovery = Not calculated						
Al 308.215†	-70.3	-0.0154778 mg/L	0.00445508	-0.0154778 mg/L	0.00445508	28.78%	
QC value within limits for Al 308.215	Recovery = Not calculated						
As 188.979†	0.9	0.0000980 mg/L	0.00108124	0.0000980 mg/L	0.00108124	>999.9%	
QC value within limits for As 188.979	Recovery = Not calculated						
Ba 233.527†	37.7	-0.0020616 mg/L	0.00003714	-0.0020616 mg/L	0.00003714	1.80%	
QC value within limits for Ba 233.527	Recovery = Not calculated						
Be 313.107†	-54.4	-0.0007472 mg/L	0.00001930	-0.0007472 mg/L	0.00001930	2.58%	
QC value within limits for Be 313.107	Recovery = Not calculated						
Ca 315.887†	340.4	-0.0829987 mg/L	0.00575920	-0.0829987 mg/L	0.00575920	6.94%	
QC value within limits for Ca 315.887	Recovery = Not calculated						
Cd 228.802†	-4.3	-0.0002610 mg/L	0.00008059	-0.0002610 mg/L	0.00008059	30.88%	
QC value within limits for Cd 228.802	Recovery = Not calculated						
Co 228.616†	20.9	-0.0020346 mg/L	0.00012894	-0.0020346 mg/L	0.00012894	6.34%	
QC value within limits for Co 228.616	Recovery = Not calculated						
Cr 267.716†	10.3	-0.0014043 mg/L	0.00005641	-0.0014043 mg/L	0.00005641	4.02%	
QC value within limits for Cr 267.716	Recovery = Not calculated						
Cu 327.393†	16.9	-0.0009142 mg/L	0.00016060	-0.0009142 mg/L	0.00016060	17.57%	
QC value within limits for Cu 327.393	Recovery = Not calculated						
Fe 273.955†	4.9	-0.0311232 mg/L	0.00046799	-0.0311232 mg/L	0.00046799	1.50%	
QC value within limits for Fe 273.955	Recovery = Not calculated						
K 404.721†	-48.9	0.334267 mg/L	0.4591190	0.334267 mg/L	0.4591190	137.35%	
QC value within limits for K 404.721	Recovery = Not calculated						
Mg 279.077†	40.3	-0.116129 mg/L	0.0016099	-0.116129 mg/L	0.0016099	1.39%	
QC value within limits for Mg 279.077	Recovery = Not calculated						
Mn 257.610†	-124.9	-0.0027125 mg/L	0.00002453	-0.0027125 mg/L	0.00002453	0.90%	
QC value within limits for Mn 257.610	Recovery = Not calculated						
Mo 202.031†	-5.3	-0.0023332 mg/L	0.00009420	-0.0023332 mg/L	0.00009420	4.04%	
QC value within limits for Mo 202.031	Recovery = Not calculated						
Na 330.237†	-5.9	0.697909 mg/L	0.0145166	0.697909 mg/L	0.0145166	2.08%	
QC value within limits for Na 330.237	Recovery = Not calculated						
Ni 231.604†	-56.0	-0.0039840 mg/L	0.00030757	-0.0039840 mg/L	0.00030757	7.72%	
QC value within limits for Ni 231.604	Recovery = Not calculated						
Pb 220.353†	-2.9	-0.0034718 mg/L	0.00018489	-0.0034718 mg/L	0.00018489	5.33%	
QC value within limits for Pb 220.353	Recovery = Not calculated						
Sb 206.836†	-2.3	-0.0017448 mg/L	0.00297569	-0.0017448 mg/L	0.00297569	170.54%	
QC value within limits for Sb 206.836	Recovery = Not calculated						
Se 196.026†	0.0	-0.0013138 mg/L	0.00205562	-0.0013138 mg/L	0.00205562	156.47%	
QC value within limits for Se 196.026	Recovery = Not calculated						
Sn 189.927†	0.0	-0.0001906 mg/L	0.00012497	-0.0001906 mg/L	0.00012497	65.57%	
QC value within limits for Sn 189.927	Recovery = Not calculated						
Ti 334.940†	139.5	-0.0010646 mg/L	0.00002745	-0.0010646 mg/L	0.00002745	2.58%	
QC value within limits for Ti 334.940	Recovery = Not calculated						
Tl 190.801†	2.8	-0.0027067 mg/L	0.00014087	-0.0027067 mg/L	0.00014087	5.20%	
QC value within limits for Tl 190.801	Recovery = Not calculated						
V 290.880†	-247.3	-0.0036735 mg/L	0.00027431	-0.0036735 mg/L	0.00027431	7.47%	
QC value within limits for V 290.880	Recovery = Not calculated						
Zn 206.200†	-12.5	-0.0017259 mg/L	0.00007074	-0.0017259 mg/L	0.00007074	4.10%	
QC value within limits for Zn 206.200	Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 23

Sample ID: 83866-011 SD

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 46

Date Collected: 3/26/2015 1:49:07 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-011 SD

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1000580.8	106 %		0.1			0.07%
Y 371.029	327025.9	105 %		0.2			0.18%
Ag 328.068†	-151.6	-0.0007879 mg/L		0.00006996	-0.0007879 mg/L	0.00006996	8.88%
Al 308.215†	-31.8	-0.0141050 mg/L		0.00103644	-0.0141050 mg/L	0.00103644	7.35%
As 188.979†	1.8	0.0009955 mg/L		0.00032852	0.0009955 mg/L	0.00032852	33.00%
Ba 233.527†	373.1	0.0011030 mg/L		0.00008916	0.0011030 mg/L	0.00008916	8.08%
Be 313.107†	-64.7	-0.0007509 mg/L		0.00000292	-0.0007509 mg/L	0.00000292	0.39%
Ca 315.887†	245677.6	2.83407 mg/L		0.015223	2.83407 mg/L	0.015223	0.54%
Cd 228.802†	-8.5	-0.0003610 mg/L		0.00001079	-0.0003610 mg/L	0.00001079	2.99%
Co 228.616†	16.4	-0.0021502 mg/L		0.00001665	-0.0021502 mg/L	0.00001665	0.77%
Cr 267.716†	19.4	-0.0012733 mg/L		0.00010763	-0.0012733 mg/L	0.00010763	8.45%
Cu 327.393†	40.4	-0.0006289 mg/L		0.00032837	-0.0006289 mg/L	0.00032837	52.21%
Fe 273.955†	113.7	-0.0254397 mg/L		0.00057509	-0.0254397 mg/L	0.00057509	2.26%
K 404.721†	-35.7	0.469624 mg/L		0.2512122	0.469624 mg/L	0.2512122	53.49%
Mg 279.077†	13973.5	0.901083 mg/L		0.0070402	0.901083 mg/L	0.0070402	0.78%
Mn 257.610†	122.9	-0.0023888 mg/L		0.00000120	-0.0023888 mg/L	0.00000120	0.05%
Mo 202.031†	1.0	-0.0020330 mg/L		0.00026957	-0.0020330 mg/L	0.00026957	13.26%
Na 330.237†	2698.4	3.27448 mg/L		0.007411	3.27448 mg/L	0.007411	0.23%
Ni 231.604†	-66.1	-0.0042536 mg/L		0.00037916	-0.0042536 mg/L	0.00037916	8.91%
Pb 220.353†	-13.1	-0.0047418 mg/L		0.00018617	-0.0047418 mg/L	0.00018617	3.93%
Sb 206.836†	-6.8	-0.0036371 mg/L		0.00161913	-0.0036371 mg/L	0.00161913	44.52%
Se 196.026†	-0.1	-0.0015142 mg/L		0.00458087	-0.0015142 mg/L	0.00458087	302.52%
Sn 189.927†	-6.6	-0.0021087 mg/L		0.00017035	-0.0021087 mg/L	0.00017035	8.08%
Ti 334.940†	129.6	-0.0010807 mg/L		0.00002963	-0.0010807 mg/L	0.00002963	2.74%
Tl 190.801†	3.0	-0.0024931 mg/L		0.00095036	-0.0024931 mg/L	0.00095036	38.12%
V 290.880†	-236.9	-0.0037149 mg/L		0.00016150	-0.0037149 mg/L	0.00016150	4.35%
Zn 206.200†	55.8	0.0001440 mg/L		0.00026623	0.0001440 mg/L	0.00026623	184.93%

Sequence No.: 24
 Sample ID: 83866-001
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 47
 Date Collected: 3/26/2015 1:52:26 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-001

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	976801.8	103 %		2.6			2.56%
Y 371.029	336218.2	108 %		2.7			2.50%
Ag 328.068†	-83.7	-0.0003210 mg/L		0.00033715	-0.0003210 mg/L	0.00033715	105.04%
Al 308.215†	32785.3	1.15413 mg/L		0.048950	1.15413 mg/L	0.048950	4.24%
As 188.979†	0.3	-0.0003952 mg/L		0.00119215	-0.0003952 mg/L	0.00119215	301.64%
Ba 233.527†	2689.9	0.0229064 mg/L		0.00087122	0.0229064 mg/L	0.00087122	3.80%
Be 313.107†	126.2	-0.0007032 mg/L		0.00001599	-0.0007032 mg/L	0.00001599	2.27%
Ca 315.887†	1341266.4	15.8606 mg/L		0.39638	15.8606 mg/L	0.39638	2.50%
Cd 228.802†	59.4	0.0013046 mg/L		0.00019130	0.0013046 mg/L	0.00019130	14.66%
Co 228.616†	43.0	-0.0014988 mg/L		0.00013731	-0.0014988 mg/L	0.00013731	9.16%
Cr 267.716†	2410.7	0.0319712 mg/L		0.00107408	0.0319712 mg/L	0.00107408	3.36%
Cu 327.393†	2088.1	0.0169589 mg/L		0.00036528	0.0169589 mg/L	0.00036528	2.15%
Fe 273.955†	32446.4	1.66360 mg/L		0.063294	1.66360 mg/L	0.063294	3.80%
K 404.721†	144.5	2.30679 mg/L		0.112154	2.30679 mg/L	0.112154	4.86%
Mg 279.077†	31628.8	2.19004 mg/L		0.085996	2.19004 mg/L	0.085996	3.93%
Mn 257.610†	24614.8	0.0331642 mg/L		0.00140676	0.0331642 mg/L	0.00140676	4.24%
Mo 202.031†	73.4	0.0022116 mg/L		0.00022530	0.0022116 mg/L	0.00022530	10.19%
Na 330.237†	8019.5	8.34437 mg/L		0.320836	8.34437 mg/L	0.320836	3.84%
Ni 231.604†	172.4	0.0020335 mg/L		0.00089403	0.0020335 mg/L	0.00089403	43.96%
Pb 220.353†	78.5	0.0068483 mg/L		0.00029633	0.0068483 mg/L	0.00029633	4.33%
Sb 206.836†	5.1	0.0008982 mg/L		0.00409965	0.0008982 mg/L	0.00409965	456.43%
Se 196.026†	5.8	0.0045452 mg/L		0.00393782	0.0045452 mg/L	0.00393782	86.64%
Sn 189.927†	-21.3	-0.0061614 mg/L		0.00018368	-0.0061614 mg/L	0.00018368	2.98%
Ti 334.940†	28798.6	0.0455796 mg/L		0.00152785	0.0455796 mg/L	0.00152785	3.35%
Tl 190.801†	1.1	-0.0037655 mg/L		0.00043959	-0.0037655 mg/L	0.00043959	11.67%
V 290.880†	367.2	0.0009439 mg/L		0.00120630	0.0009439 mg/L	0.00120630	127.80%
Zn 206.200†	1284.1	0.0336771 mg/L		0.00088508	0.0336771 mg/L	0.00088508	2.63%

Sequence No.: 25

Sample ID: 83866-003

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 48

Date Collected: 3/26/2015 1:55:47 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-003

Analyte	Mean Corrected		Calib	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Sc 361.383	970759.2	103 %		2.5			2.47%
Y 371.029	326068.7	104 %		2.6			2.45%
Ag 328.068†	-118.8	-0.0005131 mg/L	0.00008582	-0.0005131 mg/L	0.00008582	16.73%	
Al 308.215†	38511.1	1.35796 mg/L	0.037460	1.35796 mg/L	0.037460	2.76%	
As 188.979†	1.9	0.0012159 mg/L	0.00044568	0.0012159 mg/L	0.00044568	36.65%	
Ba 233.527†	2681.5	0.0228233 mg/L	0.00071929	0.0228233 mg/L	0.00071929	3.15%	
Be 313.107†	193.3	-0.0006798 mg/L	0.00000009	-0.0006798 mg/L	0.00000009	0.01%	
Ca 315.887†	1326269.0	15.6823 mg/L	0.31793	15.6823 mg/L	0.31793	2.03%	
Cd 228.802†	153.3	0.0035472 mg/L	0.00004431	0.0035472 mg/L	0.00004431	1.25%	
Co 228.616†	39.8	-0.0015890 mg/L	0.00032088	-0.0015890 mg/L	0.00032088	20.19%	
Cr 267.716†	12427.5	0.170859 mg/L	0.0042177	0.170859 mg/L	0.0042177	2.47%	
Cu 327.393†	4362.3	0.0357710 mg/L	0.00115672	0.0357710 mg/L	0.00115672	3.23%	
Fe 273.955†	34580.7	1.77509 mg/L	0.045241	1.77509 mg/L	0.045241	2.55%	
K 404.721†	147.3	2.33602 mg/L	0.163756	2.33602 mg/L	0.163756	7.01%	
Mg 279.077†	36304.1	2.53137 mg/L	0.060628	2.53137 mg/L	0.060628	2.40%	
Mn 257.610†	17909.6	0.0234479 mg/L	0.00073760	0.0234479 mg/L	0.00073760	3.15%	
Mo 202.031†	213.7	0.0115419 mg/L	0.00009213	0.0115419 mg/L	0.00009213	0.80%	
Na 330.237†	20954.7	20.6688 mg/L	0.47157	20.6688 mg/L	0.47157	2.28%	
Ni 231.604†	243.9	0.0039379 mg/L	0.00099019	0.0039379 mg/L	0.00099019	25.14%	
Pb 220.353†	141.7	0.0147661 mg/L	0.00077346	0.0147661 mg/L	0.00077346	5.24%	
Sb 206.836†	9.9	0.0028779 mg/L	0.00006859	0.0028779 mg/L	0.00006859	2.38%	
Se 196.026†	-1.1	-0.0023313 mg/L	0.00244835	-0.0023313 mg/L	0.00244835	105.02%	
Sn 189.927†	-25.4	-0.0074380 mg/L	0.00032168	-0.0074380 mg/L	0.00032168	4.32%	
Ti 334.940†	30061.2	0.0476345 mg/L	0.00160236	0.0476345 mg/L	0.00160236	3.36%	
Tl 190.801†	-2.8	-0.0068933 mg/L	0.00084079	-0.0068933 mg/L	0.00084079	12.20%	
V 290.880†	478.4	0.0018050 mg/L	0.00066740	0.0018050 mg/L	0.00066740	36.98%	
Zn 206.200†	2277.0	0.0608294 mg/L	0.00214407	0.0608294 mg/L	0.00214407	3.52%	

Sequence No.: 26
 Sample ID: 83866-005
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 49
 Date Collected: 3/26/2015 1:59:09 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-005

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	994528.6	105 %	0.0			0.02%
Y 371.029	325462.3	104 %	0.2			0.19%
Ag 328.068†	-122.0	-0.0005079 mg/L	0.00017579	-0.0005079 mg/L	0.00017579	34.61%
Al 308.215†	62844.2	2.22418 mg/L	0.004222	2.22418 mg/L	0.004222	0.19%
As 188.979†	1.7	0.0010150 mg/L	0.00191824	0.0010150 mg/L	0.00191824	188.99%
Ba 233.527†	1301.7	0.0097864 mg/L	0.00001367	0.0097864 mg/L	0.00001367	0.14%
Be 313.107†	193.9	-0.0006943 mg/L	0.00003672	-0.0006943 mg/L	0.00003672	5.29%
Ca 315.887†	714109.4	8.40373 mg/L	0.020212	8.40373 mg/L	0.020212	0.24%
Cd 228.802†	695.7	0.0164990 mg/L	0.00008931	0.0164990 mg/L	0.00008931	0.54%
Co 228.616†	50.6	-0.0013717 mg/L	0.00036937	-0.0013717 mg/L	0.00036937	26.93%
Cr 267.716†	3939.2	0.0531621 mg/L	0.00059329	0.0531621 mg/L	0.00059329	1.12%
Cu 327.393†	7306.9	0.0600125 mg/L	0.00034257	0.0600125 mg/L	0.00034257	0.57%
Fe 273.955†	43602.1	2.24636 mg/L	0.011485	2.24636 mg/L	0.011485	0.51%
K 404.721†	44.1	1.28308 mg/L	0.034045	1.28308 mg/L	0.034045	2.65%
Mg 279.077†	15085.9	0.982299 mg/L	0.0078653	0.982299 mg/L	0.0078653	0.80%
Mn 257.610†	9682.0	0.0116184 mg/L	0.00012717	0.0116184 mg/L	0.00012717	1.09%
Mo 202.031†	33.0	-0.0002221 mg/L	0.00046355	-0.0002221 mg/L	0.00046355	208.68%
Na 330.237†	2706.4	3.28209 mg/L	0.040354	3.28209 mg/L	0.040354	1.23%
Ni 231.604†	504.5	0.0108593 mg/L	0.00013264	0.0108593 mg/L	0.00013264	1.22%
Pb 220.353†	152.6	0.0161733 mg/L	0.00024106	0.0161733 mg/L	0.00024106	1.49%
Sb 206.836†	1.8	-0.0005154 mg/L	0.00040892	-0.0005154 mg/L	0.00040892	79.34%
Se 196.026†	-1.4	-0.0020090 mg/L	0.00237796	-0.0020090 mg/L	0.00237796	118.37%
Sn 189.927†	-15.8	-0.0047425 mg/L	0.00025675	-0.0047425 mg/L	0.00025675	5.41%
Ti 334.940†	49682.0	0.0795683 mg/L	0.00186802	0.0795683 mg/L	0.00186802	2.35%
Tl 190.801†	1.1	-0.0037228 mg/L	0.00051466	-0.0037228 mg/L	0.00051466	13.82%
V 290.880†	426.9	0.0015447 mg/L	0.00009257	0.0015447 mg/L	0.00009257	5.99%
Zn 206.200†	8015.0	0.217754 mg/L	0.0031815	0.217754 mg/L	0.0031815	1.46%

Sequence No.: 27
 Sample ID: 83866-007
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 50
 Date Collected: 3/26/2015 2:02:30 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-007

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	997055.5	105 %	0.2			0.17%
Y 371.029	341042.6	109 %	0.1			0.13%
Ag 328.068†	-189.3	-0.0009907 mg/L	0.00020990	-0.0009907 mg/L	0.00020990	21.19%
Al 308.215†	14432.5	0.500798 mg/L	0.0069861	0.500798 mg/L	0.0069861	1.40%
As 188.979†	1.6	0.0008253 mg/L	0.00104165	0.0008253 mg/L	0.00104165	126.22%
Ba 233.527†	5034.5	0.0450836 mg/L	0.00018630	0.0450836 mg/L	0.00018630	0.41%
Be 313.107†	795.3	-0.0004397 mg/L	0.00002086	-0.0004397 mg/L	0.00002086	4.74%
Ca 315.887†	1390209.9	16.4426 mg/L	0.07338	16.4426 mg/L	0.07338	0.45%
Cd 228.802†	-0.2	-0.0001549 mg/L	0.00001803	-0.0001549 mg/L	0.00001803	11.64%
Co 228.616†	31.9	-0.0017087 mg/L	0.00000754	-0.0017087 mg/L	0.00000754	0.44%
Cr 267.716†	642.4	0.0073950 mg/L	0.00005293	0.0073950 mg/L	0.00005293	0.72%
Cu 327.393†	181.0	0.0009711 mg/L	0.00032361	0.0009711 mg/L	0.00032361	33.32%
Fe 273.955†	3740.7	0.164029 mg/L	0.0008469	0.164029 mg/L	0.0008469	0.52%
K 404.721†	115.0	2.00593 mg/L	0.296320	2.00593 mg/L	0.296320	14.77%
Mg 279.077†	32185.6	2.23069 mg/L	0.024729	2.23069 mg/L	0.024729	1.11%
Mn 257.610†	15933.9	0.0204806 mg/L	0.00026853	0.0204806 mg/L	0.00026853	1.31%
Mo 202.031†	44.7	0.0002975 mg/L	0.00003389	0.0002975 mg/L	0.00003389	11.39%
Na 330.237†	12058.4	12.1926 mg/L	0.06006	12.1926 mg/L	0.06006	0.49%
Ni 231.604†	-33.6	-0.0033936 mg/L	0.00016117	-0.0033936 mg/L	0.00016117	4.75%
Pb 220.353†	-9.6	-0.0041775 mg/L	0.00046350	-0.0041775 mg/L	0.00046350	11.10%
Sb 206.836†	-3.9	-0.0026462 mg/L	0.00246016	-0.0026462 mg/L	0.00246016	92.97%
Se 196.026†	4.0	0.0020504 mg/L	0.00686314	0.0020504 mg/L	0.00686314	334.72%
Sn 189.927†	-27.7	-0.0081226 mg/L	0.00127321	-0.0081226 mg/L	0.00127321	15.67%
Ti 334.940†	514.5	-0.0004542 mg/L	0.00001397	-0.0004542 mg/L	0.00001397	3.08%
Tl 190.801†	1.1	-0.0038342 mg/L	0.00100742	-0.0038342 mg/L	0.00100742	26.27%
V 290.880†	-92.4	-0.0027119 mg/L	0.00014750	-0.0027119 mg/L	0.00014750	5.44%
Zn 206.200†	675.0	0.0170733 mg/L	0.00002731	0.0170733 mg/L	0.00002731	0.16%

Sequence No.: 28
 Sample ID: 83866-009
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 51
 Date Collected: 3/26/2015 2:05:50 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-009

Analyte	Mean Corrected		Calib	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Sc 361.383	993410.1	105 %		0.6			0.61%
Y 371.029	323760.9	104 %		0.5			0.53%
Ag 328.068†	-167.2	-0.0008737 mg/L	0.00025095	-0.0008737 mg/L	0.00025095	28.72%	
Al 308.215†	2051.8	0.0600672 mg/L	0.00079953	0.0600672 mg/L	0.00079953	1.33%	
As 188.979†	1.3	0.0004869 mg/L	0.00276358	0.0004869 mg/L	0.00276358	567.60%	
Ba 233.527†	1265.8	0.0095257 mg/L	0.00002577	0.0095257 mg/L	0.00002577	0.27%	
Be 313.107†	-37.0	-0.0007411 mg/L	0.00000682	-0.0007411 mg/L	0.00000682	0.92%	
Ca 315.887†	708494.3	8.33697 mg/L	0.087375	8.33697 mg/L	0.087375	1.05%	
Cd 228.802†	-4.1	-0.0002535 mg/L	0.00017318	-0.0002535 mg/L	0.00017318	68.32%	
Co 228.616†	27.9	-0.0018173 mg/L	0.00023422	-0.0018173 mg/L	0.00023422	12.89%	
Cr 267.716†	98.0	-0.0001682 mg/L	0.00018673	-0.0001682 mg/L	0.00018673	110.99%	
Cu 327.393†	85.5	-0.0000812 mg/L	0.00005588	-0.0000812 mg/L	0.00005588	68.83%	
Fe 273.955†	987.7	0.0202147 mg/L	0.00064606	0.0202147 mg/L	0.00064606	3.20%	
K 404.721†	9.2	0.927348 mg/L	0.3747712	0.927348 mg/L	0.3747712	40.41%	
Mg 279.077†	36549.4	2.54928 mg/L	0.002403	2.54928 mg/L	0.002403	0.09%	
Mn 257.610†	4915.1	0.0044983 mg/L	0.00000703	0.0044983 mg/L	0.00000703	0.16%	
Mo 202.031†	28.3	-0.0004512 mg/L	0.00003826	-0.0004512 mg/L	0.00003826	8.48%	
Na 330.237†	6909.0	7.28632 mg/L	0.027661	7.28632 mg/L	0.027661	0.38%	
Ni 231.604†	-14.3	-0.0028741 mg/L	0.00023385	-0.0028741 mg/L	0.00023385	8.14%	
Pb 220.353†	-5.1	-0.0037180 mg/L	0.00082546	-0.0037180 mg/L	0.00082546	22.20%	
Sb 206.836†	4.0	0.0007478 mg/L	0.00071156	0.0007478 mg/L	0.00071156	95.16%	
Se 196.026†	6.6	0.0049581 mg/L	0.00106839	0.0049581 mg/L	0.00106839	21.55%	
Sn 189.927†	-16.3	-0.0049152 mg/L	0.00009045	-0.0049152 mg/L	0.00009045	1.84%	
Ti 334.940†	399.4	-0.0006416 mg/L	0.00011485	-0.0006416 mg/L	0.00011485	17.90%	
Tl 190.801†	2.2	-0.0030432 mg/L	0.00014060	-0.0030432 mg/L	0.00014060	4.62%	
V 290.880†	-46.6	-0.0023789 mg/L	0.00074812	-0.0023789 mg/L	0.00074812	31.45%	
Zn 206.200†	380.7	0.0090285 mg/L	0.00000197	0.0090285 mg/L	0.00000197	0.02%	

Sequence No.: 29

Sample ID: 83866-017

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 52

Date Collected: 3/26/2015 2:09:10 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-017

Analyte	Mean Corrected		Calib	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sc 361.383	994243.9	105	%	0.4				0.43%
Y 371.029	324614.7	104	%	0.5				0.45%
Ag 328.068†	-166.1	-0.0008689	mg/L	0.00000485	-0.0008689	mg/L	0.00000485	0.56%
Al 308.215†	528.5	0.0058385	mg/L	0.00030821	0.0058385	mg/L	0.00030821	5.28%
As 188.979†	1.6	0.0008003	mg/L	0.00078044	0.0008003	mg/L	0.00078044	97.52%
Ba 233.527†	1545.8	0.0121686	mg/L	0.00007673	0.0121686	mg/L	0.00007673	0.63%
Be 313.107†	-118.2	-0.0007704	mg/L	0.00003392	-0.0007704	mg/L	0.00003392	4.40%
Ca 315.887†	1101727.3	13.0125	mg/L	0.08070	13.0125	mg/L	0.08070	0.62%
Cd 228.802†	-8.7	-0.0003636	mg/L	0.00001950	-0.0003636	mg/L	0.00001950	5.36%
Co 228.616†	12.8	-0.0022123	mg/L	0.00009607	-0.0022123	mg/L	0.00009607	4.34%
Cr 267.716†	83.0	-0.0003705	mg/L	0.00006750	-0.0003705	mg/L	0.00006750	18.22%
Cu 327.393†	37.1	-0.0003396	mg/L	0.00012013	-0.0003396	mg/L	0.00012013	35.37%
Fe 273.955†	378.0	-0.0116333	mg/L	0.00006013	-0.0116333	mg/L	0.00006013	0.52%
K 404.721†	90.9	1.76031	mg/L	0.021451	1.76031	mg/L	0.021451	1.22%
Mg 279.077†	65753.0	4.68133	mg/L	0.055317	4.68133	mg/L	0.055317	1.18%
Mn 257.610†	971.8	-0.0012908	mg/L	0.00004991	-0.0012908	mg/L	0.00004991	3.87%
Mo 202.031†	39.1	0.0000684	mg/L	0.00047671	0.0000684	mg/L	0.00047671	697.07%
Na 330.237†	13624.1	13.6843	mg/L	0.22145	13.6843	mg/L	0.22145	1.62%
Ni 231.604†	-56.6	-0.0039998	mg/L	0.00000528	-0.0039998	mg/L	0.00000528	0.13%
Pb 220.353†	-13.9	-0.0048077	mg/L	0.00026092	-0.0048077	mg/L	0.00026092	5.43%
Sb 206.836†	-4.0	-0.0026203	mg/L	0.00018593	-0.0026203	mg/L	0.00018593	7.10%
Se 196.026†	4.1	0.0022104	mg/L	0.00373486	0.0022104	mg/L	0.00373486	168.97%
Sn 189.927†	-28.2	-0.0084110	mg/L	0.00072213	-0.0084110	mg/L	0.00072213	8.59%
Ti 334.940†	202.2	-0.0009625	mg/L	0.00002471	-0.0009625	mg/L	0.00002471	2.57%
Tl 190.801†	-2.1	-0.0064281	mg/L	0.00115899	-0.0064281	mg/L	0.00115899	18.03%
V 290.880†	32.2	-0.0020048	mg/L	0.00018440	-0.0020048	mg/L	0.00018440	9.20%
Zn 206.200†	156.6	0.0028994	mg/L	0.00007405	0.0028994	mg/L	0.00007405	2.55%

Sequence No.: 30
 Sample ID: ICSA V-202074
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/26/2015 2:12:30 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	837255.7	88.4	%	0.51				0.58%
Y 371.029	270469.2	86.5	%	0.35				0.41%
Ag 328.068†	-1616.9	-0.0000300	mg/L	0.00003655	-0.0000300	mg/L	0.00003655	121.90%
Al 308.215†	14144726.1	503.516	mg/L	0.3971	503.516	mg/L	0.3971	0.08%
QC value within limits for Al 308.215 Recovery = 100.70%								
As 188.979†	-2.4	-0.0020816	mg/L	0.00020145	-0.0020816	mg/L	0.00020145	9.68%
Ba 233.527†	1370.9	0.0042068	mg/L	0.00024704	0.0042068	mg/L	0.00024704	5.87%
Be 313.107†	-2341.7	-0.0015769	mg/L	0.00001994	-0.0015769	mg/L	0.00001994	1.26%
Ca 315.887†	39431839.3	468.758	mg/L	1.0936	468.758	mg/L	1.0936	0.23%
QC value within limits for Ca 315.887 Recovery = 93.75%								
Cd 228.802†	-368.4	-0.0029755	mg/L	0.00034453	-0.0029755	mg/L	0.00034453	11.58%
Co 228.616†	131.8	0.0056467	mg/L	0.00007121	0.0056467	mg/L	0.00007121	1.26%
Cr 267.716†	-385.2	0.0014881	mg/L	0.00006941	0.0014881	mg/L	0.00006941	4.66%
Cu 327.393†	-2520.2	0.0059186	mg/L	0.00013232	0.0059186	mg/L	0.00013232	2.24%
Fe 273.955†	3461384.9	180.789	mg/L	0.2934	180.789	mg/L	0.2934	0.16%
QC value within limits for Fe 273.955 Recovery = 90.39%								
K 404.721†	162.2	2.48714	mg/L	0.536418	2.48714	mg/L	0.536418	21.57%
Mg 279.077†	6479019.9	472.893	mg/L	0.6207	472.893	mg/L	0.6207	0.13%
QC value within limits for Mg 279.077 Recovery = 94.58%								
Mn 257.610†	6972.9	0.0040019	mg/L	0.00002049	0.0040019	mg/L	0.00002049	0.51%
Mo 202.031†	344.9	0.0027645	mg/L	0.00068464	0.0027645	mg/L	0.00068464	24.77%
Na 330.237†	338.5	1.02602	mg/L	0.049392	1.02602	mg/L	0.049392	4.81%
Ni 231.604†	90.5	-0.0073678	mg/L	0.00031462	-0.0073678	mg/L	0.00031462	4.27%
Pb 220.353†	-253.1	0.0103625	mg/L	0.00110970	0.0103625	mg/L	0.00110970	10.71%
Sb 206.836†	70.6	-0.0198056	mg/L	0.00552896	-0.0198056	mg/L	0.00552896	27.92%
Se 196.026†	-124.9	-0.0487958	mg/L	0.00028878	-0.0487958	mg/L	0.00028878	0.59%
Sn 189.927†	-120.8	-0.0253275	mg/L	0.00042021	-0.0253275	mg/L	0.00042021	1.66%
Ti 334.940†	1591.2	0.0012982	mg/L	0.00003529	0.0012982	mg/L	0.00003529	2.72%
Tl 190.801†	-7.8	-0.0051209	mg/L	0.00413386	-0.0051209	mg/L	0.00413386	80.72%
V 290.880†	7600.9	-0.0090411	mg/L	0.00067765	-0.0090411	mg/L	0.00067765	7.50%
Zn 206.200†	1064.2	0.0213534	mg/L	0.00043026	0.0213534	mg/L	0.00043026	2.01%

All analyte(s) passed QC.

Sequence No.: 31

Sample ID: ICSAB V-202076

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/26/2015 2:17:11 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	843803.2	89.1 %		0.56			0.63%
Y 371.029	272712.8	87.3 %		0.13			0.15%
Ag 328.068†	181188.1	1.03058 mg/L		0.008787	1.03058 mg/L	0.008787	0.85%
QC value within limits for Ag	328.068	Recovery = 103.06%					
Al 308.215†	13888571.9	494.397 mg/L		2.6381	494.397 mg/L	2.6381	0.53%
QC value within limits for Al	308.215	Recovery = 98.88%					
As 188.979†	954.4	0.939806 mg/L		0.0033656	0.939806 mg/L	0.0033656	0.36%
QC value within limits for As	188.979	Recovery = 93.98%					
Ba 233.527†	53158.1	0.492855 mg/L		0.0038126	0.492855 mg/L	0.0038126	0.77%
QC value within limits for Ba	233.527	Recovery = 98.57%					
Be 313.107†	1303939.8	0.471649 mg/L		0.0006233	0.471649 mg/L	0.0006233	0.13%
QC value within limits for Be	313.107	Recovery = 94.33%					
Ca 315.887†	38853974.4	461.888 mg/L		2.8421	461.888 mg/L	2.8421	0.62%
QC value within limits for Ca	315.887	Recovery = 92.38%					
Cd 228.802†	40553.1	0.973093 mg/L		0.0018488	0.973093 mg/L	0.0018488	0.19%
QC value within limits for Cd	228.802	Recovery = 97.31%					
Co 228.616†	15902.0	0.441021 mg/L		0.0008965	0.441021 mg/L	0.0008965	0.20%
QC value within limits for Co	228.616	Recovery = 88.20%					
Cr 267.716†	33043.6	0.465378 mg/L		0.0037239	0.465378 mg/L	0.0037239	0.80%
QC value within limits for Cr	267.716	Recovery = 93.08%					
Cu 327.393†	59522.6	0.518777 mg/L		0.0043614	0.518777 mg/L	0.0043614	0.84%
QC value within limits for Cu	327.393	Recovery = 103.76%					
Fe 273.955†	3479351.4	181.728 mg/L		0.1287	181.728 mg/L	0.1287	0.07%
QC value within limits for Fe	273.955	Recovery = 90.86%					
K 404.721†	193.5	2.80733 mg/L		0.478659	2.80733 mg/L	0.478659	17.05%
Mg 279.077†	6514247.0	475.465 mg/L		0.2203	475.465 mg/L	0.2203	0.05%
QC value within limits for Mg	279.077	Recovery = 95.09%					
Mn 257.610†	324183.7	0.463460 mg/L		0.0038311	0.463460 mg/L	0.0038311	0.83%
QC value within limits for Mn	257.610	Recovery = 92.69%					
Mo 202.031†	339.6	0.0024414 mg/L		0.00028344	0.0024414 mg/L	0.00028344	11.61%
Na 330.237†	698.8	1.36929 mg/L		0.015907	1.36929 mg/L	0.015907	1.16%
Ni 231.604†	32262.6	0.849801 mg/L		0.0014252	0.849801 mg/L	0.0014252	0.17%
QC value within limits for Ni	231.604	Recovery = 84.98%					
Pb 220.353†	6930.1	0.905449 mg/L		0.0027422	0.905449 mg/L	0.0027422	0.30%
QC value within limits for Pb	220.353	Recovery = 90.54%					
Sb 206.836†	2432.1	0.956833 mg/L		0.0010889	0.956833 mg/L	0.0010889	0.11%
QC value within limits for Sb	206.836	Recovery = 95.68%					
Se 196.026†	784.8	0.863314 mg/L		0.0057012	0.863314 mg/L	0.0057012	0.66%
QC value within limits for Se	196.026	Recovery = 86.33%					
Sn 189.927†	-117.1	-0.0243318 mg/L		0.00138686	-0.0243318 mg/L	0.00138686	5.70%
Ti 334.940†	1652.0	0.0013970 mg/L		0.00018136	0.0013970 mg/L	0.00018136	12.98%
Tl 190.801†	1072.0	0.871078 mg/L		0.0124132	0.871078 mg/L	0.0124132	1.43%
QC value within limits for Tl	190.801	Recovery = 87.11%					
V 290.880†	63576.1	0.443109 mg/L		0.0056693	0.443109 mg/L	0.0056693	1.28%
QC value within limits for V	290.880	Recovery = 88.62%					
Zn 206.200†	32972.5	0.894043 mg/L		0.0019248	0.894043 mg/L	0.0019248	0.22%
QC value within limits for Zn	206.200	Recovery = 89.40%					

All analyte(s) passed QC.

Sample Prep Vol:

		Mean Corrected	Calib		Sample		
Analyte		Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383		954261.7	101 %	0.7			0.66%
Y 371.029		305381.9	97.7 %	0.26			0.27%
Ag 328.068†		18340.9	0.103709 mg/L	0.0005531	0.103709 mg/L	0.0005531	0.53%
QC value	within limits for Ag	328.068	Recovery = 103.71%				
Al 308.215†		136476.6	4.84536 mg/L	0.037796	4.84536 mg/L	0.037796	0.78%
QC value	within limits for Al	308.215	Recovery = 96.91%				
As 188.979†		468.9	0.460973 mg/L	0.0002131	0.460973 mg/L	0.0002131	0.05%
QC value	within limits for As	188.979	Recovery = 92.19%				
Ba 233.527†		51549.8	0.483852 mg/L	0.0037657	0.483852 mg/L	0.0037657	0.78%
QC value	within limits for Ba	233.527	Recovery = 96.77%				
Be 313.107†		1317069.7	0.476184 mg/L	0.0025749	0.476184 mg/L	0.0025749	0.54%
QC value	within limits for Be	313.107	Recovery = 95.24%				
Ca 315.887†		4038467.1	47.9304 mg/L	0.20358	47.9304 mg/L	0.20358	0.42%
QC value	within limits for Ca	315.887	Recovery = 95.86%				
Cd 228.802†		19994.5	0.476893 mg/L	0.0038785	0.476893 mg/L	0.0038785	0.81%
QC value	within limits for Cd	228.802	Recovery = 95.38%				
Co 228.616†		17523.3	0.480605 mg/L	0.0038699	0.480605 mg/L	0.0038699	0.81%
QC value	within limits for Co	228.616	Recovery = 96.12%				
Cr 267.716†		34867.9	0.482679 mg/L	0.0050378	0.482679 mg/L	0.0050378	1.04%
QC value	within limits for Cr	267.716	Recovery = 96.54%				
Cu 327.393†		58190.5	0.483240 mg/L	0.0040219	0.483240 mg/L	0.0040219	0.83%
QC value	within limits for Cu	327.393	Recovery = 96.65%				
Fe 273.955†		94219.3	4.89057 mg/L	0.036630	4.89057 mg/L	0.036630	0.75%
QC value	within limits for Fe	273.955	Recovery = 97.81%				
K 404.721†		4219.7	43.8707 mg/L	0.37415	43.8707 mg/L	0.37415	0.85%
QC value	less than the lower limit for K 404.721		Recovery = 87.74%				
Mg 279.077†		665397.5	48.4594 mg/L	0.20496	48.4594 mg/L	0.20496	0.42%
QC value	within limits for Mg	279.077	Recovery = 96.92%				
Mn 257.610†		331965.3	0.476972 mg/L	0.0038210	0.476972 mg/L	0.0038210	0.80%
QC value	within limits for Mn	257.610	Recovery = 95.39%				
Mo 202.031†		7193.7	0.474127 mg/L	0.0030299	0.474127 mg/L	0.0030299	0.64%
QC value	within limits for Mo	202.031	Recovery = 94.83%				
Na 330.237†		46859.9	45.3508 mg/L	0.29005	45.3508 mg/L	0.29005	0.64%
QC value	within limits for Na	330.237	Recovery = 90.70%				
Ni 231.604†		18032.1	0.477908 mg/L	0.0027980	0.477908 mg/L	0.0027980	0.59%
QC value	within limits for Ni	231.604	Recovery = 95.58%				
Pb 220.353†		3786.0	0.470244 mg/L	0.0035559	0.470244 mg/L	0.0035559	0.76%
QC value	within limits for Pb	220.353	Recovery = 94.05%				
Sb 206.836†		1170.8	0.481554 mg/L	0.0037719	0.481554 mg/L	0.0037719	0.78%
QC value	within limits for Sb	206.836	Recovery = 96.31%				
Se 196.026†		466.7	0.466684 mg/L	0.0053814	0.466684 mg/L	0.0053814	1.15%
QC value	within limits for Se	196.026	Recovery = 93.34%				
Sn 189.927†		1586.1	0.491702 mg/L	0.0032614	0.491702 mg/L	0.0032614	0.66

Autosampler Location: 5
Date Collected: 3/26/2015 2:25:30 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Corrected		Calib		Sample				
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc 361.383	1001250.8	106	%	0.5				0.44%
Y 371.029	327694.1	105	%	0.2				0.15%
Ag 328.068†	3150.7	0.0178434	mg/L	0.00004870	0.0178434	mg/L	0.00004870	0.27%
QC value	within limits	for Ag	328.068	Recovery = 89.22%				
Al 308.215†	5351.5	0.177530	mg/L	0.0015021	0.177530	mg/L	0.0015021	0.85%
QC value	within limits	for Al	308.215	Recovery = 88.77%				
As 188.979†	19.0	0.0178904	mg/L	0.00134108	0.0178904	mg/L	0.00134108	7.50%
QC value	within limits	for As	188.979	Recovery = 89.45%				
Ba 233.527†	5233.7	0.0469598	mg/L	0.00020032	0.0469598	mg/L	0.00020032	0.43%
QC value	within limits	for Ba	233.527	Recovery = 93.92%				
Be 313.107†	29958.0	0.0101034	mg/L	0.00001326	0.0101034	mg/L	0.00001326	0.13%
QC value	within limits	for Be	313.107	Recovery = 84.20%				
Ca 315.887†	410944.6	4.79909	mg/L	0.019016	4.79909	mg/L	0.019016	0.40%
QC value	within limits	for Ca	315.887	Recovery = 95.98%				
Cd 228.802†	446.7	0.0105053	mg/L	0.00017562	0.0105053	mg/L	0.00017562	1.67%
QC value	within limits	for Cd	228.802	Recovery = 87.54%				
Co 228.616†	721.7	0.0172602	mg/L	0.00020576	0.0172602	mg/L	0.00020576	1.19%
QC value	within limits	for Co	228.616	Recovery = 86.30%				
Cr 267.716†	3479.1	0.0467544	mg/L	0.00041332	0.0467544	mg/L	0.00041332	0.88%
QC value	within limits	for Cr	267.716	Recovery = 93.51%				
Cu 327.393†	5772.7	0.0469783	mg/L	0.00001374	0.0469783	mg/L	0.00001374	0.03%
QC value	within limits	for Cu	327.393	Recovery = 93.96%				
Fe 273.955†	5635.4	0.263011	mg/L	0.0009133	0.263011	mg/L	0.0009133	0.35%
QC value	within limits	for Fe	273.955	Recovery = 87.67%				
K 404.721†	306.3	3.95686	mg/L	0.498632	3.95686	mg/L	0.498632	12.60%
QC value	within limits	for K	404.721	Recovery = 79.14%				
Mg 279.077†	67142.5	4.78278	mg/L	0.008900	4.78278	mg/L	0.008900	0.19%
QC value	within limits	for Mg	279.077	Recovery = 95.66%				
Mn 257.610†	26378.6	0.0355272	mg/L	0.00003129	0.0355272	mg/L	0.00003129	0.09%
QC value	within limits	for Mn	257.610	Recovery = 88.82%				
Mo 202.031†	289.7	0.0170496	mg/L	0.00015932	0.0170496	mg/L	0.00015932	0.93%
QC value	within limits	for Mo	202.031	Recovery = 85.25%				
Na 330.237†	3850.2	4.37188	mg/L	0.050866	4.37188	mg/L	0.050866	1.16%
QC value	within limits	for Na	330.237	Recovery = 87.44%				
Ni 231.604†	1747.3	0.0440581	mg/L	0.00037649	0.0440581	mg/L	0.00037649	0.85%
QC value	within limits	for Ni	231.604	Recovery = 88.12%				
Pb 220.353†	78.1	0.0066763	mg/L	0.00006140	0.0066763	mg/L	0.00006140	0.92%
QC value	less than the lower limit	for Pb	220.353	Recovery = 55.64%				
Sb 206.836†	38.2	0.0148699	mg/L	0.00280964	0.0148699	mg/L	0.00280964	18.89%
QC value	within limits	for Sb	206.836	Recovery = 74.35%				

Sequence No.: 34

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/26/2015 2:28:52 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1003823.9	106 %		0.7			0.61%
Y 371.029	329897.1	106 %		0.6			0.54%
Ag 328.068†	-128.5	-0.0006578 mg/L	0.00012822	-0.0006578 mg/L	0.00012822	19.49%	
QC value within limits for Ag 328.068	Recovery = Not calculated						
Al 308.215†	-185.9	-0.0195921 mg/L	0.00495622	-0.0195921 mg/L	0.00495622	25.30%	
QC value within limits for Al 308.215	Recovery = Not calculated						
As 188.979†	-0.3	-0.0010756 mg/L	0.00019526	-0.0010756 mg/L	0.00019526	18.15%	
QC value within limits for As 188.979	Recovery = Not calculated						
Ba 233.527†	31.3	-0.0021214 mg/L	0.00011343	-0.0021214 mg/L	0.00011343	5.35%	
QC value within limits for Ba 233.527	Recovery = Not calculated						
Be 313.107†	-53.1	-0.0007467 mg/L	0.00002098	-0.0007467 mg/L	0.00002098	2.81%	
QC value within limits for Be 313.107	Recovery = Not calculated						
Ca 315.887†	64.8	-0.0862758 mg/L	0.00046151	-0.0862758 mg/L	0.00046151	0.53%	
QC value within limits for Ca 315.887	Recovery = Not calculated						
Cd 228.802†	-10.9	-0.0004177 mg/L	0.00001270	-0.0004177 mg/L	0.00001270	3.04%	
QC value within limits for Cd 228.802	Recovery = Not calculated						
Co 228.616†	12.8	-0.0022584 mg/L	0.00010778	-0.0022584 mg/L	0.00010778	4.77%	
QC value within limits for Co 228.616	Recovery = Not calculated						
Cr 267.716†	0.9	-0.0015356 mg/L	0.00000851	-0.0015356 mg/L	0.00000851	0.55%	
QC value within limits for Cr 267.716	Recovery = Not calculated						
Cu 327.393†	36.4	-0.0007531 mg/L	0.00010677	-0.0007531 mg/L	0.00010677	14.18%	
QC value within limits for Cu 327.393	Recovery = Not calculated						
Fe 273.955†	10.7	-0.0308222 mg/L	0.00096365	-0.0308222 mg/L	0.00096365	3.13%	
QC value within limits for Fe 273.955	Recovery = Not calculated						
K 404.721†	51.2	1.35572 mg/L	0.591728	1.35572 mg/L	0.591728	43.65%	
QC value within limits for K 404.721	Recovery = Not calculated						
Mg 279.077†	26.4	-0.117143 mg/L	0.0002003	-0.117143 mg/L	0.0002003	0.17%	
QC value within limits for Mg 279.077	Recovery = Not calculated						
Mn 257.610†	-141.0	-0.0027357 mg/L	0.00002984	-0.0027357 mg/L	0.00002984	1.09%	
QC value within limits for Mn 257.610	Recovery = Not calculated						
Mo 202.031†	-1.7	-0.0020930 mg/L	0.00004579	-0.0020930 mg/L	0.00004579	2.19%	
QC value within limits for Mo 202.031	Recovery = Not calculated						
Na 330.237†	-23.7	0.680961 mg/L	0.0333461	0.680961 mg/L	0.0333461	4.90%	
QC value within limits for Na 330.237	Recovery = Not calculated						
Ni 231.604†	-55.1	-0.0039614 mg/L	0.00029121	-0.0039614 mg/L	0.00029121	7.35%	
QC value within limits for Ni 231.604	Recovery = Not calculated						
Pb 220.353†	-17.1	-0.0052487 mg/L	0.00145370	-0.0052487 mg/L	0.00145370	27.70%	
QC value within limits for Pb 220.353	Recovery = Not calculated						
Sb 206.836†	1.0	-0.0004075 mg/L	0.00305725	-0.0004075 mg/L	0.00305725	750.20%	
QC value within limits for Sb 206.836	Recovery = Not calculated						
Se 196.026†	-0.3	-0.0016429 mg/L	0.00636179	-0.0016429 mg/L	0.00636179	387.23%	
QC value within limits for Se 196.026	Recovery = Not calculated						
Sn 189.927†	-1.1	-0.0005325 mg/L	0.00052188	-0.0005325 mg/L	0.00052188	98.00%	
QC value within limits for Sn 189.927	Recovery = Not calculated						
Ti 334.940†	97.0	-0.0011337 mg/L	0.00004209	-0.0011337 mg/L	0.00004209	3.71%	
QC value within limits for Ti 334.940	Recovery = Not calculated						
Tl 190.801†	5.6	-0.0004183 mg/L	0.00178313	-0.0004183 mg/L	0.00178313	426.27%	
QC value within limits for Tl 190.801	Recovery = Not calculated						
V 290.880†	-277.4	-0.0039164 mg/L	0.00093255	-0.0039164 mg/L	0.00093255	23.81%	
QC value within limits for V 290.880	Recovery = Not calculated						
Zn 206.200†	-12.4	-0.0017227 mg/L	0.00010144	-0.0017227 mg/L	0.00010144	5.89%	
QC value within limits for Zn 206.200	Recovery = Not calculated						

All analyte(s) passed QC.

File SW17599B2

Batch 17599 SW17599 5032012 0377

Method: PE2 4300DV AXIAL

Page 1

Date: 3/26/2015 3:44:17 PM

Analyst JBL 3/26/15

=====
Analysis Begun

Start Time: 3/26/2015 3:42:00 PM

Plasma On Time: 3/26/2015 2:35:30 PM

Logged In Analyst: shiamala

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030901 Autosampler Model: AS-93plus

Sample Information File: C:\pe\administrator\Sample Information\03.26.15.sif

Batch ID: PEICP 2

Results Data Set: SW17599B2

Results Library: C:\pe\administrator\Results\Results.mdb

=====
Method Loaded

Method Name: PE2 4300DV AXIAL

Method Last Saved: 3/23/2015 4:35:58 PM

IEC File: IECax092614.iec

MSF File:

Method Description: 200.7/6010B/6010C

=====
Sequence No.: 1

Autosampler Location: 1

Sample ID: CALBLK V-205362

Date Collected: 3/26/2015 3:42:01 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

=====
Mean Data: CALBLK V-205362

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Sc 361.383	1002169.8	6065.12	0.61%	100 %
Y 371.029	331007.8	1753.87	0.53%	100.0 %
Ag 328.068†	1762.4	3.35	0.19%	[0.00] mg/L
Al 308.215†	6556.4	4.27	0.07%	[0.00] mg/L
As 188.979†	-4.9	0.80	16.23%	[0.00] mg/L
Ba 233.527†	-421.5	8.37	1.99%	[0.00] mg/L
Be 313.107†	1936.2	24.07	1.24%	[0.00] mg/L
Ca 315.887†	6854.0	143.33	2.09%	[0.00] mg/L
Cd 228.802†	140.4	5.46	3.89%	[0.00] mg/L
Co 228.616†	-160.0	0.57	0.36%	[0.00] mg/L
Cr 267.716†	-36.0	2.44	6.79%	[0.00] mg/L
Cu 327.393†	70.4	55.90	79.42%	[0.00] mg/L
Fe 273.955†	427.7	8.20	1.92%	[0.00] mg/L
K 404.721†	1538.2	14.57	0.95%	[0.00] mg/L
Mg 279.077†	437.9	14.77	3.37%	[0.00] mg/L
Mn 257.610†	2428.7	4.41	0.18%	[0.00] mg/L
Mo 202.031†	51.3	1.88	3.66%	[0.00] mg/L
Na 330.237†	732.1	40.12	5.48%	[0.00] mg/L
Ni 231.604†	891.2	1.28	0.14%	[0.00] mg/L
Pb 220.353†	86.9	8.81	10.14%	[0.00] mg/L
Sb 206.836†	65.0	2.41	3.71%	[0.00] mg/L
Se 196.026†	4.2	2.22	52.22%	[0.00] mg/L
Sn 189.927†	23.3	1.75	7.52%	[0.00] mg/L
Ti 334.940†	-698.2	23.14	3.31%	[0.00] mg/L
Tl 190.801†	-26.3	0.57	2.15%	[0.00] mg/L
V 290.880†	4959.2	29.81	0.60%	[0.00] mg/L
Zn 206.200†	128.8	4.75	3.69%	[0.00] mg/L

17599
42362
83866.019-033 all elements
reported
except Nb, K

Sequence No.: 2
Sample ID: CALST1 V-203732
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 3/26/2015 3:45:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST1 V-203732

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1022948.5	162.99	0.02%	102 %
Y 371.029	335448.4	457.24	0.14%	101 %
Be 313.107†	7703.8	34.69	0.45%	[0.003] mg/L
Cd 228.802†	126.4	1.15	0.91%	[0.003] mg/L

Sequence No.: 3

Sample ID: CALST2 V-202401

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/26/2015 3:48:27 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST2 V-202401

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1010323.5	8982.91	0.89%	101	%
Y 371.029	332482.6	2496.91	0.75%	100	%
Ag 328.068†	339.9	57.64	16.96%	[0.002]	mg/L
Al 308.215†	1309.4	89.78	6.86%	[0.10]	mg/L
As 188.979†	10.4	1.51	14.51%	[0.010]	mg/L
Ba 233.527†	1108.0	12.75	1.15%	[0.010]	mg/L
Be 313.107†	26132.0	185.48	0.71%	[0.010]	mg/L
Ca 315.887†	80354.7	985.47	1.23%	[1.0]	mg/L
Cd 228.802†	405.4	2.51	0.62%	[0.010]	mg/L
Co 228.616†	391.0	0.12	0.03%	[0.010]	mg/L
Cr 267.716†	720.2	9.38	1.30%	[0.010]	mg/L
Cu 327.393†	1198.9	22.92	1.91%	[0.010]	mg/L
Fe 273.955†	1583.4	27.19	1.72%	[0.10]	mg/L
K 404.721†	12.1	74.63	617.19%	[1.0]	mg/L
Mg 279.077†	13562.1	136.55	1.01%	[1.0]	mg/L
Mn 257.610†	7167.9	72.18	1.01%	[0.010]	mg/L
Mo 202.031†	151.2	1.78	1.18%	[0.010]	mg/L
Na 330.237†	897.3	10.62	1.18%	[1.0]	mg/L
Ni 231.604†	385.5	2.87	0.75%	[0.010]	mg/L
Pb 220.353†	79.0	3.18	4.02%	[0.010]	mg/L
Sb 206.836†	12.8	2.91	22.64%	[0.010]	mg/L
Se 196.026†	6.5	2.28	34.82%	[0.010]	mg/L
Sn 189.927†	26.4	1.67	6.33%	[0.010]	mg/L
Ti 334.940†	6000.4	53.61	0.89%	[0.010]	mg/L
Tl 190.801†	15.4	1.44	9.36%	[0.010]	mg/L
V 290.880†	1179.1	73.22	6.21%	[0.010]	mg/L
Zn 206.200†	376.5	11.83	3.14%	[0.010]	mg/L

Sequence No.: 4

Sample ID: CALST3 V-202402

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/26/2015 3:51:47 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST3 V-202402

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	956226.5	2110.01	0.22%	95.4	%
Y 371.029	309967.1	4885.22	1.58%	93.6	%
Ag 328.068†	17681.0	278.25	1.57%	[0.10]	mg/L
Al 308.215†	141164.9	2491.98	1.77%	[5.0]	mg/L
As 188.979†	500.6	3.93	0.78%	[0.50]	mg/L
Ba 233.527†	54594.6	941.37	1.72%	[0.50]	mg/L
Be 313.107†	1376409.1	9278.52	0.67%	[0.50]	mg/L
Ca 315.887†	4240062.0	35717.86	0.84%	[50]	mg/L
Cd 228.802†	20966.1	411.45	1.96%	[0.50]	mg/L
Co 228.616†	18571.5	340.94	1.84%	[0.50]	mg/L
Cr 267.716†	36710.9	596.27	1.62%	[0.50]	mg/L
Cu 327.393†	60265.9	981.81	1.63%	[0.50]	mg/L
Fe 273.955†	98093.3	1941.03	1.98%	[5.0]	mg/L
K 404.721†	4554.3	43.65	0.96%	[50]	mg/L
Mg 279.077†	688016.2	5785.52	0.84%	[50]	mg/L
Mn 257.610†	354288.6	6185.11	1.75%	[0.50]	mg/L
Mo 202.031†	7611.1	42.57	0.56%	[0.50]	mg/L
Na 330.237†	49921.3	766.76	1.54%	[50]	mg/L
Ni 231.604†	19280.4	407.37	2.11%	[0.50]	mg/L
Pb 220.353†	4110.8	17.80	0.43%	[0.50]	mg/L
Sb 206.836†	1214.4	7.30	0.60%	[0.50]	mg/L
Se 196.026†	489.4	3.15	0.64%	[0.50]	mg/L
Sn 189.927†	1637.2	0.05	0.00%	[0.50]	mg/L
Ti 334.940†	308359.4	6366.32	2.06%	[0.50]	mg/L
Tl 190.801†	645.0	8.70	1.35%	[0.50]	mg/L
V 290.880†	63391.1	1087.65	1.72%	[0.50]	mg/L
Zn 206.200†	18722.2	422.91	2.26%	[0.50]	mg/L

Sequence No.: 5

Sample ID: CALST4 V-203077

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/26/2015 3:55:11 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST4 V-203077

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	942951.3	6497.81	0.69%	94.1	%
Y 371.029	298754.0	1757.18	0.59%	90.3	%
Ag 328.068†	34691.4	301.06	0.87%	[0.20]	mg/L
Al 308.215†	273801.2	1551.77	0.57%	[10]	mg/L
As 188.979†	983.4	0.79	0.08%	[1.0]	mg/L
Ba 233.527†	104553.8	817.66	0.78%	[1.0]	mg/L
Be 313.107†	2696339.6	77.58	0.00%	[1.0]	mg/L
Ca 315.887†	8271432.6	19099.01	0.23%	[100]	mg/L
Cd 228.802†	40840.5	365.68	0.90%	[1.0]	mg/L
Co 228.616†	35455.3	255.68	0.72%	[1.0]	mg/L
Cr 267.716†	70825.8	503.02	0.71%	[1.0]	mg/L
Cu 327.393†	117135.4	791.56	0.68%	[1.0]	mg/L
Fe 273.955†	187856.2	1613.53	0.86%	[10]	mg/L
K 404.721†	9696.3	10.53	0.11%	[100]	mg/L
Mg 279.077†	1348528.0	2294.21	0.17%	[100]	mg/L
Mn 257.610†	681504.4	137.44	0.02%	[1.0]	mg/L
Mo 202.031†	14746.5	66.80	0.45%	[1.0]	mg/L
Na 330.237†	105186.8	747.60	0.71%	[100]	mg/L
Ni 231.604†	36631.5	236.50	0.65%	[1.0]	mg/L
Pb 220.353†	7890.7	38.80	0.49%	[1.0]	mg/L
Sb 206.836†	2366.9	8.72	0.37%	[1.0]	mg/L
Se 196.026†	963.6	7.05	0.73%	[1.0]	mg/L
Sn 189.927†	3215.0	2.09	0.07%	[1.0]	mg/L
Ti 334.940†	600579.4	802.29	0.13%	[1.0]	mg/L
Tl 190.801†	1216.7	12.04	0.99%	[1.0]	mg/L
V 290.880†	121803.8	908.96	0.75%	[1.0]	mg/L
Zn 206.200†	35882.4	408.54	1.14%	[1.0]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	57.8	173800	0.00000	0.999950	
Al 308.215	3	Lin, Calc Int	127.5	27530	0.00000	0.999839	
As 188.979	3	Lin, Calc Int	1.9	984.7	0.00000	0.999958	
Ba 233.527	3	Lin, Calc Int	450.2	104900	0.00000	0.999742	
Be 313.107	4	Lin, Calc Int	3138.5	2704000	0.00000	0.999948	
Ca 315.887	3	Lin, Calc Int	17919.9	82920	0.00000	0.999914	
Cd 228.802	4	Lin, Calc Int	68.3	40980	0.00000	0.999916	
Co 228.616	3	Lin, Calc Int	170.1	35590	0.00000	0.999705	
Cr 267.716	3	Lin, Calc Int	241.7	71050	0.00000	0.999822	
Cu 327.393	3	Lin, Calc Int	321.6	117400	0.00000	0.999889	
Fe 273.955	3	Lin, Calc Int	624.0	18880	0.00000	0.999729	
K 404.721	3	Lin, Calc Int	-92.0	96.89	0.00000	0.999549	
Mg 279.077	3	Lin, Calc Int	2537.8	13510	0.00000	0.999945	
Mn 257.610	3	Lin, Calc Int	2623.8	683800	0.00000	0.999793	
Mo 202.031	3	Lin, Calc Int	45.0	14790	0.00000	0.999863	
Na 330.237	3	Lin, Calc Int	-556.5	1048	0.00000	0.999661	
Ni 231.604	3	Lin, Calc Int	184.3	36790	0.00000	0.999636	
Pb 220.353	3	Lin, Calc Int	30.2	7920	0.00000	0.999767	
Sb 206.836	3	Lin, Calc Int	0.7	2378	0.00000	0.999885	
Se 196.026	3	Lin, Calc Int	-0.0	966.6	0.00000	0.999956	
Sn 189.927	3	Lin, Calc Int	2.8	3223	0.00000	0.999949	
Ti 334.940	3	Lin, Calc Int	1466.2	602000	0.00000	0.999904	
Tl 190.801	3	Lin, Calc Int	8.1	1222	0.00000	0.999538	
V 290.880	3	Lin, Calc Int	435.4	122300	0.00000	0.999776	
Zn 206.200	3	Lin, Calc Int	150.2	36010	0.00000	0.999751	

Sequence No.: 6

Sample ID: ICS3 V-202402

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/26/2015 3:59:43 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICS3 V-202402

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	953927.3	95.2 %	0.07			0.08%
Y 371.029	305988.7	92.4 %	0.87			0.94%
Ag 328.068†	17583.4	0.101106 mg/L	0.0009753	0.101106 mg/L	0.0009753	0.96%
QC value within limits for Ag		328.068 Recovery = 101.11%				
Al 308.215†	140200.5	5.08725 mg/L	0.026831	5.08725 mg/L	0.026831	0.53%
QC value within limits for Al		308.215 Recovery = 101.74%				
As 188.979†	496.6	0.502664 mg/L	0.0003930	0.502664 mg/L	0.0003930	0.08%
QC value within limits for As		188.979 Recovery = 100.53%				
Ba 233.527†	54109.8	0.511170 mg/L	0.0032487	0.511170 mg/L	0.0032487	0.64%
QC value within limits for Ba		233.527 Recovery = 102.23%				
Be 313.107†	1376854.2	0.507832 mg/L	0.0039919	0.507832 mg/L	0.0039919	0.79%
QC value within limits for Be		313.107 Recovery = 101.57%				
Ca 315.887†	4236386.0	50.8770 mg/L	0.28230	50.8770 mg/L	0.28230	0.55%
QC value within limits for Ca		315.887 Recovery = 101.75%				
Cd 228.802†	20761.4	0.505145 mg/L	0.0038074	0.505145 mg/L	0.0038074	0.75%
QC value within limits for Cd		228.802 Recovery = 101.03%				
Co 228.616†	18406.8	0.511897 mg/L	0.0047152	0.511897 mg/L	0.0047152	0.92%
QC value within limits for Co		228.616 Recovery = 102.38%				
Cr 267.716†	36381.2	0.509427 mg/L	0.0034000	0.509427 mg/L	0.0034000	0.67%
QC value within limits for Cr		267.716 Recovery = 101.89%				
Cu 327.393†	59856.9	0.510314 mg/L	0.0024697	0.510314 mg/L	0.0024697	0.48%
QC value within limits for Cu		327.393 Recovery = 102.06%				
Fe 273.955†	97252.7	5.11896 mg/L	0.034304	5.11896 mg/L	0.034304	0.67%
QC value within limits for Fe		273.955 Recovery = 102.38%				
K 404.721†	4535.3	47.7570 mg/L	0.24486	47.7570 mg/L	0.24486	0.51%
QC value within limits for K		404.721 Recovery = 95.51%				
Mg 279.077†	687540.5	50.7047 mg/L	0.32193	50.7047 mg/L	0.32193	0.63%
QC value within limits for Mg		279.077 Recovery = 101.41%				
Mn 257.610†	351534.9	0.508879 mg/L	0.0036082	0.508879 mg/L	0.0036082	0.71%
QC value within limits for Mn		257.610 Recovery = 101.78%				
Mo 202.031†	7576.9	0.506919 mg/L	0.0003748	0.506919 mg/L	0.0003748	0.07%
QC value within limits for Mo		202.031 Recovery = 101.38%				
Na 330.237†	49710.7	47.9699 mg/L	0.35895	47.9699 mg/L	0.35895	0.75%
QC value within limits for Na		330.237 Recovery = 95.94%				
Ni 231.604†	19061.9	0.512996 mg/L	0.0059814	0.512996 mg/L	0.0059814	1.17%
QC value within limits for Ni		231.604 Recovery = 102.60%				
Pb 220.353†	4085.9	0.513144 mg/L	0.0027028	0.513144 mg/L	0.0027028	0.53%
QC value within limits for Pb		220.353 Recovery = 102.63%				
Sb 206.836†	1209.0	0.506376 mg/L	0.0005143	0.506376 mg/L	0.0005143	0.10%
QC value within limits for Sb		206.836 Recovery = 101.28%				
Se 196.026†	486.7	0.503783 mg/L	0.0103683	0.503783 mg/L	0.0103683	2.06%
QC value within limits for Se		196.026 Recovery = 100.76%				
Sn 189.927†	1634.3	0.508195 mg/L	0.0026457	0.508195 mg/L	0.0026457	0.52%
QC value within limits for Sn		189.927 Recovery = 101.64%				
Ti 334.940†	305148.0	0.504425 mg/L	0.0037420	0.504425 mg/L	0.0037420	0.74%
QC value within limits for Ti		334.940 Recovery = 100.88%				
Tl 190.801†	636.9	0.516355 mg/L	0.0008291	0.516355 mg/L	0.0008291	0.16%
QC value within limits for Tl		190.801 Recovery = 103.27%				
V 290.880†	63090.6	0.506869 mg/L	0.0031336	0.506869 mg/L	0.0031336	0.62%
QC value within limits for V		290.880 Recovery = 101.37%				
Zn 206.200†	18509.2	0.509594 mg/L	0.0057367	0.509594 mg/L	0.0057367	1.13%
QC value within limits for Zn		206.200 Recovery = 101.92%				

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICV V-202964

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/26/2015 4:03:08 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICV V-202964

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	953944.5	95.2 %		0.01			0.01%
Y 371.029	305990.3	92.4 %		0.32			0.35%
Ag 328.068†	18963.4	0.109045 mg/L		0.0010941	0.109045 mg/L	0.0010941	1.00%
QC value within limits for Ag	328.068	Recovery = 109.04%					
Al 308.215†	139385.7	5.05766 mg/L		0.031028	5.05766 mg/L	0.031028	0.61%
QC value within limits for Al	308.215	Recovery = 101.15%					
As 188.979†	481.1	0.486990 mg/L		0.0045191	0.486990 mg/L	0.0045191	0.93%
QC value within limits for As	188.979	Recovery = 97.40%					
Ba 233.527†	53290.6	0.503364 mg/L		0.0029900	0.503364 mg/L	0.0029900	0.59%
QC value within limits for Ba	233.527	Recovery = 100.67%					
Be 313.107†	1340398.3	0.494349 mg/L		0.0032347	0.494349 mg/L	0.0032347	0.65%
QC value within limits for Be	313.107	Recovery = 98.87%					
Ca 315.887†	4161700.7	49.9762 mg/L		0.37156	49.9762 mg/L	0.37156	0.74%
QC value within limits for Ca	315.887	Recovery = 99.95%					
Cd 228.802†	20554.2	0.500088 mg/L		0.0027270	0.500088 mg/L	0.0027270	0.55%
QC value within limits for Cd	228.802	Recovery = 100.02%					
Co 228.616†	18013.6	0.500849 mg/L		0.0021368	0.500849 mg/L	0.0021368	0.43%
QC value within limits for Co	228.616	Recovery = 100.17%					
Cr 267.716†	35988.4	0.503887 mg/L		0.0014028	0.503887 mg/L	0.0014028	0.28%
QC value within limits for Cr	267.716	Recovery = 100.78%					
Cu 327.393†	59208.6	0.504759 mg/L		0.0019751	0.504759 mg/L	0.0019751	0.39%
QC value within limits for Cu	327.393	Recovery = 100.95%					
Fe 273.955†	96515.4	5.07991 mg/L		0.026251	5.07991 mg/L	0.026251	0.52%
QC value within limits for Fe	273.955	Recovery = 101.60%					
K 404.721†	4424.7	46.6161 mg/L		0.60424	46.6161 mg/L	0.60424	1.30%
QC value within limits for K	404.721	Recovery = 93.23%					
Mg 279.077†	684535.3	50.4823 mg/L		0.40457	50.4823 mg/L	0.40457	0.80%
QC value within limits for Mg	279.077	Recovery = 100.96%					
Mn 257.610†	342108.1	0.495097 mg/L		0.0024836	0.495097 mg/L	0.0024836	0.50%
QC value within limits for Mn	257.610	Recovery = 99.02%					
Mo 202.031†	7456.7	0.498835 mg/L		0.0017382	0.498835 mg/L	0.0017382	0.35%
QC value within limits for Mo	202.031	Recovery = 99.77%					
Na 330.237†	49115.9	47.4023 mg/L		0.30598	47.4023 mg/L	0.30598	0.65%
QC value within limits for Na	330.237	Recovery = 94.80%					
Ni 231.604†	18659.8	0.502069 mg/L		0.0010727	0.502069 mg/L	0.0010727	0.21%
QC value within limits for Ni	231.604	Recovery = 100.41%					
Pb 220.353†	3949.1	0.495856 mg/L		0.0029342	0.495856 mg/L	0.0029342	0.59%
QC value within limits for Pb	220.353	Recovery = 99.17%					
Sb 206.836†	1205.6	0.504958 mg/L		0.0006535	0.504958 mg/L	0.0006535	0.13%
QC value within limits for Sb	206.836	Recovery = 100.99%					
Se 196.026†	471.1	0.487727 mg/L		0.0043007	0.487727 mg/L	0.0043007	0.88%
QC value within limits for Se	196.026	Recovery = 97.55%					
Sn 189.927†	1654.9	0.514547 mg/L		0.0023721	0.514547 mg/L	0.0023721	0.46%
QC value within limits for Sn	189.927	Recovery = 102.91%					
Ti 334.940†	304418.9	0.503214 mg/L		0.0030210	0.503214 mg/L	0.0030210	0.60%
QC value within limits for Ti	334.940	Recovery = 100.64%					
Tl 190.801†	608.8	0.493331 mg/L		0.0026979	0.493331 mg/L	0.0026979	0.55%
QC value within limits for Tl	190.801	Recovery = 98.67%					
V 290.880†	61732.1	0.495773 mg/L		0.0026678	0.495773 mg/L	0.0026678	0.54%
QC value within limits for V	290.880	Recovery = 99.15%					
Zn 206.200†	18326.7	0.504528 mg/L		0.0034020	0.504528 mg/L	0.0034020	0.67%
QC value within limits for Zn	206.200	Recovery = 100.91%					

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: LLICV [aq] V-206357

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/26/2015 4:06:31 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	993261.6	99.1 %		0.21			0.21%
Y 371.029	325023.0	98.2 %		0.08			0.08%
Ag 328.068†	3440.0	0.0194761 mg/L		0.00000792	0.0194761 mg/L	0.00000792	0.04%
QC value within limits for Ag		328.068	Recovery = 97.38%				
Al 308.215†	4428.5	0.156204 mg/L		0.0020550	0.156204 mg/L	0.0020550	1.32%
QC value within limits for Al		308.215	Recovery = 78.10%				
As 188.979†	18.4	0.0168521 mg/L		0.00164885	0.0168521 mg/L	0.00164885	9.78%
QC value within limits for As		188.979	Recovery = 84.26%				
Ba 233.527†	5675.1	0.0497818 mg/L		0.00055638	0.0497818 mg/L	0.00055638	1.12%
QC value within limits for Ba		233.527	Recovery = 99.56%				
Be 313.107†	32324.3	0.0107713 mg/L		0.00011874	0.0107713 mg/L	0.00011874	1.10%
QC value within limits for Be		313.107	Recovery = 89.76%				
Ca 315.887†	429058.6	4.95856 mg/L		0.017910	4.95856 mg/L	0.017910	0.36%
QC value within limits for Ca		315.887	Recovery = 99.17%				
Cd 228.802†	484.8	0.0101725 mg/L		0.00007422	0.0101725 mg/L	0.00007422	0.73%
QC value within limits for Cd		228.802	Recovery = 84.77%				
Co 228.616†	752.4	0.0163090 mg/L		0.00011106	0.0163090 mg/L	0.00011106	0.68%
QC value within limits for Co		228.616	Recovery = 81.55%				
Cr 267.716†	3757.0	0.0495370 mg/L		0.00016856	0.0495370 mg/L	0.00016856	0.34%
QC value within limits for Cr		267.716	Recovery = 99.07%				
Cu 327.393†	6108.1	0.0495858 mg/L		0.00052742	0.0495858 mg/L	0.00052742	1.06%
QC value within limits for Cu		327.393	Recovery = 99.17%				
Fe 273.955†	5647.4	0.266114 mg/L		0.0036120	0.266114 mg/L	0.0036120	1.36%
QC value within limits for Fe		273.955	Recovery = 88.70%				
K 404.721†	285.0	3.89059 mg/L		0.752475	3.89059 mg/L	0.752475	19.34%
QC value within limits for K		404.721	Recovery = 77.81%				
Mg 279.077†	71798.4	5.12676 mg/L		0.059020	5.12676 mg/L	0.059020	1.15%
QC value within limits for Mg		279.077	Recovery = 102.54%				
Mn 257.610†	28579.5	0.0378000 mg/L		0.00050082	0.0378000 mg/L	0.00050082	1.32%
QC value within limits for Mn		257.610	Recovery = 94.50%				
Mo 202.031†	317.9	0.0182207 mg/L		0.00060989	0.0182207 mg/L	0.00060989	3.35%
QC value within limits for Mo		202.031	Recovery = 91.10%				
Na 330.237†	4361.4	4.69318 mg/L		0.021264	4.69318 mg/L	0.021264	0.45%
QC value within limits for Na		330.237	Recovery = 93.86%				
Ni 231.604†	1938.1	0.0476599 mg/L		0.00051884	0.0476599 mg/L	0.00051884	1.09%
QC value within limits for Ni		231.604	Recovery = 95.32%				
Pb 220.353†	99.0	0.0087313 mg/L		0.00031326	0.0087313 mg/L	0.00031326	3.59%
QC value within limits for Pb		220.353	Recovery = 72.76%				
Sb 206.836†	47.8	0.0196727 mg/L		0.00272961	0.0196727 mg/L	0.00272961	13.88%
QC value within limits for Sb		206.836	Recovery = 98.36%				
Se 196.026†	33.6	0.0347608 mg/L		0.00061326	0.0347608 mg/L	0.00061326	1.76%
QC value within limits for Se		196.026	Recovery = 86.90%				
Sn 189.927†	165.0	0.0505412 mg/L		0.00033838	0.0505412 mg/L	0.00033838	0.67%
QC value within limits for Sn		189.927	Recovery = 101.08%				
Ti 334.940†	31551.0	0.0499717 mg/L		0.00054523	0.0499717 mg/L	0.00054523	1.09%
QC value within limits for Ti		334.940	Recovery = 99.94%				
Tl 190.801†	26.7	0.0154131 mg/L		0.00419277	0.0154131 mg/L	0.00419277	27.20%
QC value within limits for Tl		190.801	Recovery = 77.07%				
V 290.880†	6573.2	0.0496012 mg/L		0.00061796	0.0496012 mg/L	0.00061796	1.25%
QC value within limits for V		290.880	Recovery = 99.20%				
Zn 206.200†	1888.4	0.0482562 mg/L		0.00020762	0.0482562 mg/L	0.00020762	0.43%
QC value within limits for Zn		206.200	Recovery = 96.51%				

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICB V-205362

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/26/2015 4:09:53 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB V-205362

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1003522.7	100 %		0.1			0.06%
Y 371.029	331101.0	100 %		0.2			0.22%
Ag 328.068†	-63.8 -0.0007017 mg/L		0.00033033	-0.0007017 mg/L	0.00033033	47.08%	
QC value within limits for Ag 328.068	Recovery = Not calculated						
Al 308.215†	125.6 -0.0000710 mg/L		0.00316725	-0.0000710 mg/L	0.00316725	>999.9%	
QC value within limits for Al 308.215	Recovery = Not calculated						
As 188.979†	-0.1 -0.0019814 mg/L		0.00155157	-0.0019814 mg/L	0.00155157	78.31%	
QC value within limits for As 188.979	Recovery = Not calculated						
Ba 233.527†	13.3 -0.0041621 mg/L		0.00000686	-0.0041621 mg/L	0.00000686	0.16%	
QC value within limits for Ba 233.527	Recovery = Not calculated						
Be 313.107†	36.1 -0.0011463 mg/L		0.00000820	-0.0011463 mg/L	0.00000820	0.72%	
QC value within limits for Be 313.107	Recovery = Not calculated						
Ca 315.887†	86.6 -0.0215079 mg/L		0.0000100	-0.0215079 mg/L	0.0000100	0.00%	
QC value within limits for Ca 315.887	Recovery = Not calculated						
Cd 228.802†	-3.9 -0.0017619 mg/L		0.00001104	-0.0017619 mg/L	0.00001104	0.63%	
QC value within limits for Cd 228.802	Recovery = Not calculated						
Co 228.616†	13.0 -0.0044120 mg/L		0.00017378	-0.0044120 mg/L	0.00017378	3.94%	
QC value within limits for Co 228.616	Recovery = Not calculated						
Cr 267.716†	7.0 -0.0033068 mg/L		0.00008940	-0.0033068 mg/L	0.00008940	2.70%	
QC value within limits for Cr 267.716	Recovery = Not calculated						
Cu 327.393†	11.8 -0.0026537 mg/L		0.00036381	-0.0026537 mg/L	0.00036381	13.71%	
QC value within limits for Cu 327.393	Recovery = Not calculated						
Fe 273.955†	16.2 -0.0321988 mg/L		0.00005834	-0.0321988 mg/L	0.00005834	0.18%	
QC value within limits for Fe 273.955	Recovery = Not calculated						
K 404.721†	-102.5 -0.107872 mg/L		1.3795730	-0.107872 mg/L	1.3795730	>999.9%	
QC value within limits for K 404.721	Recovery = Not calculated						
Mg 279.077†	-5.2 -0.188236 mg/L		0.0038095	-0.188236 mg/L	0.0038095	2.02%	
QC value within limits for Mg 279.077	Recovery = Not calculated						
Mn 257.610†	-14.7 -0.0038547 mg/L		0.00001770	-0.0038547 mg/L	0.00001770	0.46%	
QC value within limits for Mn 257.610	Recovery = Not calculated						
Mo 202.031†	-0.9 -0.0030881 mg/L		0.00028410	-0.0030881 mg/L	0.00028410	9.20%	
QC value within limits for Mo 202.031	Recovery = Not calculated						
Na 330.237†	48.4 0.577230 mg/L		0.0201275	0.577230 mg/L	0.0201275	3.49%	
QC value within limits for Na 330.237	Recovery = Not calculated						
Ni 231.604†	-10.4 -0.0052910 mg/L		0.00000121	-0.0052910 mg/L	0.00000121	0.02%	
QC value within limits for Ni 231.604	Recovery = Not calculated						
Pb 220.353†	1.3 -0.0036498 mg/L		0.00044551	-0.0036498 mg/L	0.00044551	12.21%	
QC value within limits for Pb 220.353	Recovery = Not calculated						
Sb 206.836†	-3.1 -0.0016128 mg/L		0.00200289	-0.0016128 mg/L	0.00200289	124.19%	
QC value within limits for Sb 206.836	Recovery = Not calculated						
Se 196.026†	1.9 0.0019876 mg/L		0.00505225	0.0019876 mg/L	0.00505225	254.18%	
QC value within limits for Se 196.026	Recovery = Not calculated						
Sn 189.927†	4.8 0.0006030 mg/L		0.00107698	0.0006030 mg/L	0.00107698	178.60%	
QC value within limits for Sn 189.927	Recovery = Not calculated						
Ti 334.940†	-5.3 -0.0024442 mg/L		0.00004522	-0.0024442 mg/L	0.00004522	1.85%	
QC value within limits for Ti 334.940	Recovery = Not calculated						
Tl 190.801†	0.9 -0.0058863 mg/L		0.00221885	-0.0058863 mg/L	0.00221885	37.69%	
QC value within limits for Tl 190.801	Recovery = Not calculated						
V 290.880†	-35.9 -0.0038350 mg/L		0.00028650	-0.0038350 mg/L	0.00028650	7.47%	
QC value within limits for V 290.880	Recovery = Not calculated						
Zn 206.200†	-1.7 -0.0042160 mg/L		0.00009196	-0.0042160 mg/L	0.00009196	2.18%	
QC value within limits for Zn 206.200	Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSA V-202074

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/26/2015 4:13:10 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	844027.1	84.2 %		0.30			0.36%
Y 371.029	269634.1	81.5 %		0.24			0.29%
Ag 328.068†	-1533.5	0.0006153 mg/L		0.00039552	0.0006153 mg/L	0.00039552	64.28%
Al 308.215†	14627382.2	531.241 mg/L		3.8826	531.241 mg/L	3.8826	0.73%
QC value within limits for Al 308.215 Recovery = 106.25%							
As 188.979†	-4.9	-0.0053925 mg/L		0.00047351	-0.0053925 mg/L	0.00047351	8.78%
Ba 233.527†	1426.3	0.0024621 mg/L		0.00013697	0.0024621 mg/L	0.00013697	5.56%
Be 313.107†	-2325.6	-0.0020209 mg/L		0.00003022	-0.0020209 mg/L	0.00003022	1.50%
Ca 315.887†	41322397.2	498.154 mg/L		3.5007	498.154 mg/L	3.5007	0.70%
QC value within limits for Ca 315.887 Recovery = 99.63%							
Cd 228.802†	-383.8	-0.0046078 mg/L		0.00003127	-0.0046078 mg/L	0.00003127	0.68%
Co 228.616†	129.5	0.0038687 mg/L		0.00052425	0.0038687 mg/L	0.00052425	13.55%
Cr 267.716†	-426.2	-0.0003261 mg/L		0.00015782	-0.0003261 mg/L	0.00015782	48.39%
Cu 327.393†	-2741.7	0.0037510 mg/L		0.00030350	0.0037510 mg/L	0.00030350	8.09%
Fe 273.955†	3699095.6	195.929 mg/L		0.4365	195.929 mg/L	0.4365	0.22%
QC value within limits for Fe 273.955 Recovery = 97.96%							
K 404.721†	76.2	1.73650 mg/L		0.243407	1.73650 mg/L	0.243407	14.02%
Mg 279.077†	6927911.6	512.625 mg/L		1.3357	512.625 mg/L	1.3357	0.26%
QC value within limits for Mg 279.077 Recovery = 102.52%							
Mn 257.610†	7066.2	0.0026289 mg/L		0.00030005	0.0026289 mg/L	0.00030005	11.41%
Mo 202.031†	354.7	0.0016063 mg/L		0.00018392	0.0016063 mg/L	0.00018392	11.45%
Na 330.237†	452.1	0.962477 mg/L		0.0461512	0.962477 mg/L	0.0461512	4.80%
Ni 231.604†	169.8	-0.0082890 mg/L		0.00008287	-0.0082890 mg/L	0.00008287	1.00%
Pb 220.353†	-266.0	0.0098461 mg/L		0.00070490	0.0098461 mg/L	0.00070490	7.16%
Sb 206.836†	82.8	-0.0168181 mg/L		0.00178167	-0.0168181 mg/L	0.00178167	10.59%
Se 196.026†	-132.8	-0.0531503 mg/L		0.00484882	-0.0531503 mg/L	0.00484882	9.12%
Sn 189.927†	-124.3	-0.0264391 mg/L		0.00315033	-0.0264391 mg/L	0.00315033	11.92%
Ti 334.940†	1518.3	0.0000865 mg/L		0.00006844	0.0000865 mg/L	0.00006844	79.09%
Tl 190.801†	-9.4	-0.0077926 mg/L		0.00360696	-0.0077926 mg/L	0.00360696	46.29%
V 290.880†	8866.1	-0.0056156 mg/L		0.00043674	-0.0056156 mg/L	0.00043674	7.78%
Zn 206.200†	1156.0	0.0210170 mg/L		0.00048093	0.0210170 mg/L	0.00048093	2.29%

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: ICSAB V-202076

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/26/2015 4:18:03 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	843467.6	84.2 %	0.32			0.38%
Y 371.029	274182.9	82.8 %	0.38			0.46%
Ag 328.068†	191863.9	1.11350 mg/L	0.003695	1.11350 mg/L	0.003695	0.33%
QC value within limits for Ag 328.068 Recovery = 111.35%						
Al 308.215†	14746736.4	535.576 mg/L	2.4663	535.576 mg/L	2.4663	0.46%
QC value within limits for Al 308.215 Recovery = 107.12%						
As 188.979†	1003.6	1.01864 mg/L	0.001398	1.01864 mg/L	0.001398	0.14%
QC value within limits for As 188.979 Recovery = 101.86%						
Ba 233.527†	57020.6	0.532256 mg/L	0.0013519	0.532256 mg/L	0.0013519	0.25%
QC value within limits for Ba 233.527 Recovery = 106.45%						
Be 313.107†	1373103.7	0.506676 mg/L	0.0014938	0.506676 mg/L	0.0014938	0.29%
QC value within limits for Be 313.107 Recovery = 101.34%						
Ca 315.887†	41685001.0	502.527 mg/L	1.5716	502.527 mg/L	1.5716	0.31%
QC value within limits for Ca 315.887 Recovery = 100.51%						
Cd 228.802†	42976.7	1.05359 mg/L	0.003473	1.05359 mg/L	0.003473	0.33%
QC value within limits for Cd 228.802 Recovery = 105.36%						
Co 228.616†	16912.6	0.475461 mg/L	0.0017902	0.475461 mg/L	0.0017902	0.38%
QC value within limits for Co 228.616 Recovery = 95.09%						
Cr 267.716†	35296.1	0.502778 mg/L	0.0001449	0.502778 mg/L	0.0001449	0.03%
QC value within limits for Cr 267.716 Recovery = 100.56%						
Cu 327.393†	62645.9	0.560702 mg/L	0.0007232	0.560702 mg/L	0.0007232	0.13%
QC value within limits for Cu 327.393 Recovery = 112.14%						
Fe 273.955†	3694440.9	195.682 mg/L	0.7822	195.682 mg/L	0.7822	0.40%
QC value within limits for Fe 273.955 Recovery = 97.84%						
K 404.721†	174.7	2.75236 mg/L	0.090136	2.75236 mg/L	0.090136	3.27%
Mg 279.077†	6918824.2	511.952 mg/L	1.7098	511.952 mg/L	1.7098	0.33%
QC value within limits for Mg 279.077 Recovery = 102.39%						
Mn 257.610†	345798.9	0.498037 mg/L	0.0012390	0.498037 mg/L	0.0012390	0.25%
QC value within limits for Mn 257.610 Recovery = 99.61%						
Mo 202.031†	362.9	0.0017319 mg/L	0.00034341	0.0017319 mg/L	0.00034341	19.83%
Na 330.237†	787.6	1.28268 mg/L	0.017557	1.28268 mg/L	0.017557	1.37%
Ni 231.604†	34484.7	0.924320 mg/L	0.0036981	0.924320 mg/L	0.0036981	0.40%
QC value within limits for Ni 231.604 Recovery = 92.43%						
Pb 220.353†	7424.7	0.981328 mg/L	0.0054676	0.981328 mg/L	0.0054676	0.56%
QC value within limits for Pb 220.353 Recovery = 98.13%						
Sb 206.836†	2565.0	1.02662 mg/L	0.012800	1.02662 mg/L	0.012800	1.25%
QC value within limits for Sb 206.836 Recovery = 102.66%						
Se 196.026†	821.4	0.933873 mg/L	0.0064548	0.933873 mg/L	0.0064548	0.69%
QC value within limits for Se 196.026 Recovery = 93.39%						
Sn 189.927†	-127.8	-0.0274047 mg/L	0.00138352	-0.0274047 mg/L	0.00138352	5.05%
Ti 334.940†	1688.9	0.0003698 mg/L	0.00004995	0.0003698 mg/L	0.00004995	13.51%
Tl 190.801†	1144.1	0.935960 mg/L	0.0007984	0.935960 mg/L	0.0007984	0.09%
QC value within limits for Tl 190.801 Recovery = 93.60%						
V 290.880†	68812.4	0.484886 mg/L	0.0020767	0.484886 mg/L	0.0020767	0.43%
QC value within limits for V 290.880 Recovery = 96.98%						
Zn 206.200†	35516.3	0.975121 mg/L	0.0053041	0.975121 mg/L	0.0053041	0.54%
QC value within limits for Zn 206.200 Recovery = 97.51%						

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: 83866-019

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 53

Date Collected: 3/26/2015 4:22:47 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-019

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	998171.7	99.6	%	0.82			0.83%
Y 371.029	325462.3	98.3	%	0.90			0.91%
Ag 328.068†	-17.7	-0.0004262	mg/L	0.00004217	-0.0004262	mg/L	0.00004217 9.89%
Al 308.215†	3661.3	0.128343	mg/L	0.0014312	0.128343	mg/L	0.0014312 1.12%
As 188.979†	1.2	-0.0006764	mg/L	0.00181427	-0.0006764	mg/L	0.00181427 268.23%
Ba 233.527†	2197.9	0.0166491	mg/L	0.00015928	0.0166491	mg/L	0.00015928 0.96%
Be 313.107†	37.5	-0.0011475	mg/L	0.00000467	-0.0011475	mg/L	0.00000467 0.41%
Ca 315.887†	1533610.7	18.2800	mg/L	0.11747	18.2800	mg/L	0.11747 0.64%
Cd 228.802†	6.8	-0.0014952	mg/L	0.00012904	-0.0014952	mg/L	0.00012904 8.63%
Co 228.616†	13.5	-0.0043741	mg/L	0.00010546	-0.0043741	mg/L	0.00010546 2.41%
Cr 267.716†	160.3	-0.0004346	mg/L	0.00000639	-0.0004346	mg/L	0.00000639 1.47%
Cu 327.393†	752.0	0.0042488	mg/L	0.00000107	0.0042488	mg/L	0.00000107 0.03%
Fe 273.955†	3907.2	0.173926	mg/L	0.0008696	0.173926	mg/L	0.0008696 0.50%
K 404.721†	355.2	4.61551	mg/L	0.521111	4.61551	mg/L	0.521111 11.29%
Mg 279.077†	44356.8	3.09550	mg/L	0.030065	3.09550	mg/L	0.030065 0.97%
Mn 257.610†	649655.0	0.946199	mg/L	0.0075397	0.946199	mg/L	0.0075397 0.80%
Mo 202.031†	65.6	0.0006277	mg/L	0.00030368	0.0006277	mg/L	0.00030368 48.38%
Na 330.237†	17254.4	16.9969	mg/L	0.12117	16.9969	mg/L	0.12117 0.71%
Ni 231.604†	43.4	-0.0038347	mg/L	0.00015798	-0.0038347	mg/L	0.00015798 4.12%
Pb 220.353†	4.5	-0.0031380	mg/L	0.00042656	-0.0031380	mg/L	0.00042656 13.59%
Sb 206.836†	1.0	-0.0001028	mg/L	0.00197190	-0.0001028	mg/L	0.00197190 >999.9%
Se 196.026†	0.3	-0.0009145	mg/L	0.00778536	-0.0009145	mg/L	0.00778536 851.33%
Sn 189.927†	-27.6	-0.0087379	mg/L	0.00121403	-0.0087379	mg/L	0.00121403 13.89%
Ti 334.940†	2234.3	0.0012758	mg/L	0.00003038	0.0012758	mg/L	0.00003038 2.38%
Tl 190.801†	0.8	-0.0067740	mg/L	0.00484638	-0.0067740	mg/L	0.00484638 71.54%
V 290.880†	225.0	-0.0018482	mg/L	0.00045049	-0.0018482	mg/L	0.00045049 24.38%
Zn 206.200†	404.9	0.0070673	mg/L	0.00010398	0.0070673	mg/L	0.00010398 1.47%

Sequence No.: 13

Sample ID: 83866-021

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 54

Date Collected: 3/26/2015 4:26:08 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-021

AnalYTE	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1008110.3	101	%	1.2			1.20%
Y 371.029	329633.3	99.6	%	1.28			1.29%
Ag 328.068†	-81.8	-0.0007828	mg/L	0.00035111	-0.0007828	mg/L	0.00035111 44.86%
Al 308.215†	2458.2	0.0846482	mg/L	0.00094860	0.0846482	mg/L	0.00094860 1.12%
As 188.979†	1.2	-0.0006433	mg/L	0.00222399	-0.0006433	mg/L	0.00222399 345.69%
Ba 233.527†	2714.8	0.0215668	mg/L	0.00001183	0.0215668	mg/L	0.00001183 0.05%
Be 313.107†	1.7	-0.0011607	mg/L	0.00000134	-0.0011607	mg/L	0.00000134 0.12%
Ca 315.887†	1857067.6	22.1811	mg/L	0.16859	22.1811	mg/L	0.16859 0.76%
Cd 228.802†	1569.6	0.0366500	mg/L	0.00038277	0.0366500	mg/L	0.00038277 1.04%
Co 228.616†	26.0	-0.0040211	mg/L	0.00014205	-0.0040211	mg/L	0.00014205 3.53%
Cr 267.716†	6807.0	0.0924397	mg/L	0.00112840	0.0924397	mg/L	0.00112840 1.22%
Cu 327.393†	112.7	-0.0010560	mg/L	0.00006543	-0.0010560	mg/L	0.00006543 6.20%
Fe 273.955†	8387.1	0.411252	mg/L	0.0065479	0.411252	mg/L	0.0065479 1.59%
K 404.721†	138.8	2.38255	mg/L	0.309463	2.38255	mg/L	0.309463 12.99%
Mg 279.077†	47902.1	3.35792	mg/L	0.031074	3.35792	mg/L	0.031074 0.93%
Mn 257.610†	10415.6	0.0113074	mg/L	0.00019258	0.0113074	mg/L	0.00019258 1.70%
Mo 202.031†	87.7	0.0019523	mg/L	0.00029648	0.0019523	mg/L	0.00029648 15.19%
Na 330.237†	10923.5	10.9553	mg/L	0.18436	10.9553	mg/L	0.18436 1.68%
Ni 231.604†	98.5	-0.0023461	mg/L	0.00027784	-0.0023461	mg/L	0.00027784 11.84%
Pb 220.353†	31.6	0.0002938	mg/L	0.00121167	0.0002938	mg/L	0.00121167 412.48%
Sb 206.836†	2.4	0.0004046	mg/L	0.00009956	0.0004046	mg/L	0.00009956 24.61%
Se 196.026†	-0.4	-0.0012460	mg/L	0.00491754	-0.0012460	mg/L	0.00491754 394.65%
Sn 189.927†	-34.8	-0.0108181	mg/L	0.00074086	-0.0108181	mg/L	0.00074086 6.85%
Ti 334.940†	2259.8	0.0013181	mg/L	0.00015758	0.0013181	mg/L	0.00015758 11.95%
Tl 190.801†	-0.5	-0.0067558	mg/L	0.00115052	-0.0067558	mg/L	0.00115052 17.03%
V 290.880†	242.5	-0.0020088	mg/L	0.00069157	-0.0020088	mg/L	0.00069157 34.43%
Zn 206.200†	415.9	0.0073639	mg/L	0.00003372	0.0073639	mg/L	0.00003372 0.46%

Sequence No.: 14
 Sample ID: 83866-023
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 55
 Date Collected: 3/26/2015 4:29:29 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-023

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	994984.6	99.3	%	0.04			0.04%
Y 371.029	327978.6	99.1	%	0.16			0.16%
Ag 328.068†	-18.9	-0.0004362	mg/L	0.00006202	-0.0004362	0.00006202	14.22%
Al 308.215†	5246.0	0.185897	mg/L	0.0012514	0.185897	0.0012514	0.67%
As 188.979†	0.4	-0.0015001	mg/L	0.00070220	-0.0015001	0.00070220	46.81%
Ba 233.527†	19310.8	0.179728	mg/L	0.0001230	0.179728	0.0001230	0.07%
Be 313.107†	899.7	-0.0008275	mg/L	0.00000640	-0.0008275	0.00000640	0.77%
Ca 315.887†	1175503.6	13.9611	mg/L	0.03935	13.9611	0.03935	0.28%
Cd 228.802†	163.8	0.0023349	mg/L	0.00008654	0.0023349	0.00008654	3.71%
Co 228.616†	6.4	-0.0045625	mg/L	0.00014892	-0.0045625	0.00014892	3.26%
Cr 267.716†	151.4	-0.0009738	mg/L	0.00004032	-0.0009738	0.00004032	4.14%
Cu 327.393†	1103.0	0.0070922	mg/L	0.00002326	0.0070922	0.00002326	0.33%
Fe 273.955†	2613.8	0.105406	mg/L	0.0004755	0.105406	0.0004755	0.45%
K 404.721†	336.3	4.42015	mg/L	0.359019	4.42015	0.359019	8.12%
Mg 279.077†	52135.9	3.67131	mg/L	0.008026	3.67131	0.008026	0.22%
Mn 257.610†	259743.2	0.375921	mg/L	0.0010860	0.375921	0.0010860	0.29%
Mo 202.031†	46.3	-0.0004970	mg/L	0.00019223	-0.0004970	0.00019223	38.68%
Na 330.237†	9081.5	9.19756	mg/L	0.073361	9.19756	0.073361	0.80%
Ni 231.604†	331.5	0.0039958	mg/L	0.00006610	0.0039958	0.00006610	1.65%
Pb 220.353†	6.6	-0.0029068	mg/L	0.00001197	-0.0029068	0.00001197	0.41%
Sb 206.836†	-0.6	-0.0007525	mg/L	0.00117896	-0.0007525	0.00117896	156.68%
Se 196.026†	-0.1	-0.0008109	mg/L	0.00111835	-0.0008109	0.00111835	137.91%
Sn 189.927†	-24.9	-0.0080408	mg/L	0.00085549	-0.0080408	0.00085549	10.64%
Ti 334.940†	801.1	-0.0011048	mg/L	0.00005877	-0.0011048	0.00005877	5.32%
Tl 190.801†	-3.1	-0.0094149	mg/L	0.00084672	-0.0094149	0.00084672	8.99%
V 290.880†	260.1	-0.0017895	mg/L	0.00049766	-0.0017895	0.00049766	27.81%
Zn 206.200†	759.8	0.0169254	mg/L	0.00014773	0.0169254	0.00014773	0.87%

Sequence No.: 15

Sample ID: 83866-025

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 56

Date Collected: 3/26/2015 4:32:49 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-025

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	984694.2	98.3 %		0.26			0.27%
Y 371.029	320309.9	96.8 %		0.54			0.55%
Ag 328.068†	-57.2	-0.0006172 mg/L		0.00016992	-0.0006172 mg/L	0.00016992	27.53%
Al 308.215†	24062.5	0.869285 mg/L		0.0025614	0.869285 mg/L	0.0025614	0.29%
As 188.979†	2.1	0.0002624 mg/L		0.00034866	0.0002624 mg/L	0.00034866	132.87%
Ba 233.527†	7587.4	0.0679828 mg/L		0.00044172	0.0679828 mg/L	0.00044172	0.65%
Be 313.107†	89.6	-0.0011432 mg/L		0.00001002	-0.0011432 mg/L	0.00001002	0.88%
Ca 315.887†	2641475.5	31.6415 mg/L		0.24764	31.6415 mg/L	0.24764	0.78%
Cd 228.802†	302.2	0.0057341 mg/L		0.00003480	0.0057341 mg/L	0.00003480	0.61%
Co 228.616†	30.2	-0.0039280 mg/L		0.00016022	-0.0039280 mg/L	0.00016022	4.08%
Cr 267.716†	483.1	0.0034839 mg/L		0.00000685	0.0034839 mg/L	0.00000685	0.20%
Cu 327.393†	993.6	0.0068625 mg/L		0.00014272	0.0068625 mg/L	0.00014272	2.08%
Fe 273.955†	17652.6	0.902096 mg/L		0.0014305	0.902096 mg/L	0.0014305	0.16%
K 404.721†	161.7	2.61887 mg/L		0.001365	2.61887 mg/L	0.001365	0.05%
Mg 279.077†	104780.9	7.56816 mg/L		0.012384	7.56816 mg/L	0.012384	0.16%
Mn 257.610†	18438.8	0.0229292 mg/L		0.00001356	0.0229292 mg/L	0.00001356	0.06%
Mo 202.031†	93.9	0.0019522 mg/L		0.00008231	0.0019522 mg/L	0.00008231	4.22%
Na 330.237†	35562.6	34.4684 mg/L		0.24161	34.4684 mg/L	0.24161	0.70%
Ni 231.604†	118.3	-0.0018289 mg/L		0.00025423	-0.0018289 mg/L	0.00025423	13.90%
Pb 220.353†	53.4	0.0031453 mg/L		0.00030161	0.0031453 mg/L	0.00030161	9.59%
Sb 206.836†	1.0	-0.0004071 mg/L		0.00135305	-0.0004071 mg/L	0.00135305	332.38%
Se 196.026†	5.7	0.0049426 mg/L		0.00170627	0.0049426 mg/L	0.00170627	34.52%
Sn 189.927†	-43.3	-0.0130930 mg/L		0.00115208	-0.0130930 mg/L	0.00115208	8.80%
Ti 334.940†	21877.7	0.0339040 mg/L		0.00032340	0.0339040 mg/L	0.00032340	0.95%
Tl 190.801†	-1.9	-0.0076835 mg/L		0.00002911	-0.0076835 mg/L	0.00002911	0.38%
V 290.880†	1108.6	0.0045400 mg/L		0.00043649	0.0045400 mg/L	0.00043649	9.61%
Zn 206.200†	2970.9	0.0782912 mg/L		0.00038048	0.0782912 mg/L	0.00038048	0.49%

Sequence No.: 16

Sample ID: CCV V-202964

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/26/2015 4:36:10 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	961569.3	95.9 %	0.91			0.94%
Y 371.029	307436.6	92.9 %	0.59			0.64%
Ag 328.068†	18859.0	0.108443 mg/L	0.0021827	0.108443 mg/L	0.0021827	2.01%
QC value within limits for Ag 328.068 Recovery = 108.44%						
Al 308.215†	138897.4	5.03992 mg/L	0.111997	5.03992 mg/L	0.111997	2.22%
QC value within limits for Al 308.215 Recovery = 100.80%						
As 188.979†	470.4	0.476076 mg/L	0.0060278	0.476076 mg/L	0.0060278	1.27%
QC value within limits for As 188.979 Recovery = 95.22%						
Ba 233.527†	53040.9	0.500986 mg/L	0.0098630	0.500986 mg/L	0.0098630	1.97%
QC value within limits for Ba 233.527 Recovery = 100.20%						
Be 313.107†	1336022.6	0.492732 mg/L	0.0032659	0.492732 mg/L	0.0032659	0.66%
QC value within limits for Be 313.107 Recovery = 98.55%						
Ca 315.887†	4146436.6	49.7921 mg/L	0.21156	49.7921 mg/L	0.21156	0.42%
QC value within limits for Ca 315.887 Recovery = 99.58%						
Cd 228.802†	20463.2	0.497867 mg/L	0.0107652	0.497867 mg/L	0.0107652	2.16%
QC value within limits for Cd 228.802 Recovery = 99.57%						
Co 228.616†	17940.2	0.498789 mg/L	0.0110412	0.498789 mg/L	0.0110412	2.21%
QC value within limits for Co 228.616 Recovery = 99.76%						
Cr 267.716†	35786.5	0.501042 mg/L	0.0123218	0.501042 mg/L	0.0123218	2.46%
QC value within limits for Cr 267.716 Recovery = 100.21%						
Cu 327.393†	58940.9	0.502464 mg/L	0.0112283	0.502464 mg/L	0.0112283	2.23%
QC value within limits for Cu 327.393 Recovery = 100.49%						
Fe 273.955†	96099.5	5.05787 mg/L	0.107040	5.05787 mg/L	0.107040	2.12%
QC value within limits for Fe 273.955 Recovery = 101.16%						
K 404.721†	4310.9	45.4411 mg/L	0.39361	45.4411 mg/L	0.39361	0.87%
QC value within limits for K 404.721 Recovery = 90.88%						
Mg 279.077†	681577.9	50.2634 mg/L	0.18868	50.2634 mg/L	0.18868	0.38%
QC value within limits for Mg 279.077 Recovery = 100.53%						
Mn 257.610†	340377.0	0.492572 mg/L	0.0097572	0.492572 mg/L	0.0097572	1.98%
QC value within limits for Mn 257.610 Recovery = 98.51%						
Mo 202.031†	7344.3	0.491243 mg/L	0.0057256	0.491243 mg/L	0.0057256	1.17%
QC value within limits for Mo 202.031 Recovery = 98.25%						
Na 330.237†	48891.7	47.1884 mg/L	1.01868	47.1884 mg/L	1.01868	2.16%
QC value within limits for Na 330.237 Recovery = 94.38%						
Ni 231.604†	18509.5	0.497982 mg/L	0.0123771	0.497982 mg/L	0.0123771	2.49%
QC value within limits for Ni 231.604 Recovery = 99.60%						
Pb 220.353†	3877.7	0.486835 mg/L	0.0053823	0.486835 mg/L	0.0053823	1.11%
QC value within limits for Pb 220.353 Recovery = 97.37%						
Sb 206.836†	1179.7	0.494051 mg/L	0.0073630	0.494051 mg/L	0.0073630	1.49%
QC value within limits for Sb 206.836 Recovery = 98.81%						
Se 196.026†	458.1	0.474265 mg/L	0.0065212	0.474265 mg/L	0.0065212	1.38%
QC value within limits for Se 196.026 Recovery = 94.85%						
Sn 189.927†	1622.8	0.504602 mg/L	0.0029730	0.504602 mg/L	0.0029730	0.59%
QC value within limits for Sn 189.927 Recovery = 100.92%						
Ti 334.940†	302480.2	0.499993 mg/L	0.0112476	0.499993 mg/L	0.0112476	2.25%
QC value within limits for Ti 334.940 Recovery = 100.00%						
Tl 190.801†	596.0	0.482835 mg/L	0.0017912	0.482835 mg/L	0.0017912	0.37%
QC value within limits for Tl 190.801 Recovery = 96.57%						
V 290.880†	61471.5	0.493657 mg/L	0.0107376	0.493657 mg/L	0.0107376	2.18%
QC value within limits for V 290.880 Recovery = 98.73%						
Zn 206.200†	18236.2	0.502017 mg/L	0.0107351	0.502017 mg/L	0.0107351	2.14%
QC value within limits for Zn 206.200 Recovery = 100.40%						

All analyte(s) passed QC.

Autosampler Location: 5
Date Collected: 3/26/2015 4:39:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analyte		Mean Corrected	Calib	Sample			
		Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc	361.383	995184.8	99.3 %	1.19			1.20%
Y	371.029	325525.5	98.3 %	1.47			1.50%
Ag	328.068†	3392.1	0.0191999 mg/L	0.00087786	0.0191999 mg/L	0.00087786	4.57%
	QC value within limits for Ag	328.068	Recovery = 96.00%				
Al	308.215†	4313.2	0.152017 mg/L	0.0052224	0.152017 mg/L	0.0052224	3.44%
	QC value within limits for Al	308.215	Recovery = 76.01%				
As	188.979†	18.2	0.0166436 mg/L	0.00166003	0.0166436 mg/L	0.00166003	9.97%
	QC value within limits for As	188.979	Recovery = 83.22%				
Ba	233.527†	5522.7	0.0483290 mg/L	0.00104036	0.0483290 mg/L	0.00104036	2.15%
	QC value within limits for Ba	233.527	Recovery = 96.66%				
Be	313.107†	31446.9	0.0104474 mg/L	0.00025377	0.0104474 mg/L	0.00025377	2.43%
	QC value within limits for Be	313.107	Recovery = 87.06%				
Ca	315.887†	427814.0	4.94354 mg/L	0.027409	4.94354 mg/L	0.027409	0.55%
	QC value within limits for Ca	315.887	Recovery = 98.87%				
Cd	228.802†	478.1	0.0100069 mg/L	0.00006277	0.0100069 mg/L	0.00006277	0.63%
	QC value within limits for Cd	228.802	Recovery = 83.39%				
Co	228.616†	745.9	0.0161267 mg/L	0.00034989	0.0161267 mg/L	0.00034989	2.17%
	QC value within limits for Co	228.616	Recovery = 80.63%				
Cr	267.716†	3676.7	0.0484055 mg/L	0.00137706	0.0484055 mg/L	0.00137706	2.84%
	QC value within limits for Cr	267.716	Recovery = 96.81%				
Cu	327.393†	5956.5	0.0482907 mg/L	0.00116888	0.0482907 mg/L	0.00116888	2.42%
	QC value within limits for Cu	327.393	Recovery = 96.58%				
Fe	273.955†	5532.8	0.260047 mg/L	0.0066616	0.260047 mg/L	0.0066616	2.56%
	QC value within limits for Fe	273.955	Recovery = 86.68%				
K	404.721†	238.5	3.41078 mg/L	0.117329	3.41078 mg/L	0.117329	3.44%
	QC value less than the lower limit for K 404.721		Recovery = 68.22%				
Mg	279.077†	70113.7	5.00205 mg/L	0.112553	5.00205 mg/L	0.112553	2.25%
	QC value within limits for Mg	279.077	Recovery = 100.04%				
Mn	257.610†	27967.9	0.0369095 mg/L	0.00096866	0.0369095 mg/L	0.00096866	2.62%
	QC value within limits for Mn	257.610	Recovery = 92.27%				
Mo	202.031†	314.3	0.0179787 mg/L	0.00030818	0.0179787 mg/L	0.00030818	1.71%
	QC value within limits for Mo	202.031	Recovery = 89.89%				
Na	330.237†	4247.3	4.58423 mg/L	0.128310	4.58423 mg/L	0.128310	2.80%
	QC value within limits for Na	330.237	Recovery = 91.68%				
Ni	231.604†	1907.4	0.0468239 mg/L	0.00116473	0.0468239 mg/L	0.00116473	2.49%
	QC value within limits for Ni	231.604	Recovery = 93.65%				
Pb	220.353†	103.5	0.0092992 mg/L	0.00117697	0.0092992 mg/L	0.00117697	12.66%
	QC value within limits for Pb	220.353	Recovery = 77.49%				
Sb	206.836†	43.3	0.0177664 mg/L	0.00041117	0.0177664 mg/L	0.00041117	2.31%
	QC value within limits for Sb	206.836	Recovery = 88.83%				
Se	196.026†	33.6	0.0346577 mg/L	0.00169836	0.0346577 mg/L	0.00169836	4.90%
	QC value within limits for Se	196.026	Recovery = 86.64%				
Sn	189.927†	161.5	0.0494400 mg/L	0.00010548	0.04		

Sequence No.: 18

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/26/2015 4:42:55 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1007963.7	101 %		0.8			0.77%
Y 371.029	332679.9	101 %		0.8			0.79%
Ag 328.068†	-59.8	-0.0006799 mg/L	0.00017335	-0.0006799 mg/L	0.00017335	25.50%	
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 308.215†	-1444.7	-0.0571002 mg/L	0.00200042	-0.0571002 mg/L	0.00200042	3.50%	
QC value within limits for Al 308.215 Recovery = Not calculated							
As 188.979†	2.0	0.0001219 mg/L	0.00048440	0.0001219 mg/L	0.00048440	397.53%	
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	1.2	-0.0042764 mg/L	0.00004297	-0.0042764 mg/L	0.00004297	1.00%	
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	42.5	-0.0011439 mg/L	0.00001356	-0.0011439 mg/L	0.00001356	1.19%	
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 315.887†	-5009.2	-0.276537 mg/L	0.0011856	-0.276537 mg/L	0.0011856	0.43%	
QC value within limits for Ca 315.887 Recovery = Not calculated							
Cd 228.802†	0.9	-0.0016458 mg/L	0.00025343	-0.0016458 mg/L	0.00025343	15.40%	
QC value within limits for Cd 228.802 Recovery = Not calculated							
Co 228.616†	9.1	-0.0045219 mg/L	0.00004041	-0.0045219 mg/L	0.00004041	0.89%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	3.0	-0.0033651 mg/L	0.00005345	-0.0033651 mg/L	0.00005345	1.59%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 327.393†	-15.1	-0.0028863 mg/L	0.00001507	-0.0028863 mg/L	0.00001507	0.52%	
QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe 273.955†	-393.1	-0.0538823 mg/L	0.00047444	-0.0538823 mg/L	0.00047444	0.88%	
QC value within limits for Fe 273.955 Recovery = Not calculated							
K 404.721†	-81.3	0.110313 mg/L	0.0178696	0.110313 mg/L	0.0178696	16.20%	
QC value within limits for K 404.721 Recovery = Not calculated							
Mg 279.077†	-846.3	-0.250497 mg/L	0.0012913	-0.250497 mg/L	0.0012913	0.52%	
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	-118.2	-0.0040054 mg/L	0.00001623	-0.0040054 mg/L	0.00001623	0.41%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	5.2	-0.0026762 mg/L	0.00007522	-0.0026762 mg/L	0.00007522	2.81%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 330.237†	32.0	0.561590 mg/L	0.0329668	0.561590 mg/L	0.0329668	5.87%	
QC value within limits for Na 330.237 Recovery = Not calculated							
Ni 231.604†	-31.2	-0.0058563 mg/L	0.00022438	-0.0058563 mg/L	0.00022438	3.83%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	-5.5	-0.0045112 mg/L	0.00046021	-0.0045112 mg/L	0.00046021	10.20%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	3.1	0.0010275 mg/L	0.00326873	0.0010275 mg/L	0.00326873	318.13%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-5.2	-0.0053632 mg/L	0.00081544	-0.0053632 mg/L	0.00081544	15.20%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Sn 189.927†	-2.2	-0.0015562 mg/L	0.00055817	-0.0015562 mg/L	0.00055817	35.87%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	1.7	-0.0024327 mg/L	0.00000582	-0.0024327 mg/L	0.00000582	0.24%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	5.3	-0.0022947 mg/L	0.00097691	-0.0022947 mg/L	0.00097691	42.57%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	-73.6	-0.0041343 mg/L	0.00033714	-0.0041343 mg/L	0.00033714	8.15%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-14.7	-0.0045748 mg/L	0.00027849	-0.0045748 mg/L	0.00027849	6.09%	
QC value within limits for Zn 206.200 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 19
 Sample ID: 83866-027
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 57
 Date Collected: 3/26/2015 4:46:14 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-027

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1000910.6	99.9 %		0.08			0.08%
Y 371.029	330171.0	99.7 %		0.32			0.32%
Ag 328.068†	-73.3	-0.0006181 mg/L		0.00000142	-0.0006181 mg/L	0.00000142	0.23%
Al 308.215†	54961.0	1.99147 mg/L		0.004765	1.99147 mg/L	0.004765	0.24%
As 188.979†	0.0	-0.0016927 mg/L		0.00076831	-0.0016927 mg/L	0.00076831	45.39%
Ba 233.527†	5102.1	0.0442350 mg/L		0.00042778	0.0442350 mg/L	0.00042778	0.97%
Be 313.107†	324.6	-0.0010724 mg/L		0.00000644	-0.0010724 mg/L	0.00000644	0.60%
Ca 315.887†	1320307.3	15.7075 mg/L		0.03269	15.7075 mg/L	0.03269	0.21%
Cd 228.802†	-4.1	-0.0016938 mg/L		0.00012285	-0.0016938 mg/L	0.00012285	7.25%
Co 228.616†	56.6	-0.0032596 mg/L		0.00002310	-0.0032596 mg/L	0.00002310	0.71%
Cr 267.716†	734.8	0.0071165 mg/L		0.00003491	0.0071165 mg/L	0.00003491	0.49%
Cu 327.393†	740.4	0.0044454 mg/L		0.00031463	0.0044454 mg/L	0.00031463	7.08%
Fe 273.955†	52307.3	2.73795 mg/L		0.001617	2.73795 mg/L	0.001617	0.06%
K 404.721†	180.5	2.81288 mg/L		0.306377	2.81288 mg/L	0.306377	10.89%
Mg 279.077†	106057.5	7.66265 mg/L		0.010113	7.66265 mg/L	0.010113	0.13%
Mn 257.610†	46115.0	0.0635350 mg/L		0.00000840	0.0635350 mg/L	0.00000840	0.01%
Mo 202.031†	53.2	-0.0001264 mg/L		0.00011321	-0.0001264 mg/L	0.00011321	89.55%
Na 330.237†	15926.6	15.7298 mg/L		0.03015	15.7298 mg/L	0.03015	0.19%
Ni 231.604†	84.3	-0.0028264 mg/L		0.00004757	-0.0028264 mg/L	0.00004757	1.68%
Pb 220.353†	46.3	0.0022195 mg/L		0.00119398	0.0022195 mg/L	0.00119398	53.80%
Sb 206.836†	-0.9	-0.0012532 mg/L		0.00010429	-0.0012532 mg/L	0.00010429	8.32%
Se 196.026†	-2.6	-0.0020945 mg/L		0.00031846	-0.0020945 mg/L	0.00031846	15.20%
Sn 189.927†	-22.6	-0.0072768 mg/L		0.00030347	-0.0072768 mg/L	0.00030347	4.17%
Ti 334.940†	43049.1	0.0690704 mg/L		0.00062915	0.0690704 mg/L	0.00062915	0.91%
Tl 190.801†	-1.5	-0.0075280 mg/L		0.00187303	-0.0075280 mg/L	0.00187303	24.88%
V 290.880†	1000.1	0.0035560 mg/L		0.00096338	0.0035560 mg/L	0.00096338	27.09%
Zn 206.200†	738.5	0.0162366 mg/L		0.00006417	0.0162366 mg/L	0.00006417	0.40%

Sequence No.: 20
 Sample ID: 83866-029
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 58
 Date Collected: 3/26/2015 4:49:33 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-029

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1011180.3	101	%	0.6				0.56%
Y 371.029	330572.8	99.9	%	0.66				0.66%
Ag 328.068†	-105.6	-0.0009390	mg/L	0.00009284	-0.0009390	mg/L	0.00009284	9.89%
Al 308.215†	572.4	0.0161568	mg/L	0.00546967	0.0161568	mg/L	0.00546967	33.85%
As 188.979†	1.3	-0.0005434	mg/L	0.00081944	-0.0005434	mg/L	0.00081944	150.81%
Ba 233.527†	6378.4	0.0564916	mg/L	0.00042054	0.0564916	mg/L	0.00042054	0.74%
Be 313.107†	30.9	-0.0011488	mg/L	0.00002930	-0.0011488	mg/L	0.00002930	2.55%
Ca 315.887†	1042002.4	12.3510	mg/L	0.06407	12.3510	mg/L	0.06407	0.52%
Cd 228.802†	-1.5	-0.0017035	mg/L	0.00004009	-0.0017035	mg/L	0.00004009	2.35%
Co 228.616†	7.5	-0.0045191	mg/L	0.00000736	-0.0045191	mg/L	0.00000736	0.16%
Cr 267.716†	1019.6	0.0109958	mg/L	0.00013253	0.0109958	mg/L	0.00013253	1.21%
Cu 327.393†	38.6	-0.0020269	mg/L	0.00048599	-0.0020269	mg/L	0.00048599	23.98%
Fe 273.955†	1285.5	0.0350388	mg/L	0.00027955	0.0350388	mg/L	0.00027955	0.80%
K 404.721†	279.8	3.83766	mg/L	0.361279	3.83766	mg/L	0.361279	9.41%
Mg 279.077†	68465.9	4.88008	mg/L	0.055340	4.88008	mg/L	0.055340	1.13%
Mn 257.610†	21694.3	0.0277222	mg/L	0.00028079	0.0277222	mg/L	0.00028079	1.01%
Mo 202.031†	42.8	-0.0006652	mg/L	0.00057144	-0.0006652	mg/L	0.00057144	85.91%
Na 330.237†	13120.0	13.0514	mg/L	0.13713	13.0514	mg/L	0.13713	1.05%
Ni 231.604†	-15.4	-0.0054278	mg/L	0.00028542	-0.0054278	mg/L	0.00028542	5.26%
Pb 220.353†	2.9	-0.0034122	mg/L	0.00105044	-0.0034122	mg/L	0.00105044	30.78%
Sb 206.836†	0.1	-0.0004040	mg/L	0.00045582	-0.0004040	mg/L	0.00045582	112.84%
Se 196.026†	-0.4	-0.0009421	mg/L	0.00007392	-0.0009421	mg/L	0.00007392	7.85%
Sn 189.927†	-26.0	-0.0084655	mg/L	0.00054575	-0.0084655	mg/L	0.00054575	6.45%
Ti 334.940†	846.8	-0.0010289	mg/L	0.00016505	-0.0010289	mg/L	0.00016505	16.04%
Tl 190.801†	-2.3	-0.0083493	mg/L	0.00083461	-0.0083493	mg/L	0.00083461	10.00%
V 290.880†	219.8	-0.0023619	mg/L	0.00073309	-0.0023619	mg/L	0.00073309	31.04%
Zn 206.200†	236.3	0.0023902	mg/L	0.00027773	0.0023902	mg/L	0.00027773	11.62%

Sequence No.: 21
 Sample ID: 83866-031
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 59
 Date Collected: 3/26/2015 4:52:53 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-031

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	966757.0	96.5	%	0.28			0.29%
Y 371.029	317410.5	95.9	%	0.31			0.33%
Ag 328.068†	-17.2	-0.0003414	mg/L	0.00004797	-0.0003414	mg/L	0.00004797 14.05%
Al 308.215†	42314.1	1.53215	mg/L	0.002359	1.53215	mg/L	0.002359 0.15%
As 188.979†	1.1	-0.0006409	mg/L	0.00345282	-0.0006409	mg/L	0.00345282 538.74%
Ba 233.527†	4574.6	0.0392403	mg/L	0.00062486	0.0392403	mg/L	0.00062486 1.59%
Be 313.107†	284.4	-0.0010818	mg/L	0.00003049	-0.0010818	mg/L	0.00003049 2.82%
Ca 315.887†	822262.4	9.70080	mg/L	0.054557	9.70080	mg/L	0.054557 0.56%
Cd 228.802†	142.6	0.0018620	mg/L	0.00014043	0.0018620	mg/L	0.00014043 7.54%
Co 228.616†	43.8	-0.0036470	mg/L	0.00025265	-0.0036470	mg/L	0.00025265 6.93%
Cr 267.716†	5496.7	0.0741247	mg/L	0.00060717	0.0741247	mg/L	0.00060717 0.82%
Cu 327.393†	1905.0	0.0140750	mg/L	0.00026940	0.0140750	mg/L	0.00026940 1.91%
Fe 273.955†	34817.5	1.81142	mg/L	0.012954	1.81142	mg/L	0.012954 0.72%
K 404.721†	345.4	4.51444	mg/L	0.104523	4.51444	mg/L	0.104523 2.32%
Mg 279.077†	32221.4	2.19722	mg/L	0.017801	2.19722	mg/L	0.017801 0.81%
Mn 257.610†	91033.4	0.129354	mg/L	0.0008794	0.129354	mg/L	0.0008794 0.68%
Mo 202.031†	32.2	-0.0013058	mg/L	0.00056472	-0.0013058	mg/L	0.00056472 43.25%
Na 330.237†	113121.5	108.483	mg/L	0.1629	108.483	mg/L	0.1629 0.15%
Ni 231.604†	211.9	0.0006780	mg/L	0.00022423	0.0006780	mg/L	0.00022423 33.07%
Pb 220.353†	123.5	0.0119527	mg/L	0.00032898	0.0119527	mg/L	0.00032898 2.75%
Sb 206.836†	5.1	0.0014776	mg/L	0.00108205	0.0014776	mg/L	0.00108205 73.23%
Se 196.026†	-4.5	-0.0042812	mg/L	0.00839195	-0.0042812	mg/L	0.00839195 196.02%
Sn 189.927†	-17.5	-0.0059341	mg/L	0.00072379	-0.0059341	mg/L	0.00072379 12.20%
Ti 334.940†	35839.6	0.0570953	mg/L	0.00040738	0.0570953	mg/L	0.00040738 0.71%
Tl 190.801†	-2.0	-0.0081032	mg/L	0.00098048	-0.0081032	mg/L	0.00098048 12.10%
V 290.880†	965.1	0.0040113	mg/L	0.00025132	0.0040113	mg/L	0.00025132 6.27%
Zn 206.200†	2915.0	0.0767070	mg/L	0.00006499	0.0767070	mg/L	0.00006499 0.08%

Sequence No.: 22
 Sample ID: 83866-033
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 60
 Date Collected: 3/26/2015 4:56:15 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-033

Mean Corrected		Calib	Sample			
Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	1010413.8	101 %	0.8			0.77%
Y 371.029	329962.0	99.7 %	0.64			0.64%
Ag 328.068†	-111.0	-0.0009740 mg/L	0.00006528	-0.0009740 mg/L	0.00006528	6.70%
Al 308.215†	-1229.4	-0.0492811 mg/L	0.00468725	-0.0492811 mg/L	0.00468725	9.51%
As 188.979†	0.5	-0.0013514 mg/L	0.00025898	-0.0013514 mg/L	0.00025898	19.16%
Ba 233.527†	48.2	-0.0038288 mg/L	0.00001555	-0.0038288 mg/L	0.00001555	0.41%
Be 313.107†	-1.5	-0.0011603 mg/L	0.00001500	-0.0011603 mg/L	0.00001500	1.29%
Ca 315.887†	20052.4	0.0257193 mg/L	0.00011780	0.0257193 mg/L	0.00011780	0.46%
Cd 228.802†	-7.2	-0.0018447 mg/L	0.00014716	-0.0018447 mg/L	0.00014716	7.98%
Co 228.616†	8.9	-0.0045282 mg/L	0.00012219	-0.0045282 mg/L	0.00012219	2.70%
Cr 267.716†	18.9	-0.0031404 mg/L	0.00008248	-0.0031404 mg/L	0.00008248	2.63%
Cu 327.393†	672.7	0.0029818 mg/L	0.00022252	0.0029818 mg/L	0.00022252	7.46%
Fe 273.955†	-242.1	-0.0458855 mg/L	0.00035204	-0.0458855 mg/L	0.00035204	0.77%
K 404.721†	-83.8	0.0844556 mg/L	0.24676633	0.0844556 mg/L	0.24676633	292.18%
Mg 279.077†	-590.9	-0.231592 mg/L	0.0019262	-0.231592 mg/L	0.0019262	0.83%
Mn 257.610†	253.0	-0.0034626 mg/L	0.00007363	-0.0034626 mg/L	0.00007363	2.13%
Mo 202.031†	2.7	-0.0028623 mg/L	0.00049863	-0.0028623 mg/L	0.00049863	17.42%
Na 330.237†	212.2	0.733530 mg/L	0.0305277	0.733530 mg/L	0.0305277	4.16%
Ni 231.604†	-32.4	-0.0058881 mg/L	0.00027267	-0.0058881 mg/L	0.00027267	4.63%
Pb 220.353†	-3.2	-0.0042193 mg/L	0.00079499	-0.0042193 mg/L	0.00079499	18.84%
Sb 206.836†	-8.2	-0.0037494 mg/L	0.00059714	-0.0037494 mg/L	0.00059714	15.93%
Se 196.026†	-3.7	-0.0038006 mg/L	0.00700429	-0.0038006 mg/L	0.00700429	184.29%
Sn 189.927†	-5.3	-0.0025052 mg/L	0.00068857	-0.0025052 mg/L	0.00068857	27.49%
Ti 334.940†	88.6	-0.0022883 mg/L	0.00005726	-0.0022883 mg/L	0.00005726	2.50%
Tl 190.801†	-0.6	-0.0071710 mg/L	0.00183255	-0.0071710 mg/L	0.00183255	25.55%
V 290.880†	-35.7	-0.0038268 mg/L	0.00070537	-0.0038268 mg/L	0.00070537	18.43%
Zn 206.200†	243.8	0.0026009 mg/L	0.00033605	0.0026009 mg/L	0.00033605	12.92%

Sequence No.: 23

Autosampler Location: 7

Sample ID: ICSA V-202074

Date Collected: 3/26/2015 4:59:36 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	842674.9	84.1	%	0.56			0.67%
Y 371.029	271760.8	82.1	%	0.82			1.00%
Ag 328.068†	-1610.6	0.0000879	mg/L	0.00028172	0.0000879 mg/L	0.00028172	320.58%
Al 308.215†	14646200.8	531.924	mg/L	5.8103	531.924 mg/L	5.8103	1.09%
QC value within limits for Al 308.215 Recovery = 106.38%							
As 188.979†	-0.1	-0.0006747	mg/L	0.00318406	-0.0006747 mg/L	0.00318406	471.95%
Ba 233.527†	1431.8	0.0025732	mg/L	0.00027965	0.0025732 mg/L	0.00027965	10.87%
Be 313.107†	-2366.0	-0.0020359	mg/L	0.00000627	-0.0020359 mg/L	0.00000627	0.31%
Ca 315.887†	41202724.5	496.711	mg/L	4.2256	496.711 mg/L	4.2256	0.85%
QC value within limits for Ca 315.887 Recovery = 99.34%							
Cd 228.802†	-395.4	-0.0049300	mg/L	0.00015962	-0.0049300 mg/L	0.00015962	3.24%
Co 228.616†	133.8	0.0039457	mg/L	0.00037176	0.0039457 mg/L	0.00037176	9.42%
Cr 267.716†	-421.3	-0.0003362	mg/L	0.00023984	-0.0003362 mg/L	0.00023984	71.33%
Cu 327.393†	-2719.6	0.0037654	mg/L	0.00024215	0.0037654 mg/L	0.00024215	6.43%
Fe 273.955†	3667390.2	194.249	mg/L	0.0184	194.249 mg/L	0.0184	0.01%
QC value within limits for Fe 273.955 Recovery = 97.12%							
K 404.721†	175.7	2.76272	mg/L	0.089271	2.76272 mg/L	0.089271	3.23%
Mg 279.077†	6865631.0	508.015	mg/L	0.2595	508.015 mg/L	0.2595	0.05%
QC value within limits for Mg 279.077 Recovery = 101.60%							
Mn 257.610†	7092.2	0.0027076	mg/L	0.00019046	0.0027076 mg/L	0.00019046	7.03%
Mo 202.031†	354.1	0.0016310	mg/L	0.00026190	0.0016310 mg/L	0.00026190	16.06%
Na 330.237†	387.5	0.900810	mg/L	0.0655202	0.900810 mg/L	0.0655202	7.27%
Ni 231.604†	142.5	-0.0089650	mg/L	0.00007974	-0.0089650 mg/L	0.00007974	0.89%
Pb 220.353†	-260.4	0.0107169	mg/L	0.00080506	0.0107169 mg/L	0.00080506	7.51%
Sb 206.836†	73.1	-0.0207534	mg/L	0.00038667	-0.0207534 mg/L	0.00038667	1.86%
Se 196.026†	-145.9	-0.0674010	mg/L	0.00591916	-0.0674010 mg/L	0.00591916	8.78%
Sn 189.927†	-127.4	-0.0274568	mg/L	0.00001342	-0.0274568 mg/L	0.00001342	0.05%
Ti 334.940†	1557.3	0.0001513	mg/L	0.00002246	0.0001513 mg/L	0.00002246	14.84%
Tl 190.801†	-10.1	-0.0083689	mg/L	0.00494083	-0.0083689 mg/L	0.00494083	59.04%
V 290.880†	8979.1	-0.0040248	mg/L	0.00060847	-0.0040248 mg/L	0.00060847	15.12%
Zn 206.200†	1128.6	0.0203183	mg/L	0.00007949	0.0203183 mg/L	0.00007949	0.39%

All analyte(s) passed QC.

Sequence No.: 24

Sample ID: ICSAB V-202076

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/26/2015 5:04:30 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	840315.7	83.8 %		0.54			0.65%
Y 371.029	270808.2	81.8 %		0.19			0.24%
Ag 328.068†	189564.2	1.10017 mg/L		0.000669	1.10017 mg/L	0.000669	0.06%
QC value within limits for Ag	328.068	Recovery = 110.02%					
Al 308.215†	14683780.1	533.289 mg/L		3.1675	533.289 mg/L	3.1675	0.59%
QC value within limits for Al	308.215	Recovery = 106.66%					
As 188.979†	989.9	1.00468 mg/L		0.004352	1.00468 mg/L	0.004352	0.43%
QC value within limits for As	188.979	Recovery = 100.47%					
Ba 233.527†	55879.0	0.521446 mg/L		0.0010126	0.521446 mg/L	0.0010126	0.19%
QC value within limits for Ba	233.527	Recovery = 104.29%					
Be 313.107†	1360802.3	0.502126 mg/L		0.0010378	0.502126 mg/L	0.0010378	0.21%
QC value within limits for Be	313.107	Recovery = 100.43%					
Ca 315.887†	41286026.4	497.716 mg/L		3.0247	497.716 mg/L	3.0247	0.61%
QC value within limits for Ca	315.887	Recovery = 99.54%					
Cd 228.802†	42815.7	1.04960 mg/L		0.005870	1.04960 mg/L	0.005870	0.56%
QC value within limits for Cd	228.802	Recovery = 104.96%					
Co 228.616†	16810.6	0.472528 mg/L		0.0019680	0.472528 mg/L	0.0019680	0.42%
QC value within limits for Co	228.616	Recovery = 94.51%					
Cr 267.716†	34705.7	0.494362 mg/L		0.0011066	0.494362 mg/L	0.0011066	0.22%
QC value within limits for Cr	267.716	Recovery = 98.87%					
Cu 327.393†	61822.5	0.553393 mg/L		0.0006002	0.553393 mg/L	0.0006002	0.11%
QC value within limits for Cu	327.393	Recovery = 110.68%					
Fe 273.955†	3657249.8	193.712 mg/L		0.4295	193.712 mg/L	0.4295	0.22%
QC value within limits for Fe	273.955	Recovery = 96.86%					
K 404.721†	174.3	2.74830 mg/L		0.864962	2.74830 mg/L	0.864962	31.47%
Mg 279.077†	6826530.5	505.120 mg/L		1.1594	505.120 mg/L	1.1594	0.23%
QC value within limits for Mg	279.077	Recovery = 101.02%					
Mn 257.610†	339291.2	0.488618 mg/L		0.0007602	0.488618 mg/L	0.0007602	0.16%
QC value within limits for Mn	257.610	Recovery = 97.72%					
Mo 202.031†	358.9	0.0016639 mg/L		0.00040776	0.0016639 mg/L	0.00040776	24.51%
Na 330.237†	781.9	1.27727 mg/L		0.039034	1.27727 mg/L	0.039034	3.06%
Ni 231.604†	34282.2	0.918894 mg/L		0.0053653	0.918894 mg/L	0.0053653	0.58%
QC value within limits for Ni	231.604	Recovery = 91.89%					
Pb 220.353†	7383.0	0.975937 mg/L		0.0048947	0.975937 mg/L	0.0048947	0.50%
QC value within limits for Pb	220.353	Recovery = 97.59%					
Sb 206.836†	2562.6	1.02599 mg/L		0.007715	1.02599 mg/L	0.007715	0.75%
QC value within limits for Sb	206.836	Recovery = 102.60%					
Se 196.026†	828.2	0.940081 mg/L		0.0082069	0.940081 mg/L	0.0082069	0.87%
QC value within limits for Se	196.026	Recovery = 94.01%					
Sn 189.927†	-131.5	-0.0287079 mg/L		0.00084469	-0.0287079 mg/L	0.00084469	2.94%
Ti 334.940†	1630.1	0.0002722 mg/L		0.00003608	0.0002722 mg/L	0.00003608	13.25%
Tl 190.801†	1131.1	0.925266 mg/L		0.0057349	0.925266 mg/L	0.0057349	0.62%
QC value within limits for Tl	190.801	Recovery = 92.53%					
V 290.880†	67741.0	0.477078 mg/L		0.0007661	0.477078 mg/L	0.0007661	0.16%
QC value within limits for V	290.880	Recovery = 95.42%					
Zn 206.200†	35138.3	0.964699 mg/L		0.0049107	0.964699 mg/L	0.0049107	0.51%
QC value within limits for Zn	206.200	Recovery = 96.47%					

All analyte(s) passed QC.

Sequence No.: 25

Sample ID: CCV V-202964

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/26/2015 5:09:13 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	955448.8	95.3 %	0.96			1.00%
Y 371.029	305911.2	92.4 %	0.36			0.39%
Ag 328.068†	18709.9	0.107584 mg/L	0.0013898	0.107584 mg/L	0.0013898	1.29%
QC value within limits for Ag	328.068	Recovery = 107.58%				
Al 308.215†	138564.4	5.02783 mg/L	0.072933	5.02783 mg/L	0.072933	1.45%
QC value within limits for Al	308.215	Recovery = 100.56%				
As 188.979†	473.1	0.478879 mg/L	0.0032628	0.478879 mg/L	0.0032628	0.68%
QC value within limits for As	188.979	Recovery = 95.78%				
Ba 233.527†	52749.1	0.498206 mg/L	0.0066364	0.498206 mg/L	0.0066364	1.33%
QC value within limits for Ba	233.527	Recovery = 99.64%				
Be 313.107†	1335648.5	0.492595 mg/L	0.0035406	0.492595 mg/L	0.0035406	0.72%
QC value within limits for Be	313.107	Recovery = 98.52%				
Ca 315.887†	4130084.2	49.5949 mg/L	0.26739	49.5949 mg/L	0.26739	0.54%
QC value within limits for Ca	315.887	Recovery = 99.19%				
Cd 228.802†	20345.3	0.494989 mg/L	0.0061995	0.494989 mg/L	0.0061995	1.25%
QC value within limits for Cd	228.802	Recovery = 99.00%				
Co 228.616†	17813.4	0.495230 mg/L	0.0066608	0.495230 mg/L	0.0066608	1.35%
QC value within limits for Co	228.616	Recovery = 99.05%				
Cr 267.716†	35556.9	0.497807 mg/L	0.0078544	0.497807 mg/L	0.0078544	1.58%
QC value within limits for Cr	267.716	Recovery = 99.56%				
Cu 327.393†	58883.7	0.501962 mg/L	0.0070621	0.501962 mg/L	0.0070621	1.41%
QC value within limits for Cu	327.393	Recovery = 100.39%				
Fe 273.955†	95678.4	5.03556 mg/L	0.073866	5.03556 mg/L	0.073866	1.47%
QC value within limits for Fe	273.955	Recovery = 100.71%				
K 404.721†	4341.0	45.7524 mg/L	1.27148	45.7524 mg/L	1.27148	2.78%
QC value within limits for K	404.721	Recovery = 91.50%				
Mg 279.077†	679030.6	50.0748 mg/L	0.27378	50.0748 mg/L	0.27378	0.55%
QC value within limits for Mg	279.077	Recovery = 100.15%				
Mn 257.610†	338713.2	0.490143 mg/L	0.0069005	0.490143 mg/L	0.0069005	1.41%
QC value within limits for Mn	257.610	Recovery = 98.03%				
Mo 202.031†	7333.1	0.490496 mg/L	0.0045596	0.490496 mg/L	0.0045596	0.93%
QC value within limits for Mo	202.031	Recovery = 98.10%				
Na 330.237†	48548.0	46.8604 mg/L	0.64374	46.8604 mg/L	0.64374	1.37%
QC value within limits for Na	330.237	Recovery = 93.72%				
Ni 231.604†	18417.7	0.495489 mg/L	0.0073602	0.495489 mg/L	0.0073602	1.49%
QC value within limits for Ni	231.604	Recovery = 99.10%				
Pb 220.353†	3875.2	0.486516 mg/L	0.0033775	0.486516 mg/L	0.0033775	0.69%
QC value within limits for Pb	220.353	Recovery = 97.30%				
Sb 206.836†	1185.4	0.496453 mg/L	0.0037752	0.496453 mg/L	0.0037752	0.76%
QC value within limits for Sb	206.836	Recovery = 99.29%				
Se 196.026†	466.1	0.482536 mg/L	0.0014044	0.482536 mg/L	0.0014044	0.29%
QC value within limits for Se	196.026	Recovery = 96.51%				
Sn 189.927†	1620.8	0.503947 mg/L	0.0028561	0.503947 mg/L	0.0028561	0.57%
QC value within limits for Sn	189.927	Recovery = 100.79%				
Ti 334.940†	301139.2	0.497766 mg/L	0.0076936	0.497766 mg/L	0.0076936	1.55%
QC value within limits for Ti	334.940	Recovery = 99.55%				
Tl 190.801†	597.4	0.484013 mg/L	0.0072187	0.484013 mg/L	0.0072187	1.49%
QC value within limits for Tl	190.801	Recovery = 96.80%				
V 290.880†	61180.6	0.491300 mg/L	0.0064038	0.491300 mg/L	0.0064038	1.30%
QC value within limits for V	290.880	Recovery = 98.26%				
Zn 206.200†	18031.0	0.496320 mg/L	0.0069017	0.496320 mg/L	0.0069017	1.39%
QC value within limits for Zn	206.200	Recovery = 99.26%				

All analyte(s) passed QC.

Sequence No.: 26

Sample ID: LLCCV [aq] V-206357

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/26/2015 5:12:36 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	988145.5	98.6 %		0.25			0.25%
Y 371.029	322844.5	97.5 %		0.13			0.14%
Ag 328.068†	3422.9	0.0193774 mg/L		0.00006001	0.0193774 mg/L	0.00006001	0.31%
QC value within limits for Ag	328.068	Recovery = 96.89%					
Al 308.215†	4489.3	0.158413 mg/L		0.0014711	0.158413 mg/L	0.0014711	0.93%
QC value within limits for Al	308.215	Recovery = 79.21%					
As 188.979†	18.9	0.0173019 mg/L		0.00117435	0.0173019 mg/L	0.00117435	6.79%
QC value within limits for As	188.979	Recovery = 86.51%					
Ba 233.527†	5565.4	0.0487359 mg/L		0.00057287	0.0487359 mg/L	0.00057287	1.18%
QC value within limits for Ba	233.527	Recovery = 97.47%					
Be 313.107†	31882.3	0.0106082 mg/L		0.00005198	0.0106082 mg/L	0.00005198	0.49%
QC value within limits for Be	313.107	Recovery = 88.40%					
Ca 315.887†	427939.3	4.94506 mg/L		0.035326	4.94506 mg/L	0.035326	0.71%
QC value within limits for Ca	315.887	Recovery = 98.90%					
Cd 228.802†	481.6	0.0100935 mg/L		0.00002659	0.0100935 mg/L	0.00002659	0.26%
QC value within limits for Cd	228.802	Recovery = 84.11%					
Co 228.616†	756.0	0.0164096 mg/L		0.00034977	0.0164096 mg/L	0.00034977	2.13%
QC value within limits for Co	228.616	Recovery = 82.05%					
Cr 267.716†	3722.9	0.0490565 mg/L		0.00042302	0.0490565 mg/L	0.00042302	0.86%
QC value within limits for Cr	267.716	Recovery = 98.11%					
Cu 327.393†	6020.0	0.0488325 mg/L		0.00010070	0.0488325 mg/L	0.00010070	0.21%
QC value within limits for Cu	327.393	Recovery = 97.66%					
Fe 273.955†	5604.1	0.263824 mg/L		0.0000381	0.263824 mg/L	0.0000381	0.01%
QC value within limits for Fe	273.955	Recovery = 87.94%					
K 404.721†	369.5	4.76305 mg/L		0.643294	4.76305 mg/L	0.643294	13.51%
QC value within limits for K	404.721	Recovery = 95.26%					
Mg 279.077†	70802.1	5.05301 mg/L		0.016256	5.05301 mg/L	0.016256	0.32%
QC value within limits for Mg	279.077	Recovery = 101.06%					
Mn 257.610†	28282.7	0.0373683 mg/L		0.00016093	0.0373683 mg/L	0.00016093	0.43%
QC value within limits for Mn	257.610	Recovery = 93.42%					
Mo 202.031†	312.4	0.0178488 mg/L		0.00001976	0.0178488 mg/L	0.00001976	0.11%
QC value within limits for Mo	202.031	Recovery = 89.24%					
Na 330.237†	4300.4	4.63492 mg/L		0.019194	4.63492 mg/L	0.019194	0.41%
QC value within limits for Na	330.237	Recovery = 92.70%					
Ni 231.604†	1919.6	0.0471565 mg/L		0.00058665	0.0471565 mg/L	0.00058665	1.24%
QC value within limits for Ni	231.604	Recovery = 94.31%					
Pb 220.353†	100.7	0.0089494 mg/L		0.00044110	0.0089494 mg/L	0.00044110	4.93%
QC value within limits for Pb	220.353	Recovery = 74.58%					
Sb 206.836†	43.8	0.0179725 mg/L		0.00017511	0.0179725 mg/L	0.00017511	0.97%
QC value within limits for Sb	206.836	Recovery = 89.86%					
Se 196.026†	37.6	0.0388482 mg/L		0.00293168	0.0388482 mg/L	0.00293168	7.55%
QC value within limits for Se	196.026	Recovery = 97.12%					
Sn 189.927†	157.7	0.0482736 mg/L		0.00030628	0.0482736 mg/L	0.00030628	0.63%
QC value within limits for Sn	189.927	Recovery = 96.55%					
Ti 334.940†	31024.5	0.0490972 mg/L		0.00027242	0.0490972 mg/L	0.00027242	0.55%
QC value within limits for Ti	334.940	Recovery = 98.19%					
Tl 190.801†	26.0	0.0148281 mg/L		0.00004209	0.0148281 mg/L	0.00004209	0.28%
QC value within limits for Tl	190.801	Recovery = 74.14%					
V 290.880†	6433.0	0.0484629 mg/L		0.00072536	0.0484629 mg/L	0.00072536	1.50%
QC value within limits for V	290.880	Recovery = 96.93%					
Zn 206.200†	1859.7	0.0474603 mg/L		0.00035508	0.0474603 mg/L	0.00035508	0.75%
QC value within limits for Zn	206.200	Recovery = 94.92%					

All analyte(s) passed QC.

Sequence No.: 27

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/26/2015 5:15:58 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	995441.6	99.3 %	0.09			0.09%
Y 371.029	327836.8	99.0 %	0.07			0.07%
Ag 328.068†	-19.3	-0.0004468 mg/L	0.00011833	-0.0004468 mg/L	0.00011833	26.48%
QC value within limits for Ag 328.068	Recovery = Not calculated					
Al 308.215†	-1357.1	-0.0539202 mg/L	0.00063619	-0.0539202 mg/L	0.00063619	1.18%
QC value within limits for Al 308.215	Recovery = Not calculated					
As 188.979†	0.3	-0.0015725 mg/L	0.00180823	-0.0015725 mg/L	0.00180823	114.99%
QC value within limits for As 188.979	Recovery = Not calculated					
Ba 233.527†	7.5	-0.0042166 mg/L	0.00013889	-0.0042166 mg/L	0.00013889	3.29%
QC value within limits for Ba 233.527	Recovery = Not calculated					
Be 313.107†	-1.9	-0.0011603 mg/L	0.00000031	-0.0011603 mg/L	0.00000031	0.03%
QC value within limits for Be 313.107	Recovery = Not calculated					
Ca 315.887†	-4873.1	-0.274896 mg/L	0.0000633	-0.274896 mg/L	0.0000633	0.02%
QC value within limits for Ca 315.887	Recovery = Not calculated					
Cd 228.802†	-1.0	-0.0016930 mg/L	0.00029977	-0.0016930 mg/L	0.00029977	17.71%
QC value within limits for Cd 228.802	Recovery = Not calculated					
Co 228.616†	6.1	-0.0046080 mg/L	0.00001895	-0.0046080 mg/L	0.00001895	0.41%
QC value within limits for Co 228.616	Recovery = Not calculated					
Cr 267.716†	2.7	-0.0033685 mg/L	0.00013884	-0.0033685 mg/L	0.00013884	4.12%
QC value within limits for Cr 267.716	Recovery = Not calculated					
Cu 327.393†	6.2	-0.0027051 mg/L	0.00024745	-0.0027051 mg/L	0.00024745	9.15%
QC value within limits for Cu 327.393	Recovery = Not calculated					
Fe 273.955†	-376.9	-0.0530244 mg/L	0.00054674	-0.0530244 mg/L	0.00054674	1.03%
QC value within limits for Fe 273.955	Recovery = Not calculated					
K 404.721†	-42.1	0.515028 mg/L	0.6161316	0.515028 mg/L	0.6161316	119.63%
QC value within limits for K 404.721	Recovery = Not calculated					
Mg 279.077†	-798.9	-0.246986 mg/L	0.0011771	-0.246986 mg/L	0.0011771	0.48%
QC value within limits for Mg 279.077	Recovery = Not calculated					
Mn 257.610†	-81.1	-0.0039512 mg/L	0.00000187	-0.0039512 mg/L	0.00000187	0.05%
QC value within limits for Mn 257.610	Recovery = Not calculated					
Mo 202.031†	-0.6	-0.0030647 mg/L	0.00020760	-0.0030647 mg/L	0.00020760	6.77%
QC value within limits for Mo 202.031	Recovery = Not calculated					
Na 330.237†	29.2	0.558908 mg/L	0.0631138	0.558908 mg/L	0.0631138	11.29%
QC value within limits for Na 330.237	Recovery = Not calculated					
Ni 231.604†	-22.8	-0.0056269 mg/L	0.00012371	-0.0056269 mg/L	0.00012371	2.20%
QC value within limits for Ni 231.604	Recovery = Not calculated					
Pb 220.353†	-1.7	-0.0040336 mg/L	0.00011647	-0.0040336 mg/L	0.00011647	2.89%
QC value within limits for Pb 220.353	Recovery = Not calculated					
Sb 206.836†	-0.4	-0.0004368 mg/L	0.00138197	-0.0004368 mg/L	0.00138197	316.40%
QC value within limits for Sb 206.836	Recovery = Not calculated					
Se 196.026†	1.8	0.0018521 mg/L	0.00319479	0.0018521 mg/L	0.00319479	172.50%
QC value within limits for Se 196.026	Recovery = Not calculated					
Sn 189.927†	-4.4	-0.0022305 mg/L	0.00091301	-0.0022305 mg/L	0.00091301	40.93%
QC value within limits for Sn 189.927	Recovery = Not calculated					
Ti 334.940†	-41.0	-0.0025035 mg/L	0.00003504	-0.0025035 mg/L	0.00003504	1.40%
QC value within limits for Ti 334.940	Recovery = Not calculated					
Tl 190.801†	-0.9	-0.0073856 mg/L	0.00093207	-0.0073856 mg/L	0.00093207	12.62%
QC value within limits for Tl 190.801	Recovery = Not calculated					
V 290.880†	-0.7	-0.0035385 mg/L	0.00003498	-0.0035385 mg/L	0.00003498	0.99%
QC value within limits for V 290.880	Recovery = Not calculated					
Zn 206.200†	-13.0	-0.0045295 mg/L	0.00036546	-0.0045295 mg/L	0.00036546	8.07%
QC value within limits for Zn 206.200	Recovery = Not calculated					

All analyte(s) passed QC.

File SW17599C2

Batch 17599 SW846

Method: PE 2 4300DV RADIAL

Page 1

Date: 3/27/2015 10:34:02 AM

Analyst J Be 3/27/15

=====
Analysis Begun

Start Time: 3/27/2015 10:31:47 AM

Plasma On Time: 3/27/2015 9:38:46 AM

Logged In Analyst: shiamala

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030901 Autosampler Model: AS-93plus

Sample Information File: C:\pe\administrator\Sample Information\03.26.15.sif

Batch ID: PEICP 2

Results Data Set: SW17599C2

Results Library: C:\pe\administrator\Results\Results.mdb

=====
Method Loaded

Method Name: PE 2 4300DV RADIAL

Method Last Saved: 3/23/2015 4:35:41 PM

IEC File: IECrad101413.iec

MSF File:

Method Description: 200.7/6010B/6010C

=====
Sequence No.: 1

Autosampler Location: 1

Sample ID: CALBLK V-205362

Date Collected: 3/27/2015 10:31:48 AM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

=====
Mean Data: CALBLK V-205362

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Y 371.029	30084.1	565.11	1.88%	100.000 %	
Sc 361.383	76553.6	1282.02	1.67%	100 %	
Al 308.215†	217.4	3.17	1.46%	[0.00] mg/L	
Ca 315.887†	1061.0	19.22	1.81%	[0.00] mg/L	
Fe 273.955†	-65.9	3.85	5.84%	[0.00] mg/L	
Mg 279.077†	-101.0	2.30	2.27%	[0.00] mg/L	
Mn 257.610†	379.7	1.14	0.30%	[0.00] mg/L	
K 766.490†	594.7	7.61	1.28%	[0.00] mg/L	
Na 589.592†	248.9	42.38	17.03%	[0.00] mg/L	
Ti 334.940†	97.6	16.46	16.85%	[0.00] mg/L	

17599
42362

Na, K reported

83866.019 not reported

Sequence No.: 2

Sample ID: CALST2 V-202401

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/27/2015 10:35:03 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST2 V-202401

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	30000.6	27.85	0.09%	99.7225	%
Sc 361.383	76834.9	98.36	0.13%	100	%
Al 308.215†	128.8	9.85	7.64%	[0.1]	mg/L
Ca 315.887†	7190.8	20.86	0.29%	[1]	mg/L
Fe 273.955†	120.9	2.55	2.11%	[0.1]	mg/L
Mg 279.077†	1060.2	3.58	0.34%	[1]	mg/L
Mn 257.610†	426.6	4.55	1.07%	[0.01]	mg/L
K 766.490†	1629.9	33.89	2.08%	[1]	mg/L
Na 589.592†	7880.4	26.02	0.33%	[1]	mg/L
Ti 334.940†	472.2	15.70	3.32%	[0.01]	mg/L

Sequence No.: 3
Sample ID: CALST3 V-202402
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/27/2015 10:38:19 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CALST3 V-202402

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	28810.5	175.46	0.61%	95.7667 %
Sc 361.383	75828.9	160.87	0.21%	99.1 %
Al 308.215†	7020.6	40.97	0.58%	[5] mg/L
Ca 315.887†	358190.2	1312.49	0.37%	[50] mg/L
Fe 273.955†	6378.2	45.45	0.71%	[5] mg/L
Mg 279.077†	50923.6	361.67	0.71%	[50] mg/L
Mn 257.610†	20696.4	122.68	0.59%	[0.5] mg/L
K 766.490†	83262.5	653.74	0.79%	[50] mg/L
Na 589.592†	388340.9	1207.17	0.31%	[50] mg/L
Ti 334.940†	23769.8	130.70	0.55%	[0.5] mg/L

Sequence No.: 4

Sample ID: CALST4 V-203077

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/27/2015 10:41:06 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST4 V-203077

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	28520.4	17.00	0.06%	94.8022	%
Sc 361.383	73946.5	74.84	0.10%	96.6	%
Al 308.215†	13750.5	59.68	0.43%	[10]	mg/L
Ca 315.887†	707719.4	2565.66	0.36%	[100]	mg/L
Fe 273.955†	12497.0	5.56	0.04%	[10]	mg/L
Mg 279.077†	100217.6	163.88	0.16%	[100]	mg/L
Mn 257.610†	40570.9	3.38	0.01%	[1.0]	mg/L
K 766.490†	165922.8	375.25	0.23%	[100]	mg/L
Na 589.592†	777251.4	2911.64	0.37%	[100]	mg/L
Ti 334.940†	47066.0	51.59	0.11%	[1.0]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Al 308.215	3	Lin, Calc Int	22.5	1378	0.00000	0.999939	
Ca 315.887	3	Lin, Calc Int	839.7	7084	0.00000	0.999980	
Fe 273.955	3	Lin, Calc Int	21.8	1252	0.00000	0.999942	
Mg 279.077	3	Lin, Calc Int	174.6	1003	0.00000	0.999966	
Mn 257.610	3	Lin, Calc Int	84.3	40630	0.00000	0.999947	
K 766.490	3	Lin, Calc Int	41.5	1660	0.00000	0.999998	
Na 589.592	3	Lin, Calc Int	-2.9	7771	0.00000	1.000000	
Ti 334.940	3	Lin, Calc Int	43.8	47110	0.00000	0.999987	

Sequence No.: 5

Sample ID: ICS3 V-202402

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/27/2015 10:43:53 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICS3 V-202402

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28756.1	95.5859 %		0.81885			0.86%
Sc 361.383	75107.0	98.1 %		0.08			0.08%
Al 308.215†	7078.9	5.12026 mg/L		0.046966	5.12026 mg/L	0.046966	0.92%
QC value within limits for Al 308.215 Recovery = 102.41%							
Ca 315.887†	356883.9	50.2576 mg/L		0.29198	50.2576 mg/L	0.29198	0.58%
QC value within limits for Ca 315.887 Recovery = 100.52%							
Fe 273.955†	6388.1	5.08385 mg/L		0.031330	5.08385 mg/L	0.031330	0.62%
QC value within limits for Fe 273.955 Recovery = 101.68%							
Mg 279.077†	50889.4	50.5464 mg/L		0.45683	50.5464 mg/L	0.45683	0.90%
QC value within limits for Mg 279.077 Recovery = 101.09%							
Mn 257.610†	20768.7	0.512359 mg/L		0.0032487	0.512359 mg/L	0.0032487	0.63%
QC value within limits for Mn 257.610 Recovery = 102.47%							
K 766.490†	83958.5	50.5546 mg/L		0.48585	50.5546 mg/L	0.48585	0.96%
QC value within limits for K 766.490 Recovery = 101.11%							
Na 589.592†	391750.4	50.4095 mg/L		0.11360	50.4095 mg/L	0.11360	0.23%
QC value within limits for Na 589.592 Recovery = 100.82%							
Ti 334.940†	23919.3	0.506826 mg/L		0.0031148	0.506826 mg/L	0.0031148	0.61%
QC value within limits for Ti 334.940 Recovery = 101.37%							

All analyte(s) passed QC.

Sequence No.: 6
 Sample ID: ICV V-202964
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/27/2015 10:46:40 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICV V-202964

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28529.8	94.8334 %	0.19309			0.20%
Sc 361.383	75216.9	98.3 %	0.61			0.62%
Al 308.215†	7019.9	5.07741 mg/L	0.050332	5.07741 mg/L	0.050332	0.99%
QC value within limits for Al 308.215 Recovery = 101.55%						
Ca 315.887†	351835.8	49.5451 mg/L	0.10982	49.5451 mg/L	0.10982	0.22%
QC value within limits for Ca 315.887 Recovery = 99.09%						
Fe 273.955†	6339.6	5.04516 mg/L	0.050189	5.04516 mg/L	0.050189	0.99%
QC value within limits for Fe 273.955 Recovery = 100.90%						
Mg 279.077†	50507.7	50.1661 mg/L	0.45325	50.1661 mg/L	0.45325	0.90%
QC value within limits for Mg 279.077 Recovery = 100.33%						
Mn 257.610†	20168.4	0.497562 mg/L	0.0053273	0.497562 mg/L	0.0053273	1.07%
QC value within limits for Mn 257.610 Recovery = 99.51%						
K 766.490†	82168.8	49.4764 mg/L	0.03340	49.4764 mg/L	0.03340	0.07%
QC value within limits for K 766.490 Recovery = 98.95%						
Na 589.592†	388595.2	50.0035 mg/L	0.10359	50.0035 mg/L	0.10359	0.21%
QC value within limits for Na 589.592 Recovery = 100.01%						
Ti 334.940†	23839.0	0.505123 mg/L	0.0033856	0.505123 mg/L	0.0033856	0.67%
QC value within limits for Ti 334.940 Recovery = 101.02%						

All analyte(s) passed QC.

Sequence No.: 7
 Sample ID: LLICV [aq] V-206357
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 3/27/2015 10:49:25 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: LLICV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29612.8	98.4333 %		0.69059			0.70%
Sc 361.383	76064.2	99.4 %		0.59			0.59%
Al 308.215†	260.0	0.172297 mg/L		0.0052735	0.172297 mg/L	0.0052735	3.06%
QC value within limits for Al 308.215 Recovery = 86.15%							
Ca 315.887†	36803.7	5.07651 mg/L		0.024735	5.07651 mg/L	0.024735	0.49%
QC value within limits for Ca 315.887 Recovery = 101.53%							
Fe 273.955†	378.1	0.284585 mg/L		0.0023103	0.284585 mg/L	0.0023103	0.81%
QC value within limits for Fe 273.955 Recovery = 94.86%							
Mg 279.077†	5274.8	5.08324 mg/L		0.049694	5.08324 mg/L	0.049694	0.98%
QC value within limits for Mg 279.077 Recovery = 101.66%							
Mn 257.610†	1678.0	0.0394063 mg/L		0.00073624	0.0394063 mg/L	0.00073624	1.87%
QC value within limits for Mn 257.610 Recovery = 98.52%							
K 766.490†	8472.0	5.07887 mg/L		0.019487	5.07887 mg/L	0.019487	0.38%
QC value within limits for K 766.490 Recovery = 101.58%							
Na 589.592†	39948.2	5.14077 mg/L		0.035495	5.14077 mg/L	0.035495	0.69%
QC value within limits for Na 589.592 Recovery = 102.82%							
Ti 334.940†	2423.3	0.0505115 mg/L		0.00063125	0.0505115 mg/L	0.00063125	1.25%
QC value within limits for Ti 334.940 Recovery = 101.02%							

All analyte(s) passed QC.

Sequence No.: 8
 Sample ID: ICB V-205362
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 3/27/2015 10:52:43 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICB V-205362

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29858.1	99.2488 %	0.77469			0.78%
Sc 361.383	75904.8	99.2 %	0.87			0.88%
Al 308.215†	-10.8	-0.0241595 mg/L	0.00469611	-0.0241595 mg/L	0.00469611	19.44%
QC value within limits for Al 308.215		Recovery = Not calculated				
Ca 315.887†	-11.6	-0.120165 mg/L	0.0016164	-0.120165 mg/L	0.0016164	1.35%
QC value within limits for Ca 315.887		Recovery = Not calculated				
Fe 273.955†	-15.3	-0.0295624 mg/L	0.00453396	-0.0295624 mg/L	0.00453396	15.34%
QC value within limits for Fe 273.955		Recovery = Not calculated				
Mg 279.077†	0.5	-0.173504 mg/L	0.0024973	-0.173504 mg/L	0.0024973	1.44%
QC value within limits for Mg 279.077		Recovery = Not calculated				
Mn 257.610†	1.6	-0.0020552 mg/L	0.00002792	-0.0020552 mg/L	0.00002792	1.36%
QC value within limits for Mn 257.610		Recovery = Not calculated				
K 766.490†	-41.7	-0.0501255 mg/L	0.03102612	-0.0501255 mg/L	0.03102612	61.90%
QC value within limits for K 766.490		Recovery = Not calculated				
Na 589.592†	73.1	0.0097803 mg/L	0.00260574	0.0097803 mg/L	0.00260574	26.64%
QC value within limits for Na 589.592		Recovery = Not calculated				
Ti 334.940†	-3.5	-0.0010048 mg/L	0.00009416	-0.0010048 mg/L	0.00009416	9.37%
QC value within limits for Ti 334.940		Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSA V-202074

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/27/2015 10:55:57 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	26957.9	89.6085 %		0.09854			0.11%
Sc 361.383	71538.8	93.4 %		0.38			0.41%
Al 308.215†	729265.0	529.152 mg/L		1.7271	529.152 mg/L	1.7271	0.33%
QC value within limits for Al 308.215 Recovery = 105.83%							
Ca 315.887†	3513003.4	495.762 mg/L		1.9777	495.762 mg/L	1.9777	0.40%
QC value within limits for Ca 315.887 Recovery = 99.15%							
Fe 273.955†	243754.4	194.634 mg/L		0.5774	194.634 mg/L	0.5774	0.30%
QC value within limits for Fe 273.955 Recovery = 97.32%							
Mg 279.077†	505438.8	503.587 mg/L		1.9847	503.587 mg/L	1.9847	0.39%
QC value within limits for Mg 279.077 Recovery = 100.72%							
Mn 257.610†	-1828.2	0.0798027 mg/L		0.00080256	0.0798027 mg/L	0.00080256	1.01%
QC value within limits for Mn 257.610 Recovery = 7.98%							
K 766.490†	200.6	0.0958939 mg/L		0.03813542	0.0958939 mg/L	0.03813542	39.77%
QC value within limits for K 766.490 Recovery = 9.59%							
Na 589.592†	1908.4	0.245940 mg/L		0.0011633	0.245940 mg/L	0.0011633	0.47%
QC value within limits for Na 589.592 Recovery = 24.59%							
Ti 334.940†	-2469.7	-0.0533572 mg/L		0.00017856	-0.0533572 mg/L	0.00017856	0.33%
QC value within limits for Ti 334.940 Recovery = -5.34%							

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSAB V-202076

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/27/2015 10:59:04 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	26618.4	88.4800 %	0.31631			0.36%
Sc 361.383	70583.5	92.2 %	0.44			0.48%
Al 308.215†	732609.2	531.579 mg/L	2.8926	531.579 mg/L	2.8926	0.54%
QC value within limits for Al 308.215 Recovery = 106.32%						
Ca 315.887†	3511079.4	495.490 mg/L	1.8361	495.490 mg/L	1.8361	0.37%
QC value within limits for Ca 315.887 Recovery = 99.10%						
Fe 273.955†	244192.5	194.984 mg/L	0.9806	194.984 mg/L	0.9806	0.50%
QC value within limits for Fe 273.955 Recovery = 97.49%						
Mg 279.077†	505792.0	503.939 mg/L	1.6491	503.939 mg/L	1.6491	0.33%
QC value within limits for Mg 279.077 Recovery = 100.79%						
Mn 257.610†	17789.2	0.562817 mg/L	0.0053271	0.562817 mg/L	0.0053271	0.95%
QC value within limits for Mn 257.610 Recovery = 112.56%						
K 766.490†	211.5	0.102405 mg/L	0.0099459	0.102405 mg/L	0.0099459	9.71%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	1867.2	0.240638 mg/L	0.0051263	0.240638 mg/L	0.0051263	2.13%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940†	-2535.0	-0.0547437 mg/L	0.00005821	-0.0547437 mg/L	0.00005821	0.11%

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: MB 42362 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 38
 Date Collected: 3/27/2015 11:02:13 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 42362 (1)

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	30156.0	100.239 %		0.8996			0.90%
Sc 361.383	77574.8	101 %		0.9			0.90%
Al 308.215†	27.6	0.0036968 mg/L		0.00157427	0.0036968 mg/L	0.00157427	42.58%
Ca 315.887†	9236.1	1.18519 mg/L		0.010732	1.18519 mg/L	0.010732	0.91%
Fe 273.955†	312.3	0.232004 mg/L		0.0095602	0.232004 mg/L	0.0095602	4.12%
Mg 279.077†	16.1	-0.157973 mg/L		0.0018062	-0.157973 mg/L	0.0018062	1.14%
Mn 257.610†	60.8	-0.0004262 mg/L		0.00014786	-0.0004262 mg/L	0.00014786	34.69%
K 766.490†	42.2	0.0004400 mg/L		0.02855709	0.0004400 mg/L	0.02855709	>999.9%
Na 589.592†	333.6	0.0432979 mg/L		0.01318235	0.0432979 mg/L	0.01318235	30.45%
Ti 334.940†	10.7	-0.0007025 mg/L		0.00004647	-0.0007025 mg/L	0.00004647	6.62%

Sequence No.: 12

Sample ID: LCSW 42362

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 39

Date Collected: 3/27/2015 11:05:29 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCSW 42362

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29000.4	96.3977 %	1.05324			1.09%
Sc 361.383	76430.3	99.8 %	0.48			0.48%
Al 308.215†	6575.8	4.75519 mg/L	0.024076	4.75519 mg/L	0.024076	0.51%
Ca 315.887†	343786.7	48.4089 mg/L	0.25959	48.4089 mg/L	0.25959	0.54%
Fe 273.955†	6086.8	4.84329 mg/L	0.004422	4.84329 mg/L	0.004422	0.09%
Mg 279.077†	47166.4	46.8358 mg/L	0.15615	46.8358 mg/L	0.15615	0.33%
Mn 257.610†	19300.8	0.476077 mg/L	0.0022956	0.476077 mg/L	0.0022956	0.48%
K 766.490†	76249.0	45.9101 mg/L	0.17259	45.9101 mg/L	0.17259	0.38%
Na 589.592†	364061.3	46.8466 mg/L	0.31713	46.8466 mg/L	0.31713	0.68%
Ti 334.940†	22194.0	0.470202 mg/L	0.0011560	0.470202 mg/L	0.0011560	0.25%

Sequence No.: 13
Sample ID: LCSW MR 42362
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 3/27/2015 11:08:16 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCSW MR 42362

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29248.3	97.2218 %	0.33738			0.35%
Sc 361.383	76193.5	99.5 %	0.03			0.03%
Al 308.215†	6450.4	4.66423 mg/L	0.001481	4.66423 mg/L	0.001481	0.03%
Ca 315.887†	340373.2	47.9271 mg/L	0.00465	47.9271 mg/L	0.00465	0.01%
Fe 273.955†	6042.0	4.80749 mg/L	0.021749	4.80749 mg/L	0.021749	0.45%
Mg 279.077†	47340.1	47.0089 mg/L	0.14238	47.0089 mg/L	0.14238	0.30%
Mn 257.610†	19161.0	0.472615 mg/L	0.0011033	0.472615 mg/L	0.0011033	0.23%
K 766.490†	75918.5	45.7110 mg/L	0.56800	45.7110 mg/L	0.56800	1.24%
Na 589.592†	358749.7	46.1631 mg/L	0.04499	46.1631 mg/L	0.04499	0.10%
Ti 334.940†	22044.5	0.467028 mg/L	0.0012753	0.467028 mg/L	0.0012753	0.27%

Sequence No.: 14
 Sample ID: 83866-011
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 41
 Date Collected: 3/27/2015 11:11:03 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-011

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30683.2	101.991	%	0.9563			0.94%
Sc 361.383	79617.9	104	%	0.8			0.82%
Al 308.215†	21.9	-0.0004479	mg/L	0.00711610	-0.0004479 mg/L	0.00711610	>999.9%
Ca 315.887†	106274.3	14.8827	mg/L	0.08997	14.8827 mg/L	0.08997	0.60%
Fe 273.955†	24.1	0.0018896	mg/L	0.00560361	0.0018896 mg/L	0.00560361	296.55%
Mg 279.077†	5326.0	5.13432	mg/L	0.090563	5.13432 mg/L	0.090563	1.76%
Mn 257.610†	77.4	-0.0001682	mg/L	0.00019934	-0.0001682 mg/L	0.00019934	118.54%
K 766.490†	1466.3	0.858352	mg/L	0.0253718	0.858352 mg/L	0.0253718	2.96%
Na 589.592†	133545.1	17.1845	mg/L	0.10282	17.1845 mg/L	0.10282	0.60%
Ti 334.940†	-51.4	-0.0020214	mg/L	0.00018775	-0.0020214 mg/L	0.00018775	9.29%

Sequence No.: 15

Sample ID: 83866-011 MR

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 42

Date Collected: 3/27/2015 11:14:19 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-011 MR

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30490.6	101.351	%	1.2353			1.22%
Sc 361.383	79123.0	103	%	1.3			1.30%
Al 308.215†	-5.6	-0.0203983	mg/L	0.00718441	-0.0203983	0.00718441	35.22%
Ca 315.887†	106336.1	14.8914	mg/L	0.10836	14.8914	0.10836	0.73%
Fe 273.955†	33.0	0.0089783	mg/L	0.00484928	0.0089783	0.00484928	54.01%
Mg 279.077†	5177.2	4.98597	mg/L	0.091013	4.98597	0.091013	1.83%
Mn 257.610†	76.1	-0.0001955	mg/L	0.00016480	-0.0001955	0.00016480	84.28%
K 766.490†	1436.7	0.840519	mg/L	0.0370841	0.840519	0.0370841	4.41%
Na 589.592†	130070.1	16.7373	mg/L	0.15600	16.7373	0.15600	0.93%
Ti 334.940†	-35.2	-0.0016780	mg/L	0.00003522	-0.0016780	0.00003522	2.10%

Sequence No.: 16

Sample ID: 83866-012 MS 1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 43

Date Collected: 3/27/2015 11:17:35 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-012 MS 1

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29412.7	97.7684 %	0.67472			0.69%
Sc 361.383	77462.1	101 %	0.4			0.41%
Al 308.215†	6632.9	4.79663 mg/L	0.012317	4.79663 mg/L	0.012317	0.26%
Ca 315.887†	454806.4	64.0799 mg/L	0.02047	64.0799 mg/L	0.02047	0.03%
Fe 273.955†	6147.1	4.89145 mg/L	0.021571	4.89145 mg/L	0.021571	0.44%
Mg 279.077†	53948.8	53.5957 mg/L	0.14458	53.5957 mg/L	0.14458	0.27%
Mn 257.610†	19850.2	0.489629 mg/L	0.0018928	0.489629 mg/L	0.0018928	0.39%
K 766.490†	79221.7	47.7010 mg/L	0.17404	47.7010 mg/L	0.17404	0.36%
Na 589.592†	511090.4	65.7658 mg/L	0.35035	65.7658 mg/L	0.35035	0.53%
Ti 334.940†	22463.9	0.475931 mg/L	0.0007475	0.475931 mg/L	0.0007475	0.16%

Sequence No.: 17
Sample ID: 83866-013 MS 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 3/27/2015 11:20:22 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 83866-013 MS 2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29170.4	96.9630	%	0.00659			0.01%
Sc 361.383	77469.4	101	%	0.2			0.20%
Al 308.215†	6487.8	4.69132	mg/L	0.017816	4.69132 mg/L	0.017816	0.38%
Ca 315.887†	437205.8	61.5955	mg/L	0.01391	61.5955 mg/L	0.01391	0.02%
Fe 273.955†	6029.7	4.79770	mg/L	0.008032	4.79770 mg/L	0.008032	0.17%
Mg 279.077†	52117.2	51.7702	mg/L	0.03716	51.7702 mg/L	0.03716	0.07%
Mn 257.610†	19475.4	0.480344	mg/L	0.0008581	0.480344 mg/L	0.0008581	0.18%
K 766.490†	77441.6	46.6286	mg/L	0.17333	46.6286 mg/L	0.17333	0.37%
Na 589.592†	495497.7	63.7593	mg/L	0.02227	63.7593 mg/L	0.02227	0.03%
Ti 334.940†	22130.2	0.468848	mg/L	0.0009820	0.468848 mg/L	0.0009820	0.21%

Sequence No.: 18

Sample ID: 83866-011 PS

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 45

Date Collected: 3/27/2015 11:23:09 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-011 PS

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	29199.6	97.0601	%	0.29475			0.30%
Sc 361.383	76425.9	99.8	%	0.50			0.50%
Al 308.215†	6915.4	5.00158	mg/L	0.023328	5.00158	0.023328	0.47%
Ca 315.887†	450395.1	63.4573	mg/L	0.24990	63.4573	0.24990	0.39%
Fe 273.955†	6334.0	5.04068	mg/L	0.024733	5.04068	0.024733	0.49%
Mg 279.077†	55086.2	54.7293	mg/L	0.03590	54.7293	0.03590	0.07%
Mn 257.610†	20079.8	0.495378	mg/L	0.0008639	0.495378	0.0008639	0.17%
K 766.490†	81743.3	49.2201	mg/L	0.04297	49.2201	0.04297	0.09%
Na 589.592†	512070.8	65.8919	mg/L	0.23408	65.8919	0.23408	0.36%
Ti 334.940†	27855.1	0.590376	mg/L	0.0011926	0.590376	0.0011926	0.20%

Sequence No.: 19
 Sample ID: CCV V-202964
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/27/2015 11:25:56 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28815.0	95.7815 %	1.60147			1.67%
Sc 361.383	76141.0	99.5 %	1.16			1.17%
Al 308.215†	7013.5	5.07277 mg/L	0.143574	5.07277 mg/L	0.143574	2.83%
QC value within limits for Al 308.215 Recovery = 101.46%						
Ca 315.887†	353753.1	49.8157 mg/L	0.14534	49.8157 mg/L	0.14534	0.29%
QC value within limits for Ca 315.887 Recovery = 99.63%						
Fe 273.955†	6335.5	5.04187 mg/L	0.143004	5.04187 mg/L	0.143004	2.84%
QC value within limits for Fe 273.955 Recovery = 100.84%						
Mg 279.077†	50635.6	50.2935 mg/L	1.52487	50.2935 mg/L	1.52487	3.03%
QC value within limits for Mg 279.077 Recovery = 100.59%						
Mn 257.610†	20123.6	0.496456 mg/L	0.0148024	0.496456 mg/L	0.0148024	2.98%
QC value within limits for Mn 257.610 Recovery = 99.29%						
K 766.490†	82178.1	49.4820 mg/L	0.00387	49.4820 mg/L	0.00387	0.01%
QC value within limits for K 766.490 Recovery = 98.96%						
Na 589.592†	389106.8	50.0693 mg/L	0.02330	50.0693 mg/L	0.02330	0.05%
QC value within limits for Na 589.592 Recovery = 100.14%						
Ti 334.940†	23815.6	0.504625 mg/L	0.0130255	0.504625 mg/L	0.0130255	2.58%
QC value within limits for Ti 334.940 Recovery = 100.93%						

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: LLCCV [aq] V-206357

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/27/2015 11:28:41 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV [aq] V-206357

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29880.7	99.3238 %	0.23486			0.24%
Sc 361.383	76731.4	100 %	0.0			0.03%
Al 308.215†	262.6	0.174206 mg/L	0.0045604	0.174206 mg/L	0.0045604	2.62%
QC value within limits for Al 308.215 Recovery = 87.10%						
Ca 315.887†	36968.6	5.09979 mg/L	0.023882	5.09979 mg/L	0.023882	0.47%
QC value within limits for Ca 315.887 Recovery = 102.00%						
Fe 273.955†	385.7	0.290654 mg/L	0.0023514	0.290654 mg/L	0.0023514	0.81%
QC value within limits for Fe 273.955 Recovery = 96.88%						
Mg 279.077†	5303.2	5.11158 mg/L	0.006338	5.11158 mg/L	0.006338	0.12%
QC value within limits for Mg 279.077 Recovery = 102.23%						
Mn 257.610†	1675.6	0.0393522 mg/L	0.00014269	0.0393522 mg/L	0.00014269	0.36%
QC value within limits for Mn 257.610 Recovery = 98.38%						
K 766.490†	8388.7	5.02868 mg/L	0.024176	5.02868 mg/L	0.024176	0.48%
QC value within limits for K 766.490 Recovery = 100.57%						
Na 589.592†	39762.3	5.11685 mg/L	0.037480	5.11685 mg/L	0.037480	0.73%
QC value within limits for Na 589.592 Recovery = 102.34%						
Ti 334.940†	2404.3	0.0501072 mg/L	0.00021176	0.0501072 mg/L	0.00021176	0.42%
QC value within limits for Ti 334.940 Recovery = 100.21%						

All analyte(s) passed QC.

Sequence No.: 21

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/27/2015 11:31:59 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30250.9	100.554 %	1.0200			1.01%
Sc 361.383	77107.9	101 %	0.9			0.88%
Al 308.215†	-8.1	-0.0222075 mg/L	0.00185432	-0.0222075 mg/L	0.00185432	8.35%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887†	-45.5	-0.124957 mg/L	0.0011900	-0.124957 mg/L	0.0011900	0.95%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955†	-2.1	-0.0190890 mg/L	0.00152689	-0.0190890 mg/L	0.00152689	8.00%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077†	-0.2	-0.174249 mg/L	0.0030810	-0.174249 mg/L	0.0030810	1.77%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	5.6	-0.0019491 mg/L	0.00013495	-0.0019491 mg/L	0.00013495	6.92%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490†	19.0	-0.0135589 mg/L	0.04895855	-0.0135589 mg/L	0.04895855	361.08%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	129.5	0.0170375 mg/L	0.01509980	0.0170375 mg/L	0.01509980	88.63%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940†	-2.0	-0.0009727 mg/L	0.00005135	-0.0009727 mg/L	0.00005135	5.28%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 22
 Sample ID: 83866-011 SD
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 46
 Date Collected: 3/27/2015 11:35:13 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-011 SD

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30649.8	101.880	%	0.8021			0.79%
Sc 361.383	78503.1	103	%	1.0			0.98%
Al 308.215†	-25.6	-0.0349515	mg/L	0.00548325	-0.0349515 mg/L	0.00548325	15.69%
Ca 315.887†	21474.8	2.91276	mg/L	0.011919	2.91276 mg/L	0.011919	0.41%
Fe 273.955†	-1.1	-0.0182186	mg/L	0.00512086	-0.0182186 mg/L	0.00512086	28.11%
Mg 279.077†	1064.7	0.887107	mg/L	0.0088886	0.887107 mg/L	0.0088886	1.00%
Mn 257.610†	9.0	-0.0018647	mg/L	0.00010932	-0.0018647 mg/L	0.00010932	5.86%
K 766.490†	347.0	0.184071	mg/L	0.0077055	0.184071 mg/L	0.0077055	4.19%
Na 589.592†	27095.6	3.48693	mg/L	0.003428	3.48693 mg/L	0.003428	0.10%
Ti 334.940†	-9.7	-0.0011357	mg/L	0.00010238	-0.0011357 mg/L	0.00010238	9.01%

Sequence No.: 23
 Sample ID: 83866-001
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 47
 Date Collected: 3/27/2015 11:38:30 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-001

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	31928.7	106.132	%	0.0232			0.02%
Sc 361.383	79341.6	104	%	0.2			0.22%
Al 308.215†	1656.8	1.18583	mg/L	0.003809	1.18583 mg/L	0.003809	0.32%
Ca 315.887†	114443.4	16.0358	mg/L	0.03940	16.0358 mg/L	0.03940	0.25%
Fe 273.955†	2092.4	1.65350	mg/L	0.001222	1.65350 mg/L	0.001222	0.07%
Mg 279.077†	2310.4	2.12869	mg/L	0.006144	2.12869 mg/L	0.006144	0.29%
Mn 257.610†	1413.8	0.0337969	mg/L	0.00001151	0.0337969 mg/L	0.00001151	0.03%
K 766.490†	2596.7	1.53939	mg/L	0.024977	1.53939 mg/L	0.024977	1.62%
Na 589.592†	74368.0	9.56979	mg/L	0.022219	9.56979 mg/L	0.022219	0.23%
Ti 334.940†	2178.5	0.0453140	mg/L	0.00092122	0.0453140 mg/L	0.00092122	2.03%

Sequence No.: 24
 Sample ID: 83866-003
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 48
 Date Collected: 3/27/2015 11:41:47 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-003

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	31185.8	103.662	%	0.2665			0.26%
Sc 361.383	79856.8	104	%	0.5			0.46%
Al 308.215†	1939.0	1.39066	mg/L	0.017978	1.39066 mg/L	0.017978	1.29%
Ca 315.887†	113577.6	15.9136	mg/L	0.01251	15.9136 mg/L	0.01251	0.08%
Fe 273.955†	2242.0	1.77303	mg/L	0.009081	1.77303 mg/L	0.009081	0.51%
Mg 279.077†	2671.9	2.48894	mg/L	0.012274	2.48894 mg/L	0.012274	0.49%
Mn 257.610†	1024.5	0.0242946	mg/L	0.00029598	0.0242946 mg/L	0.00029598	1.22%
K 766.490†	3540.4	2.10787	mg/L	0.011383	2.10787 mg/L	0.011383	0.54%
Na 589.592†	186631.5	24.0155	mg/L	0.04295	24.0155 mg/L	0.04295	0.18%
Ti 334.940†	2280.3	0.0474753	mg/L	0.00026264	0.0474753 mg/L	0.00026264	0.55%

Sequence No.: 25
 Sample ID: 83866-005
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 49
 Date Collected: 3/27/2015 11:45:05 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-005

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30644.8	101.864	%	0.0150			0.01%
Sc 361.383	80550.4	105	%	0.1			0.07%
Al 308.215†	3246.9	2.33966	mg/L	0.008976	2.33966 mg/L	0.008976	0.38%
Ca 315.887†	62698.8	8.73175	mg/L	0.024885	8.73175 mg/L	0.024885	0.28%
Fe 273.955†	2896.8	2.29589	mg/L	0.001897	2.29589 mg/L	0.001897	0.08%
Mg 279.077†	1125.2	0.947399	mg/L	0.0046353	0.947399 mg/L	0.0046353	0.49%
Mn 257.610†	545.3	0.0128419	mg/L	0.00004896	0.0128419 mg/L	0.00004896	0.38%
K 766.490†	2062.1	1.21732	mg/L	0.014711	1.21732 mg/L	0.014711	1.21%
Na 589.592†	26244.0	3.37735	mg/L	0.003560	3.37735 mg/L	0.003560	0.11%
Ti 334.940†	3813.8	0.0800289	mg/L	0.00003461	0.0800289 mg/L	0.00003461	0.04%

Sequence No.: 26
 Sample ID: 83866-007
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 50
 Date Collected: 3/27/2015 11:48:23 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: 83866-007

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	32477.4	107.955	%	0.0447			0.04%
Sc 361.383	79951.9	104	%	0.2			0.15%
Al 308.215†	741.7	0.521879	mg/L	0.0149221	0.521879 mg/L	0.0149221	2.86%
Ca 315.887†	121112.2	16.9771	mg/L	0.06456	16.9771 mg/L	0.06456	0.38%
Fe 273.955†	253.6	0.185127	mg/L	0.0005551	0.185127 mg/L	0.0005551	0.30%
Mg 279.077†	2429.0	2.24688	mg/L	0.017089	2.24688 mg/L	0.017089	0.76%
Mn 257.610†	960.9	0.0216939	mg/L	0.00010569	0.0216939 mg/L	0.00010569	0.49%
K 766.490†	4147.0	2.47332	mg/L	0.006963	2.47332 mg/L	0.006963	0.28%
Na 589.592†	112388.5	14.4621	mg/L	0.05457	14.4621 mg/L	0.05457	0.38%
Ti 334.940†	-27.9	-0.0015226	mg/L	0.00025141	-0.0015226 mg/L	0.00025141	16.51%

Sequence No.: 27
 Sample ID: 83866-009
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 51
 Date Collected: 3/27/2015 11:51:39 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-009

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30662.0	101.921 %		0.9917			0.97%
Sc 361.383	79480.9	104 %		1.1			1.07%
Al 308.215†	83.4	0.0441990 mg/L		0.01087560	0.0441990 mg/L	0.01087560	24.61%
Ca 315.887†	61864.9	8.61405 mg/L		0.001118	8.61405 mg/L	0.001118	0.01%
Fe 273.955†	67.8	0.0367700 mg/L		0.00761983	0.0367700 mg/L	0.00761983	20.72%
Mg 279.077†	2779.4	2.59612 mg/L		0.029872	2.59612 mg/L	0.029872	1.15%
Mn 257.610†	293.0	0.0051593 mg/L		0.00031182	0.0051593 mg/L	0.00031182	6.04%
K 766.490†	1055.5	0.610884 mg/L		0.0106548	0.610884 mg/L	0.0106548	1.74%
Na 589.592†	67162.0	8.64255 mg/L		0.017112	8.64255 mg/L	0.017112	0.20%
Ti 334.940†	-1.5	-0.0009610 mg/L		0.00030833	-0.0009610 mg/L	0.00030833	32.09%

Sequence No.: 28

Sample ID: 83866-017

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 52

Date Collected: 3/27/2015 11:54:55 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-017

Analyte	Mean Corrected Intensity	Conc.	Units	Calib Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	30492.8	101.359	%	0.0973				0.10%
Sc 361.383	79246.3	104	%	0.2				0.17%
Al 308.215†	5.2	-0.0125750	mg/L	0.00272783	-0.0125750	mg/L	0.00272783	21.69%
Ca 315.887†	96612.2	13.5188	mg/L	0.07592	13.5188	mg/L	0.07592	0.56%
Fe 273.955†	18.6	-0.0025228	mg/L	0.00453913	-0.0025228	mg/L	0.00453913	179.92%
Mg 279.077†	4994.9	4.80430	mg/L	0.015896	4.80430	mg/L	0.015896	0.33%
Mn 257.610†	55.8	-0.0007015	mg/L	0.00006536	-0.0007015	mg/L	0.00006536	9.32%
K 766.490†	1352.9	0.790025	mg/L	0.0020245	0.790025	mg/L	0.0020245	0.26%
Na 589.592†	129220.1	16.6280	mg/L	0.11043	16.6280	mg/L	0.11043	0.66%
Ti 334.940†	-48.5	-0.0019600	mg/L	0.00029152	-0.0019600	mg/L	0.00029152	14.87%

Sequence No.: 29

Sample ID: ICSA V-202074

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/27/2015 11:58:11 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27708.0	92.1019 %	0.27819			0.30%
Sc 361.383	72648.8	94.9 %	0.77			0.81%
Al 308.215†	711642.6	516.365 mg/L	3.2446	516.365 mg/L	3.2446	0.63%
QC value within limits for Al 308.215 Recovery = 103.27%						
Ca 315.887†	3419754.1	482.599 mg/L	2.5188	482.599 mg/L	2.5188	0.52%
QC value within limits for Ca 315.887 Recovery = 96.52%						
Fe 273.955†	237349.8	189.520 mg/L	0.9306	189.520 mg/L	0.9306	0.49%
QC value within limits for Fe 273.955 Recovery = 94.76%						
Mg 279.077†	491952.4	490.146 mg/L	2.4923	490.146 mg/L	2.4923	0.51%
QC value within limits for Mg 279.077 Recovery = 98.03%						
Mn 257.610†	-1826.6	0.0765073 mg/L	0.00086318	0.0765073 mg/L	0.00086318	1.13%
QC value within limits for Mn 257.610 Recovery = 7.65%						
K 766.490†	185.4	0.0867347 mg/L	0.00877369	0.0867347 mg/L	0.00877369	10.12%
QC value within limits for K 766.490 Recovery = 8.67%						
Na 589.592†	1843.7	0.237607 mg/L	0.0032881	0.237607 mg/L	0.0032881	1.38%
QC value within limits for Na 589.592 Recovery = 23.76%						
Ti 334.940†	-2505.7	-0.0541204 mg/L	0.00011416	-0.0541204 mg/L	0.00011416	0.21%
QC value within limits for Ti 334.940 Recovery = -5.41%						

All analyte(s) passed QC.

Sequence No.: 30

Sample ID: ICSAB V-202076

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/27/2015 12:01:18 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27799.1	92.4046 %		0.96560			1.04%
Sc 361.383	73105.9	95.5 %		0.28			0.29%
Al 308.215†	706725.1	512.797 mg/L		0.0087	512.797 mg/L	0.0087	0.00%
QC value within limits for Al 308.215 Recovery = 102.56%							
Ca 315.887†	3400432.0	479.872 mg/L		0.2447	479.872 mg/L	0.2447	0.05%
QC value within limits for Ca 315.887 Recovery = 95.97%							
Fe 273.955†	236697.4	188.999 mg/L		0.0695	188.999 mg/L	0.0695	0.04%
QC value within limits for Fe 273.955 Recovery = 94.50%							
Mg 279.077†	489979.4	488.179 mg/L		0.0062	488.179 mg/L	0.0062	0.00%
QC value within limits for Mg 279.077 Recovery = 97.64%							
Mn 257.610†	17266.9	0.546063 mg/L		0.0073903	0.546063 mg/L	0.0073903	1.35%
QC value within limits for Mn 257.610 Recovery = 109.21%							
K 766.490†	160.2	0.0715254 mg/L		0.01139796	0.0715254 mg/L	0.01139796	15.94%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	1790.0	0.230694 mg/L		0.0002462	0.230694 mg/L	0.0002462	0.11%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	-2446.1	-0.0528559 mg/L		0.00102712	-0.0528559 mg/L	0.00102712	1.94%

All analyte(s) passed QC.

Sequence No.: 31
 Sample ID: CCV V-202964
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/27/2015 12:04:27 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29539.3	98.1893 %	1.05867			1.08%
Sc 361.383	77089.3	101 %	0.3			0.29%
Al 308.215†	6898.7	4.98947 mg/L	0.007674	4.98947 mg/L	0.007674	0.15%
QC value within limits for Al 308.215 Recovery = 99.79%						
Ca 315.887†	344858.1	48.5601 mg/L	0.27877	48.5601 mg/L	0.27877	0.57%
QC value within limits for Ca 315.887 Recovery = 97.12%						
Fe 273.955†	6247.3	4.97143 mg/L	0.031124	4.97143 mg/L	0.031124	0.63%
QC value within limits for Fe 273.955 Recovery = 99.43%						
Mg 279.077†	49669.3	49.3304 mg/L	0.36552	49.3304 mg/L	0.36552	0.74%
QC value within limits for Mg 279.077 Recovery = 98.66%						
Mn 257.610†	19769.7	0.487702 mg/L	0.0022066	0.487702 mg/L	0.0022066	0.45%
QC value within limits for Mn 257.610 Recovery = 97.54%						
K 766.490†	80276.7	48.3366 mg/L	0.20127	48.3366 mg/L	0.20127	0.42%
QC value within limits for K 766.490 Recovery = 96.67%						
Na 589.592†	379171.4	48.7909 mg/L	0.02445	48.7909 mg/L	0.02445	0.05%
QC value within limits for Na 589.592 Recovery = 97.58%						
Ti 334.940†	23331.4	0.494346 mg/L	0.0024752	0.494346 mg/L	0.0024752	0.50%
QC value within limits for Ti 334.940 Recovery = 98.87%						

All analyte(s) passed QC.

Sequence No.: 32

Sample ID: LLCCV [aq] V-206357

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/27/2015 12:07:11 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30455.8	101.236 %	1.2691			1.25%
Sc 361.383	78468.6	103 %	1.3			1.22%
Al 308.215†	253.4	0.167500 mg/L	0.0150455	0.167500 mg/L	0.0150455	8.98%
QC value within limits for Al 308.215 Recovery = 83.75%						
Ca 315.887†	35735.0	4.92567 mg/L	0.010316	4.92567 mg/L	0.010316	0.21%
QC value within limits for Ca 315.887 Recovery = 98.51%						
Fe 273.955†	369.9	0.277985 mg/L	0.0000154	0.277985 mg/L	0.0000154	0.01%
QC value within limits for Fe 273.955 Recovery = 92.66%						
Mg 279.077†	5068.0	4.87717 mg/L	0.069336	4.87717 mg/L	0.069336	1.42%
QC value within limits for Mg 279.077 Recovery = 97.54%						
Mn 257.610†	1600.3	0.0374917 mg/L	0.00080056	0.0374917 mg/L	0.00080056	2.14%
QC value within limits for Mn 257.610 Recovery = 93.73%						
K 766.490†	8212.8	4.92268 mg/L	0.001697	4.92268 mg/L	0.001697	0.03%
QC value within limits for K 766.490 Recovery = 98.45%						
Na 589.592†	38714.0	4.98195 mg/L	0.015619	4.98195 mg/L	0.015619	0.31%
QC value within limits for Na 589.592 Recovery = 99.64%						
Ti 334.940†	2312.0	0.0481480 mg/L	0.00076135	0.0481480 mg/L	0.00076135	1.58%
QC value within limits for Ti 334.940 Recovery = 96.30%						

All analyte(s) passed QC.

Sequence No.: 33

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/27/2015 12:10:29 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30513.4	101.427 %	1.2305			1.21%
Sc 361.383	77839.3	102 %	1.0			0.94%
Al 308.215†	-11.1	-0.0243654 mg/L	0.00305138	-0.0243654 mg/L	0.00305138	12.52%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887†	-56.3	-0.126481 mg/L	0.0010720	-0.126481 mg/L	0.0010720	0.85%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955†	-2.9	-0.0196760 mg/L	0.01065154	-0.0196760 mg/L	0.01065154	54.13%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077†	-5.1	-0.179166 mg/L	0.0128788	-0.179166 mg/L	0.0128788	7.19%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-8.4	-0.0022928 mg/L	0.00001062	-0.0022928 mg/L	0.00001062	0.46%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490†	18.7	-0.0137089 mg/L	0.02987689	-0.0137089 mg/L	0.02987689	217.94%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	-24.0	-0.0027135 mg/L	0.00569637	-0.0027135 mg/L	0.00569637	209.93%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940†	-1.6	-0.0009631 mg/L	0.00001691	-0.0009631 mg/L	0.00001691	1.76%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 34

Sample ID: 83866-019

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 53

Date Collected: 3/27/2015 12:13:43 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-019

Analyte	Mean Corrected		Calib	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Y 371.029	48904.6	162.560 %		0.5605			0.34%
Sc 361.383	125605.4	164 %		0.4			0.24%
Al 308.215†	-167.3	-0.137768 mg/L		0.0003625	-0.137768 mg/L	0.0003625	0.26%
Ca 315.887†	-655.4	-0.211042 mg/L		0.0004078	-0.211042 mg/L	0.0004078	0.19%
Fe 273.955†	32.8	0.0087983 mg/L		0.00125664	0.0087983 mg/L	0.00125664	14.28%
Mg 279.077†	55.6	-0.118642 mg/L		0.0023397	-0.118642 mg/L	0.0023397	1.97%
Mn 257.610†	-225.0	-0.0076051 mg/L		0.00002395	-0.0076051 mg/L	0.00002395	0.31%
K 766.490†	-311.5	-0.212653 mg/L		0.0159807	-0.212653 mg/L	0.0159807	7.51%
Na 589.592†	-262.2	-0.0333721 mg/L		0.00123346	-0.0333721 mg/L	0.00123346	3.70%
Ti 334.940†	-26.9	-0.0015002 mg/L		0.00002979	-0.0015002 mg/L	0.00002979	1.99%

Sequence No.: 35
 Sample ID: 83866-021
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 54
 Date Collected: 3/27/2015 12:17:00 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-021

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	31026.9	103.134 %		0.2350			0.23%
Sc 361.383	79812.9	104 %		0.7			0.65%
Al 308.215†	178.3	0.113028 mg/L		0.0077629	0.113028 mg/L	0.0077629	6.87%
Ca 315.887†	153279.4	21.5177 mg/L		0.01853	21.5177 mg/L	0.01853	0.09%
Fe 273.955†	549.4	0.421342 mg/L		0.0085677	0.421342 mg/L	0.0085677	2.03%
Mg 279.077†	3502.3	3.31661 mg/L		0.018983	3.31661 mg/L	0.018983	0.57%
Mn 257.610†	596.7	0.0128844 mg/L		0.00004813	0.0128844 mg/L	0.00004813	0.37%
K 766.490†	4042.0	2.41005 mg/L		0.032426	2.41005 mg/L	0.032426	1.35%
Na 589.592†	96795.7	12.4557 mg/L		0.01739	12.4557 mg/L	0.01739	0.14%
Ti 334.940†	88.4	0.0009457 mg/L		0.00017646	0.0009457 mg/L	0.00017646	18.66%

Sequence No.: 36
 Sample ID: 83866-023
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 55
 Date Collected: 3/27/2015 12:20:17 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-023

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	31581.3	104.977 %		0.9005			0.86%
Sc 361.383	80954.5	106 %		1.1			1.01%
Al 308.215†	275.0	0.183226 mg/L		0.0071579	0.183226 mg/L	0.0071579	3.91%
Ca 315.887†	95782.0	13.4016 mg/L		0.03751	13.4016 mg/L	0.03751	0.28%
Fe 273.955†	180.7	0.126938 mg/L		0.0001844	0.126938 mg/L	0.0001844	0.15%
Mg 279.077†	3657.1	3.47095 mg/L		0.052659	3.47095 mg/L	0.052659	1.52%
Mn 257.610†	14632.2	0.358109 mg/L		0.0009792	0.358109 mg/L	0.0009792	0.27%
K 766.490†	7005.5	4.19535 mg/L		0.012955	4.19535 mg/L	0.012955	0.31%
Na 589.592†	77662.1	9.99366 mg/L		0.035817	9.99366 mg/L	0.035817	0.36%
Ti 334.940†	-4.2	-0.0010190 mg/L		0.00004478	-0.0010190 mg/L	0.00004478	4.39%

Sequence No.: 37
 Sample ID: 83866-025
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 56
 Date Collected: 3/27/2015 12:23:33 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-025

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30342.8	100.860	%	0.1580			0.16%
Sc 361.383	80210.1	105	%	0.2			0.20%
Al 308.215†	1179.1	0.839266	mg/L	0.0131133	0.839266 mg/L	0.0131133	1.56%
Ca 315.887†	216974.9	30.5087	mg/L	0.00369	30.5087 mg/L	0.00369	0.01%
Fe 273.955†	1111.1	0.869938	mg/L	0.0006507	0.869938 mg/L	0.0006507	0.07%
Mg 279.077†	7404.4	7.20573	mg/L	0.009280	7.20573 mg/L	0.009280	0.13%
Mn 257.610†	1006.1	0.0232533	mg/L	0.00004067	0.0232533 mg/L	0.00004067	0.17%
K 766.490†	4736.6	2.82850	mg/L	0.015330	2.82850 mg/L	0.015330	0.54%
Na 589.592†	289119.8	37.2033	mg/L	0.00104	37.2033 mg/L	0.00104	0.00%
Ti 334.940†	1502.5	0.0309655	mg/L	0.00004575	0.0309655 mg/L	0.00004575	0.15%

Sequence No.: 38
Sample ID: 83866-027
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 57
Date Collected: 3/27/2015 12:26:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 83866-027

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30987.6	103.003	%	0.0187			0.02%
Sc 361.383	80458.4	105	%	0.4			0.39%
Al 308.215†	2706.9	1.94785	mg/L	0.006743	1.94785 mg/L	0.006743	0.35%
Ca 315.887†	107374.4	15.0380	mg/L	0.03573	15.0380 mg/L	0.03573	0.24%
Fe 273.955†	3341.7	2.65113	mg/L	0.000484	2.65113 mg/L	0.000484	0.02%
Mg 279.077†	7706.9	7.50725	mg/L	0.014137	7.50725 mg/L	0.014137	0.19%
Mn 257.610†	2608.3	0.0638436	mg/L	0.00004504	0.0638436 mg/L	0.00004504	0.07%
K 766.490†	2728.7	1.61887	mg/L	0.007584	1.61887 mg/L	0.007584	0.47%
Na 589.592†	136528.2	17.5684	mg/L	0.06211	17.5684 mg/L	0.06211	0.35%
Ti 334.940†	3131.3	0.0655413	mg/L	0.00065086	0.0655413 mg/L	0.00065086	0.99%

Sequence No.: 39
 Sample ID: 83866-029
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 58
 Date Collected: 3/27/2015 12:30:06 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-029

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	31403.5	104.386	%	0.0413			0.04%
Sc 361.383	81480.8	106	%	0.1			0.06%
Al 308.215†	59.8	0.0270221	mg/L	0.00637825	0.0270221 mg/L	0.00637825	23.60%
Ca 315.887†	86947.4	12.1546	mg/L	0.00694	12.1546 mg/L	0.00694	0.06%
Fe 273.955†	95.9	0.0592317	mg/L	0.00300175	0.0592317 mg/L	0.00300175	5.07%
Mg 279.077†	4947.7	4.75727	mg/L	0.008024	4.75727 mg/L	0.008024	0.17%
Mn 257.610†	1231.6	0.0282745	mg/L	0.00005770	0.0282745 mg/L	0.00005770	0.20%
K 766.490†	7365.3	4.41216	mg/L	0.001528	4.41216 mg/L	0.001528	0.03%
Na 589.592†	114553.6	14.7407	mg/L	0.01226	14.7407 mg/L	0.01226	0.08%
Ti 334.940†	-0.3	-0.0009355	mg/L	0.00010955	-0.0009355 mg/L	0.00010955	11.71%

Sequence No.: 40
 Sample ID: 83866-031
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 59
 Date Collected: 3/27/2015 12:33:23 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-031

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30516.0	101.436	%	0.2772			0.27%
Sc 361.383	80074.7	105	%	0.3			0.30%
Al 308.215†	2064.8	1.48194	mg/L	0.008105	1.48194 mg/L	0.008105	0.55%
Ca 315.887†	67518.9	9.41214	mg/L	0.001282	9.41214 mg/L	0.001282	0.01%
Fe 273.955†	2221.1	1.75633	mg/L	0.010325	1.75633 mg/L	0.010325	0.59%
Mg 279.077†	2352.5	2.17065	mg/L	0.021025	2.17065 mg/L	0.021025	0.97%
Mn 257.610†	5169.0	0.126281	mg/L	0.0008621	0.126281 mg/L	0.0008621	0.68%
K 766.490†	5590.9	3.34316	mg/L	0.052147	3.34316 mg/L	0.052147	1.56%
Na 589.592†	836208.7	107.601	mg/L	0.2788	107.601 mg/L	0.2788	0.26%
Ti 334.940†	2686.8	0.0561059	mg/L	0.00030099	0.0561059 mg/L	0.00030099	0.54%

Sequence No.: 41
 Sample ID: 83866-033
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 60
 Date Collected: 3/27/2015 12:36:41 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-033

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	31380.0	104.308	%	1.0558				1.01%
Sc 361.383	80667.4	105	%	0.9				0.84%
Al 308.215†	-31.4	-0.0391545	mg/L	0.00316503	-0.0391545	mg/L	0.00316503	8.08%
Ca 315.887†	1868.2	0.145174	mg/L	0.0022477	0.145174	mg/L	0.0022477	1.55%
Fe 273.955†	3.8	-0.0143193	mg/L	0.00057319	-0.0143193	mg/L	0.00057319	4.00%
Mg 279.077†	4.2	-0.169891	mg/L	0.0077758	-0.169891	mg/L	0.0077758	4.58%
Mn 257.610†	-9.4	-0.0023159	mg/L	0.00007455	-0.0023159	mg/L	0.00007455	3.22%
K 766.490†	-9.1	-0.0304534	mg/L	0.01742089	-0.0304534	mg/L	0.01742089	57.21%
Na 589.592†	403.5	0.0522849	mg/L	0.00850849	0.0522849	mg/L	0.00850849	16.27%
Ti 334.940†	5.4	-0.0008145	mg/L	0.00027090	-0.0008145	mg/L	0.00027090	33.26%

Sequence No.: 42

Sample ID: ICSEA V-202074

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/27/2015 12:39:59 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSEA V-202074

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28132.8	93.5139 %	0.63784			0.68%
Sc 361.383	74863.9	97.8 %	0.18			0.19%
Al 308.215†	689104.9	500.011 mg/L	0.2918	500.011 mg/L	0.2918	0.06%
QC value within limits for Al 308.215 Recovery = 100.00%						
Ca 315.887†	3305272.7	466.439 mg/L	0.6468	466.439 mg/L	0.6468	0.14%
QC value within limits for Ca 315.887 Recovery = 93.29%						
Fe 273.955†	229494.9	183.247 mg/L	0.1747	183.247 mg/L	0.1747	0.10%
QC value within limits for Fe 273.955 Recovery = 91.62%						
Mg 279.077†	475269.5	473.518 mg/L	0.3752	473.518 mg/L	0.3752	0.08%
QC value within limits for Mg 279.077 Recovery = 94.70%						
Mn 257.610†	-1729.5	0.0748104 mg/L	0.00055578	0.0748104 mg/L	0.00055578	0.74%
QC value within limits for Mn 257.610 Recovery = 7.48%						
K 766.490†	99.8	0.0351139 mg/L	0.02423324	0.0351139 mg/L	0.02423324	69.01%
QC value within limits for K 766.490 Recovery = 3.51%						
Na 589.592†	1814.4	0.233834 mg/L	0.0085709	0.233834 mg/L	0.0085709	3.67%
QC value within limits for Na 589.592 Recovery = 23.38%						
Ti 334.940†	-2425.8	-0.0524257 mg/L	0.00007329	-0.0524257 mg/L	0.00007329	0.14%
QC value within limits for Ti 334.940 Recovery = -5.24%						

All analyte(s) passed QC.

Sequence No.: 43
 Sample ID: ICSAB V-202076
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/27/2015 12:43:06 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28580.7	95.0028 %	1.32868			1.40%
Sc 361.383	75025.1	98.0 %	0.40			0.41%
Al 308.215†	688427.9	499.520 mg/L	1.4499	499.520 mg/L	1.4499	0.29%
QC value within limits for Al 308.215 Recovery = 99.90%						
Ca 315.887†	3307724.2	466.785 mg/L	2.1152	466.785 mg/L	2.1152	0.45%
QC value within limits for Ca 315.887 Recovery = 93.36%						
Fe 273.955†	230366.6	183.943 mg/L	0.5706	183.943 mg/L	0.5706	0.31%
QC value within limits for Fe 273.955 Recovery = 91.97%						
Mg 279.077†	476682.2	474.926 mg/L	2.1880	474.926 mg/L	2.1880	0.46%
QC value within limits for Mg 279.077 Recovery = 94.99%						
Mn 257.610†	16879.1	0.533222 mg/L	0.0066193	0.533222 mg/L	0.0066193	1.24%
QC value within limits for Mn 257.610 Recovery = 106.64%						
K 766.490†	116.2	0.0450078 mg/L	0.00597495	0.0450078 mg/L	0.00597495	13.28%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	1745.6	0.224989 mg/L	0.0126540	0.224989 mg/L	0.0126540	5.62%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940†	-2383.4	-0.0515236 mg/L	0.00009365	-0.0515236 mg/L	0.00009365	0.18%

All analyte(s) passed QC.

Sequence No.: 44

Sample ID: CCV V-202964

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/27/2015 12:46:15 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30513.4	101.427 %	0.0923			0.09%
Sc 361.383	80093.8	105 %	0.2			0.24%
Al 308.215†	6648.4	4.80784 mg/L	0.007657	4.80784 mg/L	0.007657	0.16%
QC value within limits for Al 308.215 Recovery = 96.16%						
Ca 315.887†	331525.4	46.6781 mg/L	0.10468	46.6781 mg/L	0.10468	0.22%
QC value within limits for Ca 315.887 Recovery = 93.36%						
Fe 273.955†	6068.5	4.82870 mg/L	0.003185	4.82870 mg/L	0.003185	0.07%
QC value within limits for Fe 273.955 Recovery = 96.57%						
Mg 279.077†	48403.4	48.0687 mg/L	0.06785	48.0687 mg/L	0.06785	0.14%
QC value within limits for Mg 279.077 Recovery = 96.14%						
Mn 257.610†	19208.2	0.473791 mg/L	0.0002788	0.473791 mg/L	0.0002788	0.06%
QC value within limits for Mn 257.610 Recovery = 94.76%						
K 766.490†	76217.5	45.8911 mg/L	0.13904	45.8911 mg/L	0.13904	0.30%
QC value within limits for K 766.490 Recovery = 91.78%						
Na 589.592†	362371.3	46.6291 mg/L	0.00643	46.6291 mg/L	0.00643	0.01%
QC value within limits for Na 589.592 Recovery = 93.26%						
Ti 334.940†	22582.6	0.478451 mg/L	0.0000469	0.478451 mg/L	0.0000469	0.01%
QC value within limits for Ti 334.940 Recovery = 95.69%						

All analyte(s) passed QC.

Sequence No.: 45

Sample ID: LLCCV [aq] V-206357

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/27/2015 12:49:00 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV [aq] V-206357

Analyte	Mean Corrected		Calib	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Y 371.029	31429.6	104.473 %		0.8175			0.78%
Sc 361.383	80867.6	106 %		0.8			0.72%
Al 308.215†	233.6	0.153134 mg/L		0.0005173	0.153134 mg/L	0.0005173	0.34%
QC value within limits for Al 308.215 Recovery = 76.57%							
Ca 315.887†	34414.9	4.73933 mg/L		0.020669	4.73933 mg/L	0.020669	0.44%
QC value within limits for Ca 315.887 Recovery = 94.79%							
Fe 273.955†	363.6	0.272944 mg/L		0.0017815	0.272944 mg/L	0.0017815	0.65%
QC value within limits for Fe 273.955 Recovery = 90.98%							
Mg 279.077†	4973.7	4.78312 mg/L		0.006913	4.78312 mg/L	0.006913	0.14%
QC value within limits for Mg 279.077 Recovery = 95.66%							
Mn 257.610†	1556.1	0.0363982 mg/L		0.00032355	0.0363982 mg/L	0.00032355	0.89%
QC value within limits for Mn 257.610 Recovery = 91.00%							
K 766.490†	7764.2	4.65243 mg/L		0.032920	4.65243 mg/L	0.032920	0.71%
QC value within limits for K 766.490 Recovery = 93.05%							
Na 589.592†	37335.2	4.80454 mg/L		0.018155	4.80454 mg/L	0.018155	0.38%
QC value within limits for Na 589.592 Recovery = 96.09%							
Ti 334.940†	2258.1	0.0470043 mg/L		0.00025389	0.0470043 mg/L	0.00025389	0.54%
QC value within limits for Ti 334.940 Recovery = 94.01%							

All analyte(s) passed QC.

Sequence No.: 46

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/27/2015 12:52:18 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	31623.0	105.115 %	0.1644			0.16%
Sc 361.383	80639.8	105 %	0.0			0.01%
Al 308.215†	-22.5	-0.0326995 mg/L	0.00361534	-0.0326995 mg/L	0.00361534	11.06%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887†	-84.4	-0.130452 mg/L	0.0018455	-0.130452 mg/L	0.0018455	1.41%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955†	3.6	-0.0144693 mg/L	0.00748744	-0.0144693 mg/L	0.00748744	51.75%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077†	-1.0	-0.175083 mg/L	0.0121665	-0.175083 mg/L	0.0121665	6.95%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-25.5	-0.0027116 mg/L	0.00009242	-0.0027116 mg/L	0.00009242	3.41%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490†	-79.8	-0.0730523 mg/L	0.03100291	-0.0730523 mg/L	0.03100291	42.44%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	-45.8	-0.0055220 mg/L	0.01385353	-0.0055220 mg/L	0.01385353	250.88%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940†	-19.0	-0.0013335 mg/L	0.00033262	-0.0013335 mg/L	0.00033262	24.94%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

File SW17599D2

5032012 0450
Batch 17599 SW846

Method: PE 2 4300DV RADIAL

Page 1

Date: 3/27/2015 1:31:12 PM

Analyst JBL 3/27/15

=====

Analysis Begun

Start Time: 3/27/2015 1:28:58 PM

Plasma On Time: 3/27/2015 9:38:46 AM

Logged In Analyst: shiamala

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030901 Autosampler Model: AS-93plus

Sample Information File: C:\pe\administrator\Sample Information\03.26.15.sif

Batch ID: PEICP 2

Results Data Set: SW17599D2

Results Library: C:\pe\administrator\Results\Results.mdb

=====

Method Loaded

Method Name: PE 2 4300DV RADIAL

Method Last Saved: 3/23/2015 4:35:41 PM

IEC File: IECrad101413.iec

MSF File:

Method Description: 200.7/6010B/6010C

=====

Sequence No.: 1

Autosampler Location: 1

Sample ID: CALBLK V-205362

Date Collected: 3/27/2015 1:28:58 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CALBLK V-205362

Analyte	Mean Corrected		Std.Dev.	RSD	Calib	
	Intensity				Conc.	Units
Y 371.029	32303.4		267.66	0.83%	100.000	%
Sc 361.383	82349.7		516.61	0.63%	100	%
Al 308.215†	213.7		18.44	8.63%	[0.00]	mg/L
Ca 315.887†	1088.3		2.12	0.20%	[0.00]	mg/L
Fe 273.955†	-69.3		1.69	2.44%	[0.00]	mg/L
Mg 279.077†	-106.5		1.53	1.44%	[0.00]	mg/L
Mn 257.610†	388.4		7.52	1.94%	[0.00]	mg/L
K 766.490†	651.3		29.33	4.50%	[0.00]	mg/L
Na 589.592†	285.6		8.18	2.86%	[0.00]	mg/L
Ti 334.940†	102.7		7.69	7.48%	[0.00]	mg/L

17599
42362

NayK 3/27

83866-019 NayK reported

Sequence No.: 2

Autosampler Location: 9

Sample ID: CALST2 V-202401

Date Collected: 3/27/2015 1:32:13 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CALST2 V-202401

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	32116.6	229.59	0.71%	99.4218 %
Sc 361.383	82456.9	577.95	0.70%	100 %
Al 308.215†	131.4	4.10	3.12%	[0.1] mg/L
Ca 315.887†	7137.9	32.39	0.45%	[1] mg/L
Fe 273.955†	120.7	2.73	2.26%	[0.1] mg/L
Mg 279.077†	1052.6	18.47	1.75%	[1] mg/L
Mn 257.610†	421.3	6.70	1.59%	[0.01] mg/L
K 766.490†	1574.3	36.25	2.30%	[1] mg/L
Na 589.592†	7755.8	45.98	0.59%	[1] mg/L
Ti 334.940†	448.7	5.49	1.22%	[0.01] mg/L

Sequence No.: 3

Sample ID: CALST3 V-202402

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/27/2015 1:35:29 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST3 V-202402

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Y 371.029	30742.4	76.98	0.25%	95.1679 %
Sc 361.383	81759.4	719.26	0.88%	99.3 %
Al 308.215†	6976.0	76.53	1.10%	[5] mg/L
Ca 315.887†	359194.4	39.73	0.01%	[50] mg/L
Fe 273.955†	6331.6	51.13	0.81%	[5] mg/L
Mg 279.077†	50339.7	330.54	0.66%	[50] mg/L
Mn 257.610†	20475.0	135.58	0.66%	[0.5] mg/L
K 766.490†	81519.5	397.08	0.49%	[50] mg/L
Na 589.592†	388306.6	377.09	0.10%	[50] mg/L
Ti 334.940†	23565.6	202.58	0.86%	[0.5] mg/L

Sequence No.: 4

Autosampler Location: 4

Sample ID: CALST4 V-203077

Date Collected: 3/27/2015 1:38:16 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CALST4 V-203077

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	30588.1	121.43	0.40%	94.6900 %
Sc 361.383	79475.6	291.12	0.37%	96.5 %
Al 308.215†	13883.3	8.76	0.06%	[10] mg/L
Ca 315.887†	710487.6	1864.40	0.26%	[100] mg/L
Fe 273.955†	12629.1	11.50	0.09%	[10] mg/L
Mg 279.077†	100876.9	6.96	0.01%	[100] mg/L
Mn 257.610†	40880.0	4.45	0.01%	[1.0] mg/L
K 766.490†	164112.6	1150.90	0.70%	[100] mg/L
Na 589.592†	780779.4	2243.18	0.29%	[100] mg/L
Ti 334.940†	47398.0	36.96	0.08%	[1.0] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Al 308.215	3	Lin, Calc Int	2.9	1389	0.00000	0.999996	
Ca 315.887	3	Lin, Calc Int	734.0	7112	0.00000	0.999984	
Fe 273.955	3	Lin, Calc Int	0.6	1264	0.00000	0.999999	
Mg 279.077	3	Lin, Calc Int	1.9	1008	0.00000	0.999999	
Mn 257.610	3	Lin, Calc Int	12.1	40880	0.00000	1.000000	
K 766.490	3	Lin, Calc Int	-128.0	1641	0.00000	0.999995	
Na 589.592	3	Lin, Calc Int	-402.7	7804	0.00000	0.999996	
Ti 334.940	3	Lin, Calc Int	-35.7	47390	0.00000	0.999996	

Sequence No.: 5

Autosampler Location: 3

Sample ID: ICS3 V-202402

Date Collected: 3/27/2015 1:41:03 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: ICS3 V-202402

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30944.4	95.7930 %	0.17715			0.18%
Sc 361.383	80868.3	98.2 %	0.36			0.37%
Al 308.215†	7062.6	5.08133 mg/L	0.046182	5.08133 mg/L	0.046182	0.91%
QC value within limits for Al 308.215 Recovery = 101.63%						
Ca 315.887†	357182.8	50.1207 mg/L	0.19693	50.1207 mg/L	0.19693	0.39%
QC value within limits for Ca 315.887 Recovery = 100.24%						
Fe 273.955†	6414.1	5.07592 mg/L	0.031342	5.07592 mg/L	0.031342	0.62%
QC value within limits for Fe 273.955 Recovery = 101.52%						
Mg 279.077†	50967.2	50.5430 mg/L	0.28008	50.5430 mg/L	0.28008	0.55%
QC value within limits for Mg 279.077 Recovery = 101.09%						
Mn 257.610†	20799.7	0.511819 mg/L	0.0023489	0.511819 mg/L	0.0023489	0.46%
QC value within limits for Mn 257.610 Recovery = 102.36%						
K 766.490†	81711.3	49.8862 mg/L	0.09574	49.8862 mg/L	0.09574	0.19%
QC value within limits for K 766.490 Recovery = 99.77%						
Na 589.592†	387683.7	49.7271 mg/L	0.22925	49.7271 mg/L	0.22925	0.46%
QC value within limits for Na 589.592 Recovery = 99.45%						
Ti 334.940†	23914.5	0.505411 mg/L	0.0032695	0.505411 mg/L	0.0032695	0.65%
QC value within limits for Ti 334.940 Recovery = 101.08%						

All analyte(s) passed QC.

Sequence No.: 6

Autosampler Location: 6

Sample ID: ICV V-202964

Date Collected: 3/27/2015 1:43:50 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: ICV V-202964

Analyte	Mean Corrected		Calib		Sample		RSD
	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.		
Y 371.029	30843.3	95.4803 %	0.62082			0.65%	
Sc 361.383	81844.5	99.4 %	0.70			0.71%	
Al 308.215†	7010.7	5.04396 mg/L	0.017456	5.04396 mg/L	0.017456	0.35%	
QC value within limits for Al 308.215 Recovery = 100.88%							
Ca 315.887†	357531.4	50.1697 mg/L	0.34734	50.1697 mg/L	0.34734	0.69%	
QC value within limits for Ca 315.887 Recovery = 100.34%							
Fe 273.955†	6429.6	5.08818 mg/L	0.005136	5.08818 mg/L	0.005136	0.10%	
QC value within limits for Fe 273.955 Recovery = 101.76%							
Mg 279.077†	51212.6	50.7864 mg/L	0.15824	50.7864 mg/L	0.15824	0.31%	
QC value within limits for Mg 279.077 Recovery = 101.57%							
Mn 257.610†	20330.1	0.500340 mg/L	0.0015015	0.500340 mg/L	0.0015015	0.30%	
QC value within limits for Mn 257.610 Recovery = 100.07%							
K 766.490†	81186.6	49.5664 mg/L	0.07238	49.5664 mg/L	0.07238	0.15%	
QC value within limits for K 766.490 Recovery = 99.13%							
Na 589.592†	387315.8	49.6800 mg/L	0.25870	49.6800 mg/L	0.25870	0.52%	
QC value within limits for Na 589.592 Recovery = 99.36%							
Ti 334.940†	23872.0	0.504515 mg/L	0.0014013	0.504515 mg/L	0.0014013	0.28%	
QC value within limits for Ti 334.940 Recovery = 100.90%							

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV [aq] V-206357

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/27/2015 1:46:35 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	31963.4	98.9475 %		2.07000			2.09%
Sc 361.383	82334.5	100.0 %		2.31			2.31%
Al 308.215†	262.6	0.186977 mg/L		0.0112046	0.186977 mg/L	0.0112046	5.99%
QC value within limits for Al 308.215 Recovery = 93.49%							
Ca 315.887†	37041.9	5.10529 mg/L		0.008021	5.10529 mg/L	0.008021	0.16%
QC value within limits for Ca 315.887 Recovery = 102.11%							
Fe 273.955†	384.5	0.303890 mg/L		0.0015899	0.303890 mg/L	0.0015899	0.52%
QC value within limits for Fe 273.955 Recovery = 101.30%							
Mg 279.077†	5356.6	5.31030 mg/L		0.144201	5.31030 mg/L	0.144201	2.72%
QC value within limits for Mg 279.077 Recovery = 106.21%							
Mn 257.610†	1693.8	0.0413378 mg/L		0.00129442	0.0413378 mg/L	0.00129442	3.13%
QC value within limits for Mn 257.610 Recovery = 103.34%							
K 766.490†	8161.3	5.05288 mg/L		0.000170	5.05288 mg/L	0.000170	0.00%
QC value within limits for K 766.490 Recovery = 101.06%							
Na 589.592†	39436.3	5.10473 mg/L		0.035463	5.10473 mg/L	0.035463	0.69%
QC value within limits for Na 589.592 Recovery = 102.09%							
Ti 334.940†	2431.5	0.0520654 mg/L		0.00136015	0.0520654 mg/L	0.00136015	2.61%
QC value within limits for Ti 334.940 Recovery = 104.13%							

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB V-205362

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/27/2015 1:49:53 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB V-205362

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	32155.9	99.5436 %		0.28628			0.29%
Sc 361.383	82079.9	99.7 %		0.31			0.31%
Al 308.215†	-12.2	-0.0108214 mg/L		0.00996426	-0.0108214 mg/L	0.00996426	92.08%
QC value within limits for Al 308.215 Recovery = Not calculated							
Ca 315.887†	6.3	-0.102330 mg/L		0.0017508	-0.102330 mg/L	0.0017508	1.71%
QC value within limits for Ca 315.887 Recovery = Not calculated							
Fe 273.955†	-3.7	-0.0033399 mg/L		0.00360449	-0.0033399 mg/L	0.00360449	107.92%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	-1.9	-0.0038550 mg/L		0.00287571	-0.0038550 mg/L	0.00287571	74.60%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	-2.0	-0.0003469 mg/L		0.00018580	-0.0003469 mg/L	0.00018580	53.56%
QC value within limits for Mn 257.610 Recovery = Not calculated							
K 766.490†	-12.5	0.0704395 mg/L		0.06156542	0.0704395 mg/L	0.06156542	87.40%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	80.4	0.0619065 mg/L		0.00735285	0.0619065 mg/L	0.00735285	11.88%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	4.3	0.0008443 mg/L		0.00041206	0.0008443 mg/L	0.00041206	48.80%
QC value within limits for Ti 334.940 Recovery = Not calculated							

All analyte(s) passed QC.

Autosampler Location: 7
Date Collected: 3/27/2015 1:53:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analyte	Mean Corrected		Calib	Std.Dev.	Sample		RSD
	Intensity	Conc.	Units		Conc.	Units	
Y 371.029	29275.1	90.6257	%	0.12764			0.14%
Sc 361.383	77028.0	93.5	%	0.49			0.52%
Al 308.215†	723131.2	520.480	mg/L	1.2500	520.480	mg/L	0.24%
QC value within limits for Al 308.215		Recovery =	104.10%				
Ca 315.887†	3494816.3	491.307	mg/L	1.1772	491.307	mg/L	0.24%
QC value within limits for Ca 315.887		Recovery =	98.26%				
Fe 273.955†	242310.9	191.774	mg/L	0.3949	191.774	mg/L	0.21%
QC value within limits for Fe 273.955		Recovery =	95.89%				
Mg 279.077†	502625.6	498.460	mg/L	1.3347	498.460	mg/L	0.27%
QC value within limits for Mg 279.077		Recovery =	99.69%				
Mn 257.610†	-1827.8	0.0799972	mg/L	0.00091156	0.0799972	mg/L	1.14%
QC value within limits for Mn 257.610		Recovery =	8.00%				
K 766.490†	119.8	0.151050	mg/L	0.0001567	0.151050	mg/L	0.10%
QC value within limits for K 766.490		Recovery =	15.11%				
Na 589.592†	1959.4	0.302669	mg/L	0.0103575	0.302669	mg/L	3.42%
QC value within limits for Na 589.592		Recovery =	30.27%				
Ti 334.940†	-2526.6	-0.0525640	mg/L	0.00049316	-0.0525640	mg/L	0.94%
QC value within limits for Ti 334.940		Recovery =	-5.26%				

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSAB V-202076
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/27/2015 1:56:14 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28994.2	89.7559 %	0.41051			0.46%
Sc 361.383	76670.2	93.1 %	0.30			0.32%
Al 308.215†	729668.1	525.185 mg/L	2.4220	525.185 mg/L	2.4220	0.46%
QC value within limits for Al 308.215		Recovery = 105.04%				
Ca 315.887†	3523519.8	495.343 mg/L	2.1347	495.343 mg/L	2.1347	0.43%
QC value within limits for Ca 315.887		Recovery = 99.07%				
Fe 273.955†	245125.4	194.002 mg/L	0.8923	194.002 mg/L	0.8923	0.46%
QC value within limits for Fe 273.955		Recovery = 97.00%				
Mg 279.077†	507366.0	503.161 mg/L	2.2387	503.161 mg/L	2.2387	0.44%
QC value within limits for Mg 279.077		Recovery = 100.63%				
Mn 257.610†	17787.9	0.561291 mg/L	0.0055614	0.561291 mg/L	0.0055614	0.99%
QC value within limits for Mn 257.610		Recovery = 112.26%				
K 766.490†	153.4	0.171567 mg/L	0.0089777	0.171567 mg/L	0.0089777	5.23%
QC value within limits for K 766.490		Recovery = Not calculated				
Na 589.592†	1849.5	0.288592 mg/L	0.0079882	0.288592 mg/L	0.0079882	2.77%
QC value within limits for Na 589.592		Recovery = Not calculated				
Ti 334.940†	-2540.4	-0.0528558 mg/L	0.00133379	-0.0528558 mg/L	0.00133379	2.52%

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: 83866-019

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 53

Date Collected: 3/27/2015 1:59:23 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-019

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	32445.0	100.439	%	0.4918				0.49%
Sc 361.383	84163.6	102	%	0.5				0.50%
Al 308.215†	245.4	0.174575	mg/L	0.0018173	0.174575	mg/L	0.0018173	1.04%
Ca 315.887†	131911.0	18.4449	mg/L	0.03391	18.4449	mg/L	0.03391	0.18%
Fe 273.955†	278.4	0.219906	mg/L	0.0059381	0.219906	mg/L	0.0059381	2.70%
Mg 279.077†	3331.3	3.30177	mg/L	0.014854	3.30177	mg/L	0.014854	0.45%
Mn 257.610†	38815.7	0.949364	mg/L	0.0003581	0.949364	mg/L	0.0003581	0.04%
K 766.490†	7247.8	4.49604	mg/L	0.068018	4.49604	mg/L	0.068018	1.51%
Na 589.592†	150841.4	19.3795	mg/L	0.07267	19.3795	mg/L	0.07267	0.37%
Ti 334.940†	81.5	0.0024734	mg/L	0.00010459	0.0024734	mg/L	0.00010459	4.23%

Sequence No.: 12

Sample ID: ICSA V-202074

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/27/2015 2:02:39 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29397.2	91.0035 %		1.23860			1.36%
Sc 361.383	77770.4	94.4 %		0.47			0.49%
Al 308.215†	723182.4	520.517 mg/L		3.7765	520.517 mg/L	3.7765	0.73%
QC value within limits for Al 308.215 Recovery = 104.10%							
Ca 315.887†	3510815.6	493.556 mg/L		2.2962	493.556 mg/L	2.2962	0.47%
QC value within limits for Ca 315.887 Recovery = 98.71%							
Fe 273.955†	243547.2	192.753 mg/L		1.1965	192.753 mg/L	1.1965	0.62%
QC value within limits for Fe 273.955 Recovery = 96.38%							
Mg 279.077†	506276.3	502.080 mg/L		2.2173	502.080 mg/L	2.2173	0.44%
QC value within limits for Mg 279.077 Recovery = 100.42%							
Mn 257.610†	-1829.5	0.0805933 mg/L		0.00028103	0.0805933 mg/L	0.00028103	0.35%
QC value within limits for Mn 257.610 Recovery = 8.06%							
K 766.490†	132.3	0.158707 mg/L		0.0030940	0.158707 mg/L	0.0030940	1.95%
QC value within limits for K 766.490 Recovery = 15.87%							
Na 589.592†	1910.0	0.296342 mg/L		0.0031524	0.296342 mg/L	0.0031524	1.06%
QC value within limits for Na 589.592 Recovery = 29.63%							
Ti 334.940†	-2476.3	-0.0515014 mg/L		0.00040966	-0.0515014 mg/L	0.00040966	0.80%
QC value within limits for Ti 334.940 Recovery = -5.15%							

All analyte(s) passed QC.

Sequence No.: 13

Sample ID: ICSAB V-202076

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/27/2015 2:05:46 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29458.8	91.1942 %	0.98991			1.09%
Sc 361.383	77496.9	94.1 %	1.13			1.20%
Al 308.215†	726649.1	523.012 mg/L	2.4590	523.012 mg/L	2.4590	0.47%
QC value within limits for Al 308.215 Recovery = 104.60%						
Ca 315.887†	3520411.4	494.906 mg/L	1.4620	494.906 mg/L	1.4620	0.30%
QC value within limits for Ca 315.887 Recovery = 98.98%						
Fe 273.955†	244729.0	193.688 mg/L	0.7084	193.688 mg/L	0.7084	0.37%
QC value within limits for Fe 273.955 Recovery = 96.84%						
Mg 279.077†	507849.1	503.640 mg/L	1.2596	503.640 mg/L	1.2596	0.25%
QC value within limits for Mg 279.077 Recovery = 100.73%						
Mn 257.610†	17977.5	0.565725 mg/L	0.0003844	0.565725 mg/L	0.0003844	0.07%
QC value within limits for Mn 257.610 Recovery = 113.15%						
K 766.490†	112.6	0.146693 mg/L	0.0163668	0.146693 mg/L	0.0163668	11.16%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	1791.0	0.281086 mg/L	0.0042242	0.281086 mg/L	0.0042242	1.50%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940†	-2517.3	-0.0523680 mg/L	0.00034632	-0.0523680 mg/L	0.00034632	0.66%

All analyte(s) passed QC.

Sequence No.: 14
 Sample ID: CCV V-202964
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/27/2015 2:08:55 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	31156.3	96.4490 %	1.74979			1.81%
Sc 361.383	81637.6	99.1 %	0.45			0.45%
Al 308.215†	7076.7	5.09147 mg/L	0.038752	5.09147 mg/L	0.038752	0.76%
QC value within limits for Al 308.215 Recovery = 101.83%						
Ca 315.887†	354698.0	49.7713 mg/L	0.17551	49.7713 mg/L	0.17551	0.35%
QC value within limits for Ca 315.887 Recovery = 99.54%						
Fe 273.955†	6422.7	5.08273 mg/L	0.081060	5.08273 mg/L	0.081060	1.59%
QC value within limits for Fe 273.955 Recovery = 101.65%						
Mg 279.077†	51308.9	50.8819 mg/L	0.73396	50.8819 mg/L	0.73396	1.44%
QC value within limits for Mg 279.077 Recovery = 101.76%						
Mn 257.610†	20365.1	0.501192 mg/L	0.0055497	0.501192 mg/L	0.0055497	1.11%
QC value within limits for Mn 257.610 Recovery = 100.24%						
K 766.490†	80375.4	49.0719 mg/L	0.40831	49.0719 mg/L	0.40831	0.83%
QC value within limits for K 766.490 Recovery = 98.14%						
Na 589.592†	385555.6	49.4544 mg/L	0.27358	49.4544 mg/L	0.27358	0.55%
QC value within limits for Na 589.592 Recovery = 98.91%						
Ti 334.940†	24004.8	0.507317 mg/L	0.0062038	0.507317 mg/L	0.0062038	1.22%
QC value within limits for Ti 334.940 Recovery = 101.46%						

All analyte(s) passed QC.

Sequence No.: 15

Sample ID: LLCCV [aq] V-206357

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/27/2015 2:11:39 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV [aq] V-206357

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	32245.0	99.8193 %	0.37950			0.38%
Sc 361.383	83006.1	101 %	0.4			0.42%
Al 308.215†	267.5	0.190497 mg/L	0.0032920	0.190497 mg/L	0.0032920	1.73%
QC value within limits for Al 308.215 Recovery = 95.25%						
Ca 315.887†	36743.1	5.06327 mg/L	0.007778	5.06327 mg/L	0.007778	0.15%
QC value within limits for Ca 315.887 Recovery = 101.27%						
Fe 273.955†	390.9	0.308932 mg/L	0.0015845	0.308932 mg/L	0.0015845	0.51%
QC value within limits for Fe 273.955 Recovery = 102.98%						
Mg 279.077†	5281.7	5.23597 mg/L	0.001654	5.23597 mg/L	0.001654	0.03%
QC value within limits for Mg 279.077 Recovery = 104.72%						
Mn 257.610†	1659.1	0.0404919 mg/L	0.00005126	0.0404919 mg/L	0.00005126	0.13%
QC value within limits for Mn 257.610 Recovery = 101.23%						
K 766.490†	8054.5	4.98775 mg/L	0.046428	4.98775 mg/L	0.046428	0.93%
QC value within limits for K 766.490 Recovery = 99.75%						
Na 589.592†	39282.2	5.08499 mg/L	0.015923	5.08499 mg/L	0.015923	0.31%
QC value within limits for Na 589.592 Recovery = 101.70%						
Ti 334.940†	2387.2	0.0511308 mg/L	0.00019843	0.0511308 mg/L	0.00019843	0.39%
QC value within limits for Ti 334.940 Recovery = 102.26%						

All analyte(s) passed QC.

Sequence No.: 16

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/27/2015 2:14:57 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	32620.2	100.981 %	1.0865			1.08%
Sc 361.383	83194.7	101 %	1.0			0.94%
Al 308.215†	3.1	0.0001957 mg/L	0.00141760	0.0001957 mg/L	0.00141760	724.29%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887†	-29.0	-0.107291 mg/L	0.0008718	-0.107291 mg/L	0.0008718	0.81%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955†	-1.3	-0.0014404 mg/L	0.00552800	-0.0014404 mg/L	0.00552800	383.78%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077†	-4.1	-0.0059848 mg/L	0.00258521	-0.0059848 mg/L	0.00258521	43.20%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	0.5	-0.0002836 mg/L	0.00022799	-0.0002836 mg/L	0.00022799	80.39%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490†	-6.2	0.0742415 mg/L	0.00354308	0.0742415 mg/L	0.00354308	4.77%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	17.1	0.0537943 mg/L	0.00560898	0.0537943 mg/L	0.00560898	10.43%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940†	0.5	0.0007652 mg/L	0.00049476	0.0007652 mg/L	0.00049476	64.66%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

=====

Analysis Begun

Logged In Analyst: usermet
Spectrometer Model: FIMS-100, S/N B050-9550

Technique: AA FIMS-MHS
Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H17599SW.sif

Batch ID: H17599SW

Results Data Set: H17599SW

Results Library: C:\data-AA\johns\Results\Results.mdb

=====

Method Loaded

Method Name: HGC2 SWH20 (7470A)

Method Last Saved: 1/23/2015 3:59:02 PM

Method Description: HgCV2 SW846H20 (7470A)

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calibration Blank

Date Collected: 3/27/2015 1:07:37 PM

Analyst:

Data Type: Original

=====

Replicate Data: Calibration Blank

Repl #	Sample Conc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0000	-0.0001	0.0000	13:08:34	Yes
2		[0.00]	0.0001	0.0007	0.0001	13:09:06	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0001				
%RSD:		0.00	85.53				

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: .2 PPB

Date Collected: 3/27/2015 1:09:07 PM

Analyst:

Data Type: Original

=====

Replicate Data: .2 PPB

Repl #	Sample Conc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0010	0.0052	0.0011	13:10:03	Yes
2		[0.2]	0.0011	0.0061	0.0012	13:10:36	Yes
Mean:		[0.2]	0.0011				
SD:		0.0	0.0001				
%RSD:		0.0	6.15				

Standard number 1 applied. [0.2]

Correlation Coef.: 1.000000 Slope: 0.00545 Intercept: 0.00000

Sequence No.: 3

Autosampler Location: 3

Sample ID: .5 PPB

Date Collected: 3/27/2015 1:10:37 PM

Analyst:

Data Type: Original

=====

Replicate Data: .5 PPB

Repl #	Sample Conc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0020	0.0115	0.0021	13:11:33	Yes
2		[0.5]	0.0019	0.0102	0.0019	13:12:05	Yes
Mean:		[0.5]	0.0019				
SD:		0.0	0.0001				
%RSD:		0.0	5.21				

Standard number 2 applied. [0.5]

Correlation Coef.: 0.982295 Slope: 0.00378 Intercept: 0.00013

Sequence No.: 4

Autosampler Location: 4

Sample ID: 1 PPB

Date Collected: 3/27/2015 1:12:06 PM

Analyst:

Data Type: Original

=====

Replicate Data: 1 PPB

Repl #	Sample Conc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
--------	------------------	--------------	----------------	-----------	-------------	------	-------------

Method: HGCv2 SWH2O (7470A)

Page 2

Date: 3/27/2015 1:19:31 PM

1	[1]	0.0037	0.0184	0.0037	13:13:02	Yes
2	[1]	0.0037	0.0182	0.0037	13:13:34	Yes
Mean:	[1]	0.0037				
SD:	0	0.0000				
%RSD:	0	0.09				

Standard number 3 applied. [1]

Correlation Coef.: 0.994670 Slope: 0.00353 Intercept: 0.00017

Sequence No.: 5

Sample ID: 2 PPB

Analyst:

Autosampler Location: 5

Date Collected: 3/27/2015 1:13:35 PM

Data Type: Original

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[2]	[2]	0.0075	0.0369	0.0076	13:14:31	Yes
2	[2]	[2]	0.0075	0.0371	0.0076	13:15:03	Yes
Mean:	[2]	[2]	0.0075				
SD:	0	0	0.0000				
%RSD:	0	0	0.20				

Standard number 4 applied. [2]

Correlation Coef.: 0.998709 Slope: 0.00367 Intercept: 0.00013

Sequence No.: 6

Sample ID: 5 PPB

Analyst:

Autosampler Location: 6

Date Collected: 3/27/2015 1:15:04 PM

Data Type: Original

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[5]	[5]	0.0186	0.0898	0.0187	13:16:00	Yes
2	[5]	[5]	0.0185	0.0889	0.0185	13:16:32	Yes
Mean:	[5]	[5]	0.0185				
SD:	0	0	0.0001				
%RSD:	0	0	0.48				

Standard number 5 applied. [5]

Correlation Coef.: 0.999813 Slope: 0.00368 Intercept: 0.00012

Sequence No.: 7

Sample ID: 10 PPB

Analyst:

Autosampler Location: 7

Date Collected: 3/27/2015 1:16:33 PM

Data Type: Original

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[10]	[10]	0.0362	0.1701	0.0363	13:17:29	Yes
2	[10]	[10]	0.0357	0.1683	0.0358	13:18:01	Yes
Mean:	[10]	[10]	0.0360				
SD:	0	0	0.0004				
%RSD:	0	0	0.98				

Standard number 6 applied. [10]

Correlation Coef.: 0.999877 Slope: 0.00359 Intercept: 0.00021

Sequence No.: 8

Sample ID: 25 PPB

Analyst:

Autosampler Location: 8

Date Collected: 3/27/2015 1:18:02 PM

Data Type: Original

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[25]	[25]	0.0872	0.4139	0.0873	13:18:58	Yes
2	[25]	[25]	0.0874	0.4148	0.0875	13:19:30	Yes
Mean:	[25]	[25]	0.0873				
SD:	0	0	0.0002				
%RSD:	0	0	0.21				

Standard number 7 applied. [25]

Correlation Coef.: 0.999898 Slope: 0.00349 Intercept: 0.00044

Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.125	0.00	85.5
.2 PPB	0.0011	0.2	0.188	0.00	6.1
.5 PPB	0.0019	0.5	0.429	0.00	5.2
1 PPB	0.0037	1.0	0.925	0.00	0.1
2 PPB	0.0075	2.0	2.025	0.00	0.2
5 PPB	0.0185	5.0	5.183	0.00	0.5
10 PPB	0.0360	10.0	10.183	0.00	1.0
25 PPB	0.0873	25.0	24.893	0.00	0.2

Correlation Coef.: 0.999898 Slope: 0.00349 Intercept: 0.00044

Sequence No.: 9

Autosampler Location: 10

Sample ID: ICV (2)

Date Collected: 3/27/2015 1:19:32 PM

Analyst:

Data Type: Original

Replicate Data: ICV (2)

Repl	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.56	20.56	0.0722	0.3432	0.0723	13:20:30	Yes
2	20.50	20.50	0.0720	0.3408	0.0720	13:21:02	Yes
Mean:	20.53	20.53	0.0721				
SD:	0.047	0.047	0.0002				
%RSD:	0.230	0.230	0.23				

QC value within limits for Hg 253.7 Recovery = 102.65%
All analyte(s) passed QC.

Sequence No.: 10

Autosampler Location: 1

Sample ID: ICB

Date Collected: 3/27/2015 1:21:04 PM

Analyst:

Data Type: Original

Replicate Data: ICB

Repl	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	0.0001	0.0009	0.0002	13:21:59	Yes
2	-0.069	-0.069	0.0002	0.0025	0.0003	13:22:32	Yes
Mean:	-0.083	-0.083	0.0001				
SD:	0.020	0.020	0.0001				
%RSD:	23.70	23.70	47.39				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11

Autosampler Location: 11

Sample ID: MB 42362 (1)

Date Collected: 3/27/2015 1:22:33 PM

Analyst:

Data Type: Original

Replicate Data: MB 42362 (1)

Repl	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.137	-0.137	-0.0000	-0.0003	0.0000	13:23:29	Yes
2	-0.136	-0.136	-0.0000	-0.0012	0.0000	13:24:02	Yes
Mean:	-0.136	-0.136	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.185	0.185	2.18				

Sequence No.: 12

Autosampler Location: 12

Sample ID: LCS 42362

Date Collected: 3/27/2015 1:24:03 PM

Analyst:

Data Type: Original

Replicate Data: LCS 42362

Repl	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.05	10.05	0.0355	0.1728	0.0356	13:24:58	Yes
2	10.02	10.02	0.0354	0.1703	0.0355	13:25:31	Yes
Mean:	10.03	10.03	0.0355				

Method: HGC V2 SWH20 (7470A)

Page 4

Date: 3/27/2015 1:32:58 PM

SD: 0.027 0.027 0.0001
%RSD: 0.265 0.265 0.26

Sequence No.: 13

Autosampler Location: 13

Sample ID: LCS MR 42362

Date Collected: 3/27/2015 1:25:32 PM

Analyst:

Data Type: Original

Replicate Data: LCS MR 42362

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.999	9.999	0.0353	0.1711	0.0354	13:26:27	Yes
2	10.07	10.07	0.0356	0.1705	0.0356	13:27:00	Yes
Mean:	10.03	10.03	0.0355				
SD:	0.047	0.047	0.0002				
%RSD:	0.464	0.464	0.46				

Sequence No.: 14

Autosampler Location: 14

Sample ID: 83866-011

Date Collected: 3/27/2015 1:27:01 PM

Analyst:

Data Type: Original

Replicate Data: 83866-011

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.146	-0.146	-0.0001	-0.0008	-0.0000	13:27:57	Yes
2	-0.138	-0.138	-0.0000	-0.0001	0.0000	13:28:29	Yes
Mean:	-0.142	-0.142	-0.0001				
SD:	0.006	0.006	0.0000				
%RSD:	3.969	3.969	32.31				

Sequence No.: 15

Autosampler Location: 15

Sample ID: 83866-011 MR

Date Collected: 3/27/2015 1:28:30 PM

Analyst:

Data Type: Original

Replicate Data: 83866-011 MR

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.157	-0.157	-0.0001	-0.0015	-0.0000	13:29:25	Yes
2	-0.125	-0.125	0.0000	0.0004	0.0001	13:29:58	Yes
Mean:	-0.141	-0.141	-0.0001				
SD:	0.023	0.023	0.0001				
%RSD:	16.21	16.21	141.64				

Sequence No.: 16

Autosampler Location: 16

Sample ID: 83866-012 MS 1

Date Collected: 3/27/2015 1:29:59 PM

Analyst:

Data Type: Original

Replicate Data: 83866-012 MS 1

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	10.14	10.14	0.0358	0.1734	0.0359	13:30:55	Yes
2	10.24	10.24	0.0362	0.1740	0.0363	13:31:27	Yes
Mean:	10.19	10.19	0.0360				
SD:	0.071	0.071	0.0002				
%RSD:	0.696	0.696	0.69				

Sequence No.: 17

Autosampler Location: 17

Sample ID: 83866-013 MS 2

Date Collected: 3/27/2015 1:31:28 PM

Analyst:

Data Type: Original

Replicate Data: 83866-013 MS 2

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	10.23	10.23	0.0361	0.1765	0.0362	13:32:24	Yes
2	10.17	10.17	0.0359	0.1726	0.0360	13:32:57	Yes
Mean:	10.20	10.20	0.0360				
SD:	0.046	0.046	0.0002				

%RSD: 0.453 0.453 0.45

Sequence No.: 18

Sample ID: 83866-001

Analyst:

Autosampler Location: 18

Date Collected: 3/27/2015 1:32:58 PM

Data Type: Original

Replicate Data: 83866-001

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.153	-0.153	-0.0001	-0.0023	-0.0000	13:33:54	Yes
2	-0.137	-0.137	-0.0000	-0.0002	0.0000	13:34:26	Yes
Mean:	-0.145	-0.145	-0.0001				
SD:	0.012	0.012	0.0000				
%RSD:	8.067	8.067	57.45				

Sequence No.: 19

Sample ID: 83866-003

Analyst:

Autosampler Location: 19

Date Collected: 3/27/2015 1:34:27 PM

Data Type: Original

Replicate Data: 83866-003

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.139	-0.139	-0.0000	-0.0004	0.0000	13:35:26	Yes
2	-0.138	-0.138	-0.0000	-0.0004	0.0000	13:35:59	Yes
Mean:	-0.138	-0.138	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	0.464	0.464	4.80				

Sequence No.: 20

Sample ID: CCV

Analyst:

Autosampler Location: 9

Date Collected: 3/27/2015 1:36:00 PM

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.993	9.993	0.0353	0.1733	0.0354	13:36:56	Yes
2	10.05	10.05	0.0355	0.1743	0.0356	13:37:28	Yes
Mean:	10.02	10.02	0.0354				
SD:	0.040	0.040	0.0001				
%RSD:	0.398	0.398	0.39				

QC value within limits for Hg 253.7 Recovery = 100.21%
All analyte(s) passed QC.

Sequence No.: 21

Sample ID: CCB

Analyst:

Autosampler Location: 1

Date Collected: 3/27/2015 1:37:29 PM

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.133	-0.133	-0.0000	-0.0003	0.0000	13:38:25	Yes
2	-0.148	-0.148	-0.0001	-0.0012	-0.0000	13:38:57	Yes
Mean:	-0.140	-0.140	-0.0001				
SD:	0.011	0.011	0.0000				
%RSD:	7.546	7.546	68.78				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 22

Sample ID: 83866-005

Analyst:

Autosampler Location: 20

Date Collected: 3/27/2015 1:38:58 PM

Data Type: Original

Replicate Data: 83866-005

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.129	-0.129	-0.0000	0.0002	0.0001	13:39:55	Yes

Method: HGC2 SWH20 (7470A)

Page 6

Date: 3/27/2015 1:47:54 PM

2	-0.143	-0.143	-0.0001	-0.0005	0.0000	13:40:27	Yes
Mean:	-0.136	-0.136	-0.0000				
SD:	0.010	0.010	0.0000				
%RSD:	7.449	7.449	92.92				

Sequence No.: 23

Autosampler Location: 21

Sample ID: 83866-007

Date Collected: 3/27/2015 1:40:29 PM

Analyst:

Data Type: Original

Replicate Data: 83866-007

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.146	-0.146	-0.0001	-0.0031	-0.0000	13:41:24	Yes
2	-0.073	-0.073	0.0002	0.0025	0.0002	13:41:56	Yes
Mean:	-0.110	-0.110	0.0001				
SD:	0.052	0.052	0.0002				
%RSD:	47.14	47.14	346.75				

Sequence No.: 24

Autosampler Location: 22

Sample ID: 83866-009

Date Collected: 3/27/2015 1:41:57 PM

Analyst:

Data Type: Original

Replicate Data: 83866-009

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.121	-0.121	0.0000	0.0004	0.0001	13:42:53	Yes
2	-0.117	-0.117	0.0000	0.0008	0.0001	13:43:25	Yes
Mean:	-0.119	-0.119	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	2.164	2.164	42.66				

Sequence No.: 25

Autosampler Location: 23

Sample ID: 83866-017

Date Collected: 3/27/2015 1:43:26 PM

Analyst:

Data Type: Original

Replicate Data: 83866-017

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.143	-0.143	-0.0001	-0.0006	0.0000	13:44:22	Yes
2	-0.149	-0.149	-0.0001	-0.0015	-0.0000	13:44:54	Yes
Mean:	-0.146	-0.146	-0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	2.647	2.647	18.25				

Sequence No.: 26

Autosampler Location: 24

Sample ID: 83866-019

Date Collected: 3/27/2015 1:44:56 PM

Analyst:

Data Type: Original

Replicate Data: 83866-019

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.120	-0.120	0.0000	0.0004	0.0001	13:45:51	Yes
2	-0.139	-0.139	-0.0001	-0.0013	0.0000	13:46:24	Yes
Mean:	-0.130	-0.130	-0.0000				
SD:	0.013	0.013	0.0000				
%RSD:	10.35	10.35	263.47				

Sequence No.: 27

Autosampler Location: 25

Sample ID: 83866-021

Date Collected: 3/27/2015 1:46:25 PM

Analyst:

Data Type: Original

Replicate Data: 83866-021

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.154	-0.154	-0.0001	-0.0020	-0.0000	13:47:21	Yes
2	-0.135	-0.135	-0.0000	-0.0012	0.0000	13:47:53	Yes

Mean: -0.145 -0.145 -0.0001
 SD: 0.013 0.013 0.0000
 %RSD: 9.243 9.243 66.46

Sequence No.: 28
 Sample ID: 83866-023
 Analyst:

Autosampler Location: 26
 Date Collected: 3/27/2015 1:47:54 PM
 Data Type: Original

Replicate Data: 83866-023

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.143	-0.143	-0.0001	-0.0016	0.0000	13:48:49	Yes
2	-0.134	-0.134	-0.0000	-0.0019	0.0000	13:49:22	Yes
Mean:	-0.138	-0.138	-0.0000				
SD:	0.006	0.006	0.0000				
%RSD:	4.408	4.408	45.35				

Sequence No.: 29
 Sample ID: 83866-025
 Analyst:

Autosampler Location: 27
 Date Collected: 3/27/2015 1:49:23 PM
 Data Type: Original

Replicate Data: 83866-025

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.142	-0.142	-0.0001	-0.0017	0.0000	13:50:18	Yes
2	-0.128	-0.128	-0.0000	-0.0002	0.0001	13:50:50	Yes
Mean:	-0.135	-0.135	-0.0000				
SD:	0.010	0.010	0.0000				
%RSD:	7.214	7.214	95.84				

Sequence No.: 30
 Sample ID: 83866-027
 Analyst:

Autosampler Location: 28
 Date Collected: 3/27/2015 1:50:51 PM
 Data Type: Original

Replicate Data: 83866-027

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.140	-0.140	-0.0001	-0.0008	0.0000	13:51:50	Yes
2	-0.131	-0.131	-0.0000	-0.0004	0.0000	13:52:23	Yes
Mean:	-0.136	-0.136	-0.0000				
SD:	0.006	0.006	0.0000				
%RSD:	4.347	4.347	54.26				

Sequence No.: 31
 Sample ID: CCV
 Analyst:

Autosampler Location: 9
 Date Collected: 3/27/2015 1:52:24 PM
 Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.978	9.978	0.0353	0.1721	0.0353	13:53:20	Yes
2	10.23	10.23	0.0362	0.1762	0.0362	13:53:52	Yes
Mean:	10.11	10.11	0.0357				
SD:	0.181	0.181	0.0006				
%RSD:	1.795	1.795	1.77				

QC value within limits for Hg 253.7 Recovery = 101.06%
 All analyte(s) passed QC.

Sequence No.: 32
 Sample ID: CCB
 Analyst:

Autosampler Location: 1
 Date Collected: 3/27/2015 1:53:53 PM
 Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.135	-0.135	-0.0000	-0.0006	0.0000	13:54:49	Yes

Method: HGC V2 SWH2O (7470A)

Page 8

Date: 3/27/2015 2:02:20 PM

2	-0.102	-0.102	0.0001	0.0009	0.0001	13:55:22	Yes
Mean:	-0.119	-0.119	0.0000				
SD:	0.023	0.023	0.0001				
%RSD:	19.57	19.57	378.44				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 33

Autosampler Location: 29

Sample ID: 83866-029

Date Collected: 3/27/2015 1:55:23 PM

Analyst:

Data Type: Original

Replicate Data: 83866-029

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.116	-0.116	0.0000	0.0003	0.0001	13:56:20	Yes
2	-0.099	-0.099	0.0001	0.0010	0.0002	13:56:52	Yes
Mean:	-0.108	-0.108	0.0001				
SD:	0.012	0.012	0.0000				
%RSD:	10.73	10.73	66.90				

Sequence No.: 34

Autosampler Location: 30

Sample ID: 83866-031

Date Collected: 3/27/2015 1:56:53 PM

Analyst:

Data Type: Original

Replicate Data: 83866-031

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.115	-0.115	0.0000	0.0004	0.0001	13:57:49	Yes
2	-0.119	-0.119	0.0000	0.0005	0.0001	13:58:21	Yes
Mean:	-0.117	-0.117	0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	2.611	2.611	37.99				

Sequence No.: 35

Autosampler Location: 31

Sample ID: 83866-033

Date Collected: 3/27/2015 1:58:22 PM

Analyst:

Data Type: Original

Replicate Data: 83866-033

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.106	-0.106	0.0001	0.0007	0.0001	13:59:18	Yes
2	-0.141	-0.141	-0.0001	-0.0008	0.0000	13:59:50	Yes
Mean:	-0.124	-0.124	0.0000				
SD:	0.024	0.024	0.0001				
%RSD:	19.66	19.66	>999.9%				

Sequence No.: 36

Autosampler Location: 9

Sample ID: CCV

Date Collected: 3/27/2015 1:59:51 PM

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	10.32	10.32	0.0365	0.1651	0.0365	14:00:49	Yes
2	10.44	10.44	0.0369	0.1655	0.0369	14:01:21	Yes
Mean:	10.38	10.38	0.0367				
SD:	0.083	0.083	0.0003				
%RSD:	0.801	0.801	0.79				

QC value within limits for Hg 253.7 Recovery = 103.80%
All analyte(s) passed QC.

Sequence No.: 37

Autosampler Location: 1

Sample ID: CCB

Date Collected: 3/27/2015 2:01:23 PM

Analyst:

Data Type: Original

Replicate Data: CCB

Method: HGCV2 SWH20 (7470A)

Page 9

Date: 3/27/2015 2:02:59 PM

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.136	-0.136	-0.0000	-0.0010	0.0000	14:02:19	Yes
2	-0.124	-0.124	0.0000	-0.0005	0.0001	14:02:51	Yes
Mean:	-0.130	-0.130	-0.0000				
SD:	0.009	0.009	0.0000				
%RSD:	6.688	6.688	175.95				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

C:\ICPCHEM\1\DATA\SW33115A.b\001CALB.D\001CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\001CALB.D\001CALB.D#
 Date Acquired: Apr 1 2015 02:48 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: Rinse
 Misc Info: MS_7500 CALIBRATION
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 02:52 am
 Sample Type: CalBlk

File SW33115A

B-17599

QC 42362

Run OK.

Report As, Be, Cd, Co, Pb, Sb, Se, Ti


QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	51	26.36
23	Na	45	1	90388	1.73
24	Mg	45	1	1310	2.23
27	Al	45	1	1752	1.73
39	K	45	1	42834	4.59
44	Ca	45	1	309	5.10
51	V	45	1	58	7.72
52	Cr	45	1	611	3.87
55	Mn	45	1	956	3.49
56	Fe	45	1	30796	0.44
59	Co	45	1	109	1.56
60	Ni	45	1	61	19.22
65	Cu	45	1	657	6.66
66	Zn	45	1	696	2.87
75	As	115	1	13	28.01
78	Se	115	1	30	14.57
83	Kr	115	2	354	4.64
95	Mo	115	2	73	12.03
107	Ag	115	2	100	20.28
111	Cd	115	2	21	15.80
121	Sb	115	2	177	23.64
137	Ba	159	2	957	7.64
205	Tl	165	2	697	3.92
206	(Pb)	165	2	993	4.70
207	(Pb)	165	2	861	2.49
208	Pb	165	2	4026	4.19

Internal Standard Elements

Element	Tune	CPS Mean	RSD(%)
45 Sc	1	43412	3.75
45 Sc	2	735968	1.29
115 In	1	168616	4.52
115 In	2	983805	0.39
159 Tb	1	484828	2.46
159 Tb	2	1507471	0.49
165 Ho	1	475632	2.39
165 Ho	2	1487649	1.49

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\



4/1/15

C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#
 Date Acquired: Apr 1 2015 02:54 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalBlk V-206937
 Misc Info: MS_7500 CALIBRATION
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 02:52 am
 Sample Type: CalBlk

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	59	18.20
23	Na	45	1	93038	1.33
24	Mg	45	1	1639	6.79
27	Al	45	1	1996	3.84
39	K	45	1	46600	0.91
44	Ca	45	1	339	7.68
51	V	45	1	79	12.68
52	Cr	45	1	707	0.63
55	Mn	45	1	1038	3.04
56	Fe	45	1	37421	4.42
59	Co	45	1	108	2.06
60	Ni	45	1	67	8.30
65	Cu	45	1	642	2.10
66	Zn	45	1	767	2.34
75	As	115	1	17	36.69
78	Se	115	1	36	15.44
83	Kr	115	2	277	10.84
95	Mo	115	2	79	32.82
107	Ag	115	2	122	30.04
111	Cd	115	2	19	26.65
121	Sb	115	2	180	14.70
137	Ba	159	2	943	8.50
205	Tl	165	2	634	2.19
206	(Pb)	165	2	991	5.40
207	(Pb)	165	2	805	6.23
208	Pb	165	2	3878	2.05

Internal Standard Elements

Element	Tune	CPS Mean	RSD(%)	
45	Sc	1	46034	0.71
45	Sc	2	746250	0.97
115	In	1	184953	1.17
115	In	2	992378	0.99
159	Tb	1	508548	0.70
159	Tb	2	1522400	0.41
165	Ho	1	499548	1.22
165	Ho	2	1505114	0.94

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

C:\ICPCHEM\1\DATA\SW33115A.b\003CALI.D\003CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\003CALI.D\003CALI.D#
 Date Acquired: Apr 1 2015 03:00 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd1 V-206938
 Misc Info: MS_7500 CALIBRATION
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 02:58 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	2140	1.80
23	Na	45	1	126197	0.45
24	Mg	45	1	26259	0.37
27	Al	45	1	5129	1.08
39	K	45	1	60947	0.96
44	Ca	45	1	1111	2.54
51	V	45	1	1232	1.93
52	Cr	45	1	1894	3.90
55	Mn	45	1	1617	3.10
56	Fe	45	1	155931	0.78
59	Co	45	1	2261	1.82
60	Ni	45	1	630	2.49
65	Cu	45	1	993	4.70
66	Zn	45	1	629	3.32
75	As	115	1	158	6.22
78	Se	115	1	108	11.60
83	Kr	115	2	282	10.72
95	Mo	115	2	1838	9.19
107	Ag	115	2	5314	2.48
111	Cd	115	2	1072	3.43
121	Sb	115	2	4116	4.55
137	Ba	159	2	1746	3.32
205	Tl	165	2	12337	0.75
206	(Pb)	165	2	4705	2.82
207	(Pb)	165	2	4004	2.40
208	Pb	165	2	18916	0.52

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	46470	0.29	46034	100.9	80 - 120
45	Sc	2	738880	0.78	746250	99.0	80 - 120
115	In	1	188232	0.37	184953	101.8	80 - 120
115	In	2	984799	1.56	992378	99.2	80 - 120
159	Tb	1	518607	1.53	508548	102.0	80 - 120
159	Tb	2	1505790	0.66	1522400	98.9	80 - 120
165	Ho	1	505213	0.63	499548	101.1	80 - 120
165	Ho	2	1479205	0.84	1505114	98.3	80 - 120

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\SW33115A.b\004CALI.D\004CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\004CALI.D\004CALI.D#
 Date Acquired: Apr 1 2015 03:06 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd2 V-206939
 Misc Info: MS_7500 CALIBRATION
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:04 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
9	Be	45	21671	4.25
23	Na	45	506877	0.39
24	Mg	45	258055	1.06
27	Al	45	43372	1.81
39	K	45	225246	0.12
44	Ca	45	9163	0.95
51	V	45	12081	1.04
52	Cr	45	14158	0.53
55	Mn	45	11296	0.64
56	Fe	45	1394850	0.30
59	Co	45	21499	0.39
60	Ni	45	5674	1.46
65	Cu	45	7504	1.73
66	Zn	45	2827	0.81
75	As	115	1389	1.69
78	Se	115	792	1.47
83	Kr	115	292	17.27
95	Mo	115	18543	1.49
107	Ag	115	52383	2.01
111	Cd	115	10788	0.56
121	Sb	115	38586	0.21
137	Ba	159	16519	0.62
205	Tl	165	122538	0.77
206	(Pb)	165	41565	1.73
207	(Pb)	165	36016	1.33
208	Pb	165	164982	1.21

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	46544	0.34	46034	101.1	80 - 120
45	Sc	2	769432	5.05	746250	103.1	80 - 120
115	In	1	189234	0.89	184953	102.3	80 - 120
115	In	2	1005767	0.53	992378	101.3	80 - 120
159	Tb	1	517342	1.13	508548	101.7	80 - 120
159	Tb	2	1540873	1.34	1522400	101.2	80 - 120
165	Ho	1	508286	0.56	499548	101.7	80 - 120
165	Ho	2	1528360	1.05	1505114	101.5	80 - 120

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\SW33115A.b\005CALI.D\005CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\005CALI.D\005CALI.D#
 Date Acquired: Apr 1 2015 03:12 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd3 V-206940
 Misc Info: MS_7500 CALIBRATION
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:10 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	43774	0.94
23	Na	45	1	1017946	1.70
24	Mg	45	1	518794	1.65
27	Al	45	1	86634	1.87
39	K	45	1	418031	0.97
44	Ca	45	1	18369	3.02
51	V	45	1	24420	1.12
52	Cr	45	1	28810	1.27
55	Mn	45	1	22280	1.95
56	Fe	45	1	2767063	2.78
59	Co	45	1	43506	3.11
60	Ni	45	1	11339	3.11
65	Cu	45	1	14778	1.81
66	Zn	45	1	5458	3.64
75	As	115	1	2803	0.64
78	Se	115	1	1515	0.75
83	Kr	115	2	308	1.65
95	Mo	115	2	37536	1.83
107	Ag	115	2	104569	1.73
111	Cd	115	2	21806	2.78
121	Sb	115	2	77038	1.59
137	Ba	159	2	33401	1.25
205	Tl	165	2	244362	0.94
206	(Pb)	165	2	82720	0.12
207	(Pb)	165	2	71848	1.59
208	Pb	165	2	327954	1.25

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	46615	0.51	46034	101.3	80 - 120
45	Sc	2	754609	1.36	746250	101.1	80 - 120
115	In	1	189157	1.20	184953	102.3	80 - 120
115	In	2	1013549	2.25	992378	102.1	80 - 120
159	Tb	1	519207	1.07	508548	102.1	80 - 120
159	Tb	2	1544208	1.86	1522400	101.4	80 - 120
165	Ho	1	505336	1.02	499548	101.2	80 - 120
165	Ho	2	1516420	1.73	1505114	100.8	80 - 120

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 : Element Failures 0
 0 : ISTD Failures 0

C:\ICPCHEM\1\DATA\SW33115A.b\006CALI.D\006CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\006CALI.D\006CALI.D#
 Date Acquired: Apr 1 2015 03:18 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd4 V-206941
 Misc Info: MS_7500 CALIBRATION
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:16 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
9	Be	45	219565	3.51
23	Na	45	4732104	2.87
24	Mg	45	2692161	2.61
27	Al	45	447498	1.84
39	K	45	2013988	1.74
44	Ca	45	93984	2.09
51	V	45	125460	2.91
52	Cr	45	145068	2.57
55	Mn	45	112176	2.07
56	Fe	45	13700620	2.89
59	Co	45	221569	2.66
60	Ni	45	57224	2.37
65	Cu	45	72977	1.71
66	Zn	45	26937	2.01
75	As	115	14580	1.48
78	Se	115	7796	2.22
83	Kr	115	296	12.68
95	Mo	115	187284	1.49
107	Ag	115	519333	1.99
111	Cd	115	108078	2.10
121	Sb	115	385112	0.75
137	Ba	159	165705	0.80
205	Tl	165	1312925	0.57
206	(Pb)	165	401038	0.03
207	(Pb)	165	349976	0.48
208	Pb	165	1601471	0.12

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	48561	0.76	46034	105.5	80 - 120
45	Sc	2	768286	5.06	746250	103.0	80 - 120
115	In	1	192189	0.71	184953	103.9	80 - 120
115	In	2	998575	2.14	992378	100.6	80 - 120
159	Tb	1	527277	1.01	508548	103.7	80 - 120
159	Tb	2	1540527	1.79	1522400	101.2	80 - 120
165	Ho	1	519871	1.06	499548	104.1	80 - 120
165	Ho	2	1505604	0.34	1505114	100.0	80 - 120

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\SW33115A.b\007CALI.D\007CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\007CALI.D\007CALI.D#
 Date Acquired: Apr 1 2015 03:23 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd5 V-206942
 Misc Info: MS_7500 CALIBRATION
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:22 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	440621	3.30
23	Na	45	1	9116645	1.21
24	Mg	45	1	5147437	1.29
27	Al	45	1	904189	1.65
39	K	45	1	3794808	1.91
44	Ca	45	1	182262	1.59
51	V	45	1	243517	1.46
52	Cr	45	1	282041	1.31
55	Mn	45	1	218173	1.30
56	Fe	45	1	26618630	1.51
59	Co	45	1	431661	1.60
60	Ni	45	1	110980	1.22
65	Cu	45	1	141492	1.89
66	Zn	45	1	51521	1.93
75	As	115	1	28490	1.61
78	Se	115	1	14913	1.94
83	Kr	115	2	316	7.64
95	Mo	115	2	378024	1.83
107	Ag	115	2	1065884	1.97
111	Cd	115	2	212923	1.33
121	Sb	115	2	772136	2.01
137	Ba	159	2	334768	0.92
205	Tl	165	2	2585035	1.43
206	(Pb)	165	2	796786	0.33
207	(Pb)	165	2	691705	0.25
208	Pb	165	2	3280299	0.20

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	47729	0.82	46034	103.7	80 - 120
45	Sc	2	761571	3.67	746250	102.1	80 - 120
115	In	1	188304	0.16	184953	101.8	80 - 120
115	In	2	983572	2.22	992378	99.1	80 - 120
159	Tb	1	518461	0.55	508548	101.9	80 - 120
159	Tb	2	1528742	1.13	1522400	100.4	80 - 120
165	Ho	1	508680	0.86	499548	101.8	80 - 120
165	Ho	2	1500520	0.43	1505114	99.7	80 - 120

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\SW33115A.b\008_ICV.D\008_ICV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\008_ICV.D\008_ICV.D#
 Date Acquired: Apr 1 2015 03:29 am
 Operator: GK
 Sample Name: ICV V-206943
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1109
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: 6-ICV
 Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	47.64 ppb	4.71	214936	50	95.3	90 - 110	
23 Na	45	1	4922.00 ppb	0.64	4546195	5000	98.4	90 - 110	
24 Mg	45	1	4985.00 ppb	1.66	2581813	5000	99.7	90 - 110	
27 Al	45	1	4740.00 ppb	1.11	1418566	5000	94.8	90 - 110	
39 K	45	1	4934.00 ppb	1.61	1908515	5000	98.7	90 - 110	
44 Ca	45	1	4801.00 ppb	2.34	87896	5000	96.0	90 - 110	
51 V	45	1	48.34 ppb	1.67	118089	50	96.7	90 - 110	
52 Cr	45	1	47.67 ppb	0.72	135083	50	95.3	90 - 110	
55 Mn	45	1	47.05 ppb	1.80	103337	50	94.1	90 - 110	
56 Fe	45	1	4821.00 ppb	1.98	12886070	5000	96.4	90 - 110	
59 Co	45	1	47.62 ppb	1.33	206052	50	95.2	90 - 110	
60 Ni	45	1	47.12 ppb	1.47	52494	50	94.2	90 - 110	
65 Cu	45	1	48.19 ppb	0.91	68676	50	96.4	90 - 110	
66 Zn	45	1	47.34 ppb	1.80	24848	50	94.7	90 - 110	
75 As	115	1	47.69 ppb	0.85	13711	50	95.4	90 - 110	
78 Se	115	1	49.68 ppb	1.08	1534	50	99.4	90 - 110	
83 Kr	115	2	----- ppb	-----	316	50	#VALUE!	#####	
95 Mo	115	2	45.99 ppb	0.83	179882	50	92.0	90 - 110	
107 Ag	115	2	9.34 ppb	1.27	102711	10	93.4	90 - 110	
111 Cd	115	2	47.79 ppb	1.55	105798	50	95.6	90 - 110	
121 Sb	115	2	46.83 ppb	0.89	374685	50	93.7	90 - 110	
137 Ba	159	2	46.91 ppb	0.82	159674	50	93.8	90 - 110	
205 Tl	165	2	46.82 ppb	0.24	1236738	50	93.6	90 - 110	
206 (Pb)	165	2	46.18 ppb	0.20	376022	50	92.4	90 - 110	
207 (Pb)	165	2	48.61 ppb	0.49	343870	50	97.2	90 - 110	
208 Pb	165	2	46.44 ppb	0.42	1546560	50	92.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	47732	0.44	46034	103.7	80 - 120	
45 Sc	2	782103	4.94	746250	104.8	80 - 120	
115 In	1	189840	0.58	184953	102.6	80 - 120	
115 In	2	1022603	0.93	992378	103.0	80 - 120	
159 Tb	1	525708	0.62	508548	103.4	80 - 120	
159 Tb	2	1556325	0.49	1522400	102.2	80 - 120	
165 Ho	1	514762	0.28	499548	103.0	80 - 120	
165 Ho	2	1530269	0.94	1505114	101.7	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\009_CCV.D\009_CCV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\009_CCV.D\009_CCV.D#
 Date Acquired: Apr 1 2015 03:35 am
 Operator: GK
 Sample Name: LLICV V-206949
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3105
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: LL-ICV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.53	ppb	5.52	2426	1	106.4	70 - 130	
23 Na	45	1	223.30	ppb	1.33	301977	250	89.3	70 - 130	
24 Mg	45	1	248.30	ppb	1.72	131783	250	99.3	70 - 130	
27 Al	45	1	99.43	ppb	0.73	32171	100	99.4	70 - 130	
39 K	45	1	228.90	ppb	1.62	136255	250	91.6	70 - 130	
44 Ca	45	1	242.20	ppb	1.36	4827	250	96.9	70 - 130	
51 V	45	1	0.98	ppb	4.27	2497	1	97.7	70 - 130	
52 Cr	45	1	0.83	ppb	6.42	3103	1	82.8	70 - 130	
55 Mn	45	1	2.60	ppb	2.64	6801	3	86.5	70 - 130	
56 Fe	45	1	142.90	ppb	1.85	424843	150	95.3	70 - 130	
59 Co	45	1	0.99	ppb	1.20	4465	1	99.4	70 - 130	
60 Ni	45	1	1.50	ppb	2.25	1762	2	100.1	70 - 130	
65 Cu	45	1	4.75	ppb	5.87	7461	5	95.0	70 - 130	
66 Zn	45	1	9.21	ppb	2.90	5539	10	92.1	70 - 130	
75 As	115	1	0.99	ppb	2.21	306	1	98.9	70 - 130	
78 Se	115	1	4.77	ppb	8.09	183	5	95.5	70 - 130	
83 Kr	115	2	-----	ppb	-----	316	1	#VALUE!	##### - #####	
95 Mo	115	2	0.98	ppb	3.26	3945	1	97.6	70 - 130	
107 Ag	115	2	0.49	ppb	2.05	5595	1	98.3	70 - 130	
111 Cd	115	2	0.99	ppb	1.68	2238	1	98.9	70 - 130	
121 Sb	115	2	1.47	ppb	1.44	12077	2	97.9	70 - 130	
137 Ba	159	2	2.19	ppb	2.69	8412	3	87.5	70 - 130	
205 Tl	165	2	0.95	ppb	0.70	25745	1	94.7	70 - 130	
206 (Pb)	165	2	1.47	ppb	0.49	12944	2	97.7	70 - 130	
207 (Pb)	165	2	1.46	ppb	3.81	11174	2	97.5	70 - 130	
208 Pb	165	2	1.42	ppb	1.56	51165	2	94.5	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	48312	0.32	46034	104.9	80 - 120	
45 Sc	2	769972	0.62	746250	103.2	80 - 120	
115 In	1	192328	0.98	184953	104.0	80 - 120	
115 In	2	1035442	1.01	992378	104.3	80 - 120	
159 Tb	1	530181	1.26	508548	104.3	80 - 120	
159 Tb	2	1565312	0.77	1522400	102.8	80 - 120	
165 Ho	1	520072	0.90	499548	104.1	80 - 120	
165 Ho	2	1535314	1.34	1505114	102.0	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\010_ICB.D\010_ICB.D#

Initial Calibration Blank (ICB) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\010_ICB.D\010_ICB.D#
 Date Acquired: Apr 1 2015 03:41 am
 Operator: GK
 Sample Name: ICB V-206944
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3102
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: 6-ICB
 Total Dil Factor: 1.00

QC Summary:

Analytes: Pass

ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.01	ppb	52.39	96	0.50	
23 Na	45	1	-13.73	ppb	1.34	83925	250.00	
24 Mg	45	1	-0.36	ppb	49.61	1511	250.00	
27 Al	45	1	-3.69	ppb	2.20	966	100.00	
39 K	45	1	-9.70	ppb	4.30	44592	250.00	
44 Ca	45	1	-1.60	ppb	36.51	322	250.00	
51 V	45	1	0.00	ppb	178.11	77	1.00	
52 Cr	45	1	-0.15	ppb	2.47	303	1.00	
55 Mn	45	1	-0.27	ppb	1.59	478	3.00	
56 Fe	45	1	-5.64	ppb	10.20	23747	150.00	
59 Co	45	1	0.01	ppb	28.16	153	1.00	
60 Ni	45	1	-0.02	ppb	59.58	52	1.50	
65 Cu	45	1	0.12	ppb	36.56	835	5.00	
66 Zn	45	1	-1.18	ppb	1.84	195	10.00	
75 As	115	1	-0.01	ppb	113.41	16	1.00	
78 Se	115	1	-0.05	ppb	353.27	36	5.00	
83 Kr	115	2	-----	ppb	-----	332	1.00	
95 Mo	115	2	0.03	ppb	24.10	178	1.00	
107 Ag	115	2	0.01	ppb	15.18	183	0.50	
111 Cd	115	2	0.01	ppb	12.56	48	1.00	
121 Sb	115	2	0.01	ppb	55.06	287	1.00	
137 Ba	159	2	-0.15	ppb	1.81	464	2.50	
205 Tl	165	2	0.01	ppb	30.52	966	1.00	
206 (Pb)	165	2	-0.01	ppb	43.57	878	1.50	
207 (Pb)	165	2	0.00	ppb	114.39	777	1.50	
208 Pb	165	2	-0.01	ppb	27.80	3438	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	47654	0.62	46034	103.5	80 - 120	
45 Sc	2	771223	4.49	746250	103.3	80 - 120	
115 In	1	191614	1.21	184953	103.6	80 - 120	
115 In	2	1014114	2.95	992378	102.2	80 - 120	
159 Tb	1	524779	1.06	508548	103.2	80 - 120	
159 Tb	2	1538530	2.10	1522400	101.1	80 - 120	
165 Ho	1	510868	0.92	499548	102.3	80 - 120	
165 Ho	2	1515819	1.52	1505114	100.7	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\011ICSA.D\011ICSA.D#

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\011ICSA.D\011ICSA.D#
 Date Acquired: Apr 1 2015 03:47 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: ICSA V-206945
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: 6-ICSA
 Dilution Factor: 1.00

QC Summary:

Analytes: Fail

ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	45	2	0.00 ppb	563.78	0.50	
23 Na	45	1	120300.00 ppb	0.60	250.00	
24 Mg	45	1	47300.00 ppb	0.98	250.00	
27 Al	45	1	46130.00 ppb	1.74	100.00	
39 K	45	1	47580.00 ppb	1.12	250.00	
44 Ca	45	1	152300.00 ppb	0.98	250.00	
51 V	45	1	0.05 ppb	16.96	1.00	
52 Cr	45	1	0.27 ppb	3.93	1.00	
55 Mn	45	1	3.01 ppb	2.03	3.00	**
56 Fe	45	1	116500.00 ppb	0.76	150.00	
59 Co	45	1	0.54 ppb	2.68	1.00	
60 Ni	45	1	0.57 ppb	4.65	1.50	
65 Cu	45	1	0.30 ppb	18.50	5.00	
66 Zn	45	1	-0.44 ppb	16.73	10.00	
75 As	115	1	0.31 ppb	7.85	1.00	
78 Se	115	1	0.17 ppb	78.85	5.00	
83 Kr	115	2	----- ppb	-----	1.00	
95 Mo	115	2	1000.00 ppb	2.04	1.00	
107 Ag	115	2	0.03 ppb	20.31	0.50	
111 Cd	115	2	1.45 ppb	2.94	1.00	**
121 Sb	115	2	0.24 ppb	1.66	1.00	
137 Ba	159	2	0.65 ppb	2.37	2.50	
205 Tl	165	2	0.00 ppb	33.45	1.00	
206 (Pb)	165	2	0.08 ppb	19.85	1.50	
207 (Pb)	165	2	0.09 ppb	9.01	1.50	
208 Pb	165	2	0.08 ppb	6.19	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	46469	0.46	46034	100.9	70 - 150	
45 Sc	2	802422	3.13	746250	107.5	70 - 150	
115 In	1	176164	0.82	184953	95.2	70 - 150	
115 In	2	955171	2.28	992378	96.3	70 - 150	
159 Tb	1	513121	0.47	508548	100.9	70 - 150	
159 Tb	2	1510663	0.89	1522400	99.2	70 - 150	
165 Ho	1	507139	0.63	499548	101.5	70 - 150	
165 Ho	2	1503077	0.52	1505114	99.9	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

2 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Nnumber of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\012ICSB.D\012ICSB.D#

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\012ICSB.D\012ICSB.D#
 Date Acquired: Apr 1 2015 03:53 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: ICSAB V-206946
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1108
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: 6-ICSAB
 Dilution Factor: 1.00

QC Summary:

Analytes: Pass

ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	45	2		0.00	53.84	---		-	
23 Na	45	1		120400.00	1.75	---		-	
24 Mg	45	1		47430.00	2.33	---		-	
27 Al	45	1		46180.00	1.57	---		-	
39 K	45	1		47340.00	1.23	---		-	
44 Ca	45	1		151300.00	1.29	---		-	
51 V	45	1		197.60	0.93	200	98.8	80 - 120	
52 Cr	45	1		192.30	1.33	200	96.2	80 - 120	
55 Mn	45	1		191.70	1.02	200	95.9	80 - 120	
56 Fe	45	1		117300.00	0.07	---		-	
59 Co	45	1		184.10	1.28	200	92.1	80 - 120	
60 Ni	45	1		177.90	1.25	200	89.0	80 - 120	
65 Cu	45	1		181.10	1.24	---		-	
66 Zn	45	1		87.98	0.23	100	88.0	80 - 120	
75 As	115	1		99.29	0.70	100	99.3	80 - 120	
78 Se	115	1		92.86	2.79	100	92.9	80 - 120	
83 Kr	115	2		-----	---	---		-	
95 Mo	115	2		998.00	2.09	---		-	
107 Ag	115	2		45.32	1.61	50	90.6	80 - 120	
111 Cd	115	2		94.94	0.91	100	94.9	80 - 120	
121 Sb	115	2		0.32	4.84	---		-	
137 Ba	159	2		0.67	4.22	---		-	
205 Tl	165	2		0.00	6974.30	---		-	
206 (Pb)	165	2		0.06	7.34	---		-	
207 (Pb)	165	2		0.07	16.98	---		-	
208 Pb	165	2		0.06	10.40	---		-	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	46074	0.45	46034	100.1	70 - 150	
45 Sc	2	826151	1.57	746250	110.7	70 - 150	
115 In	1	174937	1.03	184953	94.6	70 - 150	
115 In	2	967365	2.05	992378	97.5	70 - 150	
159 Tb	1	513158	0.64	508548	100.9	70 - 150	
159 Tb	2	1541878	1.76	1522400	101.3	70 - 150	
165 Ho	1	505205	0.94	499548	101.1	70 - 150	
165 Ho	2	1511473	0.92	1505114	100.4	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\013_CCV.D\013_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\013_CCV.D\013_CCV.D#
 Date Acquired: Apr 1 2015 03:59 am
 Operator: GK
 Sample Name: CCV V-206947
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3103
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: 6-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	52.35 ppb	0.11	233870	50	104.7	90 - 110	
23 Na	45	1	5290.00 ppb	0.87	4895840	5000	105.8	90 - 110	
24 Mg	45	1	5336.00 ppb	0.83	2773176	5000	106.7	90 - 110	
27 Al	45	1	1521.00 ppb	0.89	458209	1500	101.4	90 - 110	
39 K	45	1	5279.00 ppb	0.39	2045406	5000	105.6	90 - 110	
44 Ca	45	1	5227.00 ppb	0.58	96013	5000	104.5	90 - 110	
51 V	45	1	52.08 ppb	0.88	127661	50	104.2	90 - 110	
52 Cr	45	1	51.73 ppb	0.84	147048	50	103.5	90 - 110	
55 Mn	45	1	51.43 ppb	0.61	113240	50	102.9	90 - 110	
56 Fe	45	1	5210.00 ppb	1.02	13972640	5000	104.2	90 - 110	
59 Co	45	1	51.89 ppb	0.89	225269	50	103.8	90 - 110	
60 Ni	45	1	52.41 ppb	1.56	58583	50	104.8	90 - 110	
65 Cu	45	1	51.60 ppb	1.48	73741	50	103.2	90 - 110	
66 Zn	45	1	51.71 ppb	1.06	27167	50	103.4	90 - 110	
75 As	115	1	51.18 ppb	0.59	14790	50	102.4	90 - 110	
78 Se	115	1	257.10 ppb	0.62	7823	250	102.8	90 - 110	
83 Kr	115	2	----- ppb	-----	357	50	#VALUE!	##### - #####	
95 Mo	115	2	51.37 ppb	1.15	198794	50	102.7	90 - 110	
107 Ag	115	2	50.11 ppb	0.62	544925	50	100.2	90 - 110	
111 Cd	115	2	51.37 ppb	0.61	112530	50	102.7	90 - 110	
121 Sb	115	2	51.33 ppb	1.27	406329	50	102.7	90 - 110	
137 Ba	159	2	51.64 ppb	0.69	176624	50	103.3	90 - 110	
205 Tl	165	2	51.92 ppb	0.37	1376044	50	103.8	90 - 110	
206 (Pb)	165	2	51.02 ppb	1.06	416640	50	102.0	90 - 110	
207 (Pb)	165	2	51.64 ppb	0.94	366478	50	103.3	90 - 110	
208 Pb	165	2	50.22 ppb	0.88	1677660	50	100.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	47897	0.39	46034	104.0	80 - 120	
45 Sc	2	773340	0.50	746250	103.6	80 - 120	
115 In	1	190858	0.65	184953	103.2	80 - 120	
115 In	2	1011735	0.85	992378	102.0	80 - 120	
159 Tb	1	530738	0.54	508548	104.4	80 - 120	
159 Tb	2	1564638	0.83	1522400	102.8	80 - 120	
165 Ho	1	523802	0.15	499548	104.9	80 - 120	
165 Ho	2	1535326	0.14	1505114	102.0	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\014_CCV.D\014_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\014_CCV.D\014_CCV.D#
 Date Acquired: Apr 1 2015 04:05 am
 Operator: GK
 Sample Name: LLCCV V-206949
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3105
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.50	ppb	4.98	2346	1	99.0	70 - 130	
23 Na	45	1	240.90	ppb	0.65	309360	250	96.4	70 - 130	
24 Mg	45	1	257.40	ppb	0.85	132867	250	103.0	70 - 130	
27 Al	45	1	104.20	ppb	2.27	32691	100	104.2	70 - 130	
39 K	45	1	237.30	ppb	0.66	135639	250	94.9	70 - 130	
44 Ca	45	1	258.20	ppb	0.77	4981	250	103.3	70 - 130	
51 V	45	1	1.03	ppb	2.30	2544	1	102.5	70 - 130	
52 Cr	45	1	0.87	ppb	1.77	3147	1	87.4	70 - 130	
55 Mn	45	1	2.64	ppb	3.01	6705	3	87.9	70 - 130	
56 Fe	45	1	152.00	ppb	1.40	437086	150	101.3	70 - 130	
59 Co	45	1	1.03	ppb	1.94	4475	1	102.5	70 - 130	
60 Ni	45	1	1.44	ppb	1.62	1651	2	96.3	70 - 130	
65 Cu	45	1	4.83	ppb	1.74	7372	5	96.7	70 - 130	
66 Zn	45	1	9.38	ppb	1.09	5473	10	93.8	70 - 130	
75 As	115	1	0.98	ppb	9.98	300	1	97.6	70 - 130	
78 Se	115	1	5.45	ppb	5.96	203	5	108.9	70 - 130	
83 Kr	115	2	-----	ppb	-----	357	1	#VALUE!	##### - #####	
95 Mo	115	2	1.08	ppb	1.41	4249	1	107.5	70 - 130	
107 Ag	115	2	0.51	ppb	3.21	5643	1	101.3	70 - 130	
111 Cd	115	2	0.99	ppb	1.24	2189	1	98.8	70 - 130	
121 Sb	115	2	1.51	ppb	2.25	12119	2	100.3	70 - 130	
137 Ba	159	2	2.20	ppb	0.63	8340	3	87.8	70 - 130	
205 Tl	165	2	0.95	ppb	2.03	25339	1	94.7	70 - 130	
206 (Pb)	165	2	1.48	ppb	0.41	12891	2	98.8	70 - 130	
207 (Pb)	165	2	1.48	ppb	2.27	11135	2	98.7	70 - 130	
208 Pb	165	2	1.44	ppb	0.93	51256	2	96.2	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	46993	0.42	46034	102.1	80 - 120	
45 Sc	2	799007	4.22	746250	107.1	80 - 120	
115 In	1	191245	1.27	184953	103.4	80 - 120	
115 In	2	1014299	0.83	992378	102.2	80 - 120	
159 Tb	1	522966	1.19	508548	102.8	80 - 120	
159 Tb	2	1546203	1.72	1522400	101.6	80 - 120	
165 Ho	1	515630	1.42	499548	103.2	80 - 120	
165 Ho	2	1512189	1.00	1505114	100.5	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\015_CCB.D\015_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\015_CCB.D\015_CCB.D#
 Date Acquired: Apr 1 2015 04:11 am
 Operator: GK
 Sample Name: CCB V-206944
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3102
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: 6-CCB
 Total Dil Factor: 1.00

QC Summary:

Analytes: Pass

ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.011 ppb	33.47	107	0.50	
23 Na	45	1	-7.846 ppb	29.74	87505	250.00	
24 Mg	45	1	0.930 ppb	45.71	2135	250.00	
27 Al	45	1	-2.143 ppb	23.70	1399	100.00	
39 K	45	1	-11.990 ppb	11.08	42881	250.00	
44 Ca	45	1	2.110 ppb	42.73	382	250.00	
51 V	45	1	0.003 ppb	195.32	86	1.00	
52 Cr	45	1	-0.145 ppb	10.18	317	1.00	
55 Mn	45	1	-0.301 ppb	4.12	414	3.00	
56 Fe	45	1	-2.303 ppb	53.84	31975	150.00	
59 Co	45	1	0.015 ppb	6.27	173	1.00	
60 Ni	45	1	-0.010 ppb	72.16	58	1.50	
65 Cu	45	1	0.181 ppb	42.41	902	5.00	
66 Zn	45	1	-1.154 ppb	1.98	204	10.00	
75 As	115	1	-0.005 ppb	191.68	16	1.00	
78 Se	115	1	0.090 ppb	150.94	40	5.00	
83 Kr	115	2	----- ppb	-----	310	1.00	
95 Mo	115	2	0.084 ppb	20.50	398	1.00	
107 Ag	115	2	0.004 ppb	51.23	163	0.50	
111 Cd	115	2	0.012 ppb	30.99	46	1.00	
121 Sb	115	2	0.005 ppb	104.67	221	1.50	
137 Ba	159	2	-0.150 ppb	3.69	454	2.50	
205 Tl	165	2	0.010 ppb	2.84	903	1.00	
206 (Pb)	165	2	-0.012 ppb	43.51	909	1.50	
207 (Pb)	165	2	-0.003 ppb	66.55	799	1.50	
208 Pb	165	2	-0.013 ppb	15.59	3510	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	46733	0.70	46034	101.5	80 - 120	
45 Sc	2	755099	1.82	746250	101.2	80 - 120	
115 In	1	189032	0.92	184953	102.2	80 - 120	
115 In	2	996252	1.60	992378	100.4	80 - 120	
159 Tb	1	512498	0.80	508548	100.8	80 - 120	
159 Tb	2	1552532	1.46	1522400	102.0	80 - 120	
165 Ho	1	513357	0.68	499548	102.8	80 - 120	
165 Ho	2	1530422	1.13	1505114	101.7	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\016SMPL.D\016SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\016SMPL.D\016SMPL.D#
 Date Acquired: Apr 1 2015 04:17 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: MB 42362
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2201
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.00	0.00	ppb	3520.40	63	2700	
23 Na	45	1	50.96	50.96	ppb	4.32	136378	225000	
24 Mg	45	1	10.30	10.30	ppb	2.88	6726	225000	
27 Al	45	1	7.37	7.37	ppb	3.78	4089	67500	
39 K	45	1	3.35	3.35	ppb	33.98	47440	225000	
44 Ca	45	1	681.80	681.80	ppb	3.33	12230	225000	
51 V	45	1	0.26	0.26	ppb	3.59	688	2700	
52 Cr	45	1	0.11	0.11	ppb	12.85	1008	2700	
55 Mn	45	1	1.02	1.02	ppb	4.23	3159	2700	
56 Fe	45	1	130.80	130.80	ppb	2.61	370468	202500	
59 Co	45	1	0.02	0.02	ppb	11.36	179	2700	
60 Ni	45	1	0.13	0.13	ppb	16.09	208	2700	
65 Cu	45	1	0.54	0.54	ppb	5.49	1361	2700	
66 Zn	45	1	2.99	2.99	ppb	2.26	2215	2700	
75 As	115	1	0.16	0.16	ppb	6.37	60	2250	
78 Se	115	1	-0.12	-0.12	ppb	349.64	32	2700	
83 Kr	115	2	----	-----	ppb	-----	309	2700	
95 Mo	115	2	0.09	0.09	ppb	7.49	422	2700	
107 Ag	115	2	0.02	0.02	ppb	17.75	326	900	
111 Cd	115	2	0.03	0.03	ppb	20.23	74	2700	
121 Sb	115	2	0.04	0.04	ppb	10.38	457	1125	
137 Ba	159	2	0.25	0.25	ppb	11.89	1751	1350	
205 Tl	165	2	0.04	0.04	ppb	6.27	1542	900	
206 (Pb)	165	2	0.16	0.16	ppb	2.20	2231	2700	
207 (Pb)	165	2	0.17	0.17	ppb	4.38	1934	2700	
208 Pb	165	2	0.16	0.16	ppb	2.61	8833	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	45672	1.41	46034	99.2	70 - 150	
45 Sc	2	792200	4.54	746250	106.2	70 - 150	
115 In	1	181771	1.56	184953	98.3	70 - 150	
115 In	2	984238	0.39	992378	99.2	70 - 150	
159 Tb	1	505274	0.87	508548	99.4	70 - 150	
159 Tb	2	1513415	1.21	1522400	99.4	70 - 150	
165 Ho	1	504311	1.33	499548	101.0	70 - 150	
165 Ho	2	1471486	0.95	1505114	97.8	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\017SMPL.D\017SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\017SMPL.D\017SMPL.D#
 Date Acquired: Apr 1 2015 04:23 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW 42362
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2202
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	270.60	270.60	ppb	2.84	1200605	2700	
23 Na	45		1	25,850.00	25850.00	ppb	2.80	22371980	225000	
24 Mg	45		1	25,530.00	25530.00	ppb	1.93	12599290	225000	
27 Al	45		1	2,409.00	2409.00	ppb	1.88	688127	67500	
39 K	45		1	25,170.00	25170.00	ppb	2.01	9090013	225000	
44 Ca	45		1	26,440.00	26440.00	ppb	2.03	460024	225000	
51 V	45		1	255.20	255.20	ppb	2.02	593942	2700	
52 Cr	45		1	253.30	253.30	ppb	2.02	681286	2700	
55 Mn	45		1	254.70	254.70	ppb	1.96	528683	2700	
56 Fe	45		1	2,558.00	2558.00	ppb	1.95	6535929	202500	
59 Co	45		1	258.90	258.90	ppb	0.97	1067204	2700	
60 Ni	45		1	244.80	244.80	ppb	1.36	259660	2700	
65 Cu	45		1	250.60	250.60	ppb	2.17	337815	2700	
66 Zn	45		1	245.90	245.90	ppb	1.69	119869	2700	
75 As	115		1	255.50	255.50	ppb	1.10	67430	2250	
78 Se	115		1	257.80	257.80	ppb	1.62	7172	2700	
83 Kr	115		2	----	-----	ppb	-----	357	2700	
95 Mo	115		2	258.70	258.70	ppb	1.42	939088	2700	
107 Ag	115		2	48.81	48.81	ppb	1.13	498046	900	
111 Cd	115		2	252.10	252.10	ppb	0.53	518017	2700	
121 Sb	115		2	260.30	260.30	ppb	0.81	1932544	1125	
137 Ba	159		2	247.60	247.60	ppb	0.90	801902	1350	
205 Tl	165		2	244.70	244.70	ppb	0.68	6150747	900	
206 (Pb)	165		2	270.70	270.70	ppb	0.55	2093354	2700	
207 (Pb)	165		2	270.40	270.40	ppb	0.19	1817375	2700	
208 Pb	165		2	259.40	259.40	ppb	0.17	8207372	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	45500	0.42	46034	98.8	70 - 150	
45 Sc	2	768864	4.29	746250	103.0	70 - 150	
115 In	1	174466	0.63	184953	94.3	70 - 150	
115 In	2	949313	0.67	992378	95.7	70 - 150	
159 Tb	1	505535	1.20	508548	99.4	70 - 150	
159 Tb	2	1488028	0.39	1522400	97.7	70 - 150	
165 Ho	1	495257	1.18	499548	99.1	70 - 150	
165 Ho	2	1456556	0.91	1505114	96.8	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\018SMPL.D\018SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\018SMPL.D\018SMPL.D#
 Date Acquired: Apr 1 2015 04:29 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW MR 42362
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2203
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		260.00	260.00	ppb	1.31	1120948	2700	
23 Na	45	1		24,210.00	24210.00	ppb	1.31	20626460	225000	
24 Mg	45	1		24,130.00	24130.00	ppb	1.88	11722590	225000	
27 Al	45	1		2,280.00	2280.00	ppb	1.38	641300	67500	
39 K	45	1		23,920.00	23920.00	ppb	1.00	8508665	225000	
44 Ca	45	1		24,900.00	24900.00	ppb	1.10	426361	225000	
51 V	45	1		242.70	242.70	ppb	0.93	555982	2700	
52 Cr	45	1		241.10	241.10	ppb	0.99	638429	2700	
55 Mn	45	1		238.60	238.60	ppb	0.96	487709	2700	
56 Fe	45	1		2,437.00	2437.00	ppb	1.15	6130262	202500	
59 Co	45	1		244.70	244.70	ppb	2.01	993112	2700	
60 Ni	45	1		232.90	232.90	ppb	2.11	243258	2700	
65 Cu	45	1		239.00	239.00	ppb	0.61	317189	2700	
66 Zn	45	1		235.20	235.20	ppb	0.56	112889	2700	
75 As	115	1		246.30	246.30	ppb	1.08	63651	2250	
78 Se	115	1		245.30	245.30	ppb	0.56	6684	2700	
83 Kr	115	2		----	-----	ppb	-----	318	2700	
95 Mo	115	2		246.10	246.10	ppb	2.15	873365	2700	
107 Ag	115	2		46.74	46.74	ppb	1.99	466385	900	
111 Cd	115	2		240.80	240.80	ppb	2.42	483929	2700	
121 Sb	115	2		249.00	249.00	ppb	1.57	1808016	1125	
137 Ba	159	2		235.90	235.90	ppb	1.80	754554	1350	
205 Tl	165	2		230.60	230.60	ppb	0.96	5696379	900	
206 (Pb)	165	2		253.10	253.10	ppb	1.02	1923569	2700	
207 (Pb)	165	2		252.70	252.70	ppb	0.99	1669466	2700	
208 Pb	165	2		243.60	243.60	ppb	0.70	7577014	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	44788	0.39	46034	97.3	70 - 150	
45 Sc	2	746421	0.54	746250	100.0	70 - 150	
115 In	1	170867	1.67	184953	92.4	70 - 150	
115 In	2	928299	1.13	992378	93.5	70 - 150	
159 Tb	1	497628	1.07	508548	97.9	70 - 150	
159 Tb	2	1469672	0.90	1522400	96.5	70 - 150	
165 Ho	1	487471	1.02	499548	97.6	70 - 150	
165 Ho	2	1431838	0.05	1505114	95.1	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\019SMPL.D\019SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\019SMPL.D\019SMPL.D#
 Date Acquired: Apr 1 2015 04:35 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-011
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2204
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.18	0.18	ppb	6.18	789	2700	
23 Na	45	1	8,829.00	8829.00	ppb	0.88	6872413	225000	
24 Mg	45	1	2,668.00	2668.00	ppb	1.26	1176137	225000	
27 Al	45	1	11.55	11.55	ppb	1.75	4699	67500	
39 K	45	1	492.40	492.40	ppb	0.85	199051	225000	
44 Ca	45	1	7,562.00	7562.00	ppb	0.77	117628	225000	
51 V	45	1	0.46	0.46	ppb	3.99	1032	2700	
52 Cr	45	1	0.53	0.53	ppb	3.57	1901	2700	
55 Mn	45	1	1.11	1.11	ppb	1.57	2976	2700	
56 Fe	45	1	12.43	12.43	ppb	7.57	61191	202500	
59 Co	45	1	0.22	0.22	ppb	3.00	900	2700	
60 Ni	45	1	0.50	0.50	ppb	6.62	530	2700	
65 Cu	45	1	0.79	0.79	ppb	7.04	1512	2700	
66 Zn	45	1	2.29	2.29	ppb	6.75	1665	2700	
75 As	115	1	0.39	0.39	ppb	5.89	110	2250	
78 Se	115	1	0.40	0.40	ppb	44.37	42	2700	
83 Kr	115	2	----	-----	ppb	-----	391	2700	
95 Mo	115	2	0.29	0.29	ppb	5.27	1067	2700	
107 Ag	115	2	0.04	0.04	ppb	7.58	536	900	
111 Cd	115	2	0.17	0.17	ppb	3.10	341	2700	
121 Sb	115	2	0.25	0.25	ppb	7.32	1904	1125	
137 Ba	159	2	7.62	7.62	ppb	1.74	23603	1350	
205 Tl	165	2	0.41	0.41	ppb	2.47	10181	900	
206 (Pb)	165	2	0.29	0.29	ppb	3.33	2989	2700	
207 (Pb)	165	2	0.32	0.32	ppb	1.12	2682	2700	
208 Pb	165	2	0.29	0.29	ppb	2.68	11909	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	40607	0.74	46034	88.2	70 - 150	
45 Sc	2	699361	0.65	746250	93.7	70 - 150	
115 In	1	162002	1.17	184953	87.6	70 - 150	
115 In	2	885788	0.64	992378	89.3	70 - 150	
159 Tb	1	456356	1.06	508548	89.7	70 - 150	
159 Tb	2	1374099	1.73	1522400	90.3	70 - 150	
165 Ho	1	451930	1.52	499548	90.5	70 - 150	
165 Ho	2	1347148	0.78	1505114	89.5	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\020SMPL.D\020SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\020SMPL.D\020SMPL.D#
 Date Acquired: Apr 1 2015 04:41 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-011 MR
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2205
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.06	0.06	ppb	18.76	307	2700	
23 Na	45	1		9,151.00	9151.00	ppb	2.27	7420721	225000	
24 Mg	45	1		2,748.00	2748.00	ppb	2.73	1262157	225000	
27 Al	45	1		9.46	9.46	ppb	2.13	4342	67500	
39 K	45	1		495.00	495.00	ppb	2.25	208284	225000	
44 Ca	45	1		7,973.00	7973.00	ppb	2.40	129221	225000	
51 V	45	1		0.37	0.37	ppb	3.35	864	2700	
52 Cr	45	1		1.40	1.40	ppb	1.28	4147	2700	
55 Mn	45	1		1.64	1.64	ppb	0.44	4123	2700	
56 Fe	45	1		23.80	23.80	ppb	0.95	90646	202500	
59 Co	45	1		0.09	0.09	ppb	4.46	461	2700	
60 Ni	45	1		0.61	0.61	ppb	1.58	667	2700	
65 Cu	45	1		0.40	0.40	ppb	14.75	1089	2700	
66 Zn	45	1		4.02	4.02	ppb	0.93	2517	2700	
75 As	115	1		0.25	0.25	ppb	24.66	78	2250	
78 Se	115	1		0.10	0.10	ppb	66.34	36	2700	
83 Kr	115	2		----	-----	ppb	-----	341	2700	
95 Mo	115	2		0.14	0.14	ppb	3.20	547	2700	
107 Ag	115	2		0.03	0.03	ppb	9.88	363	900	
111 Cd	115	2		0.04	0.04	ppb	1.91	101	2700	
121 Sb	115	2		0.10	0.10	ppb	4.76	867	1125	
137 Ba	159	2		7.97	7.97	ppb	1.16	24671	1350	
205 Tl	165	2		0.15	0.15	ppb	5.77	4022	900	
206 (Pb)	165	2		0.24	0.24	ppb	5.48	2642	2700	
207 (Pb)	165	2		0.23	0.23	ppb	6.78	2170	2700	
208 Pb	165	2		0.22	0.22	ppb	5.85	9905	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	42320	1.38	46034	91.9	70 - 150	
45 Sc	2	702127	0.34	746250	94.1	70 - 150	
115 In	1	167891	1.31	184953	90.8	70 - 150	
115 In	2	883892	0.63	992378	89.1	70 - 150	
159 Tb	1	467864	1.29	508548	92.0	70 - 150	
159 Tb	2	1375222	0.42	1522400	90.3	70 - 150	
165 Ho	1	462095	1.16	499548	92.5	70 - 150	
165 Ho	2	1349317	1.12	1505114	89.6	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\021SMPL.D\021SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\021SMPL.D\021SMPL.D#
 Date Acquired: Apr 1 2015 04:47 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-011 SD
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2209
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.03	0.03	ppb	36.50	169	2700	
23 Na	45	1	1,933.00	1933.00	ppb	0.37	1766914	225000	
24 Mg	45	1	532.90	532.90	ppb	1.34	265894	225000	
27 Al	45	1	1.51	1.51	ppb	25.60	2417	67500	
39 K	45	1	150.60	150.60	ppb	1.14	100683	225000	
44 Ca	45	1	1,617.00	1617.00	ppb	1.78	28583	225000	
51 V	45	1	0.09	0.09	ppb	4.09	292	2700	
52 Cr	45	1	-0.02	-0.02	ppb	40.83	649	2700	
55 Mn	45	1	1.75	1.75	ppb	2.71	4672	2700	
56 Fe	45	1	0.57	0.57	ppb	175.98	38630	202500	
59 Co	45	1	0.03	0.03	ppb	4.78	226	2700	
60 Ni	45	1	0.16	0.16	ppb	11.61	232	2700	
65 Cu	45	1	0.47	0.47	ppb	4.66	1270	2700	
66 Zn	45	1	4.01	4.01	ppb	6.72	2714	2700	
75 As	115	1	0.05	0.05	ppb	43.95	31	2250	
78 Se	115	1	-0.05	-0.05	ppb	399.29	34	2700	
83 Kr	115	2	----	-----	ppb	-----	316	2700	
95 Mo	115	2	0.06	0.06	ppb	4.10	318	2700	
107 Ag	115	2	0.01	0.01	ppb	18.91	220	900	
111 Cd	115	2	0.03	0.03	ppb	8.06	90	2700	
121 Sb	115	2	0.04	0.04	ppb	6.12	511	1125	
137 Ba	159	2	1.47	1.47	ppb	1.04	5673	1350	
205 Tl	165	2	0.08	0.08	ppb	6.12	2597	900	
206 (Pb)	165	2	0.12	0.12	ppb	8.56	1899	2700	
207 (Pb)	165	2	0.14	0.14	ppb	11.05	1731	2700	
208 Pb	165	2	0.12	0.12	ppb	1.93	7631	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	45733	0.10	46034	99.3	70 - 150	
45 Sc	2	745416	0.20	746250	99.9	70 - 150	
115 In	1	183753	0.84	184953	99.4	70 - 150	
115 In	2	975485	0.67	992378	98.3	70 - 150	
159 Tb	1	509742	0.87	508548	100.2	70 - 150	
159 Tb	2	1491319	0.47	1522400	98.0	70 - 150	
165 Ho	1	502307	1.63	499548	100.6	70 - 150	
165 Ho	2	1460409	0.33	1505114	97.0	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\022SMPL.D\022SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\022SMPL.D\022SMPL.D#
 Date Acquired: Apr 1 2015 04:53 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-012 MS 1
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2206
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	260.50	260.50	ppb	0.51	1004431	2700	
23 Na	45	1	33,190.00	33190.00	ppb	1.34	25008120	225000	
24 Mg	45	1	26,400.00	26400.00	ppb	1.39	11353040	225000	
27 Al	45	1	2,252.00	2252.00	ppb	1.35	560774	67500	
39 K	45	1	23,840.00	23840.00	ppb	1.23	7507990	225000	
44 Ca	45	1	31,780.00	31780.00	ppb	0.78	481861	225000	
51 V	45	1	239.50	239.50	ppb	1.93	485879	2700	
52 Cr	45	1	238.80	238.80	ppb	1.66	559852	2700	
55 Mn	45	1	237.80	237.80	ppb	0.80	430399	2700	
56 Fe	45	1	2,400.00	2400.00	ppb	0.94	5345191	202500	
59 Co	45	1	235.10	235.10	ppb	1.15	844649	2700	
60 Ni	45	1	230.20	230.20	ppb	0.55	212830	2700	
65 Cu	45	1	238.70	238.70	ppb	1.06	280413	2700	
66 Zn	45	1	234.30	234.30	ppb	1.08	99570	2700	
75 As	115	1	242.30	242.30	ppb	0.19	56135	2250	
78 Se	115	1	241.90	241.90	ppb	0.30	5907	2700	
83 Kr	115	2	----	-----	ppb	-----	351	2700	
95 Mo	115	2	246.60	246.60	ppb	1.52	766568	2700	
107 Ag	115	2	47.20	47.20	ppb	0.77	412495	900	
111 Cd	115	2	244.20	244.20	ppb	0.55	429799	2700	
121 Sb	115	2	253.50	253.50	ppb	1.00	1612021	1125	
137 Ba	159	2	242.10	242.10	ppb	1.73	695065	1350	
205 Tl	165	2	231.80	231.80	ppb	1.51	5164136	900	
206 (Pb)	165	2	255.80	255.80	ppb	1.22	1753100	2700	
207 (Pb)	165	2	256.70	256.70	ppb	0.94	1529063	2700	
208 Pb	165	2	246.20	246.20	ppb	0.97	6903981	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	39658	0.55	46034	86.1	70 - 150	
45 Sc	2	667592	0.75	746250	89.5	70 - 150	
115 In	1	153128	0.27	184953	82.8	70 - 150	
115 In	2	813059	0.51	992378	81.9	70 - 150	
159 Tb	1	440446	0.50	508548	86.6	70 - 150	
159 Tb	2	1319194	1.67	1522400	86.7	70 - 150	
165 Ho	1	434632	0.50	499548	87.0	70 - 150	
165 Ho	2	1291072	0.50	1505114	85.8	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\023SMPL.D\023SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\023SMPL.D\023SMPL.D#
 Date Acquired: Apr 1 2015 04:59 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-013 MS 2
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2207
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	281.40	281.40	ppb	0.54	1102731	2700	
23 Na	45	1	35,740.00	35740.00	ppb	1.65	27252440	225000	
24 Mg	45	1	28,590.00	28590.00	ppb	2.43	12447720	225000	
27 Al	45	1	2,468.00	2468.00	ppb	1.84	621919	67500	
39 K	45	1	26,090.00	26090.00	ppb	1.03	8312727	225000	
44 Ca	45	1	34,400.00	34400.00	ppb	1.17	527852	225000	
51 V	45	1	262.60	262.60	ppb	1.42	539187	2700	
52 Cr	45	1	260.10	260.10	ppb	1.49	617155	2700	
55 Mn	45	1	260.90	260.90	ppb	1.34	477730	2700	
56 Fe	45	1	2,594.00	2594.00	ppb	1.41	5845299	202500	
59 Co	45	1	264.40	264.40	ppb	2.29	961552	2700	
60 Ni	45	1	250.50	250.50	ppb	1.10	234380	2700	
65 Cu	45	1	259.70	259.70	ppb	1.33	308828	2700	
66 Zn	45	1	255.20	255.20	ppb	1.73	109716	2700	
75 As	115	1	265.00	265.00	ppb	0.92	61509	2250	
78 Se	115	1	269.80	269.80	ppb	1.06	6600	2700	
83 Kr	115	2	----	-----	ppb	-----	369	2700	
95 Mo	115	2	269.50	269.50	ppb	0.67	855509	2700	
107 Ag	115	2	51.26	51.26	ppb	0.46	457434	900	
111 Cd	115	2	265.40	265.40	ppb	0.53	477074	2700	
121 Sb	115	2	273.20	273.20	ppb	0.48	1773746	1125	
137 Ba	159	2	262.00	262.00	ppb	0.21	765578	1350	
205 Tl	165	2	249.60	249.60	ppb	0.55	5715988	900	
206 (Pb)	165	2	277.30	277.30	ppb	0.80	1953754	2700	
207 (Pb)	165	2	276.20	276.20	ppb	1.99	1691503	2700	
208 Pb	165	2	265.60	265.60	ppb	1.32	7657206	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	40141	0.71	46034	87.2	70 - 150	
45 Sc	2	678533	0.41	746250	90.9	70 - 150	
115 In	1	153449	1.26	184953	83.0	70 - 150	
115 In	2	830217	0.49	992378	83.7	70 - 150	
159 Tb	1	445701	1.30	508548	87.6	70 - 150	
159 Tb	2	1342774	0.54	1522400	88.2	70 - 150	
165 Ho	1	437801	0.78	499548	87.6	70 - 150	
165 Ho	2	1327189	0.41	1505114	88.2	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\024SMPL.D\024SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\024SMPL.D\024SMPL.D#
 Date Acquired: Apr 1 2015 05:04 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-011 PS
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2208
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	55.69	55.69	ppb	0.64	225954	2700	
23 Na	45	1	14,250.00	14250.00	ppb	1.89	11378280	225000	
24 Mg	45	1	8,079.00	8079.00	ppb	1.68	3666666	225000	
27 Al	45	1	1,579.00	1579.00	ppb	0.69	415347	67500	
39 K	45	1	5,967.00	5967.00	ppb	0.49	2014273	225000	
44 Ca	45	1	12,960.00	12960.00	ppb	1.81	207436	225000	
51 V	45	1	54.10	54.10	ppb	1.22	115828	2700	
52 Cr	45	1	54.69	54.69	ppb	1.87	135753	2700	
55 Mn	45	1	55.38	55.38	ppb	1.22	106451	2700	
56 Fe	45	1	5,397.00	5397.00	ppb	1.34	12640150	202500	
59 Co	45	1	53.46	53.46	ppb	1.16	202739	2700	
60 Ni	45	1	54.24	54.24	ppb	1.96	52948	2700	
65 Cu	45	1	55.67	55.67	ppb	1.75	69445	2700	
66 Zn	45	1	56.90	56.90	ppb	1.29	26040	2700	
75 As	115	1	54.25	54.25	ppb	1.24	13544	2250	
78 Se	115	1	263.70	263.70	ppb	1.04	6932	2700	
83 Kr	115	2	----	-----	ppb	-----	372	2700	
95 Mo	115	2	54.18	54.18	ppb	1.41	180925	2700	
107 Ag	115	2	52.78	52.78	ppb	1.53	495263	900	
111 Cd	115	2	54.39	54.39	ppb	1.06	102803	2700	
121 Sb	115	2	54.58	54.58	ppb	1.18	372789	1125	
137 Ba	159	2	61.15	61.15	ppb	1.05	183570	1350	
205 Tl	165	2	54.20	54.20	ppb	1.01	1250492	900	
206 (Pb)	165	2	53.46	53.46	ppb	1.16	380084	2700	
207 (Pb)	165	2	54.20	54.20	ppb	0.56	334827	2700	
208 Pb	165	2	52.78	52.78	ppb	0.43	1535013	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	41837	0.70	46034	90.9	70 - 150	
45 Sc	2	702371	0.45	746250	94.1	70 - 150	
115 In	1	164895	0.68	184953	89.2	70 - 150	
115 In	2	872950	0.32	992378	88.0	70 - 150	
159 Tb	1	466231	1.13	508548	91.7	70 - 150	
159 Tb	2	1374540	0.49	1522400	90.3	70 - 150	
165 Ho	1	459098	0.77	499548	91.9	70 - 150	
165 Ho	2	1336642	0.43	1505114	88.8	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\025SMPL.D\025SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\025SMPL.D\025SMPL.D#
 Date Acquired: Apr 1 2015 05:10 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: RINSE
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3101
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	1.19	1.19	ppb	1.25	5115	2700	
23 Na	45	1	355.70	355.70	ppb	2.53	379562	225000	
24 Mg	45	1	279.50	279.50	ppb	2.52	132892	225000	
27 Al	45	1	332.30	332.30	ppb	1.77	92034	67500	
39 K	45	1	218.90	218.90	ppb	1.99	118799	225000	
44 Ca	45	1	511.50	511.50	ppb	2.26	8788	225000	
51 V	45	1	2.19	2.19	ppb	3.66	4918	2700	
52 Cr	45	1	1.66	1.66	ppb	2.34	4903	2700	
55 Mn	45	1	10.65	10.65	ppb	1.95	21995	2700	
56 Fe	45	1	791.20	791.20	ppb	2.48	1949632	202500	
59 Co	45	1	1.44	1.44	ppb	4.50	5754	2700	
60 Ni	45	1	1.55	1.55	ppb	2.50	1625	2700	
65 Cu	45	1	2.01	2.01	ppb	9.30	3178	2700	
66 Zn	45	1	3.01	3.01	ppb	3.00	2112	2700	
75 As	115	1	2.06	2.06	ppb	1.82	559	2250	
78 Se	115	1	2.66	2.66	ppb	12.64	108	2700	
83 Kr	115	2	----	-----	ppb	-----	367	2700	
95 Mo	115	2	2.76	2.76	ppb	2.53	9983	2700	
107 Ag	115	2	0.63	0.63	ppb	3.69	6524	900	
111 Cd	115	2	1.22	1.22	ppb	2.68	2498	2700	
121 Sb	115	2	0.93	0.93	ppb	1.53	6995	1125	
137 Ba	159	2	3.43	3.43	ppb	2.04	11794	1350	
205 Tl	165	2	1.31	1.31	ppb	1.56	33349	900	
206 (Pb)	165	2	5.85	5.85	ppb	0.69	45795	2700	
207 (Pb)	165	2	5.66	5.66	ppb	1.96	38420	2700	
208 Pb	165	2	5.63	5.63	ppb	1.05	180199	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	43333	0.35	46034	94.1	70 - 150	
45 Sc	2	737989	1.21	746250	98.9	70 - 150	
115 In	1	174398	1.01	184953	94.3	70 - 150	
115 In	2	939604	0.19	992378	94.7	70 - 150	
159 Tb	1	487570	1.34	508548	95.9	70 - 150	
159 Tb	2	1460582	1.59	1522400	95.9	70 - 150	
165 Ho	1	480094	1.17	499548	96.1	70 - 150	
165 Ho	2	1443949	1.58	1505114	95.9	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\026_CCV.D\026_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\026_CCV.D\026_CCV.D#
 Date Acquired: Apr 1 2015 05:16 am
 Operator: GK
 Sample Name: CCV V-206947
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3103
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: 6-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	53.19 ppb	0.46	216206	50	106.4	90 - 110	
23 Na	45	1	5231.00 ppb	1.23	4415334	5000	104.6	90 - 110	
24 Mg	45	1	5210.00 ppb	0.51	2469234	5000	104.2	90 - 110	
27 Al	45	1	1492.00 ppb	0.87	409849	1500	99.5	90 - 110	
39 K	45	1	5140.00 ppb	1.76	1817260	5000	102.8	90 - 110	
44 Ca	45	1	5136.00 ppb	1.62	86012	5000	102.7	90 - 110	
51 V	45	1	51.12 ppb	1.02	114243	50	102.2	90 - 110	
52 Cr	45	1	51.19 ppb	1.15	132684	50	102.4	90 - 110	
55 Mn	45	1	50.76 ppb	1.52	101923	50	101.5	90 - 110	
56 Fe	45	1	5165.00 ppb	1.90	12629480	5000	103.3	90 - 110	
59 Co	45	1	51.38 ppb	2.16	203411	50	102.8	90 - 110	
60 Ni	45	1	51.52 ppb	1.69	52500	50	103.0	90 - 110	
65 Cu	45	1	51.33 ppb	1.21	66893	50	102.7	90 - 110	
66 Zn	45	1	50.33 ppb	1.74	24127	50	100.7	90 - 110	
75 As	115	1	49.60 ppb	0.20	13164	50	99.2	90 - 110	
78 Se	115	1	251.50 ppb	1.92	7030	250	100.6	90 - 110	
83 Kr	115	2	----- ppb	-----	354	50	#VALUE!	##### - #####	
95 Mo	115	2	50.01 ppb	1.45	175577	50	100.0	90 - 110	
107 Ag	115	2	49.55 ppb	1.98	488875	50	99.1	90 - 110	
111 Cd	115	2	50.73 ppb	1.53	100811	50	101.5	90 - 110	
121 Sb	115	2	50.69 ppb	0.39	363997	50	101.4	90 - 110	
137 Ba	159	2	50.10 ppb	0.49	157523	50	100.2	90 - 110	
205 Tl	165	2	51.38 ppb	0.81	1254051	50	102.8	90 - 110	
206 (Pb)	165	2	50.72 ppb	0.22	381506	50	101.4	90 - 110	
207 (Pb)	165	2	51.13 ppb	0.56	334199	50	102.3	90 - 110	
208 Pb	165	2	50.08 ppb	0.33	1541073	50	100.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	43674	0.40	46034	94.9	80 - 120	
45 Sc	2	703599	0.67	746250	94.3	80 - 120	
115 In	1	175292	0.33	184953	94.8	80 - 120	
115 In	2	917845	0.46	992378	92.5	80 - 120	
159 Tb	1	487215	0.49	508548	95.8	80 - 120	
159 Tb	2	1438250	0.47	1522400	94.5	80 - 120	
165 Ho	1	483909	0.25	499548	96.9	80 - 120	
165 Ho	2	1414007	0.22	1505114	93.9	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\027_CCV.D\027_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\027_CCV.D\027_CCV.D#
 Date Acquired: Apr 1 2015 05:22 am
 Operator: GK
 Sample Name: LLCCV V-206949
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3105
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2		0.52 ppb	7.04	2142	1	103.8	70 - 130	
23 Na	45	1		237.10 ppb	3.14	282383	250	94.8	70 - 130	
24 Mg	45	1		251.50 ppb	3.09	119789	250	100.6	70 - 130	
27 Al	45	1		101.40 ppb	1.61	29418	100	101.4	70 - 130	
39 K	45	1		235.40 ppb	3.38	124519	250	94.2	70 - 130	
44 Ca	45	1		251.60 ppb	5.25	4487	250	100.6	70 - 130	
51 V	45	1		1.02 ppb	4.15	2326	1	101.6	70 - 130	
52 Cr	45	1		0.85 ppb	2.87	2830	1	84.5	70 - 130	
55 Mn	45	1		2.56 ppb	1.46	6034	3	85.3	70 - 130	
56 Fe	45	1		148.40 ppb	3.77	394381	150	98.9	70 - 130	
59 Co	45	1		1.02 ppb	2.79	4097	1	101.7	70 - 130	
60 Ni	45	1		1.42 ppb	5.26	1493	2	94.3	70 - 130	
65 Cu	45	1		4.62 ppb	2.92	6533	5	92.5	70 - 130	
66 Zn	45	1		9.18 ppb	2.24	4962	10	91.8	70 - 130	
75 As	115	1		0.99 ppb	1.94	279	1	98.7	70 - 130	
78 Se	115	1		5.04 ppb	3.39	175	5	100.7	70 - 130	
83 Kr	115	2		----- ppb	-----	337	1	#VALUE!	##### - #####	
95 Mo	115	2		1.03 ppb	0.47	3713	1	103.0	70 - 130	
107 Ag	115	2		0.51 ppb	1.14	5175	1	101.9	70 - 130	
111 Cd	115	2		0.98 ppb	1.35	1977	1	97.9	70 - 130	
121 Sb	115	2		1.50 ppb	0.31	10978	2	99.7	70 - 130	
137 Ba	159	2		2.15 ppb	1.11	7645	3	85.8	70 - 130	
205 Tl	165	2		1.01 ppb	0.66	25196	1	101.1	70 - 130	
206 (Pb)	165	2		1.46 ppb	0.83	11856	2	97.3	70 - 130	
207 (Pb)	165	2		1.46 ppb	0.96	10245	2	97.3	70 - 130	
208 Pb	165	2		1.43 ppb	1.13	47273	2	95.0	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	43371	1.68	46034	94.2	80 - 120	
45 Sc	2	696625	1.30	746250	93.4	80 - 120	
115 In	1	176165	1.09	184953	95.2	80 - 120	
115 In	2	924306	0.80	992378	93.1	80 - 120	
159 Tb	1	487225	0.99	508548	95.8	80 - 120	
159 Tb	2	1446772	0.76	1522400	95.0	80 - 120	
165 Ho	1	476107	0.64	499548	95.3	80 - 120	
165 Ho	2	1410727	1.68	1505114	93.7	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\028_CCB.D\028_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\028_CCB.D\028_CCB.D#
 Date Acquired: Apr 1 2015 05:28 am
 Operator: GK
 Sample Name: CCB V-206944
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3102
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: 6-CCB
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.012	ppb	10.38	101	0.50	
23 Na	45	1	-2.137	ppb	116.52	83330	250.00	
24 Mg	45	1	0.632	ppb	44.85	1786	250.00	
27 Al	45	1	-2.699	ppb	9.40	1113	100.00	
39 K	45	1	-5.528	ppb	54.94	40753	250.00	
44 Ca	45	1	-0.040	ppb	383.04	309	250.00	
51 V	45	1	0.013	ppb	24.01	101	1.00	
52 Cr	45	1	-0.141	ppb	6.84	296	1.00	
55 Mn	45	1	-0.307	ppb	5.50	361	3.00	
56 Fe	45	1	-3.735	ppb	20.53	25422	150.00	
59 Co	45	1	0.023	ppb	9.37	188	1.00	
60 Ni	45	1	-0.016	ppb	44.46	46	1.50	
65 Cu	45	1	0.096	ppb	20.67	707	5.00	
66 Zn	45	1	-1.169	ppb	2.12	177	10.00	
75 As	115	1	0.014	ppb	102.04	20	1.00	
78 Se	115	1	0.072	ppb	70.34	35	5.00	
83 Kr	115	2	-----	ppb	-----	277	1.00	
95 Mo	115	2	0.045	ppb	22.78	227	1.00	
107 Ag	115	2	0.005	ppb	71.68	160	0.50	
111 Cd	115	2	0.018	ppb	9.72	53	1.00	
121 Sb	115	2	0.018	ppb	35.19	291	1.50	
137 Ba	159	2	-0.145	ppb	1.22	432	2.50	
205 Tl	165	2	0.062	ppb	3.11	2071	1.00	
206 (Pb)	165	2	-0.011	ppb	81.88	837	1.50	
207 (Pb)	165	2	-0.012	ppb	31.32	664	1.50	
208 Pb	165	2	-0.009	ppb	41.43	3324	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	42080	1.61	46034	91.4	80 - 120	
45 Sc	2	683610	1.07	746250	91.6	80 - 120	
115 In	1	169313	0.67	184953	91.5	80 - 120	
115 In	2	899956	1.32	992378	90.7	80 - 120	
159 Tb	1	474919	0.47	508548	93.4	80 - 120	
159 Tb	2	1420935	0.69	1522400	93.3	80 - 120	
165 Ho	1	462413	0.51	499548	92.6	80 - 120	
165 Ho	2	1392318	1.49	1505114	92.5	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\029SMPL.D\029SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\029SMPL.D\029SMPL.D#
 Date Acquired: Apr 1 2015 05:34 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-001
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2210
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	0.05	0.05	ppb	8.04	261	2700	
23 Na	45		1	5,079.00	5079.00	ppb	2.32	4122445	225000	
24 Mg	45		1	1,163.00	1163.00	ppb	1.52	530560	225000	
27 Al	45		1	582.80	582.80	ppb	2.64	154945	67500	
39 K	45		1	850.10	850.10	ppb	2.50	324284	225000	
44 Ca	45		1	8,451.00	8451.00	ppb	2.16	135813	225000	
51 V	45		1	1.71	1.71	ppb	1.86	3742	2700	
52 Cr	45		1	17.21	17.21	ppb	2.71	43288	2700	
55 Mn	45		1	18.16	18.16	ppb	2.66	35645	2700	
56 Fe	45		1	893.50	893.50	ppb	2.88	2127647	202500	
59 Co	45		1	0.38	0.38	ppb	5.86	1560	2700	
60 Ni	45		1	3.21	3.21	ppb	6.36	3202	2700	
65 Cu	45		1	9.31	9.31	ppb	3.42	12135	2700	
66 Zn	45		1	20.35	20.35	ppb	2.34	9791	2700	
75 As	115		1	0.51	0.51	ppb	8.52	146	2250	
78 Se	115		1	0.66	0.66	ppb	71.32	50	2700	
83 Kr	115		2	----	-----	ppb	-----	393	2700	
95 Mo	115		2	0.92	0.92	ppb	2.96	3215	2700	
107 Ag	115		2	0.29	0.29	ppb	3.03	2938	900	
111 Cd	115		2	0.98	0.98	ppb	3.04	1909	2700	
121 Sb	115		2	0.14	0.14	ppb	4.84	1165	1125	
137 Ba	159		2	11.98	11.98	ppb	2.53	37500	1350	
205 Tl	165		2	0.10	0.10	ppb	0.86	2867	900	
206 (Pb)	165		2	5.40	5.40	ppb	1.51	40650	2700	
207 (Pb)	165		2	5.12	5.12	ppb	1.92	33483	2700	
208 Pb	165		2	5.08	5.08	ppb	1.53	156730	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	41973	1.08	46034	91.2	70 - 150	
45 Sc	2	705369	0.70	746250	94.5	70 - 150	
115 In	1	168110	0.78	184953	90.9	70 - 150	
115 In	2	894309	0.81	992378	90.1	70 - 150	
159 Tb	1	472103	0.61	508548	92.8	70 - 150	
159 Tb	2	1406411	0.84	1522400	92.4	70 - 150	
165 Ho	1	466143	0.80	499548	93.3	70 - 150	
165 Ho	2	1387669	0.04	1505114	92.2	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\030SMPL.D\030SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\030SMPL.D\030SMPL.D#
 Date Acquired: Apr 1 2015 05:40 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-003
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2301
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.05	0.05	ppb	6.59	264	2700	
23 Na	45	1		12,020.00	12020.00	ppb	0.61	9778978	225000	
24 Mg	45	1		1,296.00	1296.00	ppb	1.31	599886	225000	
27 Al	45	1		654.80	654.80	ppb	2.49	176331	67500	
39 K	45	1		1,096.00	1096.00	ppb	1.34	411458	225000	
44 Ca	45	1		8,127.00	8127.00	ppb	1.75	132467	225000	
51 V	45	1		2.06	2.06	ppb	2.79	4546	2700	
52 Cr	45	1		85.83	85.83	ppb	2.04	216363	2700	
55 Mn	45	1		12.63	12.63	ppb	1.76	25437	2700	
56 Fe	45	1		897.10	897.10	ppb	1.70	2166462	202500	
59 Co	45	1		0.36	0.36	ppb	3.91	1498	2700	
60 Ni	45	1		4.08	4.08	ppb	2.29	4106	2700	
65 Cu	45	1		18.24	18.24	ppb	1.72	23554	2700	
66 Zn	45	1		34.54	34.54	ppb	2.02	16362	2700	
75 As	115	1		0.73	0.73	ppb	5.00	202	2250	
78 Se	115	1		0.24	0.24	ppb	53.69	40	2700	
83 Kr	115	2		----	-----	ppb	-----	331	2700	
95 Mo	115	2		5.89	5.89	ppb	2.03	20368	2700	
107 Ag	115	2		0.08	0.08	ppb	9.03	845	900	
111 Cd	115	2		2.12	2.12	ppb	3.46	4147	2700	
121 Sb	115	2		0.18	0.18	ppb	7.08	1403	1125	
137 Ba	159	2		11.87	11.87	ppb	1.91	37338	1350	
205 Tl	165	2		0.06	0.06	ppb	3.65	2104	900	
206 (Pb)	165	2		9.47	9.47	ppb	0.73	70727	2700	
207 (Pb)	165	2		9.08	9.08	ppb	1.35	58893	2700	
208 Pb	165	2		8.92	8.92	ppb	0.67	272591	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	42563	0.25	46034	92.5	70 - 150	
45 Sc	2	708637	1.15	746250	95.0	70 - 150	
115 In	1	168642	0.49	184953	91.2	70 - 150	
115 In	2	901876	1.10	992378	90.9	70 - 150	
159 Tb	1	477052	1.05	508548	93.8	70 - 150	
159 Tb	2	1412973	0.62	1522400	92.8	70 - 150	
165 Ho	1	470549	0.44	499548	94.2	70 - 150	
165 Ho	2	1388955	1.56	1505114	92.3	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\031SMPL.D\031SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\031SMPL.D\031SMPL.D#
 Date Acquired: Apr 1 2015 05:46 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-005
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2302
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	0.04	0.04	ppb	20.82	231	2700	
23 Na	45		1	1,925.00	1925.00	ppb	3.63	1612524	225000	
24 Mg	45		1	584.00	584.00	ppb	2.35	266895	225000	
27 Al	45		1	1,199.00	1199.00	ppb	2.69	316353	67500	
39 K	45		1	693.60	693.60	ppb	1.61	272037	225000	
44 Ca	45		1	4,733.00	4733.00	ppb	1.92	76092	225000	
51 V	45		1	2.87	2.87	ppb	3.72	6229	2700	
52 Cr	45		1	30.19	30.19	ppb	1.52	75365	2700	
55 Mn	45		1	7.38	7.38	ppb	2.44	15032	2700	
56 Fe	45		1	1,246.00	1246.00	ppb	2.12	2950140	202500	
59 Co	45		1	0.32	0.32	ppb	4.12	1298	2700	
60 Ni	45		1	8.16	8.16	ppb	1.54	8036	2700	
65 Cu	45		1	35.01	35.01	ppb	2.10	43967	2700	
66 Zn	45		1	122.00	122.00	ppb	2.69	55125	2700	
75 As	115		1	0.83	0.83	ppb	7.25	225	2250	
78 Se	115		1	-0.09	-0.09	ppb	175.07	30	2700	
83 Kr	115		2	----	-----	ppb	-----	361	2700	
95 Mo	115		2	0.26	0.26	ppb	2.12	942	2700	
107 Ag	115		2	0.16	0.16	ppb	5.40	1662	900	
111 Cd	115		2	9.92	9.92	ppb	0.14	19146	2700	
121 Sb	115		2	0.25	0.25	ppb	6.62	1899	1125	
137 Ba	159		2	6.05	6.05	ppb	0.81	19465	1350	
205 Tl	165		2	0.05	0.05	ppb	6.37	1765	900	
206 (Pb)	165		2	11.28	11.28	ppb	1.83	84028	2700	
207 (Pb)	165		2	10.83	10.83	ppb	0.55	70121	2700	
208 Pb	165		2	10.78	10.78	ppb	0.75	328584	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	41912	0.69	46034	91.0	70 - 150	
45 Sc	2	711438	0.50	746250	95.3	70 - 150	
115 In	1	166456	1.12	184953	90.0	70 - 150	
115 In	2	891153	1.00	992378	89.8	70 - 150	
159 Tb	1	475196	0.65	508548	93.4	70 - 150	
159 Tb	2	1413838	0.71	1522400	92.9	70 - 150	
165 Ho	1	467574	0.69	499548	93.6	70 - 150	
165 Ho	2	1388953	0.53	1505114	92.3	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\032SMPL.D\032SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\032SMPL.D\032SMPL.D#
 Date Acquired: Apr 1 2015 05:52 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-007
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2303
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.18	0.18	ppb	1.98	820	2700	
23 Na	45	1		8,033.00	8033.00	ppb	1.24	6586742	225000	
24 Mg	45	1		1,278.00	1278.00	ppb	1.61	593596	225000	
27 Al	45	1		276.40	276.40	ppb	1.66	75796	67500	
39 K	45	1		1,432.00	1432.00	ppb	1.49	526610	225000	
44 Ca	45	1		9,272.00	9272.00	ppb	1.02	151657	225000	
51 V	45	1		0.31	0.31	ppb	3.41	759	2700	
52 Cr	45	1		4.86	4.86	ppb	1.50	12917	2700	
55 Mn	45	1		12.34	12.34	ppb	2.12	24980	2700	
56 Fe	45	1		85.66	85.66	ppb	1.38	239067	202500	
59 Co	45	1		0.20	0.20	ppb	2.43	855	2700	
60 Ni	45	1		0.71	0.71	ppb	9.61	769	2700	
65 Cu	45	1		1.25	1.25	ppb	5.46	2174	2700	
66 Zn	45	1		10.08	10.08	ppb	1.57	5298	2700	
75 As	115	1		0.32	0.32	ppb	14.67	98	2250	
78 Se	115	1		0.22	0.22	ppb	101.78	40	2700	
83 Kr	115	2		----	-----	ppb	-----	417	2700	
95 Mo	115	2		0.05	0.05	ppb	22.72	239	2700	
107 Ag	115	2		0.03	0.03	ppb	11.40	383	900	
111 Cd	115	2		0.16	0.16	ppb	9.15	337	2700	
121 Sb	115	2		0.06	0.06	ppb	10.78	573	1125	
137 Ba	159	2		24.38	24.38	ppb	0.90	76014	1350	
205 Tl	165	2		0.04	0.04	ppb	9.92	1495	900	
206 (Pb)	165	2		0.18	0.18	ppb	4.46	2318	2700	
207 (Pb)	165	2		0.18	0.18	ppb	6.73	1956	2700	
208 Pb	165	2		0.18	0.18	ppb	0.34	9080	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	42724	0.36	46034	92.8	70 - 150	
45 Sc	2	720696	1.19	746250	96.6	70 - 150	
115 In	1	172329	0.59	184953	93.2	70 - 150	
115 In	2	915780	0.55	992378	92.3	70 - 150	
159 Tb	1	487629	0.24	508548	95.9	70 - 150	
159 Tb	2	1417555	0.85	1522400	93.1	70 - 150	
165 Ho	1	483216	0.35	499548	96.7	70 - 150	
165 Ho	2	1415251	1.10	1505114	94.0	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\033SMPL.D\033SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\033SMPL.D\033SMPL.D#
 Date Acquired: Apr 1 2015 05:58 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-009
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2304
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.02	0.02	ppb	23.70	120	2700	
23 Na	45	1		4,611.00	4611.00	ppb	0.72	3686446	225000	
24 Mg	45	1		1,399.00	1399.00	ppb	0.96	627385	225000	
27 Al	45	1		38.95	38.95	ppb	1.25	11851	67500	
39 K	45	1		346.20	346.20	ppb	1.16	154563	225000	
44 Ca	45	1		4,606.00	4606.00	ppb	1.46	72881	225000	
51 V	45	1		0.43	0.43	ppb	4.21	985	2700	
52 Cr	45	1		0.53	0.53	ppb	2.73	1918	2700	
55 Mn	45	1		4.21	4.21	ppb	3.81	8830	2700	
56 Fe	45	1		33.81	33.81	ppb	1.91	111444	202500	
59 Co	45	1		0.09	0.09	ppb	9.69	438	2700	
60 Ni	45	1		0.92	0.92	ppb	5.41	946	2700	
65 Cu	45	1		0.63	0.63	ppb	7.92	1345	2700	
66 Zn	45	1		10.66	10.66	ppb	0.87	5370	2700	
75 As	115	1		0.25	0.25	ppb	9.05	78	2250	
78 Se	115	1		0.02	0.02	ppb	1172.00	33	2700	
83 Kr	115	2		----	-----	ppb	-----	329	2700	
95 Mo	115	2		0.15	0.15	ppb	15.05	562	2700	
107 Ag	115	2		0.01	0.01	ppb	18.89	208	900	
111 Cd	115	2		0.08	0.08	ppb	11.46	160	2700	
121 Sb	115	2		0.06	0.06	ppb	1.31	541	1125	
137 Ba	159	2		5.78	5.78	ppb	1.54	17701	1350	
205 Tl	165	2		0.03	0.03	ppb	13.06	1318	900	
206 (Pb)	165	2		0.20	0.20	ppb	5.49	2238	2700	
207 (Pb)	165	2		0.18	0.18	ppb	3.25	1802	2700	
208 Pb	165	2		0.17	0.17	ppb	1.84	8264	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	41256	2.73	46034	89.6	70 - 150	
45 Sc	2	683876	0.38	746250	91.6	70 - 150	
115 In	1	166473	3.24	184953	90.0	70 - 150	
115 In	2	863280	1.64	992378	87.0	70 - 150	
159 Tb	1	466942	3.18	508548	91.8	70 - 150	
159 Tb	2	1342334	0.44	1522400	88.2	70 - 150	
165 Ho	1	462552	2.66	499548	92.6	70 - 150	
165 Ho	2	1319958	0.18	1505114	87.7	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\034SMPL.D\034SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\034SMPL.D\034SMPL.D#
 Date Acquired: Apr 1 2015 06:04 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-017
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2305
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.01	0.01	ppb	44.60	107	2700	
23 Na	45	1	8,877.00	8877.00	ppb	1.18	6923278	225000	
24 Mg	45	1	2,663.00	2663.00	ppb	0.75	1176527	225000	
27 Al	45	1	7.70	7.70	ppb	1.87	3726	67500	
39 K	45	1	480.90	480.90	ppb	0.90	195714	225000	
44 Ca	45	1	7,275.00	7275.00	ppb	0.86	113374	225000	
51 V	45	1	0.30	0.30	ppb	3.49	702	2700	
52 Cr	45	1	0.46	0.46	ppb	1.91	1740	2700	
55 Mn	45	1	0.81	0.81	ppb	2.21	2412	2700	
56 Fe	45	1	5.01	5.01	ppb	12.49	44447	202500	
59 Co	45	1	0.03	0.03	ppb	16.85	192	2700	
60 Ni	45	1	0.38	0.38	ppb	9.94	423	2700	
65 Cu	45	1	0.28	0.28	ppb	14.71	899	2700	
66 Zn	45	1	2.88	2.88	ppb	2.68	1926	2700	
75 As	115	1	0.16	0.16	ppb	5.49	54	2250	
78 Se	115	1	0.24	0.24	ppb	121.88	39	2700	
83 Kr	115	2	----	-----	ppb	-----	332	2700	
95 Mo	115	2	0.06	0.06	ppb	7.72	279	2700	
107 Ag	115	2	0.01	0.01	ppb	25.85	191	900	
111 Cd	115	2	0.01	0.01	ppb	22.38	39	2700	
121 Sb	115	2	0.03	0.03	ppb	29.04	396	1125	
137 Ba	159	2	7.35	7.35	ppb	1.24	22790	1350	
205 Tl	165	2	0.02	0.02	ppb	2.79	1082	900	
206 (Pb)	165	2	0.04	0.04	ppb	35.91	1197	2700	
207 (Pb)	165	2	0.05	0.05	ppb	8.18	1021	2700	
208 Pb	165	2	0.04	0.04	ppb	6.57	4756	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	40683	0.94	46034	88.4	70 - 150	
45 Sc	2	694556	1.31	746250	93.1	70 - 150	
115 In	1	164737	1.18	184953	89.1	70 - 150	
115 In	2	888481	1.31	992378	89.5	70 - 150	
159 Tb	1	469437	0.83	508548	92.3	70 - 150	
159 Tb	2	1373882	2.21	1522400	90.2	70 - 150	
165 Ho	1	460218	1.27	499548	92.1	70 - 150	
165 Ho	2	1351698	1.46	1505114	89.8	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\035SMPL.D\035SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\035SMPL.D\035SMPL.D#
 Date Acquired: Apr 1 2015 06:10 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-019
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2306
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.01	0.01	ppb	22.45	91	2700	
23 Na	45	1		10,590.00	10590.00	ppb	1.87	8469417	225000	
24 Mg	45	1		1,771.00	1771.00	ppb	1.05	804513	225000	
27 Al	45	1		83.79	83.79	ppb	2.16	23749	67500	
39 K	45	1		2,566.00	2566.00	ppb	1.48	889625	225000	
44 Ca	45	1		9,852.00	9852.00	ppb	1.57	157692	225000	
51 V	45	1		0.52	0.52	ppb	3.80	1183	2700	
52 Cr	45	1		1.43	1.43	ppb	2.87	4164	2700	
55 Mn	45	1		509.00	509.00	ppb	2.83	969954	2700	
56 Fe	45	1		109.50	109.50	ppb	0.65	289657	202500	
59 Co	45	1		0.18	0.18	ppb	4.82	768	2700	
60 Ni	45	1		0.88	0.88	ppb	3.88	917	2700	
65 Cu	45	1		2.63	2.63	ppb	2.50	3833	2700	
66 Zn	45	1		5.45	5.45	ppb	3.69	3121	2700	
75 As	115	1		0.25	0.25	ppb	9.47	79	2250	
78 Se	115	1		0.17	0.17	ppb	90.78	37	2700	
83 Kr	115	2		----	-----	ppb	-----	353	2700	
95 Mo	115	2		0.44	0.44	ppb	2.97	1566	2700	
107 Ag	115	2		0.03	0.03	ppb	11.16	400	900	
111 Cd	115	2		0.13	0.13	ppb	7.24	260	2700	
121 Sb	115	2		0.07	0.07	ppb	8.40	634	1125	
137 Ba	159	2		10.40	10.40	ppb	2.42	32357	1350	
205 Tl	165	2		0.02	0.02	ppb	15.91	1047	900	
206 (Pb)	165	2		0.34	0.34	ppb	4.25	3346	2700	
207 (Pb)	165	2		0.33	0.33	ppb	9.15	2798	2700	
208 Pb	165	2		0.32	0.32	ppb	1.37	12951	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	41813	0.46	46034	90.8	70 - 150	
45 Sc	2	696524	0.36	746250	93.3	70 - 150	
115 In	1	167526	1.03	184953	90.6	70 - 150	
115 In	2	889114	0.48	992378	89.6	70 - 150	
159 Tb	1	473181	0.48	508548	93.0	70 - 150	
159 Tb	2	1393368	0.92	1522400	91.5	70 - 150	
165 Ho	1	468143	1.20	499548	93.7	70 - 150	
165 Ho	2	1373199	0.29	1505114	91.2	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\036SMPL.D\036SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\036SMPL.D\036SMPL.D#
 Date Acquired: Apr 1 2015 06:16 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-021
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2307
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	0.02	0.02	ppb	17.80	124	2700	
23 Na	45		1	6,837.00	6837.00	ppb	1.46	5614564	225000	
24 Mg	45		1	1,900.00	1900.00	ppb	1.00	881022	225000	
27 Al	45		1	68.14	68.14	ppb	1.57	20065	67500	
39 K	45		1	1,379.00	1379.00	ppb	1.26	508134	225000	
44 Ca	45		1	11,780.00	11780.00	ppb	1.55	192460	225000	
51 V	45		1	0.46	0.46	ppb	2.85	1077	2700	
52 Cr	45		1	49.89	49.89	ppb	1.87	126436	2700	
55 Mn	45		1	10.64	10.64	ppb	3.01	21644	2700	
56 Fe	45		1	235.90	235.90	ppb	2.07	596899	202500	
59 Co	45		1	0.23	0.23	ppb	1.02	1000	2700	
60 Ni	45		1	1.84	1.84	ppb	3.50	1897	2700	
65 Cu	45		1	0.92	0.92	ppb	7.39	1758	2700	
66 Zn	45		1	6.10	6.10	ppb	3.65	3484	2700	
75 As	115		1	0.25	0.25	ppb	10.52	82	2250	
78 Se	115		1	0.27	0.27	ppb	31.66	41	2700	
83 Kr	115		2	----	-----	ppb	-----	373	2700	
95 Mo	115		2	0.87	0.87	ppb	5.61	3008	2700	
107 Ag	115		2	0.02	0.02	ppb	19.95	259	900	
111 Cd	115		2	20.87	20.87	ppb	0.44	40109	2700	
121 Sb	115		2	0.07	0.07	ppb	8.41	644	1125	
137 Ba	159		2	12.84	12.84	ppb	1.43	39651	1350	
205 Tl	165		2	0.04	0.04	ppb	11.62	1551	900	
206 (Pb)	165		2	1.60	1.60	ppb	0.44	12461	2700	
207 (Pb)	165		2	1.48	1.48	ppb	3.22	10009	2700	
208 Pb	165		2	1.49	1.49	ppb	0.48	47597	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	42693	1.36	46034	92.7	70 - 150	
45 Sc	2	691126	0.94	746250	92.6	70 - 150	
115 In	1	171495	1.10	184953	92.7	70 - 150	
115 In	2	887378	0.73	992378	89.4	70 - 150	
159 Tb	1	485053	1.27	508548	95.4	70 - 150	
159 Tb	2	1389151	0.91	1522400	91.2	70 - 150	
165 Ho	1	473646	0.85	499548	94.8	70 - 150	
165 Ho	2	1359618	0.49	1505114	90.3	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\037SMPL.D\037SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\037SMPL.D\037SMPL.D#
 Date Acquired: Apr 1 2015 06:22 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-023
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2308
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.17	0.17	ppb	7.31	737	2700	
23 Na	45	1		5,322.00	5322.00	ppb	0.73	4271355	225000	
24 Mg	45	1		1,913.00	1913.00	ppb	0.88	863294	225000	
27 Al	45	1		108.60	108.60	ppb	0.39	30035	67500	
39 K	45	1		2,327.00	2327.00	ppb	2.24	805493	225000	
44 Ca	45	1		7,096.00	7096.00	ppb	1.07	112919	225000	
51 V	45	1		0.32	0.32	ppb	6.84	755	2700	
52 Cr	45	1		1.03	1.03	ppb	2.01	3170	2700	
55 Mn	45	1		183.50	183.50	ppb	0.19	347983	2700	
56 Fe	45	1		71.67	71.67	ppb	1.33	199949	202500	
59 Co	45	1		0.09	0.09	ppb	4.17	436	2700	
60 Ni	45	1		4.49	4.49	ppb	1.17	4403	2700	
65 Cu	45	1		4.59	4.59	ppb	0.95	6221	2700	
66 Zn	45	1		11.54	11.54	ppb	0.86	5794	2700	
75 As	115	1		0.18	0.18	ppb	1.60	62	2250	
78 Se	115	1		0.07	0.07	ppb	326.38	35	2700	
83 Kr	115	2		----	-----	ppb	-----	338	2700	
95 Mo	115	2		0.02	0.02	ppb	19.24	141	2700	
107 Ag	115	2		0.03	0.03	ppb	5.63	362	900	
111 Cd	115	2		1.96	1.96	ppb	2.45	3756	2700	
121 Sb	115	2		0.03	0.03	ppb	14.46	384	1125	
137 Ba	159	2		83.66	83.66	ppb	1.41	252489	1350	
205 Tl	165	2		0.02	0.02	ppb	6.01	1136	900	
206 (Pb)	165	2		0.19	0.19	ppb	1.03	2230	2700	
207 (Pb)	165	2		0.19	0.19	ppb	4.26	1891	2700	
208 Pb	165	2		0.19	0.19	ppb	5.18	8941	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	41534	1.31	46034	90.2	70 - 150	
45 Sc	2	698357	0.85	746250	93.6	70 - 150	
115 In	1	167450	1.73	184953	90.5	70 - 150	
115 In	2	880608	1.38	992378	88.7	70 - 150	
159 Tb	1	470814	0.70	508548	92.6	70 - 150	
159 Tb	2	1383637	0.90	1522400	90.9	70 - 150	
165 Ho	1	464129	1.18	499548	92.9	70 - 150	
165 Ho	2	1351194	1.34	1505114	89.8	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\038SMPL.D\038SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\038SMPL.D\038SMPL.D#
 Date Acquired: Apr 1 2015 06:28 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: RINSE
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3101
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		1.04	1.04	ppb	3.62	4279	2700	
23 Na	45	1		362.60	362.60	ppb	2.22	373995	225000	
24 Mg	45	1		274.80	274.80	ppb	1.75	126867	225000	
27 Al	45	1		321.50	321.50	ppb	1.63	86510	67500	
39 K	45	1		215.70	215.70	ppb	2.01	114263	225000	
44 Ca	45	1		519.80	519.80	ppb	2.66	8666	225000	
51 V	45	1		2.17	2.17	ppb	3.08	4737	2700	
52 Cr	45	1		1.67	1.67	ppb	2.56	4789	2700	
55 Mn	45	1		10.88	10.88	ppb	2.53	21794	2700	
56 Fe	45	1		783.70	783.70	ppb	2.54	1875325	202500	
59 Co	45	1		1.37	1.37	ppb	2.83	5314	2700	
60 Ni	45	1		1.51	1.51	ppb	4.88	1544	2700	
65 Cu	45	1		1.93	1.93	ppb	5.36	2984	2700	
66 Zn	45	1		2.97	2.97	ppb	2.49	2031	2700	
75 As	115	1		1.85	1.85	ppb	3.83	494	2250	
78 Se	115	1		2.61	2.61	ppb	9.82	104	2700	
83 Kr	115	2		----	-----	ppb	-----	358	2700	
95 Mo	115	2		2.67	2.67	ppb	2.62	9295	2700	
107 Ag	115	2		0.55	0.55	ppb	2.34	5491	900	
111 Cd	115	2		1.10	1.10	ppb	2.60	2167	2700	
121 Sb	115	2		0.74	0.74	ppb	1.58	5434	1125	
137 Ba	159	2		3.43	3.43	ppb	3.65	11346	1350	
205 Tl	165	2		0.95	0.95	ppb	1.52	23483	900	
206 (Pb)	165	2		5.90	5.90	ppb	1.65	44504	2700	
207 (Pb)	165	2		5.62	5.62	ppb	2.38	36876	2700	
208 Pb	165	2		5.57	5.57	ppb	2.15	172017	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	42077	1.11	46034	91.4	70 - 150	
45 Sc	2	705386	0.49	746250	94.5	70 - 150	
115 In	1	170620	0.82	184953	92.3	70 - 150	
115 In	2	905127	0.13	992378	91.2	70 - 150	
159 Tb	1	482856	0.07	508548	94.9	70 - 150	
159 Tb	2	1406685	2.18	1522400	92.4	70 - 150	
165 Ho	1	473270	0.60	499548	94.7	70 - 150	
165 Ho	2	1393470	1.99	1505114	92.6	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\039_CCV.D\039_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\039_CCV.D\039_CCV.D#
 Date Acquired: Apr 1 2015 06:34 am
 Operator: GK
 Sample Name: CCV V-206947
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3103
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: 6-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	52.27 ppb	4.04	214492	50	104.5	90 - 110	
23 Na	45	1	5161.00 ppb	2.04	4350329	5000	103.2	90 - 110	
24 Mg	45	1	5189.00 ppb	2.91	2454728	5000	103.8	90 - 110	
27 Al	45	1	1478.00 ppb	2.30	405300	1500	98.5	90 - 110	
39 K	45	1	5106.00 ppb	2.30	1802331	5000	102.1	90 - 110	
44 Ca	45	1	5072.00 ppb	2.03	84814	5000	101.4	90 - 110	
51 V	45	1	50.46 ppb	1.59	112594	50	100.9	90 - 110	
52 Cr	45	1	50.64 ppb	2.52	131034	50	101.3	90 - 110	
55 Mn	45	1	50.41 ppb	0.99	101078	50	100.8	90 - 110	
56 Fe	45	1	5119.00 ppb	2.24	12494860	5000	102.4	90 - 110	
59 Co	45	1	50.74 ppb	1.74	200533	50	101.5	90 - 110	
60 Ni	45	1	51.30 ppb	1.97	52189	50	102.6	90 - 110	
65 Cu	45	1	51.07 ppb	1.22	66449	50	102.1	90 - 110	
66 Zn	45	1	50.67 ppb	1.59	24244	50	101.3	90 - 110	
75 As	115	1	49.57 ppb	0.52	13117	50	99.1	90 - 110	
78 Se	115	1	252.70 ppb	2.15	7040	250	101.1	90 - 110	
83 Kr	115	2	----- ppb	-----	314	50	#VALUE!	##### - #####	
95 Mo	115	2	49.13 ppb	1.17	174431	50	98.3	90 - 110	
107 Ag	115	2	48.70 ppb	2.41	485844	50	97.4	90 - 110	
111 Cd	115	2	50.17 ppb	0.93	100818	50	100.3	90 - 110	
121 Sb	115	2	49.33 ppb	1.75	358217	50	98.7	90 - 110	
137 Ba	159	2	49.34 ppb	1.28	156918	50	98.7	90 - 110	
205 Tl	165	2	50.69 ppb	0.58	1263058	50	101.4	90 - 110	
206 (Pb)	165	2	49.50 ppb	1.38	380082	50	99.0	90 - 110	
207 (Pb)	165	2	49.43 ppb	1.16	329854	50	98.9	90 - 110	
208 Pb	165	2	48.33 ppb	1.31	1518155	50	96.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	43605	1.44	46034	94.7	80 - 120	
45 Sc	2	711109	4.33	746250	95.3	80 - 120	
115 In	1	174740	0.63	184953	94.5	80 - 120	
115 In	2	928221	1.48	992378	93.5	80 - 120	
159 Tb	1	491449	0.68	508548	96.6	80 - 120	
159 Tb	2	1454789	0.81	1522400	95.6	80 - 120	
165 Ho	1	483854	0.99	499548	96.9	80 - 120	
165 Ho	2	1443522	0.82	1505114	95.9	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\040_CCV.D\040_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\040_CCV.D\040_CCV.D#
 Date Acquired: Apr 1 2015 06:40 am
 Operator: GK
 Sample Name: LLCCV V-206949
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3105
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.55 ppb	5.12	2259	1	110.4	70 - 130	
23 Na	45	1	233.70 ppb	1.01	279787	250	93.5	70 - 130	
24 Mg	45	1	248.80 ppb	2.08	118635	250	99.5	70 - 130	
27 Al	45	1	101.00 ppb	2.90	29316	100	101.0	70 - 130	
39 K	45	1	233.90 ppb	0.17	124089	250	93.6	70 - 130	
44 Ca	45	1	256.30 ppb	4.42	4570	250	102.5	70 - 130	
51 V	45	1	0.99 ppb	4.01	2274	1	99.1	70 - 130	
52 Cr	45	1	0.83 ppb	3.62	2803	1	83.4	70 - 130	
55 Mn	45	1	2.57 ppb	4.70	6054	3	85.6	70 - 130	
56 Fe	45	1	147.90 ppb	0.66	393642	150	98.6	70 - 130	
59 Co	45	1	1.02 ppb	5.15	4098	1	101.7	70 - 130	
60 Ni	45	1	1.42 ppb	2.71	1497	2	94.5	70 - 130	
65 Cu	45	1	4.68 ppb	1.01	6615	5	93.7	70 - 130	
66 Zn	45	1	9.17 ppb	1.53	4958	10	91.7	70 - 130	
75 As	115	1	0.96 ppb	6.05	274	1	96.2	70 - 130	
78 Se	115	1	4.94 ppb	6.74	173	5	98.8	70 - 130	
83 Kr	115	2	----- ppb -----	-----	289	1	#VALUE!	##### - #####	
95 Mo	115	2	1.07 ppb	4.76	3815	1	106.7	70 - 130	
107 Ag	115	2	0.52 ppb	2.93	5217	1	103.6	70 - 130	
111 Cd	115	2	1.00 ppb	1.85	2004	1	100.0	70 - 130	
121 Sb	115	2	1.50 ppb	0.32	10904	2	99.8	70 - 130	
137 Ba	159	2	2.11 ppb	5.10	7509	3	84.5	70 - 130	
205 Tl	165	2	0.96 ppb	2.18	23892	1	95.6	70 - 130	
206 (Pb)	165	2	1.44 ppb	2.45	11742	2	96.1	70 - 130	
207 (Pb)	165	2	1.47 ppb	2.53	10335	2	98.0	70 - 130	
208 Pb	165	2	1.41 ppb	1.16	46985	2	94.3	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	43394	0.15	46034	94.3	80 - 120	
45 Sc	2	691632	0.38	746250	92.7	80 - 120	
115 In	1	176737	2.27	184953	95.6	80 - 120	
115 In	2	916935	1.22	992378	92.4	80 - 120	
159 Tb	1	490635	1.72	508548	96.5	80 - 120	
159 Tb	2	1440863	1.36	1522400	94.6	80 - 120	
165 Ho	1	480399	1.31	499548	96.2	80 - 120	
165 Ho	2	1412460	0.53	1505114	93.8	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\041_CCB.D\041_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\041_CCB.D\041_CCB.D#
 Date Acquired: Apr 1 2015 06:46 am
 Operator: GK
 Sample Name: CCB V-206944
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3102
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: 6-CCB
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.013	ppb	1.83	101	0.50	
23 Na	45	1	-6.304	ppb	12.00	78839	250.00	
24 Mg	45	1	0.590	ppb	51.41	1742	250.00	
27 Al	45	1	-2.948	ppb	8.49	1033	100.00	
39 K	45	1	-7.666	ppb	15.15	39457	250.00	
44 Ca	45	1	0.438	ppb	275.76	312	250.00	
51 V	45	1	0.014	ppb	27.56	101	1.00	
52 Cr	45	1	-0.149	ppb	5.59	271	1.00	
55 Mn	45	1	-0.329	ppb	4.78	314	3.00	
56 Fe	45	1	-3.953	ppb	16.89	24558	150.00	
59 Co	45	1	0.011	ppb	22.28	138	1.00	
60 Ni	45	1	-0.012	ppb	92.72	49	1.50	
65 Cu	45	1	0.164	ppb	24.99	779	5.00	
66 Zn	45	1	-1.143	ppb	0.43	186	10.00	
75 As	115	1	0.012	ppb	184.82	19	1.00	
78 Se	115	1	-0.100	ppb	42.94	30	5.00	
83 Kr	115	2	-----	ppb	-----	317	1.00	
95 Mo	115	2	0.041	ppb	21.52	207	1.00	
107 Ag	115	2	0.008	ppb	8.69	184	0.50	
111 Cd	115	2	0.013	ppb	28.00	42	1.00	
121 Sb	115	2	0.012	ppb	21.47	238	1.50	
137 Ba	159	2	-0.152	ppb	8.85	400	2.50	
205 Tl	165	2	0.030	ppb	9.27	1262	1.00	
206 (Pb)	165	2	-0.004	ppb	466.34	863	1.50	
207 (Pb)	165	2	-0.007	ppb	56.90	683	1.50	
208 Pb	165	2	-0.009	ppb	66.99	3230	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	41454	0.24	46034	90.1	80 - 120	
45 Sc	2	659690	1.81	746250	88.4	80 - 120	
115 In	1	167806	1.18	184953	90.7	80 - 120	
115 In	2	875583	1.41	992378	88.2	80 - 120	
159 Tb	1	472750	1.47	508548	93.0	80 - 120	
159 Tb	2	1383386	1.59	1522400	90.9	80 - 120	
165 Ho	1	461809	0.64	499548	92.4	80 - 120	
165 Ho	2	1355663	1.62	1505114	90.1	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\042SMPL.D\042SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\042SMPL.D\042SMPL.D#
 Date Acquired: Apr 1 2015 06:52 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-025
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2309
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	0.03	0.03	ppb	12.86	157	2700	
23 Na	45		1	20,260.00	20260.00	ppb	1.47	15692350	225000	
24 Mg	45		1	4,019.00	4019.00	ppb	1.16	1774355	225000	
27 Al	45		1	437.60	437.60	ppb	1.67	113225	67500	
39 K	45		1	1,588.00	1588.00	ppb	1.65	551510	225000	
44 Ca	45		1	16,750.00	16750.00	ppb	2.36	260650	225000	
51 V	45		1	2.60	2.60	ppb	3.82	5473	2700	
52 Cr	45		1	3.35	3.35	ppb	2.47	8671	2700	
55 Mn	45		1	13.25	13.25	ppb	2.17	25461	2700	
56 Fe	45		1	491.50	491.50	ppb	1.18	1149326	202500	
59 Co	45		1	0.32	0.32	ppb	2.44	1280	2700	
60 Ni	45		1	1.85	1.85	ppb	4.33	1815	2700	
65 Cu	45		1	4.78	4.78	ppb	2.11	6316	2700	
66 Zn	45		1	41.39	41.39	ppb	2.95	18601	2700	
75 As	115		1	0.59	0.59	ppb	10.12	160	2250	
78 Se	115		1	0.15	0.15	ppb	95.35	36	2700	
83 Kr	115		2	----	-----	ppb	-----	353	2700	
95 Mo	115		2	0.36	0.36	ppb	9.34	1272	2700	
107 Ag	115		2	0.02	0.02	ppb	8.26	336	900	
111 Cd	115		2	3.87	3.87	ppb	1.33	7255	2700	
121 Sb	115		2	0.48	0.48	ppb	2.25	3383	1125	
137 Ba	159		2	36.52	36.52	ppb	1.70	108908	1350	
205 Tl	165		2	0.05	0.05	ppb	8.26	1740	900	
206 (Pb)	165		2	3.58	3.58	ppb	1.43	26492	2700	
207 (Pb)	165		2	3.44	3.44	ppb	2.10	22079	2700	
208 Pb	165		2	3.40	3.40	ppb	1.81	102688	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	40682	1.11	46034	88.4	70 - 150	
45 Sc	2	685093	0.78	746250	91.8	70 - 150	
115 In	1	162141	0.92	184953	87.7	70 - 150	
115 In	2	863147	0.83	992378	87.0	70 - 150	
159 Tb	1	461706	1.00	508548	90.8	70 - 150	
159 Tb	2	1361273	1.07	1522400	89.4	70 - 150	
165 Ho	1	458170	0.77	499548	91.7	70 - 150	
165 Ho	2	1346225	0.94	1505114	89.4	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\043SMPL.D\043SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\043SMPL.D\043SMPL.D#
 Date Acquired: Apr 1 2015 06:58 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-027
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2310
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.06	0.06	ppb	14.51	306	2700	
23 Na	45	1		9,967.00	9967.00	ppb	1.91	7907963	225000	
24 Mg	45	1		4,239.00	4239.00	ppb	1.22	1906601	225000	
27 Al	45	1		1,015.00	1015.00	ppb	0.49	265191	67500	
39 K	45	1		982.70	982.70	ppb	0.84	363627	225000	
44 Ca	45	1		8,830.00	8830.00	ppb	0.58	140117	225000	
51 V	45	1		2.97	2.97	ppb	1.23	6360	2700	
52 Cr	45	1		5.63	5.63	ppb	2.40	14422	2700	
55 Mn	45	1		35.40	35.40	ppb	1.30	67749	2700	
56 Fe	45	1		1,484.00	1484.00	ppb	1.16	3467545	202500	
59 Co	45	1		0.52	0.52	ppb	2.74	2045	2700	
60 Ni	45	1		1.90	1.90	ppb	0.80	1896	2700	
65 Cu	45	1		3.83	3.83	ppb	1.06	5267	2700	
66 Zn	45	1		12.95	12.95	ppb	2.36	6405	2700	
75 As	115	1		0.57	0.57	ppb	7.30	157	2250	
78 Se	115	1		0.19	0.19	ppb	145.91	37	2700	
83 Kr	115	2		-----	-----	ppb	-----	362	2700	
95 Mo	115	2		0.26	0.26	ppb	10.68	929	2700	
107 Ag	115	2		0.03	0.03	ppb	14.14	401	900	
111 Cd	115	2		0.07	0.07	ppb	1.99	147	2700	
121 Sb	115	2		0.59	0.59	ppb	3.25	4155	1125	
137 Ba	159	2		24.47	24.47	ppb	0.75	74213	1350	
205 Tl	165	2		0.03	0.03	ppb	9.24	1251	900	
206 (Pb)	165	2		3.19	3.19	ppb	0.64	23696	2700	
207 (Pb)	165	2		3.04	3.04	ppb	2.12	19597	2700	
208 Pb	165	2		3.03	3.03	ppb	1.53	92039	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	41442	0.86	46034	90.0	70 - 150	
45 Sc	2	700246	0.61	746250	93.8	70 - 150	
115 In	1	165385	0.57	184953	89.4	70 - 150	
115 In	2	872578	0.44	992378	87.9	70 - 150	
159 Tb	1	470778	1.02	508548	92.6	70 - 150	
159 Tb	2	1379039	0.24	1522400	90.6	70 - 150	
165 Ho	1	461931	1.18	499548	92.5	70 - 150	
165 Ho	2	1348998	1.58	1505114	89.6	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\044SMPL.D\044SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\044SMPL.D\044SMPL.D#
 Date Acquired: Apr 1 2015 07:04 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-029
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2401
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	0.01	0.01	ppb	59.75	81	2700	
23 Na	45		1	8,277.00	8277.00	ppb	0.83	6599584	225000	
24 Mg	45		1	2,760.00	2760.00	ppb	1.38	1245251	225000	
27 Al	45		1	34.62	34.62	ppb	0.89	10810	67500	
39 K	45		1	2,655.00	2655.00	ppb	0.97	913458	225000	
44 Ca	45		1	7,129.00	7129.00	ppb	0.94	113502	225000	
51 V	45		1	0.36	0.36	ppb	3.67	841	2700	
52 Cr	45		1	7.59	7.59	ppb	0.98	19264	2700	
55 Mn	45		1	16.65	16.65	ppb	2.01	32451	2700	
56 Fe	45		1	42.81	42.81	ppb	1.50	133112	202500	
59 Co	45		1	0.08	0.08	ppb	12.69	391	2700	
60 Ni	45		1	0.35	0.35	ppb	7.30	402	2700	
65 Cu	45		1	0.34	0.34	ppb	5.79	1003	2700	
66 Zn	45		1	3.53	3.53	ppb	0.85	2254	2700	
75 As	115		1	0.23	0.23	ppb	8.35	74	2250	
78 Se	115		1	-0.09	-0.09	ppb	38.03	31	2700	
83 Kr	115		2	----	-----	ppb	-----	330	2700	
95 Mo	115		2	0.02	0.02	ppb	2.27	132	2700	
107 Ag	115		2	0.01	0.01	ppb	45.05	203	900	
111 Cd	115		2	0.08	0.08	ppb	1.52	170	2700	
121 Sb	115		2	0.03	0.03	ppb	22.91	382	1125	
137 Ba	159		2	30.20	30.20	ppb	0.78	92157	1350	
205 Tl	165		2	0.02	0.02	ppb	7.80	986	900	
206 (Pb)	165		2	0.13	0.13	ppb	4.83	1849	2700	
207 (Pb)	165		2	0.13	0.13	ppb	2.79	1510	2700	
208 Pb	165		2	0.12	0.12	ppb	3.27	7105	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	41560	0.95	46034	90.3	70 - 150	
45 Sc	2	706214	0.34	746250	94.6	70 - 150	
115 In	1	168205	1.74	184953	90.9	70 - 150	
115 In	2	884278	1.36	992378	89.1	70 - 150	
159 Tb	1	477683	1.45	508548	93.9	70 - 150	
159 Tb	2	1390405	1.22	1522400	91.3	70 - 150	
165 Ho	1	465938	0.95	499548	93.3	70 - 150	
165 Ho	2	1359328	1.30	1505114	90.3	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\045SMPL.D\045SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\045SMPL.D\045SMPL.D#
 Date Acquired: Apr 1 2015 07:10 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-031
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2402
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.03	0.03	ppb	21.41	160	2700	
23 Na	45	1	56,260.00	56260.00	ppb	1.58	44128240	225000	
24 Mg	45	1	1,190.00	1190.00	ppb	0.45	535032	225000	
27 Al	45	1	737.00	737.00	ppb	1.21	192504	67500	
39 K	45	1	1,801.00	1801.00	ppb	1.00	629928	225000	
44 Ca	45	1	5,053.00	5053.00	ppb	1.28	80100	225000	
51 V	45	1	2.85	2.85	ppb	1.80	6095	2700	
52 Cr	45	1	38.61	38.61	ppb	1.17	94863	2700	
55 Mn	45	1	64.25	64.25	ppb	1.52	121853	2700	
56 Fe	45	1	922.50	922.50	ppb	0.38	2162358	202500	
59 Co	45	1	0.41	0.41	ppb	1.72	1640	2700	
60 Ni	45	1	2.57	2.57	ppb	2.27	2535	2700	
65 Cu	45	1	7.79	7.79	ppb	5.16	10100	2700	
66 Zn	45	1	35.84	35.84	ppb	0.44	16457	2700	
75 As	115	1	0.76	0.76	ppb	6.78	204	2250	
78 Se	115	1	0.01	0.01	ppb	2874.20	33	2700	
83 Kr	115	2	----	-----	ppb	-----	360	2700	
95 Mo	115	2	0.29	0.29	ppb	3.81	1056	2700	
107 Ag	115	2	0.02	0.02	ppb	9.07	312	900	
111 Cd	115	2	1.77	1.77	ppb	2.99	3371	2700	
121 Sb	115	2	0.53	0.53	ppb	2.66	3817	1125	
137 Ba	159	2	19.97	19.97	ppb	1.21	61113	1350	
205 Tl	165	2	0.02	0.02	ppb	19.25	943	900	
206 (Pb)	165	2	7.10	7.10	ppb	0.76	52351	2700	
207 (Pb)	165	2	6.84	6.84	ppb	1.05	43813	2700	
208 Pb	165	2	6.76	6.76	ppb	0.41	203827	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	41331	0.24	46034	89.8	70 - 150	
45 Sc	2	708630	0.89	746250	95.0	70 - 150	
115 In	1	164831	1.31	184953	89.1	70 - 150	
115 In	2	876976	0.19	992378	88.4	70 - 150	
159 Tb	1	468211	0.87	508548	92.1	70 - 150	
159 Tb	2	1387858	1.00	1522400	91.2	70 - 150	
165 Ho	1	461201	1.37	499548	92.3	70 - 150	
165 Ho	2	1365448	0.53	1505114	90.7	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\046SMPL.D\046SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\046SMPL.D\046SMPL.D#
 Date Acquired: Apr 1 2015 07:16 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-033
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2403
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.00	0.00	ppb	311.39	51	2700	
23 Na	45	1	65.19	65.19	ppb	1.00	134567	225000	
24 Mg	45	1	6.98	6.98	ppb	1.30	4599	225000	
27 Al	45	1	3.32	3.32	ppb	4.75	2651	67500	
39 K	45	1	3.47	3.47	ppb	19.01	42972	225000	
44 Ca	45	1	154.40	154.40	ppb	3.31	2742	225000	
51 V	45	1	0.24	0.24	ppb	6.73	581	2700	
52 Cr	45	1	-0.02	-0.02	ppb	20.91	588	2700	
55 Mn	45	1	0.04	0.04	ppb	104.76	1001	2700	
56 Fe	45	1	-1.30	-1.30	ppb	35.21	30606	202500	
59 Co	45	1	-0.01	-0.01	ppb	21.76	69	2700	
60 Ni	45	1	0.04	0.04	ppb	21.52	97	2700	
65 Cu	45	1	2.28	2.28	ppb	3.48	3357	2700	
66 Zn	45	1	3.26	3.26	ppb	4.75	2124	2700	
75 As	115	1	0.11	0.11	ppb	15.33	43	2250	
78 Se	115	1	-0.16	-0.16	ppb	129.72	29	2700	
83 Kr	115	2	----	-----	ppb	-----	377	2700	
95 Mo	115	2	0.01	0.01	ppb	100.78	100	2700	
107 Ag	115	2	0.02	0.02	ppb	30.53	267	900	
111 Cd	115	2	0.01	0.01	ppb	10.43	28	2700	
121 Sb	115	2	0.03	0.03	ppb	27.05	343	1125	
137 Ba	159	2	-0.07	-0.07	ppb	35.96	648	1350	
205 Tl	165	2	0.01	0.01	ppb	57.87	707	900	
206 (Pb)	165	2	0.02	0.02	ppb	19.79	1037	2700	
207 (Pb)	165	2	0.02	0.02	ppb	24.98	879	2700	
208 Pb	165	2	0.01	0.01	ppb	16.38	3934	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	41327	0.31	46034	89.8	70 - 150	
45 Sc	2	684232	0.58	746250	91.7	70 - 150	
115 In	1	167598	1.21	184953	90.6	70 - 150	
115 In	2	880006	0.82	992378	88.7	70 - 150	
159 Tb	1	472834	1.98	508548	93.0	70 - 150	
159 Tb	2	1383772	0.54	1522400	90.9	70 - 150	
165 Ho	1	466479	0.43	499548	93.4	70 - 150	
165 Ho	2	1376224	0.42	1505114	91.4	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\047SMPL.D\047SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\047SMPL.D\047SMPL.D#
 Date Acquired: Apr 1 2015 07:22 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: RINSE
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3101
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Apr 01 2015 03:28 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		1.06	1.06	ppb	1.34	4342	2700	
23 Na	45	1		389.60	389.60	ppb	1.37	394268	225000	
24 Mg	45	1		278.60	278.60	ppb	0.87	128201	225000	
27 Al	45	1		324.70	324.70	ppb	0.98	87084	67500	
39 K	45	1		218.20	218.20	ppb	0.52	114724	225000	
44 Ca	45	1		526.10	526.10	ppb	1.21	8738	225000	
51 V	45	1		2.18	2.18	ppb	0.85	4745	2700	
52 Cr	45	1		1.69	1.69	ppb	2.10	4817	2700	
55 Mn	45	1		10.81	10.81	ppb	1.27	21600	2700	
56 Fe	45	1		786.00	786.00	ppb	0.60	1874581	202500	
59 Co	45	1		1.38	1.38	ppb	3.21	5352	2700	
60 Ni	45	1		1.49	1.49	ppb	4.50	1517	2700	
65 Cu	45	1		2.01	2.01	ppb	5.60	3073	2700	
66 Zn	45	1		3.11	3.11	ppb	2.79	2085	2700	
75 As	115	1		1.97	1.97	ppb	3.26	516	2250	
78 Se	115	1		3.05	3.05	ppb	4.36	114	2700	
83 Kr	115	2		----	----	ppb	-----	342	2700	
95 Mo	115	2		2.65	2.65	ppb	1.21	9224	2700	
107 Ag	115	2		0.60	0.60	ppb	3.89	5901	900	
111 Cd	115	2		1.12	1.12	ppb	1.29	2217	2700	
121 Sb	115	2		0.79	0.79	ppb	1.09	5733	1125	
137 Ba	159	2		3.30	3.30	ppb	1.75	11028	1350	
205 Tl	165	2		0.98	0.98	ppb	0.78	24080	900	
206 (Pb)	165	2		5.89	5.89	ppb	0.22	44252	2700	
207 (Pb)	165	2		5.72	5.72	ppb	0.88	37354	2700	
208 Pb	165	2		5.62	5.62	ppb	0.27	172992	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	41939	0.59	46034	91.1	70 - 150	
45 Sc	2	699580	0.62	746250	93.7	70 - 150	
115 In	1	168204	0.21	184953	90.9	70 - 150	
115 In	2	903957	1.03	992378	91.1	70 - 150	
159 Tb	1	475973	0.55	508548	93.6	70 - 150	
159 Tb	2	1416631	1.74	1522400	93.1	70 - 150	
165 Ho	1	469817	0.53	499548	94.0	70 - 150	
165 Ho	2	1387552	0.43	1505114	92.2	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\048_CCV.D\048_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\048_CCV.D\048_CCV.D#
 Date Acquired: Apr 1 2015 07:28 am
 Operator: GK
 Sample Name: CCV V-206947
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3103
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: 6-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	53.12 ppb	0.49	213600	50	106.2	90 - 110	
23 Na	45	1	5163.00 ppb	2.38	4384730	5000	103.3	90 - 110	
24 Mg	45	1	5213.00 ppb	2.65	2484581	5000	104.3	90 - 110	
27 Al	45	1	1489.00 ppb	1.71	411450	1500	99.3	90 - 110	
39 K	45	1	5170.00 ppb	2.25	1838333	5000	103.4	90 - 110	
44 Ca	45	1	5099.00 ppb	2.02	85908	5000	102.0	90 - 110	
51 V	45	1	51.00 ppb	2.68	114656	50	102.0	90 - 110	
52 Cr	45	1	51.08 ppb	3.13	133144	50	102.2	90 - 110	
55 Mn	45	1	50.71 ppb	2.09	102433	50	101.4	90 - 110	
56 Fe	45	1	5173.00 ppb	3.14	12722320	5000	103.5	90 - 110	
59 Co	45	1	50.69 ppb	2.39	201817	50	101.4	90 - 110	
60 Ni	45	1	51.11 ppb	2.47	52394	50	102.2	90 - 110	
65 Cu	45	1	50.96 ppb	2.75	66801	50	101.9	90 - 110	
66 Zn	45	1	51.04 ppb	2.99	24601	50	102.1	90 - 110	
75 As	115	1	49.47 ppb	2.07	13290	50	98.9	90 - 110	
78 Se	115	1	248.50 ppb	1.84	7032	250	99.4	90 - 110	
83 Kr	115	2	----- ppb	-----	331	50	#VALUE!	##### - #####	
95 Mo	115	2	49.58 ppb	1.12	173324	50	99.2	90 - 110	
107 Ag	115	2	49.21 ppb	1.11	483420	50	98.4	90 - 110	
111 Cd	115	2	50.51 ppb	1.51	99940	50	101.0	90 - 110	
121 Sb	115	2	50.30 ppb	1.67	359645	50	100.6	90 - 110	
137 Ba	159	2	49.90 ppb	1.41	155463	50	99.8	90 - 110	
205 Tl	165	2	50.76 ppb	0.38	1241659	50	101.5	90 - 110	
206 (Pb)	165	2	50.60 ppb	0.75	381417	50	101.2	90 - 110	
207 (Pb)	165	2	50.99 ppb	0.65	334021	50	102.0	90 - 110	
208 Pb	165	2	49.66 ppb	0.21	1531306	50	99.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	43933	1.32	46034	95.4	80 - 120	
45 Sc	2	696006	0.78	746250	93.3	80 - 120	
115 In	1	177430	1.23	184953	95.9	80 - 120	
115 In	2	913908	1.48	992378	92.1	80 - 120	
159 Tb	1	493129	0.96	508548	97.0	80 - 120	
159 Tb	2	1425017	0.99	1522400	93.6	80 - 120	
165 Ho	1	487241	0.49	499548	97.5	80 - 120	
165 Ho	2	1417107	1.33	1505114	94.2	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\049_CCV.D\049_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\049_CCV.D\049_CCV.D#
 Date Acquired: Apr 1 2015 07:34 am
 Operator: GK
 Sample Name: LLCCV V-206949
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3105
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.55 ppb	3.02	2081	1	109.4	70 - 130	
23 Na	45	1	242.30 ppb	1.33	267561	250	96.9	70 - 130	
24 Mg	45	1	253.30 ppb	1.46	112583	250	101.3	70 - 130	
27 Al	45	1	101.90 ppb	1.08	27575	100	101.9	70 - 130	
39 K	45	1	242.10 ppb	0.63	118359	250	96.8	70 - 130	
44 Ca	45	1	252.30 ppb	2.23	4199	250	100.9	70 - 130	
51 V	45	1	1.04 ppb	3.11	2222	1	104.0	70 - 130	
52 Cr	45	1	0.86 ppb	0.92	2681	1	86.2	70 - 130	
55 Mn	45	1	2.57 ppb	2.00	5641	3	85.5	70 - 130	
56 Fe	45	1	153.20 ppb	0.60	378960	150	102.1	70 - 130	
59 Co	45	1	1.04 ppb	2.57	3888	1	103.5	70 - 130	
60 Ni	45	1	1.46 ppb	4.25	1435	2	97.2	70 - 130	
65 Cu	45	1	4.70 ppb	1.75	6191	5	94.0	70 - 130	
66 Zn	45	1	9.45 ppb	1.61	4745	10	94.5	70 - 130	
75 As	115	1	0.99 ppb	5.98	262	1	98.7	70 - 130	
78 Se	115	1	5.10 ppb	10.65	166	5	102.1	70 - 130	
83 Kr	115	2	----- ppb	-----	314	1	#VALUE!	#####	
95 Mo	115	2	1.03 ppb	4.25	3463	1	103.0	70 - 130	
107 Ag	115	2	0.52 ppb	2.07	4878	1	103.1	70 - 130	
111 Cd	115	2	1.01 ppb	1.06	1905	1	101.2	70 - 130	
121 Sb	115	2	1.51 ppb	2.34	10311	2	100.5	70 - 130	
137 Ba	159	2	2.17 ppb	2.92	7277	3	86.8	70 - 130	
205 Tl	165	2	0.95 ppb	2.15	22321	1	95.1	70 - 130	
206 (Pb)	165	2	1.48 ppb	1.81	11271	2	98.4	70 - 130	
207 (Pb)	165	2	1.46 ppb	1.54	9647	2	97.3	70 - 130	
208 Pb	165	2	1.43 ppb	1.37	44453	2	95.0	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	40470	0.19	46034	87.9	80 - 120	
45 Sc	2	642624	0.84	746250	86.1	80 - 120	
115 In	1	165264	0.59	184953	89.4	80 - 120	
115 In	2	861546	1.39	992378	86.8	80 - 120	
159 Tb	1	459997	1.89	508548	90.5	80 - 120	
159 Tb	2	1362873	1.64	1522400	89.5	80 - 120	
165 Ho	1	448682	0.94	499548	89.8	80 - 120	
165 Ho	2	1326901	1.83	1505114	88.2	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33115A.b\050_CCB.D\050_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33115A.b\050_CCB.D\050_CCB.D#
 Date Acquired: Apr 1 2015 07:40 am
 Operator: GK
 Sample Name: CCB V-206944
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3102
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Apr 01 2015 03:28 am
 Sample Type: 6-CCB
 Total Dil Factor: 1.00

QC Summary:

Analytes: Pass

ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.014 ppb	37.94	104	0.50	
23 Na	45	1	-4.229 ppb	6.81	77206	250.00	
24 Mg	45	1	0.580 ppb	18.23	1667	250.00	
27 Al	45	1	-3.351 ppb	5.15	891	100.00	
39 K	45	1	-4.709 ppb	23.34	38785	250.00	
44 Ca	45	1	0.395 ppb	248.87	299	250.00	
51 V	45	1	0.009 ppb	77.27	86	1.00	
52 Cr	45	1	-0.143 ppb	6.32	274	1.00	
55 Mn	45	1	-0.343 ppb	3.87	276	3.00	
56 Fe	45	1	-4.234 ppb	10.55	22939	150.00	
59 Co	45	1	0.010 ppb	5.74	131	1.00	
60 Ni	45	1	-0.016 ppb	34.41	43	1.50	
65 Cu	45	1	0.164 ppb	23.27	748	5.00	
66 Zn	45	1	-1.184 ppb	1.40	161	10.00	
75 As	115	1	-0.002 ppb	258.36	15	1.00	
78 Se	115	1	-0.034 ppb	336.76	31	5.00	
83 Kr	115	2	----- ppb	-----	311	1.00	
95 Mo	115	2	0.034 ppb	12.69	178	1.00	
107 Ag	115	2	0.010 ppb	21.07	193	0.50	
111 Cd	115	2	0.013 ppb	39.99	40	1.00	
121 Sb	115	2	0.016 ppb	30.50	262	1.50	
137 Ba	159	2	-0.153 ppb	13.72	386	2.50	
205 Tl	165	2	0.024 ppb	1.25	1098	1.00	
206 (Pb)	165	2	-0.004 ppb	262.77	839	1.50	
207 (Pb)	165	2	-0.004 ppb	250.15	683	1.50	
208 Pb	165	2	-0.010 ppb	27.17	3103	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	39773	0.46	46034	86.4	80 - 120	
45 Sc	2	641698	1.30	746250	86.0	80 - 120	
115 In	1	162216	1.93	184953	87.7	80 - 120	
115 In	2	844572	2.01	992378	85.1	80 - 120	
159 Tb	1	457559	2.09	508548	90.0	80 - 120	
159 Tb	2	1347060	0.49	1522400	88.5	80 - 120	
165 Ho	1	442697	0.58	499548	88.6	80 - 120	
165 Ho	2	1319422	1.10	1505114	87.7	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

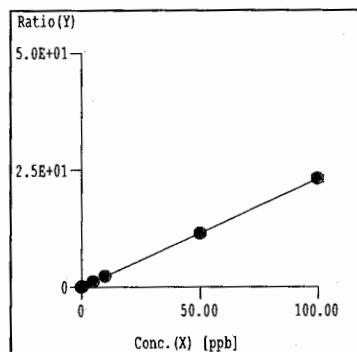
ISTD Ref File : C:\ICPCHEM\1\DATA\SW33115A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

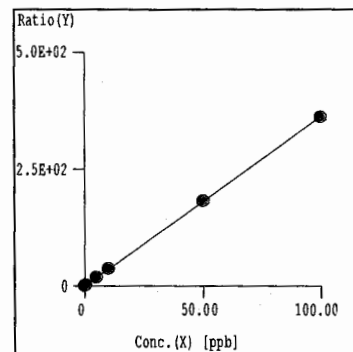
=== Graph Detail ===

Step Mass Element (2) 9 Be ISTD 45 Unit ppb



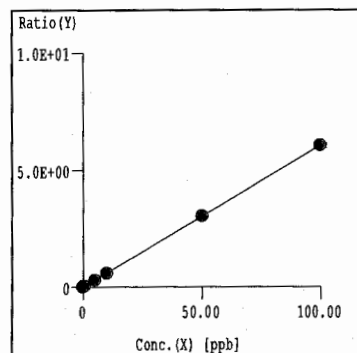
Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 2.310E-001 \cdot X + 3.153E-003$
 $X = 4.329E+000 \cdot Y - 1.365E-002$
DL = 7.114E-03 ppb
BEC = 1.365E-02 ppb

Step Mass Element (1) 59 Co ISTD 45 Unit ppb



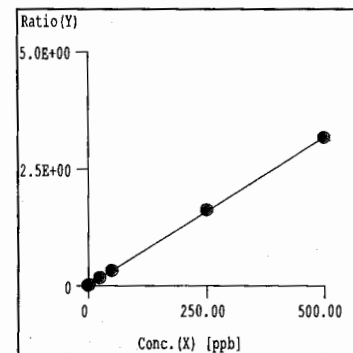
Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 3.624E+000 \cdot X + 9.365E-002$
 $X = 2.759E-001 \cdot Y - 2.584E-002$
DL = 1.508E-03 ppb
BEC = 2.584E-02 ppb

Step Mass Element (1) 75 As ISTD 115 Unit ppb



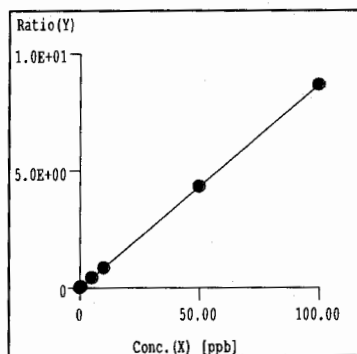
Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 6.049E-002 \cdot X + 3.757E-003$
 $X = 1.653E+001 \cdot Y - 6.211E-002$
DL = 6.970E-02 ppb
BEC = 6.211E-02 ppb

Step Mass Element (1) 78 Se ISTD 115 Unit ppb



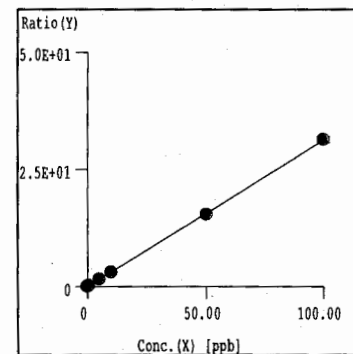
Curve Fit: $Y=aX+[blank]$
 $r = 0.9999$
 $Y = 6.347E-003 \cdot X + 7.840E-003$
 $X = 1.576E+002 \cdot Y - 1.235E+000$
DL = 6.006E-01 ppb
BEC = 1.235 ppb

Step Mass Element (2) 111 Cd ISTD 115 Unit ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 8.659E-002 \cdot X + 7.759E-004$
 $X = 1.155E+001 \cdot Y - 8.961E-003$
DL = 7.103E-03 ppb
BEC = 8.961E-03 ppb

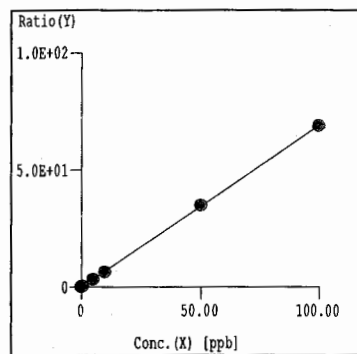
Step Mass Element (2) 121 Sb ISTD 115 Unit ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 3.128E-001 \cdot X + 7.262E-003$
 $X = 3.197E+000 \cdot Y - 2.321E-002$
DL = 1.080E-02 ppb
BEC = 2.321E-02 ppb

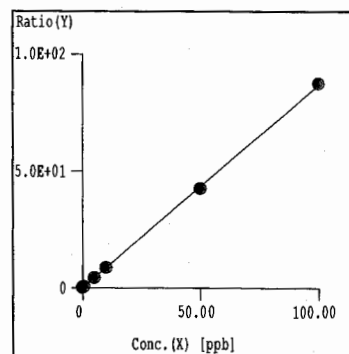
=== Graph Detail ===

Step Mass Element ISTD Unit
(2) 205 Tl 165 ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 6.901E-001*X + 1.686E-002$
 $X = 1.449E+000*Y - 2.444E-002$
DL = $1.857E-03$ ppb
BEC = $2.444E-02$ ppb

Step Mass Element ISTD Unit
(2) 208 Pb 165 ppb



Curve Fit: $Y=aX+[blank]$
 $r = 0.9999$
 $Y = 8.683E-001*X + 1.031E-001$
 $X = 1.152E+000*Y - 1.187E-001$
DL = $1.041E-02$ ppb
BEC = $1.187E-01$ ppb

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-202074

Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICSA		BatchNumber:	ApproveDate: 01/09/15	
Prep Date: 1/5/2015		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 4/4/2015		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9066	Nitric Acid	50 ml	neat neat	
9065	Hydrochloric Acid	50 ml	neat neat	
9026	ICSA	100 ml	MULTI multi	

Veritech Lot Number: V-202076

Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICSAB		BatchNumber:	ApproveDate: 01/09/15	
Prep Date: 1/5/2015		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 4/4/2015		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9068	Nitric Acid	50 ml	neat neat	
9065	Hydrochloric Acid	50 ml	neat neat	
9173	ICSA	100 ml	NEAT ug/ml	
9174	ICSAB	10 ml	NEAT ug/ml	

Veritech Lot Number: V-202401

Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS2- Low Std		BatchNumber:	ApproveDate: 01/12/15	
Prep Date: 1/9/2015		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 4/8/2015		Final Volume: 500 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9068	Nitric Acid	25 ml	neat neat	
9065	Hydrochloric Acid	25 ml	neat neat	
8934	ICP CALIBRATION STOCK 1	.05 ml	NEAT neat	
8935	ICP CALIBRATION STOCK 2	.05 ml	10000 ug/ml	

Veritech Lot Number: V-202402

Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS3 - Middle Std		BatchNumber:	ApproveDate: 01/12/15	
Prep Date: 1/9/2015		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 4/8/2015		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9068	Nitric Acid	50 ml	neat neat	
9065	Hydrochloric Acid	50 ml	neat neat	
8934	ICP CALIBRATION STOCK 1	5 ml	NEAT neat	
8935	ICP CALIBRATION STOCK 2	5 ml	10000 ug/ml	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-202629

Prepared By: Aliano, Carmela		Department: Metals	ApprovedBy: shiamala	
Description: 1:1 HCl		BatchNumber:	ApproveDate: 01/15/15	
Prep Date: 1/14/2015		Concentration: Reagent	Checked: Yes	
Expiration Date: 7/13/2015		Final Volume: 2000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O	1000 ml		
9038	Hydrochloric Acid	1000 ml	neat neat	

Veritech Lot Number: V-202964

Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: CCV		BatchNumber:	ApproveDate: 01/21/15	
Prep Date: 1/19/2015		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 4/18/2015		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9068	Nitric Acid	50 ml	neat neat	
9065	Hydrochloric Acid	50 ml	neat neat	
9032	ICV1	10 ml	MULTI multi	
8798	ICV 2	10 ml	50 ug/ml	

Veritech Lot Number: V-203077

Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS4 High std		BatchNumber:	ApproveDate: 01/21/15	
Prep Date: 1/20/2015		Concentration: various mg/l	Checked: Yes	
Expiration Date: 4/19/2015		Final Volume: 500 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9068	Nitric Acid	25 ml	neat neat	
9065	Hydrochloric Acid	25 ml	neat neat	
8934	ICP CALIBRATION STOCK 1	5 ml	NEAT neat	
8935	ICP CALIBRATION STOCK 2	5 ml	10000 ug/ml	

Veritech Lot Number: V-203725

Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS 1 INTERMEDIATE		BatchNumber:	ApproveDate: 02/03/15	
Prep Date: 1/29/2015		Concentration: various mg/l	Checked: Yes	
Expiration Date: 4/28/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9066	Nitric Acid	5 ml	neat neat	
8487	BERYLLIUM	.3 ml	1000 ug/ml	3 mg/l
8488	CADMIUM	.3 ml	1000 ug/ml	3 mg/l

Veritech Lot Number: V-203732

Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS1 Lowest std		BatchNumber:	ApproveDate: 02/03/15	
Prep Date: 1/29/2015		Concentration: various mg/l	Checked: Yes	
Expiration Date: 4/28/2015		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9066	Nitric Acid	50 ml	neat neat	
9065	Hydrochloric Acid	50 ml	neat neat	
V-203725	ICS 1 INTERMEDIATE	1 ml	various mg/l	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-205362



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: gabrielle	
Description: ICB/CCB		BatchNumber:	ApproveDate: 03/06/15	
Prep Date: 3/2/2015		Concentration: 0 mg/l	Checked: Yes	
Expiration Date: 6/1/2015		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9067	Nitric Acid	50 ml	neat neat	
9065	Hydrochloric Acid	50 ml	neat neat	

Veritech Lot Number: V-206357



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: LLICV/LLCCV aq		BatchNumber:	ApproveDate: 03/19/15	
Prep Date: 3/18/2015		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 6/17/2015		Final Volume: 500 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9196	Nitric acid	25 ml	neat neat	
9065	Hydrochloric Acid	25 ml	neat neat	
8932	LLICV/CCV ICP AQUEOUS	5 ml	NEAT neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8487



Description
BERYLLIUM

ApprovedBy: gabrielle
 ApproveDate: 02/06/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-051-04x	S131107023	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	1000	ug/mL

Veritech Control/Receipt Number: 8488



Description
CADMIUM

ApprovedBy: gabrielle
 ApproveDate: 02/06/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-051-48x	S131206019	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	1000	ug/mL

Veritech Control/Receipt Number: 8798



Description
ICV 2

ApprovedBy: shiamala
 ApproveDate: 06/27/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-102	S140619025	06/25/14	06/30/15	Kalin, Gabrielle	2	500m	50	ug/mL

Veritech Control/Receipt Number: 8932



Description
LLICV/CCV ICP AQUEOUS

ApprovedBy: shiamala
 ApproveDate: 10/03/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-24-500	26-070CR	09/04/14	09/30/15	Kalin, Gabrielle	1	500m	NEAT	NEAT

Veritech Control/Receipt Number: 8934



Description
ICP CALIBRATION STOCK 1

ApprovedBy: shiamala
 ApproveDate: 10/03/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	25-115CR	07/22/14	07/30/15	Kalin, Gabrielle	2	500m	NEAT	NEAT

Veritech Control/Receipt Number: 8935



Description
ICP CALIBRATION STOCK 2

ApprovedBy: shiamala
 ApproveDate: 10/03/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	25-116CR	07/22/14	07/30/15	Kalin, Gabrielle	2	500m	10000	ug/mL

Veritech Control/Receipt Number: 9026



Description
ICSA

ApprovedBy: shiamala
 ApproveDate: 10/22/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-104	S141014022	10/21/14	10/21/15	Kalin, Gabrielle	4	500 m	MULTI	MULTI

Veritech Standard Receipt Log

Veritech Control/Receipt Number:9032



Description
ICV1

ApprovedBy: shiamala
ApproveDate: 11/18/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-101	S141014020	10/20/14	10/31/15	Berls, Sean R.	2	500m	MULTI	MULTI

Veritech Control/Receipt Number:9038



Description
Hydrochloric Acid

ApprovedBy: shiamala
ApproveDate: 11/18/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	85716	10/28/14	07/13/19	Lopez, Jose	12	4L	neat	neat

Veritech Control/Receipt Number:9065



Description
Hydrochloric Acid

ApprovedBy: shiamala
ApproveDate: 11/18/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	888921	11/11/14	08/12/19	Lopez, Jose	24	2.5L	neat	neat

Veritech Control/Receipt Number:9066



Description
Nitric Acid

ApprovedBy: shiamala
ApproveDate: 11/18/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	88969	11/11/14	08/18/19	Lopez, Jose	8	2.5L	neat	neat

Veritech Control/Receipt Number:9067



Description
Nitric Acid

ApprovedBy: shiamala
ApproveDate: 11/18/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	84115	11/11/14	07/01/19	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number:9068



Description
Nitric Acid

ApprovedBy: shiamala
ApproveDate: 11/18/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	50770	11/11/14	06/23/18	Lopez, Jose	1	2.5L	neat	neat

Veritech Control/Receipt Number:9069



Description
DI H2O

ApprovedBy: shiamala
ApproveDate: 11/18/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemanns	1	1	11/11/14	11/10/15	Berls, Sean R.	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9173



Description

ICSA

ApprovedBy: shiamala

ApproveDate: 02/13/15

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-104	S141216018	12/24/14	12/31/15	Kalin, Gabrielle	4	500m	NEAT	ug/mL

Veritech Control/Receipt Number: 9174



Description

ICSAB

ApprovedBy: shiamala

ApproveDate: 02/13/15

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-103	S141216017	12/24/14	12/31/15	Kalin, Gabrielle	1	500m	NEAT	ug/mL

Veritech Control/Receipt Number: 9196



Description

Nitric acid

ApprovedBy: shiamala

ApproveDate: 02/06/15

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	99263	01/20/15	12/04/19	Lopez, Jose	16	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-198008



Prepared By: Papazlatanova, Snezana		Department: Metals	ApprovedBy: shiamala	
Description: 5% Potassium Persulfate		BatchNumber:	ApproveDate: 10/30/14	
Prep Date: 10/30/2014		Concentration: reagent	Checked: Yes	
Expiration Date: 4/17/2015		Final Volume: 10 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7678	DI Water			
	POTASSIUM PERSULFATE	500 g	NEAT neat	

Veritech Lot Number: V-203662



Prepared By: Adelarthey, Olufemi		Department: Metals	ApprovedBy: shiamala	
Description: 5% Potassium Permanganate		BatchNumber:	ApproveDate: 01/29/15	
Prep Date: 1/29/2015		Concentration: reagent	Checked: Yes	
Expiration Date: 5/13/2015		Final Volume: 20 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8390	Potassium Permanganate	1000 g	NEAT neat	

Veritech Lot Number: V-205975



Prepared By: a		Department: WetChem	ApprovedBy: shiamala	
Description: 3% HCL		BatchNumber:	ApproveDate: 03/18/15	
Prep Date: 3/12/2015		Concentration: 3 %	Checked: Yes	
Expiration Date: 9/11/2015		Final Volume: 10 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9038	Hydrochloric Acid	300 ml	neat neat	3 %
9069	DI H2O			

Veritech Lot Number: V-206098



Prepared By: a		Department: Metals	ApprovedBy: shiamala	
Description: Hydroxylamine Hydrochloride		BatchNumber:	ApproveDate: 03/18/15	
Prep Date: 3/13/2015		Concentration: reagent	Checked: Yes	
Expiration Date: 9/12/2015		Final Volume: 10 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9078	Sodium Chloride	1200 g	neat neat	
9189	Hydroxylamine Hydrochloride	1200 g	NEAT neat	

Veritech Lot Number: V-206811



Prepared By: Papazlatanova, Snezana		Department: Metals	ApprovedBy: gabrielle	
Description: Hg Intermediate Standard		BatchNumber: B-18998	ApproveDate: 03/27/15	
Prep Date: 3/25/2015		Concentration: .25 ppm	Checked: Yes	
Expiration Date: 3/25/2015		Final Volume: 500 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9202	MERCURY	.125 ml	1000 mg/l	
9068	Nitric Acid	12.5 ml	neat neat	
9069	DI H2O			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-206812



Prepared By: Papazlatanova, Snezana		Department: Metals	ApprovedBy: gabrielle	
Description: Hg intermediate Control		BatchNumber: B-18998	ApproveDate: 03/27/15	
Prep Date: 3/25/2015		Concentration: 1.0 ppm	Checked: Yes	
Expiration Date: 3/25/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8477	MERCURY	.1 ml	1000 ug/ml	
9068	Nitric Acid	2.5 ml	neat neat	
9069	DI H2O			

Veritech Lot Number: V-206856



Prepared By: Adewusi, Anu		Department: Metals	ApprovedBy: gabrielle	
Description: Hg AQ ICV 20 ppb		BatchNumber: B-19001	ApproveDate: 03/27/15	
Prep Date: 3/25/2015		Concentration: 20 ppb	Checked: Yes	
Expiration Date: 3/25/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206812	Hg intermediate Control	.5 ml	1.0 ppm	
9069	DI H2O			

Veritech Lot Number: V-206857



Prepared By: Adewusi, Anu		Department: Metals	ApprovedBy: gabrielle	
Description: Hg AQ CCV 10 ppb		BatchNumber: B-19001	ApproveDate: 03/27/15	
Prep Date: 3/25/2015		Concentration: 10 ppb	Checked: Yes	
Expiration Date: 3/25/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206812	Hg intermediate Control	.25 ml	1.0 ppm	
9069	DI H2O			

Veritech Lot Number: V-206858



Prepared By: Adewusi, Anu		Department: Metals	ApprovedBy: gabrielle	
Description: Hg AQ standard blk		BatchNumber: B-19001	ApproveDate: 03/27/15	
Prep Date: 3/25/2015		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 3/25/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			

Veritech Lot Number: V-206859



Prepared By: Adewusi, Anu		Department: Metals	ApprovedBy: gabrielle	
Description: Hg AQ standard .2 ppb		BatchNumber: B-19001	ApproveDate: 03/27/15	
Prep Date: 3/25/2015		Concentration: .2 ppb	Checked: Yes	
Expiration Date: 3/25/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206811	Hg Intermediate Standard	.02 ml	.25 ppm	
9069	DI H2O			

Veritech Lot Number: V-206860



Prepared By: Adewusi, Anu		Department: Metals	ApprovedBy: gabrielle	
Description: Hg AQ standard .5 ppb		BatchNumber: B-19001	ApproveDate: 03/27/15	
Prep Date: 3/25/2015		Concentration: .5 ppb	Checked: Yes	
Expiration Date: 3/25/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206811	Hg Intermediate Standard	.05 ml	.25 ppm	
9069	DI H2O			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-206861

Prepared By: Adewusi, Anu		Department: Metals	ApprovedBy: gabrielle	
Description: Hg AQ standard 1 ppb		BatchNumber: B-19001	ApproveDate: 03/27/15	
Prep Date: 3/25/2015		Concentration: 1 ppb	Checked: Yes	
Expiration Date: 3/25/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206811 9069	Hg Intermediate Standard DI H2O	.1 ml	.25 ppm	

Veritech Lot Number: V-206862

Prepared By: Adewusi, Anu		Department: Metals	ApprovedBy: gabrielle	
Description: Hg AQ standard 2 ppb		BatchNumber: B-19001	ApproveDate: 03/27/15	
Prep Date: 3/25/2015		Concentration: 2 ppb	Checked: Yes	
Expiration Date: 3/25/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206811 9069	Hg Intermediate Standard DI H2O	.2 ml	.25 ppm	

Veritech Lot Number: V-206863

Prepared By: Adewusi, Anu		Department: Metals	ApprovedBy: gabrielle	
Description: Hg AQ standard 5 ppb		BatchNumber: B-19001	ApproveDate: 03/27/15	
Prep Date: 3/25/2015		Concentration: 5 ppb	Checked: Yes	
Expiration Date: 3/25/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206811 9069	Hg Intermediate Standard DI H2O	.5 ml	.25 ppm	

Veritech Lot Number: V-206864

Prepared By: Adewusi, Anu		Department: Metals	ApprovedBy: gabrielle	
Description: Hg AQ standard 10 ppb		BatchNumber: B-19001	ApproveDate: 03/27/15	
Prep Date: 3/25/2015		Concentration: 10 ppb	Checked: Yes	
Expiration Date: 3/25/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206811 9069	Hg Intermediate Standard DI H2O	1 ml	.25 ppm	

Veritech Lot Number: V-206865

Prepared By: Adewusi, Anu		Department: Metals	ApprovedBy: gabrielle	
Description: Hg AQ standard 25 ppb		BatchNumber: B-19001	ApproveDate: 03/27/15	
Prep Date: 3/25/2015		Concentration: 25 ppb	Checked: Yes	
Expiration Date: 3/25/2015		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-206811 9069	Hg Intermediate Standard DI H2O	2.5 ml	.25 ppm	

Veritech Lot Number: V-207084

Prepared By: Aliano, Carmela		Department: Metals	ApprovedBy: gabrielle	
Description: SnCl2		BatchNumber:	ApproveDate: 03/27/15	
Prep Date: 3/27/2015		Concentration: reagent I	Checked: Yes	
Expiration Date: 3/27/2015		Final Volume: 1 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9188	STANNOUS CHLORIDE	13.2 g	NEAT neat	
V-205975	3% HCL	1000 ml	3 %	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7678									
Description							ApprovedBy: shiamala ApproveDate: 12/03/13 Checked: Yes		
POTASSIUM PERSULFATE									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CCI	LC4445NG	200712215	02/11/13	02/10/18	Kalin, Gabrielle	1	2.5kg	NEAT	NEAT

Veritech Control/Receipt Number: 8390									
Description							ApprovedBy: gabrielle ApproveDate: 02/06/14 Checked: Yes		
Potassium Permanganate									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	LCT 10208	B033-01	01/13/14	01/12/24	Kalin, Gabrielle	1	2.5kg	NEAT	NEAT

Veritech Control/Receipt Number: 8477									
Description							ApprovedBy: gabrielle ApproveDate: 02/06/14 Checked: Yes		
MERCURY									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-051-80X	S140102033	01/31/14	04/30/15	Kalin, Gabrielle	2	125m	1000	ug/mL


Veritech Control/Receipt Number: 9038									
Description							ApprovedBy: shiamala ApproveDate: 11/18/14 Checked: Yes		
Hydrochloric Acid									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	85716	10/28/14	07/13/19	Lopez, Jose	12	4L	neat	neat


Veritech Control/Receipt Number: 9068									
Description							ApprovedBy: shiamala ApproveDate: 11/18/14 Checked: Yes		
Nitric Acid									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	50770	11/11/14	06/23/18	Lopez, Jose	1	2.5L	neat	neat


Veritech Control/Receipt Number: 9069									
Description							ApprovedBy: shiamala ApproveDate: 11/18/14 Checked: Yes		
DI H2O									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemanns	1	1	11/11/14	11/10/15	Berls, Sean R.	1			

Veritech Control/Receipt Number: 9078									
Description							ApprovedBy: ApproveDate: Checked: No		
Sodium Chloride									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	SX0420-5	VG11D	11/14/14	11/13/18	Lopez, Jose	1	12kg	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9188										
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Description</div> <div style="border: 1px solid black; padding: 2px;">STANNOUS CHLORIDE</div>							<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApprovedBy: shiamala</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApproveDate: 02/13/15</div> <div style="border: 1px solid black; padding: 2px;">Checked: Yes</div>			
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:	
LabChem Inc	P33805	D231-26	01/12/15	01/11/25	Kalin, Gabrielle	1	3Kg	NEAT	NEAT	

Veritech Control/Receipt Number: 9189										
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Description</div> <div style="border: 1px solid black; padding: 2px;">Hydroxylamine Hydrochloride</div>							<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApprovedBy: shiamala</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApproveDate: 02/13/15</div> <div style="border: 1px solid black; padding: 2px;">Checked: Yes</div>			
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:	
CCI	5470-11-1	2014012797	01/12/15	01/11/25	Kalin, Gabrielle	1	2.5Kg	NEAT	NEAT	

Veritech Control/Receipt Number: 9202										
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Description</div> <div style="border: 1px solid black; padding: 2px;">MERCURY</div>							<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApprovedBy: shiamala</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApproveDate: 02/06/15</div> <div style="border: 1px solid black; padding: 2px;">Checked: Yes</div>			
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:	
SPEX	PLHG3-2Y	20-13HGY	01/20/15	01/16/16	Kalin, Gabrielle	1	125m	1000	mg/L	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9067



Description
Nitric Acid

ApprovedBy: shiamala
 ApproveDate: 11/18/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	84115	11/11/14	07/01/19	Lopez, Jose	4	2.5L	neat	neat

Veritech Control/Receipt Number: 9081



Description
Sulfuric Acid

ApprovedBy: shiamala
 ApproveDate: 02/13/15
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	A510-P212	3113122	11/24/14	05/12/17	Lopez, Jose	6	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-202629



Prepared By: Aliano, Carmela		Department: Metals	ApprovedBy: shiamala	
Description: 1:1 HCl		BatchNumber:	ApproveDate: 01/15/15	
Prep Date: 1/14/2015		Concentration: Reagent	Checked: Yes	
Expiration Date: 7/13/2015		Final Volume: 2000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O	1000 ml		
9038	Hydrochloric Acid	1000 ml	neat neat	

Veritech Lot Number: V-203597



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: 6020 CALIBRATION STOCK		BatchNumber:	ApproveDate: 01/29/15	
Prep Date: 1/28/2015		Concentration: VARIOUS pp	Checked: Yes	
Expiration Date: 4/29/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9067	Nitric Acid	2 ml	neat neat	
8471	ALUMINUM	.725 ml	10000 ug/ml	72.5
8490	SELENIUM	1 ml	1000 ug/ml	10
8474	CALCIUM	2.5 ml	10000 ug/ml	250
8476	IRON	2.5 ml	10000 ug/ml	250
8479	MAGNESIUM	2.5 ml	10000 ug/ml	250
8482	POTASSIUM	2.5 ml	10000 ug/ml	250
8483	SODIUM	2.5 ml	10000 ug/ml	250
8902	ICPMS CALIBRATION STOCK	12.5 ml	20 mg/l	2.5

Veritech Lot Number: V-203685



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Antimony Intermediate 1PPM		BatchNumber:	ApproveDate: 02/03/15	
Prep Date: 1/29/2015		Concentration: 1000 ppb	Checked: Yes	
Expiration Date: 5/29/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8624	nitric acid	2.5 ml	neat neat	
9206	ANTIMONY	.1 ml	1000 mg/l	

Veritech Lot Number: V-206937



Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: Cal Blk		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	2.5 ml	neat neat	

Veritech Lot Number: V-206938



Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: Cal Std-1		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	2.5 ml	neat neat	
V-203597	6020 CALIBRATION STOCK	.02 ml	VARIOUS pp	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-206939

Prepared By: Kalin, Gabrielle
 Description: Cal Std-2
 Prep Date: 3/26/2015
 Expiration Date: 4/1/2015

Department: Metals
 BatchNumber: B-19008
 Concentration: various ppb
 Final Volume: 100 ml

ApprovedBy: gabrielle
 ApproveDate: 03/27/15
 Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8860	Nitric Acid	2.5 ml	neat neat	
9069	DI H2O			
V-203597	6020 CALIBRATION STOCK	.2 ml	VARIOUS pp	

Veritech Lot Number: V-206940

Prepared By: Kalin, Gabrielle
 Description: Cal Std-3
 Prep Date: 3/26/2015
 Expiration Date: 4/1/2015

Department: Metals
 BatchNumber: B-19008
 Concentration: various ppb
 Final Volume: 100 ml

ApprovedBy: gabrielle
 ApproveDate: 03/27/15
 Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	2.5 ml	neat neat	
V-203597	6020 CALIBRATION STOCK	.4 ml	VARIOUS pp	

Veritech Lot Number: V-206941

Prepared By: Kalin, Gabrielle
 Description: Cal Std-4
 Prep Date: 3/26/2015
 Expiration Date: 4/1/2015

Department: Metals
 BatchNumber: B-19008
 Concentration: various ppb
 Final Volume: 100 ml

ApprovedBy: gabrielle
 ApproveDate: 03/27/15
 Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	2.5 ml	neat neat	
V-203597	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-206942

Prepared By: Kalin, Gabrielle
 Description: Cal Std-5
 Prep Date: 3/26/2015
 Expiration Date: 4/1/2015

Department: Metals
 BatchNumber: B-19008
 Concentration: various ppb
 Final Volume: 100 ml

ApprovedBy: gabrielle
 ApproveDate: 03/27/15
 Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8860	Nitric Acid	2.5 ml	neat neat	
9069	DI H2O			
V-203597	6020 CALIBRATION STOCK	4 ml	VARIOUS pp	

Veritech Lot Number: V-206943

Prepared By: Kalin, Gabrielle
 Description: ICV
 Prep Date: 3/26/2015
 Expiration Date: 4/1/2015

Department: Metals
 BatchNumber: B-19008
 Concentration: various ppb
 Final Volume: 100 ml

ApprovedBy: gabrielle
 ApproveDate: 03/27/15
 Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8860	Nitric Acid	2.5 ml	neat neat	
9069	DI H2O			
8770	6020 ICV (ONLY Ag)	.1 ml	10 ug/ml	
8769	6020 ICV (no Ag)	.1 ml	NEAT ug/ml	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-206944



Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: ICB/CCB		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	2.5 ml	neat neat	

Veritech Lot Number: V-206945



Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: ICSA		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 50 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	1.25 ml	neat neat	
9170	INTERFERENTS A	2.5 ml	VARIOUS m	

Veritech Lot Number: V-206946



Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: ICSAB		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 50 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	1.25 ml	neat neat	2.5 %
9170	INTERFERENTS A	2.5	VARIOUS m	
9171	ANALYTES B	.5	VARIOUS m	

Veritech Lot Number: V-206947



Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: CCV		BatchNumber: B-19008	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
8860	Nitric Acid	2.5 ml	neat neat	
V-203597	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-206949



Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: gabrielle	
Description: LL-ICV/CCV AQ.		BatchNumber:	ApproveDate: 03/27/15	
Prep Date: 3/26/2015		Concentration: various ppb	Checked: Yes	
Expiration Date: 4/1/2015		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9069	DI H2O			
9087	Nitric Acid	2.5 ml	neat neat	
9167	ICPMS LLICV/CCV AQUEOUS	.5 ml	VARIOUS m	
V-203685	Antimony Intermediate 1PPM	.05 ml	1000 ppb	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8471



Description
ALUMINUM

ApprovedBy: gabrielle
ApproveDate: 02/06/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-061-013x	S131219013	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	10000	ug/mL

Veritech Control/Receipt Number: 8474



Description
CALCIUM

ApprovedBy: gabrielle
ApproveDate: 02/06/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-061-20x	S130924001	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	10000	ug/mL

Veritech Control/Receipt Number: 8476



Description
IRON

ApprovedBy: gabrielle
ApproveDate: 02/06/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-061-26x	S130812002	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	10000	ug/mL

Veritech Control/Receipt Number: 8479



Description
MAGNESIUM

ApprovedBy: gabrielle
ApproveDate: 02/06/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-061-12x	S130807017	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	10000	ug/mL

Veritech Control/Receipt Number: 8482



Description
POTASSIUM

ApprovedBy: gabrielle
ApproveDate: 02/06/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-061-19x	S130715002	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	10000	ug/mL

Veritech Control/Receipt Number: 8483



Description
SODIUM

ApprovedBy: gabrielle
ApproveDate: 02/06/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-061-11x	S130620015	01/31/14	04/30/15	Kalin, Gabrielle	1	125m	10000	ug/mL

Veritech Control/Receipt Number: 8490



Description
SELENIUM

ApprovedBy: gabrielle
ApproveDate: 02/06/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	140-051-34x	S140115015	02/05/14	05/31/15	Kalin, Gabrielle	1	125m	1000	ug/mL

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8624



Description
nitric acid

ApprovedBy: shiamala
ApproveDate: 06/05/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	67379	04/03/14	12/26/18	Lopez, Jose	16	2.5L	neat	neat

Veritech Control/Receipt Number: 8769



Description
6020 ICV (no Ag)

ApprovedBy: shiamala
ApproveDate: 06/30/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-110	S140612019	06/18/14	06/30/15	Kalin, Gabrielle	1	125m	NEAT	ug/mL

Veritech Control/Receipt Number: 8770



Description
6020 ICV (ONLY Ag)

ApprovedBy: shiamala
ApproveDate: 06/30/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SCP SCIENCE	600-225-111	S140612006	06/18/14	06/30/15	Kalin, Gabrielle	1	125m	10	ug/mL

Veritech Control/Receipt Number: 8860



Description
Nitric Acid

ApprovedBy: jean
ApproveDate: 08/05/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	77192	08/05/14	04/15/19	Lopez, Jose	12	2.5L	neat	neat

Veritech Control/Receipt Number: 8902



Description
ICPMS CALIBRATION STOCK

ApprovedBy: shiamala
ApproveDate: 10/03/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-CAL-1	CL11-57YPY	08/26/14	08/30/15	Kalin, Gabrielle	1	125m	20	mg/L

Veritech Control/Receipt Number: 9038



Description
Hydrochloric Acid

ApprovedBy: shiamala
ApproveDate: 11/18/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	85716	10/28/14	07/13/19	Lopez, Jose	12	4L	neat	neat

Veritech Control/Receipt Number: 9067



Description
Nitric Acid

ApprovedBy: shiamala
ApproveDate: 11/18/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	84115	11/11/14	07/01/19	Lopez, Jose	4	2.5L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9069



Description
DI H2O

ApprovedBy: shiamala
ApproveDate: 11/18/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemanns	1	1	11/11/14	11/10/15	Berls, Sean R.	1			

Veritech Control/Receipt Number: 9087



Description
Nitric Acid

ApprovedBy: aurora
ApproveDate: 12/08/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	88969	11/25/14	08/18/19	Lopez, Jose	3	4L	neat	neat

Veritech Control/Receipt Number: 9167



Description
ICPMS LLICV/CCV AQUEOUS

ApprovedBy: shiamala
ApproveDate: 02/13/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	ZHCV-14-100	8-13WL	12/17/14	06/30/15	Kalin, Gabrielle	1	100m	VARIOU	mg/L

Veritech Control/Receipt Number: 9170



Description
INTERFERENTS A

ApprovedBy: shiamala
ApproveDate: 02/13/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-A1	CL11-66YPY	12/17/14	12/30/15	Kalin, Gabrielle	2	125m	VARIOU	mg/L

Veritech Control/Receipt Number: 9171



Description
ANALYTES B

ApprovedBy: shiamala
ApproveDate: 02/13/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-B1	CL11-35YPY	12/17/14	12/30/15	Kalin, Gabrielle	1	125m	VARIOU	mg/L

Veritech Control/Receipt Number: 9206



Description
ANTIMONY

ApprovedBy: shiamala
ApproveDate: 02/06/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSB7-2Y	19-190SBY	01/20/15	01/30/16	Kalin, Gabrielle	1	125m	1000	mg/L

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8934



Description
ICP CALIBRATION STOCK 1

ApprovedBy: shiamala
 ApproveDate: 10/03/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-19-500	25-115CR	07/22/14	07/30/15	Kalin, Gabrielle	2	500m	NEAT	NEAT

Veritech Control/Receipt Number: 8935



Description
ICP CALIBRATION STOCK 2

ApprovedBy: shiamala
 ApproveDate: 10/03/14
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-20-500	25-116CR	07/22/14	07/30/15	Kalin, Gabrielle	2	500m	10000	ug/mL

Veritech Control/Receipt Number: 9196



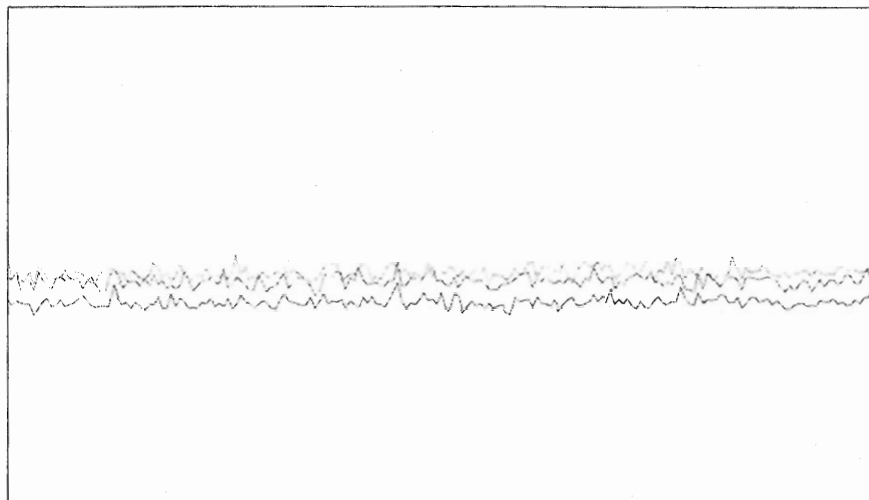
Description
Nitric acid

ApprovedBy: shiamala
 ApproveDate: 02/06/15
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	99263	01/20/15	12/04/19	Lopez, Jose	16	2.5L	neat	neat

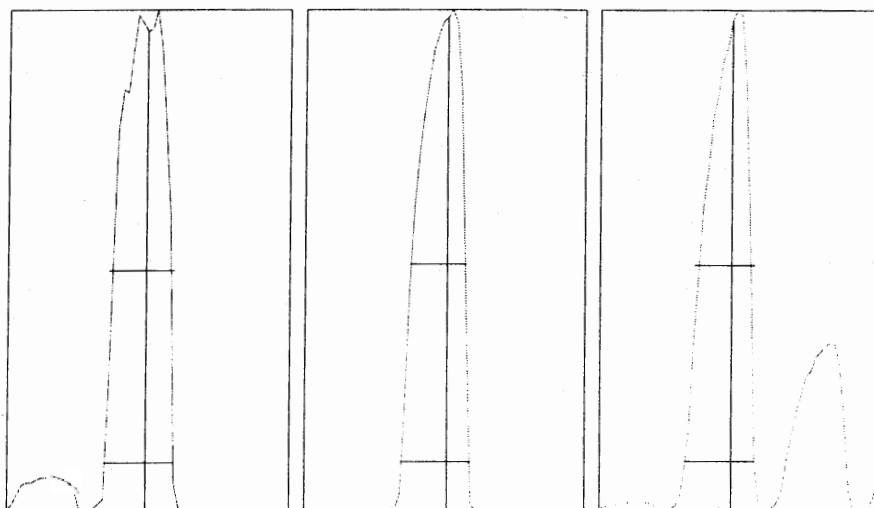
Tune Report

Tune File : ATUNE.U
 Comment : TN033015



Integration Time: 0.1000 sec
 Sampling Period: 0.6200 sec
 n: 200
 Oxide: 156/140 0.80
 Doubly Charged: 70/140 1.70

m/z	Range	Count	Mean	RSD%	Background
7	50,000	20745.0	20303.8	2.43	2.80
89	50,000	22919.0	22377.0	2.59	2.80
205	50,000	23510.0	23263.1	2.51	15.80
156/140	2	0.883%	0.814%	8.55	
70/140	5	1.799%	1.748%	7.30	



m/z: 7 89
 Height: 20,339 22,715
 Axis: 7.00 89.05
 W-50%: 0.70 0.60
 W-10%: 0.7500 0.7500

Integration Time: 0.1000 sec
 Acquisition Time: 22.7600 sec

Y axis : Linear

Tune Report

Tune File : ATUNE.U
Comment : TN033015

Tuning Parameters

===Plasma Condition===

RF Power : 1450 W
RF Matching : 1.76 V
Smpl Depth : 4.5 mm
Torch-H : -0.1 mm
Torch-V : 0.2 mm
Carrier Gas : 1 L/min
Makeup Gas : 0.1 L/min
Optional Gas : --- %
Nebulizer Pump : 0.1 rps
Sample Pump : --- rps
S/C Temp : 2 degC

===Ion Lenses===

Extract 1 : 1.5 V
Extract 2 : -135 V
Omega Bias-ce : -24 V
Omega Lens-ce : -1 V
Cell Entrance : -40 V
QP Focus : 4 V
Cell Exit : -40 V

===Q-Pole Parameters===

AMU Gain : 114
AMU Offset : 122
Axis Gain : 1.0051
Axis Offset : -0.3
QP Bias : -8 V

===Detector Parameters===

Discriminator : 8.9 mV
Analog HV : 1890 V
Pulse HV : 1280 V

===Octopole Parameters===

OctP RF : 180 V
OctP Bias : -6 V

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

P/A Factor Tuning Report

Acquired: Mar 30 2015 10:31 am

Mass[amu]	Element	P/A Factor
9	Be	0.074090
27	Al	0.088630
51	V	0.093350
52	Cr	0.095600
55	Mn	0.097699
59	Co	0.101220
60	Ni	0.100065
65	Cu	0.103091
66	Zn	0.102478
75	As	0.099375
95	Mo	0.098595
107	Ag	0.109897
111	Cd	0.107751
121	Sb	0.108435
137	Ba	0.108926
205	Tl	0.122844
208	Pb	0.121616

===Detector Parameters===

Discriminator: 8.9 mV

Analog HV: 1890 V

Pulse HV: 1280 V

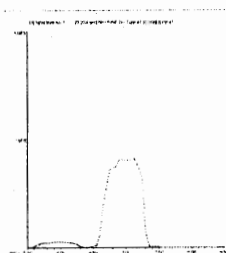
C:\ICPCHEM\1\DATA\T033015A.B\001TUNE.D

6020 Tune Check Sample

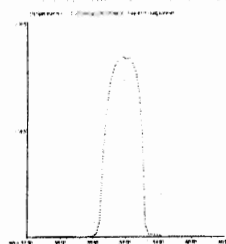
Data File: 001TUNE.D
 Date Acquired: Mar 30 2015 10:34 am
 Operator: GK
 Sample Name:
 Misc Info:
 Vial Number: 5
 Current Method: TN6020.M

QC Tune Summary:
 Pass

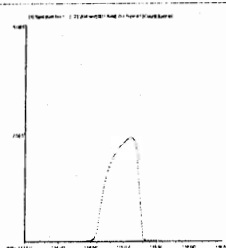
Element	Actual	Required	Flag
7 Li	1.35	5.00	0
59 Co	1.55	5.00	
115 In	1.03	5.00	
205 Tl	0.67	5.00	



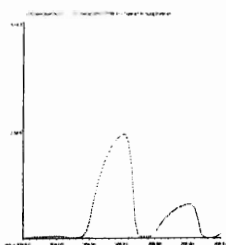
7 Li
 Mass Calib.
 Actual: 7.00
 Required: 6.90 - 7.10
 Flag:
 Peak Width
 Actual: 0.70
 Required: 0.90
 Flag:



59 Co
 Mass Calib.
 Actual: 58.95
 Required: 58.90 - 59.10
 Flag:
 Peak Width
 Actual: 0.60
 Required: 0.90
 Flag:



115 In
 Mass Calib.
 Actual: 115.05
 Required: 114.90 - 115.10
 Flag:
 Peak Width
 Actual: 0.60
 Required: 0.90
 Flag:



205 Tl
 Mass Calib.
 Actual: 205.00
 Required: 204.90 - 205.10
 Flag:
 Peak Width
 Actual: 0.60
 Required: 0.90
 Flag:

Analyst SBL 3/31/15

Method Loaded

Method Name: PE 2 4300DV RADIAL

IEC File: IECrad101413.iec

Method Description: 200.7/6010B/6010C

Method Last Saved: 3/23/2015 4:35:41 PM

MSF File:

Sequence No.: 1

Sample ID: CALBLK V-205362

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/30/2015 7:32:42 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALBLK V-205362

Analyte	Mean Corrected		Std.Dev.	RSD	Calib	
	Intensity				Conc.	Units
Y 371.029	28256.0		139.64	0.49%	100.000	%
Sc 361.383	71069.9		282.11	0.40%	100	%
Al 308.215†	188.5		8.55	4.54%	[0.00]	mg/L
Ca 315.887†	1063.5		1.05	0.10%	[0.00]	mg/L
Fe 273.955†	-90.5		1.66	1.83%	[0.00]	mg/L
Mg 279.077†	-123.3		13.67	11.09%	[0.00]	mg/L
Mn 257.610†	405.6		1.14	0.28%	[0.00]	mg/L
K 766.490†	633.4		50.63	7.99%	[0.00]	mg/L
Na 589.592†	701.6		53.91	7.68%	[0.00]	mg/L
Ti 334.940†	114.6		19.19	16.75%	[0.00]	mg/L

17600
42363

Na reported

Sequence No.: 2

Sample ID: CALST2 V-202401

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/30/2015 7:36:04 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST2 V-202401

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	28542.0	119.22	0.42%	101.012	%
Sc 361.383	72141.3	175.38	0.24%	102	%
Al 308.215†	155.0	9.38	6.05%	[0.1]	mg/L
Ca 315.887†	7343.9	83.66	1.14%	[1]	mg/L
Fe 273.955†	120.0	0.87	0.72%	[0.1]	mg/L
Mg 279.077†	1041.8	18.14	1.74%	[1]	mg/L
Mn 257.610†	427.4	3.97	0.93%	[0.01]	mg/L
K 766.490†	1541.9	68.56	4.45%	[1]	mg/L
Na 589.592†	7683.5	32.63	0.42%	[1]	mg/L
Ti 334.940†	436.8	26.18	5.99%	[0.01]	mg/L

Sequence No.: 3

Sample ID: CALST3 V-202402

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/30/2015 7:39:20 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST3 V-202402

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	27318.8	233.43	0.85%	96.6830	%
Sc 361.383	70852.4	252.37	0.36%	99.7	%
Al 308.215†	6671.7	9.93	0.15%	[5]	mg/L
Ca 315.887†	353153.6	608.39	0.17%	[50]	mg/L
Fe 273.955†	6289.2	35.08	0.56%	[5]	mg/L
Mg 279.077†	51143.5	340.98	0.67%	[50]	mg/L
Mn 257.610†	19938.9	134.33	0.67%	[0.5]	mg/L
K 766.490†	76241.1	367.47	0.48%	[50]	mg/L
Na 589.592†	371232.9	1741.59	0.47%	[50]	mg/L
Ti 334.940†	21878.0	54.97	0.25%	[0.5]	mg/L

Sequence No.: 4

Sample ID: CALST4 V-203077

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/30/2015 7:42:06 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST4 V-203077

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	26858.4	360.38	1.34%	95.0538 %
Sc 361.383	69057.3	988.88	1.43%	97.2 %
Al 308.215†	13036.9	16.03	0.12%	[10] mg/L
Ca 315.887†	707937.3	2113.87	0.30%	[100] mg/L
Fe 273.955†	12367.8	40.86	0.33%	[10] mg/L
Mg 279.077†	101170.1	554.41	0.55%	[100] mg/L
Mn 257.610†	39418.4	163.92	0.42%	[1.0] mg/L
K 766.490†	155716.2	641.38	0.41%	[100] mg/L
Na 589.592†	748435.0	2389.60	0.32%	[100] mg/L
Ti 334.940†	43353.7	120.46	0.28%	[1.0] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Al 308.215	3	Lin, Calc Int	39.1	1305	0.00000	0.999931	
Ca 315.887	3	Lin, Calc Int	-28.2	7076	0.00000	0.999999	
Fe 273.955	3	Lin, Calc Int	17.5	1239	0.00000	0.999961	
Mg 279.077	3	Lin, Calc Int	115.3	1013	0.00000	0.999984	
Mn 257.610	3	Lin, Calc Int	56.9	39440	0.00000	0.999983	
K 766.490	3	Lin, Calc Int	-301.2	1554	0.00000	0.999942	
Na 589.592	3	Lin, Calc Int	-452.8	7478	0.00000	0.999991	
Ti 334.940	3	Lin, Calc Int	38.1	43390	0.00000	0.999989	

Sequence No.: 5

Sample ID: ICS3 V-202402

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/30/2015 7:44:53 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICS3 V-202402

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	26845.4	95.0077 %	0.47046			0.50%
Sc 361.383	70809.5	99.6 %	1.28			1.28%
Al 308.215†	6599.6	5.02679 mg/L	0.043146	5.02679 mg/L	0.043146	0.86%
QC value within limits for Al 308.215 Recovery = 100.54%						
Ca 315.887†	352331.0	49.7930 mg/L	0.08911	49.7930 mg/L	0.08911	0.18%
QC value within limits for Ca 315.887 Recovery = 99.59%						
Fe 273.955†	6178.3	4.97291 mg/L	0.046692	4.97291 mg/L	0.046692	0.94%
QC value within limits for Fe 273.955 Recovery = 99.46%						
Mg 279.077†	50054.8	49.3209 mg/L	0.33999	49.3209 mg/L	0.33999	0.69%
QC value within limits for Mg 279.077 Recovery = 98.64%						
Mn 257.610†	19666.2	0.500413 mg/L	0.0038887	0.500413 mg/L	0.0038887	0.78%
QC value within limits for Mn 257.610 Recovery = 100.08%						
K 766.490†	77330.5	49.9454 mg/L	0.24544	49.9454 mg/L	0.24544	0.49%
QC value within limits for K 766.490 Recovery = 99.89%						
Na 589.592†	375789.1	50.3139 mg/L	0.10433	50.3139 mg/L	0.10433	0.21%
QC value within limits for Na 589.592 Recovery = 100.63%						
Ti 334.940†	21530.6	0.495354 mg/L	0.0045319	0.495354 mg/L	0.0045319	0.91%
QC value within limits for Ti 334.940 Recovery = 99.07%						

All analyte(s) passed QC.

Sequence No.: 6

Sample ID: ICV V-202964

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/30/2015 7:47:40 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICV V-202964

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27207.9	96.2904 %	%	1.06611			1.11%
Sc 361.383	71602.9	101 %	%	1.6			1.57%
Al 308.215†	6478.2	4.93373 mg/L	mg/L	0.012153	4.93373 mg/L	0.012153	0.25%
QC value within limits for Al 308.215 Recovery = 98.67%							
Ca 315.887†	344863.8	48.7378 mg/L	mg/L	0.12075	48.7378 mg/L	0.12075	0.25%
QC value within limits for Ca 315.887 Recovery = 97.48%							
Fe 273.955†	6082.8	4.89585 mg/L	mg/L	0.023342	4.89585 mg/L	0.023342	0.48%
QC value within limits for Fe 273.955 Recovery = 97.92%							
Mg 279.077†	49538.4	48.8108 mg/L	mg/L	0.22585	48.8108 mg/L	0.22585	0.46%
QC value within limits for Mg 279.077 Recovery = 97.62%							
Mn 257.610†	19079.0	0.485474 mg/L	mg/L	0.0026172	0.485474 mg/L	0.0026172	0.54%
QC value within limits for Mn 257.610 Recovery = 97.09%							
K 766.490†	76235.8	49.2411 mg/L	mg/L	0.06563	49.2411 mg/L	0.06563	0.13%
QC value within limits for K 766.490 Recovery = 98.48%							
Na 589.592†	368919.2	49.3952 mg/L	mg/L	0.10656	49.3952 mg/L	0.10656	0.22%
QC value within limits for Na 589.592 Recovery = 98.79%							
Ti 334.940†	21421.0	0.492829 mg/L	mg/L	0.0023967	0.492829 mg/L	0.0023967	0.49%
QC value within limits for Ti 334.940 Recovery = 98.57%							

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV [aq] V-206357

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/30/2015 7:50:24 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28305.9	100.176 %		0.4059			0.41%
Sc 361.383	71800.1	101 %		0.7			0.67%
Al 308.215†	315.1	0.211520 mg/L		0.0026297	0.211520 mg/L	0.0026297	1.24%
QC value within limits for Al 308.215 Recovery = 105.76%							
Ca 315.887†	36489.0	5.16038 mg/L		0.017750	5.16038 mg/L	0.017750	0.34%
QC value within limits for Ca 315.887 Recovery = 103.21%							
Fe 273.955†	377.2	0.290330 mg/L		0.0001386	0.290330 mg/L	0.0001386	0.05%
QC value within limits for Fe 273.955 Recovery = 96.78%							
Mg 279.077†	5272.9	5.09367 mg/L		0.018966	5.09367 mg/L	0.018966	0.37%
QC value within limits for Mg 279.077 Recovery = 101.87%							
Mn 257.610†	1587.1	0.0389870 mg/L		0.00019922	0.0389870 mg/L	0.00019922	0.51%
QC value within limits for Mn 257.610 Recovery = 97.47%							
K 766.490†	7975.0	5.32462 mg/L		0.004867	5.32462 mg/L	0.004867	0.09%
QC value within limits for K 766.490 Recovery = 106.49%							
Na 589.592†	38653.8	5.22962 mg/L		0.008042	5.22962 mg/L	0.008042	0.15%
QC value within limits for Na 589.592 Recovery = 104.59%							
Ti 334.940†	2210.7	0.0500741 mg/L		0.00092363	0.0500741 mg/L	0.00092363	1.84%
QC value within limits for Ti 334.940 Recovery = 100.15%							

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB V-205362

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/30/2015 7:53:42 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB V-205362

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28726.0	101.663 %		0.0557			0.05%
Sc 361.383	72111.2	101 %		0.1			0.13%
Al 308.215†	3.0	-0.0276519 mg/L		0.01194313	-0.0276519 mg/L	0.01194313	43.19%
QC value within limits for Al 308.215 Recovery = Not calculated							
Ca 315.887†	-3.5	0.0034913 mg/L		0.00319413	0.0034913 mg/L	0.00319413	91.49%
QC value within limits for Ca 315.887 Recovery = Not calculated							
Fe 273.955†	-4.4	-0.0176711 mg/L		0.00390103	-0.0176711 mg/L	0.00390103	22.08%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	0.9	-0.112993 mg/L		0.0085610	-0.112993 mg/L	0.0085610	7.58%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	-5.1	-0.0015826 mg/L		0.00000725	-0.0015826 mg/L	0.00000725	0.46%
QC value within limits for Mn 257.610 Recovery = Not calculated							
K 766.490†	163.3	0.298816 mg/L		0.0176377	0.298816 mg/L	0.0176377	5.90%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	201.8	0.0875370 mg/L		0.00096436	0.0875370 mg/L	0.00096436	1.10%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	1.5	-0.0008424 mg/L		0.00013803	-0.0008424 mg/L	0.00013803	16.39%
QC value within limits for Ti 334.940 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSA V-202074

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/30/2015 7:56:56 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25297.0	89.5278 %		0.51789			0.58%
Sc 361.383	65535.2	92.2 %		0.78			0.84%
Al 308.215†	693098.1	531.033 mg/L		9.0870	531.033 mg/L	9.0870	1.71%
QC value within limits for Al 308.215 Recovery = 106.21%							
Ca 315.887†	3522569.2	497.790 mg/L		8.5208	497.790 mg/L	8.5208	1.71%
QC value within limits for Ca 315.887 Recovery = 99.56%							
Fe 273.955†	243717.2	196.711 mg/L		3.2829	196.711 mg/L	3.2829	1.67%
QC value within limits for Fe 273.955 Recovery = 98.36%							
Mg 279.077†	511709.8	505.256 mg/L		8.6836	505.256 mg/L	8.6836	1.72%
QC value within limits for Mg 279.077 Recovery = 101.05%							
Mn 257.610†	-1941.9	0.0775453 mg/L		0.00113545	0.0775453 mg/L	0.00113545	1.46%
QC value within limits for Mn 257.610 Recovery = 7.75%							
K 766.490†	200.0	0.322465 mg/L		0.0348145	0.322465 mg/L	0.0348145	10.80%
QC value within limits for K 766.490 Recovery = 32.25%							
Na 589.592†	2016.3	0.330189 mg/L		0.0050774	0.330189 mg/L	0.0050774	1.54%
QC value within limits for Na 589.592 Recovery = 33.02%							
Ti 334.940†	-2095.0	-0.0491619 mg/L		0.00015746	-0.0491619 mg/L	0.00015746	0.32%
QC value within limits for Ti 334.940 Recovery = -4.92%							

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSAB V-202076

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/30/2015 8:00:03 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25567.9	90.4864 %		0.53772			0.59%
Sc 361.383	65988.8	92.9 %		0.31			0.33%
Al 308.215†	693912.0	531.656 mg/L		1.0999	531.656 mg/L	1.0999	0.21%
QC value within limits for Al 308.215		Recovery = 106.33%					
Ca 315.887†	3524173.4	498.017 mg/L		1.9624	498.017 mg/L	1.9624	0.39%
QC value within limits for Ca 315.887		Recovery = 99.60%					
Fe 273.955†	244419.5	197.278 mg/L		0.5045	197.278 mg/L	0.5045	0.26%
QC value within limits for Fe 273.955		Recovery = 98.64%					
Mg 279.077†	512117.0	505.659 mg/L		1.9450	505.659 mg/L	1.9450	0.38%
QC value within limits for Mg 279.077		Recovery = 101.13%					
Mn 257.610†	17468.0	0.570031 mg/L		0.0000923	0.570031 mg/L	0.0000923	0.02%
QC value within limits for Mn 257.610		Recovery = 114.01%					
K 766.490†	101.8	0.259294 mg/L		0.0500604	0.259294 mg/L	0.0500604	19.31%
QC value within limits for K 766.490		Recovery = Not calculated					
Na 589.592†	1795.8	0.300700 mg/L		0.0068550	0.300700 mg/L	0.0068550	2.28%
QC value within limits for Na 589.592		Recovery = Not calculated					
Ti 334.940†	-2068.1	-0.0485430 mg/L		0.00064429	-0.0485430 mg/L	0.00064429	1.33%

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: MB 4236Z (1)

Analyst: 3

Initial Sample Wt:

Dilution:

80 3/31

Autosampler Location: 61

Date Collected: 3/30/2015 8:03:12 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: MB 4236Z (1)

Analyte	Mean Corrected		Calib	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Y 371.029	29610.0	104.792	%	0.5874				0.56%
Sc 361.383	74803.4	105	%	0.5				0.48%
Al 308.215†	59.5	0.0156417	mg/L	0.00525625	0.0156417	mg/L	0.00525625	33.60%
Ca 315.887†	4001.4	0.569441	mg/L	0.0020442	0.569441	mg/L	0.0020442	0.36%
Fe 273.955†	37.7	0.0163070	mg/L	0.00187567	0.0163070	mg/L	0.00187567	11.50%
Mg 279.077†	28.7	-0.0855100	mg/L	0.00522727	-0.0855100	mg/L	0.00522727	6.11%
Mn 257.610†	3.5	-0.0013434	mg/L	0.00008679	-0.0013434	mg/L	0.00008679	6.46%
K 766.490†	-3.1	0.191799	mg/L	0.0153759	0.191799	mg/L	0.0153759	8.02%
Na 589.592†	240.2	0.0926697	mg/L	0.00812797	0.0926697	mg/L	0.00812797	8.77%
Ti 334.940†	-4.6	-0.0009845	mg/L	0.00044162	-0.0009845	mg/L	0.00044162	44.86%

Sequence No.: 12

Autosampler Location: 62

Sample ID: LCSW 42362

Date Collected: 3/30/2015 8:06:30 PM

Analyst:

Data Type: Original

Initial Sample Wt: 3

Initial Sample Vol:

Dilution:

Sample Prep Vol:

4B 3/31

3

Mean Data: LCSW 42362

Analyte	Mean Corrected		Calib	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Y 371.029	27876.6	98.6570 %		1.41561			1.43%
Sc 361.383	72424.9	102 %		0.9			0.93%
Al 308.215†	5321.1	4.04714 mg/L		0.091651	4.04714 mg/L	0.091651	2.26%
Ca 315.887†	285395.7	40.3342 mg/L		0.08069	40.3342 mg/L	0.08069	0.20%
Fe 273.955†	5020.4	4.03826 mg/L		0.116004	4.03826 mg/L	0.116004	2.87%
Mg 279.077†	40746.8	40.1281 mg/L		1.14890	40.1281 mg/L	1.14890	2.86%
Mn 257.610†	15967.4	0.406024 mg/L		0.0112870	0.406024 mg/L	0.0112870	2.78%
K 766.490†	61178.2	39.5536 mg/L		0.41590	39.5536 mg/L	0.41590	1.05%
Na 589.592†	299852.6	40.1591 mg/L		0.05185	40.1591 mg/L	0.05185	0.13%
Ti 334.940†	17491.5	0.402261 mg/L		0.0103180	0.402261 mg/L	0.0103180	2.56%

Sequence No.: 13

Sample ID: LCSW MR 42367

Analyst:

Initial Sample Wt:

Dilution:

3

SB 3/31

3

Autosampler Location: 63

Date Collected: 3/30/2015 8:09:16 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCSW MR 42367

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	27616.8	97.7377	%	0.37149				0.38%
Sc 361.383	72325.4	102	%	0.2				0.23%
Al 308.215†	5403.5	4.11027	mg/L	0.002259	4.11027	mg/L	0.002259	0.05%
Ca 315.887†	290110.6	41.0005	mg/L	0.08495	41.0005	mg/L	0.08495	0.21%
Fe 273.955†	5076.6	4.08362	mg/L	0.019313	4.08362	mg/L	0.019313	0.47%
Mg 279.077†	41411.5	40.7846	mg/L	0.00890	40.7846	mg/L	0.00890	0.02%
Mn 257.610†	16237.9	0.412913	mg/L	0.0002262	0.412913	mg/L	0.0002262	0.05%
K 766.490†	63083.6	40.7795	mg/L	0.19253	40.7795	mg/L	0.19253	0.47%
Na 589.592†	308752.8	41.3493	mg/L	0.20380	41.3493	mg/L	0.20380	0.49%
Ti 334.940†	17815.8	0.409736	mg/L	0.0013152	0.409736	mg/L	0.0013152	0.32%

Sequence No.: 14

Sample ID: 83866-014

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 64

Date Collected: 3/30/2015 8:12:04 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-014

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	28667.2	101.455	%	0.6925				0.68%
Sc 361.383	73764.7	104	%	0.4				0.40%
Al 308.215†	30.0	-0.0069477	mg/L	0.00197232	-0.0069477	mg/L	0.00197232	28.39%
Ca 315.887†	93772.8	13.2553	mg/L	0.08614	13.2553	mg/L	0.08614	0.65%
Fe 273.955†	28.3	0.0086834	mg/L	0.00518405	0.0086834	mg/L	0.00518405	59.70%
Mg 279.077†	4891.2	4.71672	mg/L	0.000280	4.71672	mg/L	0.000280	0.01%
Mn 257.610†	54.7	-0.0000486	mg/L	0.00002215	-0.0000486	mg/L	0.00002215	45.58%
K 766.490†	1384.7	1.08468	mg/L	0.002067	1.08468	mg/L	0.002067	0.19%
Na 589.592†	120664.3	16.1967	mg/L	0.03838	16.1967	mg/L	0.03838	0.24%
Ti 334.940†	-42.0	-0.0018457	mg/L	0.00078332	-0.0018457	mg/L	0.00078332	42.44%

Sequence No.: 15
 Sample ID: 83866-014 MR
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 65
 Date Collected: 3/30/2015 8:15:20 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-014 MR

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	29120.8	103.061	%	0.1809				0.18%
Sc 361.383	74937.1	105	%	0.3				0.28%
Al 308.215†	34.1	-0.0038388	mg/L	0.01552909	-0.0038388	mg/L	0.01552909	404.53%
Ca 315.887†	97957.0	13.8466	mg/L	0.00217	13.8466	mg/L	0.00217	0.02%
Fe 273.955†	22.8	0.0043082	mg/L	0.00213460	0.0043082	mg/L	0.00213460	49.55%
Mg 279.077†	4993.3	4.81753	mg/L	0.002369	4.81753	mg/L	0.002369	0.05%
Mn 257.610†	54.0	-0.0000705	mg/L	0.00009856	-0.0000705	mg/L	0.00009856	139.80%
K 766.490†	1326.9	1.04747	mg/L	0.041112	1.04747	mg/L	0.041112	3.92%
Na 589.592†	122377.2	16.4257	mg/L	0.00328	16.4257	mg/L	0.00328	0.02%
Ti 334.940†	-47.3	-0.0019685	mg/L	0.00030672	-0.0019685	mg/L	0.00030672	15.58%

Sequence No.: 16
 Sample ID: 83866-015 MS 1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 66
 Date Collected: 3/30/2015 8:18:37 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-015 MS 1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27876.3	98.6561	%	0.04200			0.04%
Sc 361.383	71871.4	101	%	0.2			0.20%
Al 308.215†	5839.0	4.44396	mg/L	0.014490	4.44396 mg/L	0.014490	0.33%
Ca 315.887†	400928.3	56.6605	mg/L	0.00952	56.6605 mg/L	0.00952	0.02%
Fe 273.955†	5509.3	4.43290	mg/L	0.001219	4.43290 mg/L	0.001219	0.03%
Mg 279.077†	49699.0	48.9694	mg/L	0.15066	48.9694 mg/L	0.15066	0.31%
Mn 257.610†	17557.9	0.446606	mg/L	0.0002720	0.446606 mg/L	0.0002720	0.06%
K 766.490†	68319.1	44.1478	mg/L	0.14633	44.1478 mg/L	0.14633	0.33%
Na 589.592†	443803.7	59.4093	mg/L	0.07692	59.4093 mg/L	0.07692	0.13%
Ti 334.940†	18981.3	0.436598	mg/L	0.0021293	0.436598 mg/L	0.0021293	0.49%

Sequence No.: 17

Sample ID: 83866-016 MS 2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 67

Date Collected: 3/30/2015 8:21:24 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-016 MS 2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	28053.5	99.2832	%	0.59532				0.60%
Sc 361.383	72509.6	102	%	0.5				0.52%
Al 308.215†	5746.2	4.37289	mg/L	0.016697	4.37289	mg/L	0.016697	0.38%
Ca 315.887†	397632.6	56.1948	mg/L	0.01062	56.1948	mg/L	0.01062	0.02%
Fe 273.955†	5470.2	4.40135	mg/L	0.002313	4.40135	mg/L	0.002313	0.05%
Mg 279.077†	49247.1	48.5231	mg/L	0.12329	48.5231	mg/L	0.12329	0.25%
Mn 257.610†	17527.7	0.445822	mg/L	0.0009518	0.445822	mg/L	0.0009518	0.21%
K 766.490†	67794.0	43.8100	mg/L	0.03886	43.8100	mg/L	0.03886	0.09%
Na 589.592†	441383.7	59.0857	mg/L	0.01189	59.0857	mg/L	0.01189	0.02%
Ti 334.940†	18890.3	0.434501	mg/L	0.0003211	0.434501	mg/L	0.0003211	0.07%

Sequence No.: 18
 Sample ID: 83866-014 PS
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 68
 Date Collected: 3/30/2015 8:24:11 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-014 PS

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27766.2	98.2664	%	0.20338			0.21%
Sc 361.383	72697.7	102	%	0.5			0.47%
Al 308.215†	6858.6	5.22519	mg/L	0.026312	5.22519 mg/L	0.026312	0.50%
Ca 315.887†	460327.8	65.0544	mg/L	0.00671	65.0544 mg/L	0.00671	0.01%
Fe 273.955†	6558.0	5.27942	mg/L	0.032545	5.27942 mg/L	0.032545	0.62%
Mg 279.077†	57772.1	56.9425	mg/L	0.17044	56.9425 mg/L	0.17044	0.30%
Mn 257.610†	20468.0	0.520941	mg/L	0.0023639	0.520941 mg/L	0.0023639	0.45%
K 766.490†	80894.1	52.2381	mg/L	0.11206	52.2381 mg/L	0.11206	0.21%
Na 589.592†	510306.8	68.3026	mg/L	0.10675	68.3026 mg/L	0.10675	0.16%
Ti 334.940†	26861.3	0.618215	mg/L	0.0030727	0.618215 mg/L	0.0030727	0.50%

Sequence No.: 19
 Sample ID: CCV V-202964
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/30/2015 8:26:58 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27337.9	96.7505 %	0.22610			0.23%
Sc 361.383	71911.8	101 %	0.8			0.83%
Al 308.215†	6441.2	4.90542 mg/L	0.056977	4.90542 mg/L	0.056977	1.16%
QC value within limits for Al 308.215 Recovery = 98.11%						
Ca 315.887†	342293.1	48.3746 mg/L	0.21503	48.3746 mg/L	0.21503	0.44%
QC value within limits for Ca 315.887 Recovery = 96.75%						
Fe 273.955†	6041.2	4.86223 mg/L	0.059198	4.86223 mg/L	0.059198	1.22%
QC value within limits for Fe 273.955 Recovery = 97.24%						
Mg 279.077†	49128.9	48.4063 mg/L	0.57947	48.4063 mg/L	0.57947	1.20%
QC value within limits for Mg 279.077 Recovery = 96.81%						
Mn 257.610†	18896.8	0.480834 mg/L	0.0063577	0.480834 mg/L	0.0063577	1.32%
QC value within limits for Mn 257.610 Recovery = 96.17%						
K 766.490†	75369.9	48.6840 mg/L	0.33135	48.6840 mg/L	0.33135	0.68%
QC value within limits for K 766.490 Recovery = 97.37%						
Na 589.592†	364345.0	48.7835 mg/L	0.14784	48.7835 mg/L	0.14784	0.30%
QC value within limits for Na 589.592 Recovery = 97.57%						
Ti 334.940†	21329.0	0.490707 mg/L	0.0052853	0.490707 mg/L	0.0052853	1.08%
QC value within limits for Ti 334.940 Recovery = 98.14%						

All analyte(s) passed QC.

Sequence No.: 20
 Sample ID: LLCCV [aq] V-206357
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 3/30/2015 8:29:47 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: LLCCV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28664.1	101.444 %		0.5161			0.51%
Sc 361.383	72962.1	103 %		0.6			0.58%
Al 308.215†	279.3	0.184079 mg/L		0.0072658	0.184079 mg/L	0.0072658	3.95%
QC value within limits for Al	308.215	Recovery = 92.04%					
Ca 315.887†	36250.6	5.12668 mg/L		0.018866	5.12668 mg/L	0.018866	0.37%
QC value within limits for Ca	315.887	Recovery = 102.53%					
Fe 273.955†	376.2	0.289521 mg/L		0.0032855	0.289521 mg/L	0.0032855	1.13%
QC value within limits for Fe	273.955	Recovery = 96.51%					
Mg 279.077†	5204.0	5.02560 mg/L		0.014726	5.02560 mg/L	0.014726	0.29%
QC value within limits for Mg	279.077	Recovery = 100.51%					
Mn 257.610†	1563.7	0.0383922 mg/L		0.00043629	0.0383922 mg/L	0.00043629	1.14%
QC value within limits for Mn	257.610	Recovery = 95.98%					
K 766.490†	7861.5	5.25161 mg/L		0.027680	5.25161 mg/L	0.027680	0.53%
QC value within limits for K	766.490	Recovery = 105.03%					
Na 589.592†	38451.1	5.20251 mg/L		0.007015	5.20251 mg/L	0.007015	0.13%
QC value within limits for Na	589.592	Recovery = 104.05%					
Ti 334.940†	2159.6	0.0488974 mg/L		0.00060081	0.0488974 mg/L	0.00060081	1.23%
QC value within limits for Ti	334.940	Recovery = 97.79%					

All analyte(s) passed QC.

Sequence No.: 21
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 3/30/2015 8:33:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28808.8	101.956 %		0.2979			0.29%
Sc 361.383	72081.4	101 %		0.2			0.22%
Al 308.215†	50.5	0.0087395 mg/L		0.00889568	0.0087395 mg/L	0.00889568	101.79%
QC value within limits for Al 308.215			Recovery = Not calculated				
Ca 315.887†	92.4	0.0170389 mg/L		0.00148368	0.0170389 mg/L	0.00148368	8.71%
QC value within limits for Ca 315.887			Recovery = Not calculated				
Fe 273.955†	14.6	-0.0023252 mg/L		0.00578247	-0.0023252 mg/L	0.00578247	248.69%
QC value within limits for Fe 273.955			Recovery = Not calculated				
Mg 279.077†	8.0	-0.105974 mg/L		0.0084900	-0.105974 mg/L	0.0084900	8.01%
QC value within limits for Mg 279.077			Recovery = Not calculated				
Mn 257.610†	7.2	-0.0012617 mg/L		0.00019150	-0.0012617 mg/L	0.00019150	15.18%
QC value within limits for Mn 257.610			Recovery = Not calculated				
K 766.490†	94.1	0.254319 mg/L		0.0138468	0.254319 mg/L	0.0138468	5.44%
QC value within limits for K 766.490			Recovery = Not calculated				
Na 589.592†	297.4	0.100316 mg/L		0.0026583	0.100316 mg/L	0.0026583	2.65%
QC value within limits for Na 589.592			Recovery = Not calculated				
Ti 334.940†	-12.4	-0.0011627 mg/L		0.00016358	-0.0011627 mg/L	0.00016358	14.07%
QC value within limits for Ti 334.940			Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 22
 Sample ID: 83866-014 SD
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 69
 Date Collected: 3/30/2015 8:36:25 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-014 SD

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28923.9	102.363	%	1.3391			1.31%
Sc 361.383	73656.4	104	%	1.3			1.30%
Al 308.215†	15.3	-0.0182285	mg/L	0.01101786	-0.0182285 mg/L	0.01101786	60.44%
Ca 315.887†	20027.9	2.83420	mg/L	0.009905	2.83420 mg/L	0.009905	0.35%
Fe 273.955†	18.0	0.0003707	mg/L	0.00896066	0.0003707 mg/L	0.00896066	>999.9%
Mg 279.077†	1046.0	0.919156	mg/L	0.0167499	0.919156 mg/L	0.0167499	1.82%
Mn 257.610†	3.4	-0.0013565	mg/L	0.00024819	-0.0013565 mg/L	0.00024819	18.30%
K 766.490†	308.3	0.392147	mg/L	0.0173289	0.392147 mg/L	0.0173289	4.42%
Na 589.592†	25611.9	3.48556	mg/L	0.014064	3.48556 mg/L	0.014064	0.40%
Ti 334.940†	5.5	-0.0007517	mg/L	0.00031861	-0.0007517 mg/L	0.00031861	42.39%

Sequence No.: 23
 Sample ID: 83866-002
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 70
 Date Collected: 3/30/2015 8:39:45 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-002

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29263.2	103.564 %	0.0861			0.08%
Sc 361.383	74748.6	105 %	0.0			0.02%
Al 308.215†	27.4	-0.0089921 mg/L	0.00690927	-0.0089921 mg/L	0.00690927	76.84%
Ca 315.887†	105551.4	14.9198 mg/L	0.06578	14.9198 mg/L	0.06578	0.44%
Fe 273.955†	17.3	-0.0001889 mg/L	0.00297228	-0.0001889 mg/L	0.00297228	>999.9%
Mg 279.077†	2096.2	1.95638 mg/L	0.001469	1.95638 mg/L	0.001469	0.08%
Mn 257.610†	33.9	-0.0005838 mg/L	0.00016253	-0.0005838 mg/L	0.00016253	27.84%
K 766.490†	2151.7	1.57811 mg/L	0.017165	1.57811 mg/L	0.017165	1.09%
Na 589.592†	71879.3	9.67278 mg/L	0.004917	9.67278 mg/L	0.004917	0.05%
Ti 334.940†	-69.9	-0.0024889 mg/L	0.00004559	-0.0024889 mg/L	0.00004559	1.83%

Sequence No.: 24
 Sample ID: 83866-004
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 71
 Date Collected: 3/30/2015 8:43:05 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-004

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28876.4	102.195	%	1.0834			1.06%
Sc 361.383	74413.6	105	%	1.1			1.05%
Al 308.215†	58.1	0.0145730	mg/L	0.00029196	0.0145730 mg/L	0.00029196	2.00%
Ca 315.887†	112959.1	15.9666	mg/L	0.05560	15.9666 mg/L	0.05560	0.35%
Fe 273.955†	64.7	0.0380887	mg/L	0.00234679	0.0380887 mg/L	0.00234679	6.16%
Mg 279.077†	2626.6	2.48022	mg/L	0.040685	2.48022 mg/L	0.040685	1.64%
Mn 257.610†	89.2	0.0008453	mg/L	0.00032447	0.0008453 mg/L	0.00032447	38.39%
K 766.490†	3362.0	2.35678	mg/L	0.016911	2.35678 mg/L	0.016911	0.72%
Na 589.592†	192740.9	25.8353	mg/L	0.06439	25.8353 mg/L	0.06439	0.25%
Ti 334.940†	-19.5	-0.0013266	mg/L	0.00017959	-0.0013266 mg/L	0.00017959	13.54%

Sequence No.: 25
 Sample ID: 83866-006
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 72
 Date Collected: 3/30/2015 8:46:24 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-006

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29432.4	104.163 %	0.8655			0.83%
Sc 361.383	75039.9	106 %	0.8			0.79%
Al 308.215†	17.9	-0.0162716 mg/L	0.00022896	-0.0162716 mg/L	0.00022896	1.41%
Ca 315.887†	58970.5	8.33731 mg/L	0.027592	8.33731 mg/L	0.027592	0.33%
Fe 273.955†	26.9	0.0076152 mg/L	0.00684198	0.0076152 mg/L	0.00684198	89.85%
Mg 279.077†	942.1	0.816521 mg/L	0.0021943	0.816521 mg/L	0.0021943	0.27%
Mn 257.610†	37.0	-0.0004982 mg/L	0.00020024	-0.0004982 mg/L	0.00020024	40.19%
K 766.490†	1770.1	1.33260 mg/L	0.008958	1.33260 mg/L	0.008958	0.67%
Na 589.592†	32365.0	4.38863 mg/L	0.027430	4.38863 mg/L	0.027430	0.63%
Ti 334.940†	-25.0	-0.0014541 mg/L	0.00042834	-0.0014541 mg/L	0.00042834	29.46%

Sequence No.: 26
 Sample ID: 83866-008
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 73
 Date Collected: 3/30/2015 8:49:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-008

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	30048.1	106.342	%	0.9292				0.87%
Sc 361.383	74988.5	106	%	0.9				0.89%
Al 308.215†	179.3	0.107451	mg/L	0.0023087	0.107451	mg/L	0.0023087	2.15%
Ca 315.887†	123634.9	17.4752	mg/L	0.06250	17.4752	mg/L	0.06250	0.36%
Fe 273.955†	15.6	-0.0014966	mg/L	0.00040680	-0.0014966	mg/L	0.00040680	27.18%
Mg 279.077†	2460.6	2.31626	mg/L	0.022530	2.31626	mg/L	0.022530	0.97%
Mn 257.610†	771.8	0.0181260	mg/L	0.00022682	0.0181260	mg/L	0.00022682	1.25%
K 766.490†	4082.8	2.82051	mg/L	0.005503	2.82051	mg/L	0.005503	0.20%
Na 589.592†	106175.6	14.2591	mg/L	0.02744	14.2591	mg/L	0.02744	0.19%
Ti 334.940†	-99.0	-0.0031590	mg/L	0.00003090	-0.0031590	mg/L	0.00003090	0.98%

Sequence No.: 27
 Sample ID: 83866-010
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 74
 Date Collected: 3/30/2015 8:53:02 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-010

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Y 371.029	29040.6	102.776	%	0.0462				0.04%
Sc 361.383	74513.8	105	%	0.0				0.02%
Al 308.215†	101.3	0.0476680	mg/L	0.00578977	0.0476680	mg/L	0.00578977	12.15%
Ca 315.887†	57272.8	8.09740	mg/L	0.019849	8.09740	mg/L	0.019849	0.25%
Fe 273.955†	35.2	0.0142982	mg/L	0.00660807	0.0142982	mg/L	0.00660807	46.22%
Mg 279.077†	2673.7	2.52672	mg/L	0.003529	2.52672	mg/L	0.003529	0.14%
Mn 257.610†	54.6	-0.0000477	mg/L	0.00024729	-0.0000477	mg/L	0.00024729	518.86%
K 766.490†	869.7	0.753298	mg/L	0.0227424	0.753298	mg/L	0.0227424	3.02%
Na 589.592†	62216.9	8.38065	mg/L	0.028184	8.38065	mg/L	0.028184	0.34%
Ti 334.940†	-18.4	-0.0013014	mg/L	0.00029372	-0.0013014	mg/L	0.00029372	22.57%

Sequence No.: 28
 Sample ID: 83866-018
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 75
 Date Collected: 3/30/2015 8:56:19 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-018

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28717.2	101.632	%	0.7503			0.74%
Sc 361.383	74087.4	104	%	0.9			0.86%
Al 308.215†	29.0	-0.0077481	mg/L	0.00730038	-0.0077481 mg/L	0.00730038	94.22%
Ca 315.887†	96301.4	13.6127	mg/L	0.01422	13.6127 mg/L	0.01422	0.10%
Fe 273.955†	24.8	0.0059002	mg/L	0.00082488	0.0059002 mg/L	0.00082488	13.98%
Mg 279.077†	5044.1	4.86769	mg/L	0.071071	4.86769 mg/L	0.071071	1.46%
Mn 257.610†	57.8	0.0000282	mg/L	0.00015523	0.0000282 mg/L	0.00015523	550.85%
K 766.490†	1337.1	1.05403	mg/L	0.046457	1.05403 mg/L	0.046457	4.41%
Na 589.592†	126383.3	16.9615	mg/L	0.02418	16.9615 mg/L	0.02418	0.14%
Ti 334.940†	-61.1	-0.0022857	mg/L	0.00006478	-0.0022857 mg/L	0.00006478	2.83%

Sequence No.: 29
 Sample ID: ICSA V-202074
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/30/2015 8:59:36 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25278.4	89.4619 %	0.35184			0.39%
Sc 361.383	65381.7	92.0 %	0.18			0.20%
Al 308.215†	690424.5	528.984 mg/L	3.8940	528.984 mg/L	3.8940	0.74%
QC value within limits for Al 308.215 Recovery = 105.80%						
Ca 315.887†	3505898.7	495.434 mg/L	5.3561	495.434 mg/L	5.3561	1.08%
QC value within limits for Ca 315.887 Recovery = 99.09%						
Fe 273.955†	242068.9	195.380 mg/L	2.0657	195.380 mg/L	2.0657	1.06%
QC value within limits for Fe 273.955 Recovery = 97.69%						
Mg 279.077†	509087.5	502.667 mg/L	6.1899	502.667 mg/L	6.1899	1.23%
QC value within limits for Mg 279.077 Recovery = 100.53%						
Mn 257.610†	-1909.2	0.0775068 mg/L	0.00169635	0.0775068 mg/L	0.00169635	2.19%
QC value within limits for Mn 257.610 Recovery = 7.75%						
K 766.490†	147.2	0.288457 mg/L	0.0288707	0.288457 mg/L	0.0288707	10.01%
QC value within limits for K 766.490 Recovery = 28.85%						
Na 589.592†	1855.5	0.308686 mg/L	0.0087695	0.308686 mg/L	0.0087695	2.84%
QC value within limits for Na 589.592 Recovery = 30.87%						
Ti 334.940†	-2095.5	-0.0491739 mg/L	0.00071583	-0.0491739 mg/L	0.00071583	1.46%
QC value within limits for Ti 334.940 Recovery = -4.92%						

All analyte(s) passed QC.

Sequence No.: 30
 Sample ID: ICSAB V-202076
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/30/2015 9:02:44 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25297.7	89.5304 %		0.35611			0.40%
Sc 361.383	65404.4	92.0 %		0.35			0.39%
Al 308.215†	696043.1	533.289 mg/L		1.5654	533.289 mg/L	1.5654	0.29%
QC value within limits for Al 308.215 Recovery = 106.66%							
Ca 315.887†	3539652.3	500.204 mg/L		1.2499	500.204 mg/L	1.2499	0.25%
QC value within limits for Ca 315.887 Recovery = 100.04%							
Fe 273.955†	244874.0	197.644 mg/L		0.6367	197.644 mg/L	0.6367	0.32%
QC value within limits for Fe 273.955 Recovery = 98.82%							
Mg 279.077†	514788.8	508.297 mg/L		1.3064	508.297 mg/L	1.3064	0.26%
QC value within limits for Mg 279.077 Recovery = 101.66%							
Mn 257.610†	17393.0	0.568367 mg/L		0.0006855	0.568367 mg/L	0.0006855	0.12%
QC value within limits for Mn 257.610 Recovery = 113.67%							
K 766.490†	29.1	0.212506 mg/L		0.0079321	0.212506 mg/L	0.0079321	3.73%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	1593.4	0.273635 mg/L		0.0010654	0.273635 mg/L	0.0010654	0.39%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	-2076.4	-0.0487330 mg/L		0.00036494	-0.0487330 mg/L	0.00036494	0.75%

All analyte(s) passed QC.

Sequence No.: 31
 Sample ID: CCV V-202964
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/30/2015 9:05:52 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27056.6	95.7550 %		0.44071			0.46%
Sc 361.383	70675.9	99.4 %		0.18			0.18%
Al 308.215†	6450.7	4.91270 mg/L		0.003890	4.91270 mg/L	0.003890	0.08%
QC value within limits for Al 308.215 Recovery = 98.25%							
Ca 315.887†	341300.5	48.2343 mg/L		0.10609	48.2343 mg/L	0.10609	0.22%
QC value within limits for Ca 315.887 Recovery = 96.47%							
Fe 273.955†	6052.8	4.87160 mg/L		0.017457	4.87160 mg/L	0.017457	0.36%
QC value within limits for Fe 273.955 Recovery = 97.43%							
Mg 279.077†	49452.0	48.7255 mg/L		0.29727	48.7255 mg/L	0.29727	0.61%
QC value within limits for Mg 279.077 Recovery = 97.45%							
Mn 257.610†	18976.6	0.482862 mg/L		0.0026148	0.482862 mg/L	0.0026148	0.54%
QC value within limits for Mn 257.610 Recovery = 96.57%							
K 766.490†	75300.5	48.6393 mg/L		0.05330	48.6393 mg/L	0.05330	0.11%
QC value within limits for K 766.490 Recovery = 97.28%							
Na 589.592†	365429.8	48.9285 mg/L		0.07682	48.9285 mg/L	0.07682	0.16%
QC value within limits for Na 589.592 Recovery = 97.86%							
Ti 334.940†	21416.3	0.492721 mg/L		0.0018584	0.492721 mg/L	0.0018584	0.38%
QC value within limits for Ti 334.940 Recovery = 98.54%							

All analyte(s) passed QC.

Sequence No.: 32

Sample ID: LLCCV [aq] V-206357

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/30/2015 9:08:36 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28182.4	99.7393 %		0.45413			0.46%
Sc 361.383	71694.1	101 %		0.2			0.23%
Al 308.215†	303.6	0.202674 mg/L		0.0011207	0.202674 mg/L	0.0011207	0.55%
QC value within limits for Al 308.215 Recovery = 101.34%							
Ca 315.887†	36089.3	5.10389 mg/L		0.004885	5.10389 mg/L	0.004885	0.10%
QC value within limits for Ca 315.887 Recovery = 102.08%							
Fe 273.955†	383.8	0.295659 mg/L		0.0059088	0.295659 mg/L	0.0059088	2.00%
QC value within limits for Fe 273.955 Recovery = 98.55%							
Mg 279.077†	5250.3	5.07141 mg/L		0.027977	5.07141 mg/L	0.027977	0.55%
QC value within limits for Mg 279.077 Recovery = 101.43%							
Mn 257.610†	1586.3	0.0389691 mg/L		0.00033062	0.0389691 mg/L	0.00033062	0.85%
QC value within limits for Mn 257.610 Recovery = 97.42%							
K 766.490†	7674.6	5.13132 mg/L		0.058525	5.13132 mg/L	0.058525	1.14%
QC value within limits for K 766.490 Recovery = 102.63%							
Na 589.592†	37952.9	5.13589 mg/L		0.047169	5.13589 mg/L	0.047169	0.92%
QC value within limits for Na 589.592 Recovery = 102.72%							
Ti 334.940†	2177.5	0.0493091 mg/L		0.00013186	0.0493091 mg/L	0.00013186	0.27%
QC value within limits for Ti 334.940 Recovery = 98.62%							

All analyte(s) passed QC.

Sequence No.: 33
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 3/30/2015 9:11:54 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28860.7	102.140 %	1.0483			1.03%
Sc 361.383	72216.7	102 %	1.2			1.19%
Al 308.215†	45.2	0.0046855 mg/L	0.00293434	0.0046855 mg/L	0.00293434	62.63%
QC value within limits for Al 308.215		Recovery = Not calculated				
Ca 315.887†	84.0	0.0158638 mg/L	0.00110475	0.0158638 mg/L	0.00110475	6.96%
QC value within limits for Ca 315.887		Recovery = Not calculated				
Fe 273.955†	16.4	-0.0009221 mg/L	0.00060181	-0.0009221 mg/L	0.00060181	65.26%
QC value within limits for Fe 273.955		Recovery = Not calculated				
Mg 279.077†	-2.3	-0.116154 mg/L	0.0027657	-0.116154 mg/L	0.0027657	2.38%
QC value within limits for Mg 279.077		Recovery = Not calculated				
Mn 257.610†	-4.1	-0.0015464 mg/L	0.00003217	-0.0015464 mg/L	0.00003217	2.08%
QC value within limits for Mn 257.610		Recovery = Not calculated				
K 766.490†	-11.7	0.186228 mg/L	0.0292987	0.186228 mg/L	0.0292987	15.73%
QC value within limits for K 766.490		Recovery = Not calculated				
Na 589.592†	56.5	0.0681017 mg/L	0.00847237	0.0681017 mg/L	0.00847237	12.44%
QC value within limits for Na 589.592		Recovery = Not calculated				
Ti 334.940†	4.5	-0.0007731 mg/L	0.00027465	-0.0007731 mg/L	0.00027465	35.52%
QC value within limits for Ti 334.940		Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 34
 Sample ID: 83866-020
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 76
 Date Collected: 3/30/2015 9:15:08 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-020

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28606.0	101.239	%	0.6864			0.68%
Sc 361.383	73549.9	103	%	0.7			0.72%
Al 308.215†	17.7	-0.0163670	mg/L	0.00269398	-0.0163670 mg/L	0.00269398	16.46%
Ca 315.887†	116787.3	16.5076	mg/L	0.05093	16.5076 mg/L	0.05093	0.31%
Fe 273.955†	20.0	0.0019920	mg/L	0.00344364	0.0019920 mg/L	0.00344364	172.87%
Mg 279.077†	3033.4	2.88194	mg/L	0.027106	2.88194 mg/L	0.027106	0.94%
Mn 257.610†	1426.9	0.0347376	mg/L	0.00025280	0.0347376 mg/L	0.00025280	0.73%
K 766.490†	6355.4	4.28261	mg/L	0.063977	4.28261 mg/L	0.063977	1.49%
Na 589.592†	134984.3	18.1117	mg/L	0.02113	18.1117 mg/L	0.02113	0.12%
Ti 334.940†	-51.7	-0.0020691	mg/L	0.00014138	-0.0020691 mg/L	0.00014138	6.83%

Sequence No.: 35
 Sample ID: 83866-022
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 77
 Date Collected: 3/30/2015 9:18:25 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-022

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28807.8	101.953	%	0.8733			0.86%
Sc 361.383	73837.2	104	%	0.8			0.73%
Al 308.215†	14.7	-0.0187253	mg/L	0.00145016	-0.0187253 mg/L	0.00145016	7.74%
Ca 315.887†	142987.5	20.2100	mg/L	0.00314	20.2100 mg/L	0.00314	0.02%
Fe 273.955†	25.0	0.0060483	mg/L	0.00612481	0.0060483 mg/L	0.00612481	101.27%
Mg 279.077†	3366.0	3.21040	mg/L	0.016328	3.21040 mg/L	0.016328	0.51%
Mn 257.610†	240.7	0.0046644	mg/L	0.00004708	0.0046644 mg/L	0.00004708	1.01%
K 766.490†	3609.8	2.51623	mg/L	0.013859	2.51623 mg/L	0.013859	0.55%
Na 589.592†	93262.3	12.5323	mg/L	0.04424	12.5323 mg/L	0.04424	0.35%
Ti 334.940†	-66.5	-0.0024110	mg/L	0.00020387	-0.0024110 mg/L	0.00020387	8.46%

Sequence No.: 36
 Sample ID: 83866-024
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 78
 Date Collected: 3/30/2015 9:21:42 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-024

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29121.9	103.064	%	0.1344			0.13%
Sc 361.383	73944.6	104	%	0.1			0.11%
Al 308.215†	258.4	0.168054	mg/L	0.0118639	0.168054 mg/L	0.0118639	7.06%
Ca 315.887†	87773.2	12.4075	mg/L	0.03865	12.4075 mg/L	0.03865	0.31%
Fe 273.955†	15.0	-0.0020176	mg/L	0.00097266	-0.0020176 mg/L	0.00097266	48.21%
Mg 279.077†	3686.9	3.52730	mg/L	0.002206	3.52730 mg/L	0.002206	0.06%
Mn 257.610†	14069.9	0.355283	mg/L	0.0008151	0.355283 mg/L	0.0008151	0.23%
K 766.490†	6605.1	4.44329	mg/L	0.020504	4.44329 mg/L	0.020504	0.46%
Na 589.592†	76382.8	10.2750	mg/L	0.01249	10.2750 mg/L	0.01249	0.12%
Ti 334.940†	-48.7	-0.0020003	mg/L	0.00000402	-0.0020003 mg/L	0.00000402	0.20%

Sequence No.: 37
 Sample ID: 83866-026
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 79
 Date Collected: 3/30/2015 9:24:59 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-026

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28383.5	100.451	%	0.0977			0.10%
Sc 361.383	73071.1	103	%	0.1			0.09%
Al 308.215†	112.6	0.0563309	mg/L	0.00187567	0.0563309 mg/L	0.00187567	3.33%
Ca 315.887†	86823.1	12.2733	mg/L	0.04649	12.2733 mg/L	0.04649	0.38%
Fe 273.955†	25.7	0.0066280	mg/L	0.00276672	0.0066280 mg/L	0.00276672	41.74%
Mg 279.077†	4827.5	4.65384	mg/L	0.001511	4.65384 mg/L	0.001511	0.03%
Mn 257.610†	1059.7	0.0254304	mg/L	0.00015724	0.0254304 mg/L	0.00015724	0.62%
K 766.490†	6974.1	4.68068	mg/L	0.008997	4.68068 mg/L	0.008997	0.19%
Na 589.592†	111578.7	14.9817	mg/L	0.04459	14.9817 mg/L	0.04459	0.30%
Ti 334.940†	-41.3	-0.0018305	mg/L	0.00002035	-0.0018305 mg/L	0.00002035	1.11%

Sequence No.: 38
 Sample ID: 83866-028
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 80
 Date Collected: 3/30/2015 9:28:16 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-028

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Y 371.029	28302.5	100.164 %		0.8505				0.85%
Sc 361.383	72972.4	103 %		0.8				0.77%
Al 308.215†	106.0	0.0513009 mg/L		0.00308278	0.0513009 mg/L		0.00308278	6.01%
Ca 315.887†	92428.3	13.0653 mg/L		0.07632	13.0653 mg/L		0.07632	0.58%
Fe 273.955†	4.9	-0.0101416 mg/L		0.00360752	-0.0101416 mg/L		0.00360752	35.57%
Mg 279.077†	6467.4	6.27337 mg/L		0.029262	6.27337 mg/L		0.029262	0.47%
Mn 257.610†	172.1	0.0029144 mg/L		0.00009528	0.0029144 mg/L		0.00009528	3.27%
K 766.490†	1882.5	1.40489 mg/L		0.002929	1.40489 mg/L		0.002929	0.21%
Na 589.592†	118197.8	15.8668 mg/L		0.03981	15.8668 mg/L		0.03981	0.25%
Ti 334.940†	-40.6	-0.0018129 mg/L		0.00039634	-0.0018129 mg/L		0.00039634	21.86%

Sequence No.: 39
Sample ID: 83866-030
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 81
Date Collected: 3/30/2015 9:31:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 83866-030

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28516.6	100.922	%	1.7790			1.76%
Sc 361.383	73492.4	103	%	1.8			1.71%
Al 308.215†	57.4	0.0140194	mg/L	0.00285482	0.0140194 mg/L	0.00285482	20.36%
Ca 315.887†	209402.6	29.5954	mg/L	0.38049	29.5954 mg/L	0.38049	1.29%
Fe 273.955†	28.4	0.0087719	mg/L	0.00303918	0.0087719 mg/L	0.00303918	34.65%
Mg 279.077†	7183.0	6.98012	mg/L	0.108939	6.98012 mg/L	0.108939	1.56%
Mn 257.610†	748.4	0.0175371	mg/L	0.00045718	0.0175371 mg/L	0.00045718	2.61%
K 766.490†	4364.0	3.00144	mg/L	0.078718	3.00144 mg/L	0.078718	2.62%
Na 589.592†	273981.9	36.6994	mg/L	0.55171	36.6994 mg/L	0.55171	1.50%
Ti 334.940†	-102.3	-0.0032365	mg/L	0.00034260	-0.0032365 mg/L	0.00034260	10.59%

Sequence No.: 40
 Sample ID: 83866-032
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 82
 Date Collected: 3/30/2015 9:34:50 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-032

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28224.6	99.8887	%	0.08236			0.08%
Sc 361.383	72935.8	103	%	0.2			0.24%
Al 308.215†	31.7	-0.0056351	mg/L	0.01209045	-0.0056351 mg/L	0.01209045	214.56%
Ca 315.887†	64307.8	9.09154	mg/L	0.003224	9.09154 mg/L	0.003224	0.04%
Fe 273.955†	91.0	0.0592992	mg/L	0.00335206	0.0592992 mg/L	0.00335206	5.65%
Mg 279.077†	2032.0	1.89300	mg/L	0.007582	1.89300 mg/L	0.007582	0.40%
Mn 257.610†	4468.3	0.111884	mg/L	0.0008600	0.111884 mg/L	0.0008600	0.77%
K 766.490†	5008.7	3.41617	mg/L	0.015053	3.41617 mg/L	0.015053	0.44%
Na 589.592†	754315.8	100.933	mg/L	0.0796	100.933 mg/L	0.0796	0.08%
Ti 334.940†	-29.6	-0.0015598	mg/L	0.00035498	-0.0015598 mg/L	0.00035498	22.76%

Sequence No.: 41
 Sample ID: 83866-034
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 83
 Date Collected: 3/30/2015 9:38:08 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-034

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Y 371.029	29271.4	103.593	%	0.2091				0.20%
Sc 361.383	73939.3	104	%	0.0				0.03%
Al 308.215†	-0.3	-0.0301683	mg/L	0.01442840	-0.0301683	mg/L	0.01442840	47.83%
Ca 315.887†	3031.1	0.432321	mg/L	0.0034349	0.432321	mg/L	0.0034349	0.79%
Fe 273.955†	9.9	-0.0061586	mg/L	0.00007190	-0.0061586	mg/L	0.00007190	1.17%
Mg 279.077†	22.5	-0.0916779	mg/L	0.00173260	-0.0916779	mg/L	0.00173260	1.89%
Mn 257.610†	1.5	-0.0014083	mg/L	0.00015231	-0.0014083	mg/L	0.00015231	10.82%
K 766.490†	55.9	0.229723	mg/L	0.0099283	0.229723	mg/L	0.0099283	4.32%
Na 589.592†	356.0	0.108151	mg/L	0.0045036	0.108151	mg/L	0.0045036	4.16%
Ti 334.940†	-1.6	-0.0009145	mg/L	0.00028706	-0.0009145	mg/L	0.00028706	31.39%

Sequence No.: 42
 Sample ID: ICSA V-202074
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/30/2015 9:41:25 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25710.7	90.9919 %		0.72226			0.79%
Sc 361.383	66315.7	93.3 %		0.63			0.68%
Al 308.215†	676180.3	518.070 mg/L		0.3040	518.070 mg/L	0.3040	0.06%
QC value within limits for Al 308.215 Recovery = 103.61%							
Ca 315.887†	3443149.0	486.567 mg/L		0.6947	486.567 mg/L	0.6947	0.14%
QC value within limits for Ca 315.887 Recovery = 97.31%							
Fe 273.955†	237497.0	191.690 mg/L		0.1183	191.690 mg/L	0.1183	0.06%
QC value within limits for Fe 273.955 Recovery = 95.84%							
Mg 279.077†	500679.5	494.363 mg/L		0.7508	494.363 mg/L	0.7508	0.15%
QC value within limits for Mg 279.077 Recovery = 98.87%							
Mn 257.610†	-1913.8	0.0749865 mg/L		0.00013951	0.0749865 mg/L	0.00013951	0.19%
QC value within limits for Mn 257.610 Recovery = 7.50%							
K 766.490†	107.4	0.262862 mg/L		0.0184404	0.262862 mg/L	0.0184404	7.02%
QC value within limits for K 766.490 Recovery = 26.29%							
Na 589.592†	1918.0	0.317037 mg/L		0.0062665	0.317037 mg/L	0.0062665	1.98%
QC value within limits for Na 589.592 Recovery = 31.70%							
Ti 334.940†	-2095.6	-0.0491774 mg/L		0.00009702	-0.0491774 mg/L	0.00009702	0.20%
QC value within limits for Ti 334.940 Recovery = -4.92%							

All analyte(s) passed QC.

Sequence No.: 43
 Sample ID: ICSAB V-202076
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/30/2015 9:44:32 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25437.0	90.0231 %	0.16756			0.19%
Sc 361.383	65715.7	92.5 %	0.33			0.35%
Al 308.215†	680167.8	521.125 mg/L	1.7190	521.125 mg/L	1.7190	0.33%
QC value within limits for Al 308.215 Recovery = 104.23%						
Ca 315.887†	3458669.3	488.760 mg/L	2.2409	488.760 mg/L	2.2409	0.46%
QC value within limits for Ca 315.887 Recovery = 97.75%						
Fe 273.955†	238854.1	192.785 mg/L	0.8275	192.785 mg/L	0.8275	0.43%
QC value within limits for Fe 273.955 Recovery = 96.39%						
Mg 279.077†	503222.2	496.874 mg/L	2.4371	496.874 mg/L	2.4371	0.49%
QC value within limits for Mg 279.077 Recovery = 99.37%						
Mn 257.610†	17243.3	0.561406 mg/L	0.0006143	0.561406 mg/L	0.0006143	0.11%
QC value within limits for Mn 257.610 Recovery = 112.28%						
K 766.490†	59.5	0.232062 mg/L	0.0016035	0.232062 mg/L	0.0016035	0.69%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	1712.5	0.289559 mg/L	0.0188635	0.289559 mg/L	0.0188635	6.51%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940†	-2082.2	-0.0488676 mg/L	0.00020016	-0.0488676 mg/L	0.00020016	0.41%

All analyte(s) passed QC.

Sequence No.: 44

Sample ID: CCV V-202964

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/30/2015 9:47:41 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27338.8	96.7536 %		0.17750			0.18%
Sc 361.383	70334.8	99.0 %		0.31			0.32%
Al 308.215†	6546.9	4.98637 mg/L		0.046364	4.98637 mg/L	0.046364	0.93%
QC value within limits for Al	308.215	Recovery = 99.73%					
Ca 315.887†	337638.2	47.7168 mg/L		0.15049	47.7168 mg/L	0.15049	0.32%
QC value within limits for Ca	315.887	Recovery = 95.43%					
Fe 273.955†	6084.6	4.89726 mg/L		0.048368	4.89726 mg/L	0.048368	0.99%
QC value within limits for Fe	273.955	Recovery = 97.95%					
Mg 279.077†	49737.0	49.0070 mg/L		0.23864	49.0070 mg/L	0.23864	0.49%
QC value within limits for Mg	279.077	Recovery = 98.01%					
Mn 257.610†	19065.5	0.485132 mg/L		0.0036964	0.485132 mg/L	0.0036964	0.76%
QC value within limits for Mn	257.610	Recovery = 97.03%					
K 766.490†	73355.4	47.3880 mg/L		0.29786	47.3880 mg/L	0.29786	0.63%
QC value within limits for K	766.490	Recovery = 94.78%					
Na 589.592†	362634.8	48.5548 mg/L		0.13844	48.5548 mg/L	0.13844	0.29%
QC value within limits for Na	589.592	Recovery = 97.11%					
Ti 334.940†	21472.1	0.494007 mg/L		0.0030773	0.494007 mg/L	0.0030773	0.62%
QC value within limits for Ti	334.940	Recovery = 98.80%					

All analyte(s) passed QC.

Sequence No.: 45
 Sample ID: LLCCV [aq] V-206357
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 3/30/2015 9:50:26 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: LLCCV [aq] V-206357

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28841.0	102.070 %	0.5771			0.57%
Sc 361.383	73222.7	103 %	0.8			0.75%
Al 308.215†	284.8	0.188276 mg/L	0.0159121	0.188276 mg/L	0.0159121	8.45%
QC value within limits for Al	308.215	Recovery = 94.14%				
Ca 315.887†	36062.3	5.10007 mg/L	0.016534	5.10007 mg/L	0.016534	0.32%
QC value within limits for Ca	315.887	Recovery = 102.00%				
Fe 273.955†	371.0	0.285313 mg/L	0.0097198	0.285313 mg/L	0.0097198	3.41%
QC value within limits for Fe	273.955	Recovery = 95.10%				
Mg 279.077†	5196.2	5.01798 mg/L	0.119845	5.01798 mg/L	0.119845	2.39%
QC value within limits for Mg	279.077	Recovery = 100.36%				
Mn 257.610†	1555.0	0.0381684 mg/L	0.00074054	0.0381684 mg/L	0.00074054	1.94%
QC value within limits for Mn	257.610	Recovery = 95.42%				
K 766.490†	7593.8	5.07936 mg/L	0.038978	5.07936 mg/L	0.038978	0.77%
QC value within limits for K	766.490	Recovery = 101.59%				
Na 589.592†	37632.4	5.09304 mg/L	0.002863	5.09304 mg/L	0.002863	0.06%
QC value within limits for Na	589.592	Recovery = 101.86%				
Ti 334.940†	2139.3	0.0484287 mg/L	0.00089890	0.0484287 mg/L	0.00089890	1.86%
QC value within limits for Ti	334.940	Recovery = 96.86%				

All analyte(s) passed QC.

Sequence No.: 46

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/30/2015 9:53:44 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29471.5	104.302 %		0.3935			0.38%
Sc 361.383	73626.5	104 %		0.4			0.34%
Al 308.215†	33.5	-0.0042965 mg/L		0.00651715	-0.0042965 mg/L	0.00651715	151.68%
QC value within limits for Al 308.215 Recovery = Not calculated							
Ca 315.887†	110.3	0.0195684 mg/L		0.00029805	0.0195684 mg/L	0.00029805	1.52%
QC value within limits for Ca 315.887 Recovery = Not calculated							
Fe 273.955†	8.7	-0.0070888 mg/L		0.00039858	-0.0070888 mg/L	0.00039858	5.62%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	14.1	-0.0999614 mg/L		0.00100279	-0.0999614 mg/L	0.00100279	1.00%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	-2.3	-0.0015049 mg/L		0.00000606	-0.0015049 mg/L	0.00000606	0.40%
QC value within limits for Mn 257.610 Recovery = Not calculated							
K 766.490†	60.7	0.232824 mg/L		0.0397626	0.232824 mg/L	0.0397626	17.08%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	12.5	0.0622186 mg/L		0.00958904	0.0622186 mg/L	0.00958904	15.41%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	0.4	-0.0008676 mg/L		0.00003875	-0.0008676 mg/L	0.00003875	4.47%
QC value within limits for Ti 334.940 Recovery = Not calculated							

All analyte(s) passed QC.

Analyst JAR 3/31/15

=====
Analysis Begun

Start Time: 3/31/2015 10:05:38 AM

Plasma On Time: 3/31/2015 9:22:10 AM

Logged In Analyst: shiamala

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N1030901 Autosampler Model: AS-93plus

Sample Information File: C:\pe\administrator\Sample Information\03.26.15.sif

Batch ID: PEICP 2

Results Data Set: SW17600F2

Results Library: C:\pe\administrator\Results\Results.mdb

=====
Method Loaded

Method Name: PE2 4300DV AXIAL

Method Last Saved: 3/23/2015 4:35:58 PM

IEC File: IECax092614.iec

MSF File:

Method Description: 200.7/6010B/6010C

Sequence No.: 1

Autosampler Location: 1

Sample ID: CALBLK V-205362

Date Collected: 3/31/2015 10:05:39 AM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

=====
Mean Data: CALBLK V-205362

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1175471.0	7125.44	0.61%	100.0	%
Y 371.029	422509.6	3064.42	0.73%	100	%
Ag 328.068†	2399.4	24.30	1.01%	[0.00]	mg/L
Al 308.215†	5488.7	108.98	1.99%	[0.00]	mg/L
As 188.979†	-5.2	0.72	13.85%	[0.00]	mg/L
Ba 233.527†	-554.0	11.09	2.00%	[0.00]	mg/L
Be 313.107†	2220.2	7.97	0.36%	[0.00]	mg/L
Ca 315.887†	2197.8	28.67	1.30%	[0.00]	mg/L
Cd 228.802†	141.8	0.99	0.70%	[0.00]	mg/L
Co 228.616†	-213.7	12.02	5.62%	[0.00]	mg/L
Cr 267.716†	144.3	10.97	7.60%	[0.00]	mg/L
Cu 327.393†	394.3	48.40	12.27%	[0.00]	mg/L
Fe 273.955†	27.9	23.55	84.38%	[0.00]	mg/L
K 404.721†	1792.2	62.33	3.48%	[0.00]	mg/L
Mg 279.077†	-435.5	25.73	5.91%	[0.00]	mg/L
Mn 257.610†	2878.2	37.85	1.32%	[0.00]	mg/L
Mo 202.031†	52.9	4.50	8.50%	[0.00]	mg/L
Na 330.237†	707.8	73.51	10.39%	[0.00]	mg/L
Ni 231.604†	1094.4	4.47	0.41%	[0.00]	mg/L
Pb 220.353†	77.7	9.81	12.63%	[0.00]	mg/L
Sb 206.836†	71.9	3.62	5.03%	[0.00]	mg/L
Se 196.026†	1.5	0.08	5.49%	[0.00]	mg/L
Sn 189.927†	18.9	3.49	18.48%	[0.00]	mg/L
Ti 334.940†	-929.2	2.19	0.24%	[0.00]	mg/L
Tl 190.801†	-34.1	1.21	3.56%	[0.00]	mg/L
V 290.880†	5356.5	11.68	0.22%	[0.00]	mg/L
Zn 206.200†	170.9	1.30	0.76%	[0.00]	mg/L

17600
42363

all elements reported
except Na, K

Sequence No.: 2

Sample ID: CALST1 V-203732

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/31/2015 10:08:57 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST1 V-203732

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Sc 361.383	1198302.5	10914.40	0.91%	102 %
Y 371.029	426305.7	4894.89	1.15%	101 %
Be 313.107†	9010.1	106.19	1.18%	[0.003] mg/L
Cd 228.802†	161.6	3.27	2.02%	[0.003] mg/L

Sequence No.: 3

Sample ID: CALST2 V-202401

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/31/2015 10:12:06 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST2 V-202401

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Sc 361.383	1174315.0	3471.95	0.30%	99.9 %
Y 371.029	417785.5	2062.52	0.49%	98.9 %
Ag 328.068†	565.9	18.64	3.29%	[0.002] mg/L
Al 308.215†	3429.1	29.49	0.86%	[0.10] mg/L
As 188.979†	15.0	0.43	2.85%	[0.010] mg/L
Ba 233.527†	1470.9	13.25	0.90%	[0.010] mg/L
Be 313.107†	31467.0	175.98	0.56%	[0.010] mg/L
Ca 315.887†	110794.4	463.70	0.42%	[1.0] mg/L
Cd 228.802†	516.3	6.15	1.19%	[0.010] mg/L
Co 228.616†	486.5	6.81	1.40%	[0.010] mg/L
Cr 267.716†	957.8	4.29	0.45%	[0.010] mg/L
Cu 327.393†	1512.1	28.56	1.89%	[0.010] mg/L
Fe 273.955†	2378.6	4.22	0.18%	[0.10] mg/L
K 404.721†	82.0	24.75	30.18%	[1.0] mg/L
Mg 279.077†	19075.5	99.80	0.52%	[1.0] mg/L
Mn 257.610†	9031.8	59.84	0.66%	[0.010] mg/L
Mo 202.031†	202.5	9.35	4.62%	[0.010] mg/L
Na 330.237†	1054.0	2.98	0.28%	[1.0] mg/L
Ni 231.604†	558.5	21.13	3.78%	[0.010] mg/L
Pb 220.353†	114.4	0.06	0.05%	[0.010] mg/L
Sb 206.836†	30.3	2.55	8.44%	[0.010] mg/L
Se 196.026†	9.7	5.05	51.87%	[0.010] mg/L
Sn 189.927†	43.9	1.25	2.86%	[0.010] mg/L
Ti 334.940†	7441.6	48.71	0.65%	[0.010] mg/L
Tl 190.801†	20.1	0.08	0.42%	[0.010] mg/L
V 290.880†	1678.0	32.79	1.95%	[0.010] mg/L
Zn 206.200†	484.6	0.96	0.20%	[0.010] mg/L

Sequence No.: 4

Sample ID: CALST3 V-202402

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/31/2015 10:15:26 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST3 V-202402

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1109628.1	1287.38	0.12%	94.4 %
Y 371.029	377606.4	1419.31	0.38%	89.4 %
Ag 328.068†	21761.5	75.35	0.35%	[0.10] mg/L
Al 308.215†	165021.0	71.61	0.04%	[5.0] mg/L
As 188.979†	666.7	8.71	1.31%	[0.50] mg/L
Ba 233.527†	71067.0	169.45	0.24%	[0.50] mg/L
Be 313.107†	1648458.8	3795.63	0.23%	[0.50] mg/L
Ca 315.887†	5590562.9	6812.00	0.12%	[50] mg/L
Cd 228.802†	26334.6	16.22	0.06%	[0.50] mg/L
Co 228.616†	23594.7	28.85	0.12%	[0.50] mg/L
Cr 267.716†	47374.1	206.29	0.44%	[0.50] mg/L
Cu 327.393†	72488.6	14.42	0.02%	[0.50] mg/L
Fe 273.955†	121600.9	343.93	0.28%	[5.0] mg/L
K 404.721†	5874.8	23.52	0.40%	[50] mg/L
Mg 279.077†	926669.2	920.55	0.10%	[50] mg/L
Mn 257.610†	432160.2	821.15	0.19%	[0.50] mg/L
Mo 202.031†	9606.1	66.46	0.69%	[0.50] mg/L
Na 330.237†	62206.5	191.24	0.31%	[50] mg/L
Ni 231.604†	25272.2	28.85	0.11%	[0.50] mg/L
Pb 220.353†	5782.9	49.07	0.85%	[0.50] mg/L
Sb 206.836†	1486.9	22.08	1.48%	[0.50] mg/L
Se 196.026†	612.4	2.90	0.47%	[0.50] mg/L
Sn 189.927†	2258.7	10.29	0.46%	[0.50] mg/L
Ti 334.940†	374105.5	1051.87	0.28%	[0.50] mg/L
Tl 190.801†	862.9	4.24	0.49%	[0.50] mg/L
V 290.880†	75824.0	160.70	0.21%	[0.50] mg/L
Zn 206.200†	25965.0	17.10	0.07%	[0.50] mg/L

Sequence No.: 5

Sample ID: CALST4 V-203077

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/31/2015 10:18:53 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST4 V-203077

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Sc 361.383	1065764.1	2520.22	0.24%	90.7 %
Y 371.029	368921.9	2064.98	0.56%	87.3 %
Ag 328.068†	43038.5	185.36	0.43%	[0.20] mg/L
Al 308.215†	322858.7	881.00	0.27%	[10] mg/L
As 188.979†	1333.2	2.95	0.22%	[1.0] mg/L
Ba 233.527†	138922.9	320.79	0.23%	[1.0] mg/L
Be 313.107†	3214525.9	9534.97	0.30%	[1.0] mg/L
Ca 315.887†	10907104.2	83181.97	0.76%	[100] mg/L
Cd 228.802†	52541.3	46.02	0.09%	[1.0] mg/L
Co 228.616†	46067.0	155.46	0.34%	[1.0] mg/L
Cr 267.716†	92881.9	250.76	0.27%	[1.0] mg/L
Cu 327.393†	143945.9	536.56	0.37%	[1.0] mg/L
Fe 273.955†	236781.6	659.42	0.28%	[10] mg/L
K 404.721†	12344.6	52.37	0.42%	[100] mg/L
Mg 279.077†	1805529.8	2486.57	0.14%	[100] mg/L
Mn 257.610†	844520.0	2072.60	0.25%	[1.0] mg/L
Mo 202.031†	18998.2	40.74	0.21%	[1.0] mg/L
Na 330.237†	132930.0	126.98	0.10%	[100] mg/L
Ni 231.604†	49115.1	53.04	0.11%	[1.0] mg/L
Pb 220.353†	11372.9	8.55	0.08%	[1.0] mg/L
Sb 206.836†	2966.0	6.37	0.21%	[1.0] mg/L
Se 196.026†	1205.9	1.27	0.11%	[1.0] mg/L
Sn 189.927†	4489.3	12.66	0.28%	[1.0] mg/L
Ti 334.940†	736722.3	2244.83	0.30%	[1.0] mg/L
Tl 190.801†	1667.4	2.54	0.15%	[1.0] mg/L
V 290.880†	148649.4	398.99	0.27%	[1.0] mg/L
Zn 206.200†	50398.7	77.58	0.15%	[1.0] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	105.6	215000	0.00000	0.999984	
Al 308.215	3	Lin, Calc Int	744.7	32340	0.00000	0.999936	
As 188.979	3	Lin, Calc Int	0.8	1332	0.00000	0.999999	
Ba 233.527	3	Lin, Calc Int	329.3	139200	0.00000	0.999930	
Be 313.107	4	Lin, Calc Int	4722.6	3225000	0.00000	0.999922	
Ca 315.887	3	Lin, Calc Int	25718.6	109300	0.00000	0.999916	
Cd 228.802	4	Lin, Calc Int	6.4	52560	0.00000	0.999999	
Co 228.616	3	Lin, Calc Int	113.9	46150	0.00000	0.999923	
Cr 267.716	3	Lin, Calc Int	183.0	93030	0.00000	0.999947	
Cu 327.393	3	Lin, Calc Int	126.8	144000	0.00000	0.999994	
Fe 273.955	3	Lin, Calc Int	589.1	23740	0.00000	0.999902	
K 404.721	3	Lin, Calc Int	-73.0	123.1	0.00000	0.999705	
Mg 279.077	3	Lin, Calc Int	4813.8	18090	0.00000	0.999908	
Mn 257.610	3	Lin, Calc Int	2068.1	846000	0.00000	0.999929	
Mo 202.031	3	Lin, Calc Int	25.2	19010	0.00000	0.999984	
Na 330.237	3	Lin, Calc Int	-900.1	1323	0.00000	0.999462	
Ni 231.604	3	Lin, Calc Int	160.6	49210	0.00000	0.999892	
Pb 220.353	3	Lin, Calc Int	17.9	11390	0.00000	0.999962	
Sb 206.836	3	Lin, Calc Int	1.0	2966	0.00000	0.999999	
Se 196.026	3	Lin, Calc Int	0.7	1209	0.00000	0.999962	
Sn 189.927	3	Lin, Calc Int	2.1	4492	0.00000	0.999995	
Ti 334.940	3	Lin, Calc Int	1079.2	737700	0.00000	0.999968	
Tl 190.801	3	Lin, Calc Int	6.9	1671	0.00000	0.999844	
V 290.880	3	Lin, Calc Int	359.8	148800	0.00000	0.999949	
Zn 206.200	3	Lin, Calc Int	130.5	50550	0.00000	0.999876	

Sequence No.: 6

Sample ID: ICS3 V-202402

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/31/2015 10:23:22 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICS3 V-202402

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1101553.9	93.7 %		0.17			0.19%
Y 371.029	375837.6	89.0 %		0.98			1.10%
Ag 328.068†	21454.7	0.0995289 mg/L	0.00102515	0.0995289 mg/L	0.00102515	1.03%	
QC value within limits for Ag		328.068	Recovery = 99.53%				
Al 308.215†	163968.3	5.04715 mg/L	0.025250	5.04715 mg/L	0.025250	0.50%	
QC value within limits for Al		308.215	Recovery = 100.94%				
As 188.979†	671.3	0.503577 mg/L	0.0030936	0.503577 mg/L	0.0030936	0.61%	
QC value within limits for As		188.979	Recovery = 100.72%				
Ba 233.527†	70414.2	0.503424 mg/L	0.0041058	0.503424 mg/L	0.0041058	0.82%	
QC value within limits for Ba		233.527	Recovery = 100.68%				
Be 313.107†	1635113.7	0.505271 mg/L	0.0037646	0.505271 mg/L	0.0037646	0.75%	
QC value within limits for Be		313.107	Recovery = 101.05%				
Ca 315.887†	5528504.7	50.3418 mg/L	0.33957	50.3418 mg/L	0.33957	0.67%	
QC value within limits for Ca		315.887	Recovery = 100.68%				
Cd 228.802†	26145.3	0.497464 mg/L	0.0039473	0.497464 mg/L	0.0039473	0.79%	
QC value within limits for Cd		228.802	Recovery = 99.49%				
Co 228.616†	23304.4	0.501903 mg/L	0.0037844	0.501903 mg/L	0.0037844	0.75%	
QC value within limits for Co		228.616	Recovery = 100.38%				
Cr 267.716†	46897.9	0.502916 mg/L	0.0034863	0.502916 mg/L	0.0034863	0.69%	
QC value within limits for Cr		267.716	Recovery = 100.58%				
Cu 327.393†	72422.2	0.505348 mg/L	0.0050157	0.505348 mg/L	0.0050157	0.99%	
QC value within limits for Cu		327.393	Recovery = 101.07%				
Fe 273.955†	120117.4	5.03586 mg/L	0.039031	5.03586 mg/L	0.039031	0.78%	
QC value within limits for Fe		273.955	Recovery = 100.72%				
K 404.721†	5540.8	45.5911 mg/L	0.50638	45.5911 mg/L	0.50638	1.11%	
QC value within limits for K		404.721	Recovery = 91.18%				
Mg 279.077†	912246.1	50.1542 mg/L	0.39503	50.1542 mg/L	0.39503	0.79%	
QC value within limits for Mg		279.077	Recovery = 100.31%				
Mn 257.610†	428172.6	0.502281 mg/L	0.0031996	0.502281 mg/L	0.0031996	0.64%	
QC value within limits for Mn		257.610	Recovery = 100.46%				
Mo 202.031†	9696.6	0.506332 mg/L	0.0029492	0.506332 mg/L	0.0029492	0.58%	
QC value within limits for Mo		202.031	Recovery = 101.27%				
Na 330.237†	61568.5	47.2131 mg/L	0.32399	47.2131 mg/L	0.32399	0.69%	
QC value within limits for Na		330.237	Recovery = 94.43%				
Ni 231.604†	24957.5	0.503877 mg/L	0.0052407	0.503877 mg/L	0.0052407	1.04%	
QC value within limits for Ni		231.604	Recovery = 100.78%				
Pb 220.353†	5785.4	0.507464 mg/L	0.0015799	0.507464 mg/L	0.0015799	0.31%	
QC value within limits for Pb		220.353	Recovery = 101.49%				
Sb 206.836†	1490.0	0.500302 mg/L	0.0007516	0.500302 mg/L	0.0007516	0.15%	
QC value within limits for Sb		206.836	Recovery = 100.06%				
Se 196.026†	608.6	0.503148 mg/L	0.0109981	0.503148 mg/L	0.0109981	2.19%	
QC value within limits for Se		196.026	Recovery = 100.63%				
Sn 189.927†	2256.4	0.503836 mg/L	0.0056521	0.503836 mg/L	0.0056521	1.12%	
QC value within limits for Sn		189.927	Recovery = 100.77%				
Ti 334.940†	374462.2	0.506133 mg/L	0.0041320	0.506133 mg/L	0.0041320	0.82%	
QC value within limits for Ti		334.940	Recovery = 101.23%				
Tl 190.801†	861.5	0.513141 mg/L	0.0029346	0.513141 mg/L	0.0029346	0.57%	
QC value within limits for Tl		190.801	Recovery = 102.63%				
V 290.880†	75117.9	0.496872 mg/L	0.0040329	0.496872 mg/L	0.0040329	0.81%	
QC value within limits for V		290.880	Recovery = 99.37%				
Zn 206.200†	25375.3	0.499247 mg/L	0.0046484	0.499247 mg/L	0.0046484	0.93%	
QC value within limits for Zn		206.200	Recovery = 99.85%				

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICV V-202964

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/31/2015 10:26:49 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICV V-202964

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1104479.0	94.0 %	0.20			0.22%
Y 371.029	379169.6	89.7 %	0.03			0.04%
Ag 328.068†	22196.3	0.102980 mg/L	0.0006323	0.102980 mg/L	0.0006323	0.61%
QC value within limits for Ag 328.068 Recovery = 102.98%						
Al 308.215†	165300.0	5.08833 mg/L	0.019287	5.08833 mg/L	0.019287	0.38%
QC value within limits for Al 308.215 Recovery = 101.77%						
As 188.979†	663.1	0.497360 mg/L	0.0000537	0.497360 mg/L	0.0000537	0.01%
QC value within limits for As 188.979 Recovery = 99.47%						
Ba 233.527†	70766.8	0.505955 mg/L	0.0012433	0.505955 mg/L	0.0012433	0.25%
QC value within limits for Ba 233.527 Recovery = 101.19%						
Be 313.107†	1622367.6	0.501317 mg/L	0.0020885	0.501317 mg/L	0.0020885	0.42%
QC value within limits for Be 313.107 Recovery = 100.26%						
Ca 315.887†	5551427.4	50.5515 mg/L	0.28470	50.5515 mg/L	0.28470	0.56%
QC value within limits for Ca 315.887 Recovery = 101.10%						
Cd 228.802†	26457.3	0.503401 mg/L	0.0011168	0.503401 mg/L	0.0011168	0.22%
QC value within limits for Cd 228.802 Recovery = 100.68%						
Co 228.616†	23368.5	0.503289 mg/L	0.0026838	0.503289 mg/L	0.0026838	0.53%
QC value within limits for Co 228.616 Recovery = 100.66%						
Cr 267.716†	47212.2	0.506296 mg/L	0.0027859	0.506296 mg/L	0.0027859	0.55%
QC value within limits for Cr 267.716 Recovery = 101.26%						
Cu 327.393†	72710.3	0.507372 mg/L	0.0015368	0.507372 mg/L	0.0015368	0.30%
QC value within limits for Cu 327.393 Recovery = 101.47%						
Fe 273.955†	121532.5	5.09548 mg/L	0.016465	5.09548 mg/L	0.016465	0.32%
QC value within limits for Fe 273.955 Recovery = 101.91%						
K 404.721†	5641.1	46.4052 mg/L	1.61235	46.4052 mg/L	1.61235	3.47%
QC value within limits for K 404.721 Recovery = 92.81%						
Mg 279.077†	928429.3	51.0487 mg/L	0.30462	51.0487 mg/L	0.30462	0.60%
QC value within limits for Mg 279.077 Recovery = 102.10%						
Mn 257.610†	423907.6	0.497213 mg/L	0.0022484	0.497213 mg/L	0.0022484	0.45%
QC value within limits for Mn 257.610 Recovery = 99.44%						
Mo 202.031†	9653.4	0.504049 mg/L	0.0018416	0.504049 mg/L	0.0018416	0.37%
QC value within limits for Mo 202.031 Recovery = 100.81%						
Na 330.237†	62216.9	47.7032 mg/L	0.11099	47.7032 mg/L	0.11099	0.23%
QC value within limits for Na 330.237 Recovery = 95.41%						
Ni 231.604†	25028.4	0.505313 mg/L	0.0037858	0.505313 mg/L	0.0037858	0.75%
QC value within limits for Ni 231.604 Recovery = 101.06%						
Pb 220.353†	5667.1	0.497075 mg/L	0.0009783	0.497075 mg/L	0.0009783	0.20%
QC value within limits for Pb 220.353 Recovery = 99.42%						
Sb 206.836†	1506.2	0.505734 mg/L	0.0049879	0.505734 mg/L	0.0049879	0.99%
QC value within limits for Sb 206.836 Recovery = 101.15%						
Se 196.026†	595.1	0.491995 mg/L	0.0045922	0.491995 mg/L	0.0045922	0.93%
QC value within limits for Se 196.026 Recovery = 98.40%						
Sn 189.927†	2314.7	0.516828 mg/L	0.0031918	0.516828 mg/L	0.0031918	0.62%
QC value within limits for Sn 189.927 Recovery = 103.37%						
Ti 334.940†	377841.9	0.510714 mg/L	0.0033336	0.510714 mg/L	0.0033336	0.65%
QC value within limits for Ti 334.940 Recovery = 102.14%						
Tl 190.801†	840.0	0.500296 mg/L	0.0023050	0.500296 mg/L	0.0023050	0.46%
QC value within limits for Tl 190.801 Recovery = 100.06%						
V 290.880†	74710.5	0.494017 mg/L	0.0017200	0.494017 mg/L	0.0017200	0.35%
QC value within limits for V 290.880 Recovery = 98.80%						
Zn 206.200†	25749.3	0.506643 mg/L	0.0026791	0.506643 mg/L	0.0026791	0.53%
QC value within limits for Zn 206.200 Recovery = 101.33%						

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: LLICV [aq] V-206357

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/31/2015 10:30:15 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1160474.1	98.7 %		0.74			0.75%
Y 371.029	408918.7	96.8 %		0.80			0.83%
Ag 328.068†	4423.5	0.0200933 mg/L		0.00056077	0.0200933 mg/L	0.00056077	2.79%
QC value within limits for Ag		328.068	Recovery = 100.47%				
Al 308.215†	8888.5	0.251819 mg/L		0.0036473	0.251819 mg/L	0.0036473	1.45%
QC value within limits for Al		308.215	Recovery = 125.91%				
As 188.979†	28.0	0.0204181 mg/L		0.00010962	0.0204181 mg/L	0.00010962	0.54%
QC value within limits for As		188.979	Recovery = 102.09%				
Ba 233.527†	7396.5	0.0507721 mg/L		0.00065628	0.0507721 mg/L	0.00065628	1.29%
QC value within limits for Ba		233.527	Recovery = 101.54%				
Be 313.107†	38011.9	0.0102981 mg/L		0.00008359	0.0102981 mg/L	0.00008359	0.81%
QC value within limits for Be		313.107	Recovery = 85.82%				
Ca 315.887†	597578.8	5.23162 mg/L		0.040803	5.23162 mg/L	0.040803	0.78%
QC value within limits for Ca		315.887	Recovery = 104.63%				
Cd 228.802†	634.2	0.0119531 mg/L		0.00030034	0.0119531 mg/L	0.00030034	2.51%
QC value within limits for Cd		228.802	Recovery = 99.61%				
Co 228.616†	952.9	0.0181234 mg/L		0.00009242	0.0181234 mg/L	0.00009242	0.51%
QC value within limits for Co		228.616	Recovery = 90.62%				
Cr 267.716†	4899.3	0.0507590 mg/L		0.00066549	0.0507590 mg/L	0.00066549	1.31%
QC value within limits for Cr		267.716	Recovery = 101.52%				
Cu 327.393†	7419.3	0.0509618 mg/L		0.00065651	0.0509618 mg/L	0.00065651	1.29%
QC value within limits for Cu		327.393	Recovery = 101.92%				
Fe 273.955†	7476.2	0.290162 mg/L		0.0032529	0.290162 mg/L	0.0032529	1.12%
QC value within limits for Fe		273.955	Recovery = 96.72%				
K 404.721†	725.0	6.48009 mg/L		0.051759	6.48009 mg/L	0.051759	0.80%
QC value within limits for K		404.721	Recovery = 129.60%				
Mg 279.077†	98277.8	5.16580 mg/L		0.042639	5.16580 mg/L	0.042639	0.83%
QC value within limits for Mg		279.077	Recovery = 103.32%				
Mn 257.610†	35240.6	0.0390513 mg/L		0.00034257	0.0390513 mg/L	0.00034257	0.88%
QC value within limits for Mn		257.610	Recovery = 97.63%				
Mo 202.031†	415.1	0.0202645 mg/L		0.00010895	0.0202645 mg/L	0.00010895	0.54%
QC value within limits for Mo		202.031	Recovery = 101.32%				
Na 330.237†	5553.0	4.87718 mg/L		0.085761	4.87718 mg/L	0.085761	1.76%
QC value within limits for Na		330.237	Recovery = 97.54%				
Ni 231.604†	2644.9	0.0504812 mg/L		0.00060383	0.0504812 mg/L	0.00060383	1.20%
QC value within limits for Ni		231.604	Recovery = 100.96%				
Pb 220.353†	138.5	0.0106436 mg/L		0.00035483	0.0106436 mg/L	0.00035483	3.33%
QC value within limits for Pb		220.353	Recovery = 88.70%				
Sb 206.836†	59.5	0.0195979 mg/L		0.00132104	0.0195979 mg/L	0.00132104	6.74%
QC value within limits for Sb		206.836	Recovery = 97.99%				
Se 196.026†	46.5	0.0378457 mg/L		0.00095650	0.0378457 mg/L	0.00095650	2.53%
QC value within limits for Se		196.026	Recovery = 94.61%				
Sn 189.927†	236.7	0.0524419 mg/L		0.00000545	0.0524419 mg/L	0.00000545	0.01%
QC value within limits for Sn		189.927	Recovery = 104.88%				
Ti 334.940†	38469.1	0.0506832 mg/L		0.00122944	0.0506832 mg/L	0.00122944	2.43%
QC value within limits for Ti		334.940	Recovery = 101.37%				
Tl 190.801†	35.0	0.0170065 mg/L		0.00054756	0.0170065 mg/L	0.00054756	3.22%
QC value within limits for Tl		190.801	Recovery = 85.03%				
V 290.880†	7824.8	0.0495630 mg/L		0.00056862	0.0495630 mg/L	0.00056862	1.15%
QC value within limits for V		290.880	Recovery = 99.13%				
Zn 206.200†	2693.1	0.0506856 mg/L		0.00107857	0.0506856 mg/L	0.00107857	2.13%
QC value within limits for Zn		206.200	Recovery = 101.37%				

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICB V-205362

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/31/2015 10:33:37 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB V-205362

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	1172057.0	99.7 %		0.26			0.26%
Y 371.029	420145.0	99.4 %		0.34			0.34%
Ag 328.068†	142.8	0.0001715 mg/L		0.00001474	0.0001715 mg/L	0.00001474	8.59%
QC value within limits for Ag	328.068	Recovery = Not calculated					
Al 308.215†	57.7	-0.0212431 mg/L		0.00135562	-0.0212431 mg/L	0.00135562	6.38%
QC value within limits for Al	308.215	Recovery = Not calculated					
As 188.979†	1.8	0.0007354 mg/L		0.00042411	0.0007354 mg/L	0.00042411	57.67%
QC value within limits for As	188.979	Recovery = Not calculated					
Ba 233.527†	-22.9	-0.0025298 mg/L		0.00007961	-0.0025298 mg/L	0.00007961	3.15%
QC value within limits for Ba	233.527	Recovery = Not calculated					
Be 313.107†	74.0	-0.0014406 mg/L		0.00001122	-0.0014406 mg/L	0.00001122	0.78%
QC value within limits for Be	313.107	Recovery = Not calculated					
Ca 315.887†	203.1	-0.233427 mg/L		0.0004807	-0.233427 mg/L	0.0004807	0.21%
QC value within limits for Ca	315.887	Recovery = Not calculated					
Cd 228.802†	13.1	0.0001283 mg/L		0.00001127	0.0001283 mg/L	0.00001127	8.79%
QC value within limits for Cd	228.802	Recovery = Not calculated					
Co 228.616†	-1.2	-0.0024926 mg/L		0.00015719	-0.0024926 mg/L	0.00015719	6.31%
QC value within limits for Co	228.616	Recovery = Not calculated					
Cr 267.716†	-0.2	-0.0019727 mg/L		0.00010833	-0.0019727 mg/L	0.00010833	5.49%
QC value within limits for Cr	267.716	Recovery = Not calculated					
Cu 327.393†	55.9	-0.0005054 mg/L		0.00056652	-0.0005054 mg/L	0.00056652	112.09%
QC value within limits for Cu	327.393	Recovery = Not calculated					
Fe 273.955†	20.2	-0.0239704 mg/L		0.00018811	-0.0239704 mg/L	0.00018811	0.78%
QC value within limits for Fe	273.955	Recovery = Not calculated					
K 404.721†	356.2	3.48522 mg/L		0.731599	3.48522 mg/L	0.731599	20.99%
QC value within limits for K	404.721	Recovery = Not calculated					
Mg 279.077†	-39.0	-0.268217 mg/L		0.0028026	-0.268217 mg/L	0.0028026	1.04%
QC value within limits for Mg	279.077	Recovery = Not calculated					
Mn 257.610†	162.0	-0.0022455 mg/L		0.00001345	-0.0022455 mg/L	0.00001345	0.60%
QC value within limits for Mn	257.610	Recovery = Not calculated					
Mo 202.031†	11.2	-0.0007248 mg/L		0.00021351	-0.0007248 mg/L	0.00021351	29.46%
QC value within limits for Mo	202.031	Recovery = Not calculated					
Na 330.237†	79.3	0.740158 mg/L		0.0190194	0.740158 mg/L	0.0190194	2.57%
QC value within limits for Na	330.237	Recovery = Not calculated					
Ni 231.604†	39.7	-0.0024570 mg/L		0.00061680	-0.0024570 mg/L	0.00061680	25.10%
QC value within limits for Ni	231.604	Recovery = Not calculated					
Pb 220.353†	7.5	-0.0009118 mg/L		0.00070507	-0.0009118 mg/L	0.00070507	77.32%
QC value within limits for Pb	220.353	Recovery = Not calculated					
Sb 206.836†	6.5	0.0018641 mg/L		0.00001201	0.0018641 mg/L	0.00001201	0.64%
QC value within limits for Sb	206.836	Recovery = Not calculated					
Se 196.026†	-1.6	-0.0018983 mg/L		0.00310319	-0.0018983 mg/L	0.00310319	163.47%
QC value within limits for Se	196.026	Recovery = Not calculated					
Sn 189.927†	9.3	0.0015922 mg/L		0.00046327	0.0015922 mg/L	0.00046327	29.10%
QC value within limits for Sn	189.927	Recovery = Not calculated					
Ti 334.940†	-40.0	-0.0015172 mg/L		0.00000136	-0.0015172 mg/L	0.00000136	0.09%
QC value within limits for Ti	334.940	Recovery = Not calculated					
Tl 190.801†	3.4	-0.0020913 mg/L		0.00031512	-0.0020913 mg/L	0.00031512	15.07%
QC value within limits for Tl	190.801	Recovery = Not calculated					
V 290.880†	168.6	-0.0012528 mg/L		0.00003545	-0.0012528 mg/L	0.00003545	2.83%
QC value within limits for V	290.880	Recovery = Not calculated					
Zn 206.200†	14.2	-0.0023017 mg/L		0.00012207	-0.0023017 mg/L	0.00012207	5.30%
QC value within limits for Zn	206.200	Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSA V-202074

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/31/2015 10:36:55 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	969222.1	82.5 %		0.15			0.18%
Y 371.029	335661.4	79.4 %		0.18			0.22%
Ag 328.068†	-1781.9	0.0012856 mg/L		0.00011075	0.0012856 mg/L	0.00011075	8.61%
Al 308.215†	17242333.9	533.140 mg/L		0.8284	533.140 mg/L	0.8284	0.16%
QC value within limits for Al 308.215 Recovery = 106.63%							
As 188.979†	-8.0	-0.0047673 mg/L		0.00456174	-0.0047673 mg/L	0.00456174	95.69%
Ba 233.527†	1914.8	0.0043494 mg/L		0.00010854	0.0043494 mg/L	0.00010854	2.50%
Be 313.107†	-3371.7	-0.0025105 mg/L		0.00001560	-0.0025105 mg/L	0.00001560	0.62%
Ca 315.887†	55947151.3	511.593 mg/L		0.7728	511.593 mg/L	0.7728	0.15%
QC value within limits for Ca 315.887 Recovery = 102.32%							
Cd 228.802†	-402.7	-0.0012099 mg/L		0.00004799	-0.0012099 mg/L	0.00004799	3.97%
Co 228.616†	154.0	0.0059953 mg/L		0.00010012	0.0059953 mg/L	0.00010012	1.67%
Cr 267.716†	-405.5	0.0030036 mg/L		0.00000996	0.0030036 mg/L	0.00000996	0.33%
Cu 327.393†	-3712.6	0.0040393 mg/L		0.00003057	0.0040393 mg/L	0.00003057	0.76%
Fe 273.955†	4789416.7	201.759 mg/L		0.0980	201.759 mg/L	0.0980	0.05%
QC value within limits for Fe 273.955 Recovery = 100.88%							
K 404.721†	463.3	4.35504 mg/L		0.283476	4.35504 mg/L	0.283476	6.51%
Mg 279.077†	9498500.0	524.721 mg/L		1.2801	524.721 mg/L	1.2801	0.24%
QC value within limits for Mg 279.077 Recovery = 104.94%							
Mn 257.610†	10324.6	0.0058871 mg/L		0.00007062	0.0058871 mg/L	0.00007062	1.20%
Mo 202.031†	435.3	0.0016790 mg/L		0.00073347	0.0016790 mg/L	0.00073347	43.68%
Na 330.237†	573.3	1.11352 mg/L		0.046310	1.11352 mg/L	0.046310	4.16%
Ni 231.604†	238.0	-0.0065586 mg/L		0.00003617	-0.0065586 mg/L	0.00003617	0.55%
Pb 220.353†	-436.3	0.0073284 mg/L		0.00149380	0.0073284 mg/L	0.00149380	20.38%
Sb 206.836†	101.1	-0.0183618 mg/L		0.00055058	-0.0183618 mg/L	0.00055058	3.00%
Se 196.026†	-175.9	-0.0596674 mg/L		0.00806240	-0.0596674 mg/L	0.00806240	13.51%
Sn 189.927†	-138.0	-0.0176938 mg/L		0.00041091	-0.0176938 mg/L	0.00041091	2.32%
Ti 334.940†	2388.8	0.0017751 mg/L		0.00013953	0.0017751 mg/L	0.00013953	7.86%
Tl 190.801†	5.3	0.0058346 mg/L		0.00124642	0.0058346 mg/L	0.00124642	21.36%
V 290.880†	8960.4	-0.0185988 mg/L		0.00065166	-0.0185988 mg/L	0.00065166	3.50%
Zn 206.200†	1637.5	0.0226846 mg/L		0.00024371	0.0226846 mg/L	0.00024371	1.07%

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: ICSAB V-202076
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/31/2015 10:41:46 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	963933.2	82.0 %	0.48			0.58%
Y 371.029	334613.8	79.2 %	0.58			0.73%
Ag 328.068†	240246.3	1.12678 mg/L	0.002420	1.12678 mg/L	0.002420	0.21%
QC value within limits for Ag	328.068	Recovery = 112.68%				
Al 308.215†	17315507.5	535.402 mg/L	2.1808	535.402 mg/L	2.1808	0.41%
QC value within limits for Al	308.215	Recovery = 107.08%				
As 188.979†	1413.3	1.06200 mg/L	0.002595	1.06200 mg/L	0.002595	0.24%
QC value within limits for As	188.979	Recovery = 106.20%				
Ba 233.527†	77704.5	0.548931 mg/L	0.0009714	0.548931 mg/L	0.0009714	0.18%
QC value within limits for Ba	233.527	Recovery = 109.79%				
Be 313.107†	1683377.6	0.520467 mg/L	0.0003211	0.520467 mg/L	0.0003211	0.06%
QC value within limits for Be	313.107	Recovery = 104.09%				
Ca 315.887†	55794140.8	510.193 mg/L	1.3829	510.193 mg/L	1.3829	0.27%
QC value within limits for Ca	315.887	Recovery = 102.04%				
Cd 228.802†	56473.8	1.08095 mg/L	0.000712	1.08095 mg/L	0.000712	0.07%
QC value within limits for Cd	228.802	Recovery = 108.09%				
Co 228.616†	22808.8	0.496817 mg/L	0.0012655	0.496817 mg/L	0.0012655	0.25%
QC value within limits for Co	228.616	Recovery = 99.36%				
Cr 267.716†	47415.1	0.517379 mg/L	0.0008028	0.517379 mg/L	0.0008028	0.16%
QC value within limits for Cr	267.716	Recovery = 103.48%				
Cu 327.393†	76465.0	0.560807 mg/L	0.0004266	0.560807 mg/L	0.0004266	0.08%
QC value within limits for Cu	327.393	Recovery = 112.16%				
Fe 273.955†	4796525.6	202.058 mg/L	0.3237	202.058 mg/L	0.3237	0.16%
QC value within limits for Fe	273.955	Recovery = 101.03%				
K 404.721†	322.8	3.21399 mg/L	1.704291	3.21399 mg/L	1.704291	53.03%
Mg 279.077†	9441621.7	521.577 mg/L	1.3435	521.577 mg/L	1.3435	0.26%
QC value within limits for Mg	279.077	Recovery = 104.32%				
Mn 257.610†	441375.7	0.515544 mg/L	0.0008600	0.515544 mg/L	0.0008600	0.17%
QC value within limits for Mn	257.610	Recovery = 103.11%				
Mo 202.031†	426.5	0.0010109 mg/L	0.00032907	0.0010109 mg/L	0.00032907	32.55%
Na 330.237†	1322.1	1.67950 mg/L	0.036535	1.67950 mg/L	0.036535	2.18%
Ni 231.604†	48019.3	0.964448 mg/L	0.0009150	0.964448 mg/L	0.0009150	0.09%
QC value within limits for Ni	231.604	Recovery = 96.44%				
Pb 220.353†	10889.3	1.00194 mg/L	0.004546	1.00194 mg/L	0.004546	0.45%
QC value within limits for Pb	220.353	Recovery = 100.19%				
Sb 206.836†	3322.0	1.06735 mg/L	0.008827	1.06735 mg/L	0.008827	0.83%
QC value within limits for Sb	206.836	Recovery = 106.73%				
Se 196.026†	1085.4	0.983921 mg/L	0.0063069	0.983921 mg/L	0.0063069	0.64%
QC value within limits for Se	196.026	Recovery = 98.39%				
Sn 189.927†	-153.9	-0.0213192 mg/L	0.00181926	-0.0213192 mg/L	0.00181926	8.53%
Ti 334.940†	2555.3	0.0020008 mg/L	0.00009422	0.0020008 mg/L	0.00009422	4.71%
Tl 190.801†	1623.6	0.973805 mg/L	0.0043958	0.973805 mg/L	0.0043958	0.45%
QC value within limits for Tl	190.801	Recovery = 97.38%				
V 290.880†	84154.2	0.487195 mg/L	0.0004109	0.487195 mg/L	0.0004109	0.08%
QC value within limits for V	290.880	Recovery = 97.44%				
Zn 206.200†	51904.8	1.01714 mg/L	0.001163	1.01714 mg/L	0.001163	0.11%
QC value within limits for Zn	206.200	Recovery = 101.71%				

All analyte(s) passed QC.

Sequence No.: 12
 Sample ID: MB 42363 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 61
 Date Collected: 3/31/2015 10:46:42 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 42363 (1)

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1211496.5	103	%	0.1			0.13%
Y 371.029	431464.5	102	%	0.1			0.10%
Ag 328.068†	59.3	-0.0002156	mg/L	0.00001272	-0.0002156 mg/L	0.00001272	5.90%
Al 308.215†	1310.2	0.0174849	mg/L	0.00021313	0.0174849 mg/L	0.00021313	1.22%
As 188.979†	-0.3	-0.0008005	mg/L	0.00015673	-0.0008005 mg/L	0.00015673	19.58%
Ba 233.527†	134.2	-0.0014016	mg/L	0.00020880	-0.0014016 mg/L	0.00020880	14.90%
Be 313.107†	-37.0	-0.0014752	mg/L	0.00001337	-0.0014752 mg/L	0.00001337	0.91%
Ca 315.887†	64484.7	0.354648	mg/L	0.0026344	0.354648 mg/L	0.0026344	0.74%
Cd 228.802†	6.2	-0.0000037	mg/L	0.00017074	-0.0000037 mg/L	0.00017074	>999.9%
Co 228.616†	9.8	-0.0022550	mg/L	0.00001534	-0.0022550 mg/L	0.00001534	0.68%
Cr 267.716†	18.4	-0.0017721	mg/L	0.00000541	-0.0017721 mg/L	0.00000541	0.31%
Cu 327.393†	142.6	0.0001174	mg/L	0.00017202	0.0001174 mg/L	0.00017202	146.56%
Fe 273.955†	581.2	-0.0003334	mg/L	0.00010649	-0.0003334 mg/L	0.00010649	31.94%
K 404.721†	91.0	1.33190	mg/L	2.273747	1.33190 mg/L	2.273747	170.71%
Mg 279.077†	393.1	-0.244335	mg/L	0.0061604	-0.244335 mg/L	0.0061604	2.52%
Mn 257.610†	400.9	-0.0019622	mg/L	0.00003573	-0.0019622 mg/L	0.00003573	1.82%
Mo 202.031†	10.7	-0.0007785	mg/L	0.00001158	-0.0007785 mg/L	0.00001158	1.49%
Na 330.237†	155.3	0.797621	mg/L	0.0146369	0.797621 mg/L	0.0146369	1.84%
Ni 231.604†	-13.2	-0.0035325	mg/L	0.00003960	-0.0035325 mg/L	0.00003960	1.12%
Pb 220.353†	0.8	-0.0014918	mg/L	0.00016076	-0.0014918 mg/L	0.00016076	10.78%
Sb 206.836†	1.0	0.0000041	mg/L	0.00116755	0.0000041 mg/L	0.00116755	>999.9%
Se 196.026†	7.3	0.0054847	mg/L	0.00228907	0.0054847 mg/L	0.00228907	41.74%
Sn 189.927†	1.2	-0.0001820	mg/L	0.00002935	-0.0001820 mg/L	0.00002935	16.13%
Ti 334.940†	163.0	-0.0012420	mg/L	0.00008267	-0.0012420 mg/L	0.00008267	6.66%
Tl 190.801†	1.5	-0.0032109	mg/L	0.00049823	-0.0032109 mg/L	0.00049823	15.52%
V 290.880†	25.9	-0.0022154	mg/L	0.00014026	-0.0022154 mg/L	0.00014026	6.33%
Zn 206.200†	382.9	0.0049919	mg/L	0.00008093	0.0049919 mg/L	0.00008093	1.62%

Sequence No.: 13
 Sample ID: LCSW 42363
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 62
 Date Collected: 3/31/2015 10:50:03 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW 42363

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1134654.6	96.5 %		0.44			0.45%
Y 371.029	390181.8	92.3 %		0.56			0.61%
Ag 328.068†	17734.3	0.0821888 mg/L		0.00063443	0.0821888 mg/L	0.00063443	0.77%
Al 308.215†	136831.4	4.20803 mg/L		0.026889	4.20803 mg/L	0.026889	0.64%
As 188.979†	555.5	0.416586 mg/L		0.0024974	0.416586 mg/L	0.0024974	0.60%
Ba 233.527†	59036.5	0.421696 mg/L		0.0016896	0.421696 mg/L	0.0016896	0.40%
Be 313.107†	1348027.1	0.416303 mg/L		0.0024084	0.416303 mg/L	0.0024084	0.58%
Ca 315.887†	4671378.1	42.5004 mg/L		0.25925	42.5004 mg/L	0.25925	0.61%
Cd 228.802†	21874.7	0.416189 mg/L		0.0005266	0.416189 mg/L	0.0005266	0.13%
Co 228.616†	19822.5	0.426577 mg/L		0.0019198	0.426577 mg/L	0.0019198	0.45%
Cr 267.716†	39264.4	0.420738 mg/L		0.0035367	0.420738 mg/L	0.0035367	0.84%
Cu 327.393†	60181.5	0.419788 mg/L		0.0033977	0.419788 mg/L	0.0033977	0.81%
Fe 273.955†	101361.7	4.24567 mg/L		0.027500	4.24567 mg/L	0.027500	0.65%
K 404.721†	4801.9	39.5898 mg/L		0.60348	39.5898 mg/L	0.60348	1.52%
Mg 279.077†	768094.7	42.1869 mg/L		0.28580	42.1869 mg/L	0.28580	0.68%
Mn 257.610†	358091.8	0.419665 mg/L		0.0024968	0.419665 mg/L	0.0024968	0.59%
Mo 202.031†	7927.4	0.413646 mg/L		0.0013997	0.413646 mg/L	0.0013997	0.34%
Na 330.237†	50919.0	39.1644 mg/L		0.09182	39.1644 mg/L	0.09182	0.23%
Ni 231.604†	21079.4	0.425068 mg/L		0.0046674	0.425068 mg/L	0.0046674	1.10%
Pb 220.353†	4856.0	0.425672 mg/L		0.0002930	0.425672 mg/L	0.0002930	0.07%
Sb 206.836†	1245.4	0.418115 mg/L		0.0019239	0.418115 mg/L	0.0019239	0.46%
Se 196.026†	518.1	0.428225 mg/L		0.0000261	0.428225 mg/L	0.0000261	0.01%
Sn 189.927†	1895.0	0.423083 mg/L		0.0023614	0.423083 mg/L	0.0023614	0.56%
Ti 334.940†	305099.9	0.412110 mg/L		0.0013144	0.412110 mg/L	0.0013144	0.32%
Tl 190.801†	723.2	0.430089 mg/L		0.0004202	0.430089 mg/L	0.0004202	0.10%
V 290.880†	62086.4	0.410152 mg/L		0.0014831	0.410152 mg/L	0.0014831	0.36%
Zn 206.200†	21865.9	0.429846 mg/L		0.0032835	0.429846 mg/L	0.0032835	0.76%

Sequence No.: 14
 Sample ID: LCSW MR 42363
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 63
 Date Collected: 3/31/2015 10:53:27 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW MR 42363

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1147804.1	97.6	%	0.28				0.29%
Y 371.029	397231.5	94.0	%	0.30				0.32%
Ag 328.068†	17650.9	0.0818008	mg/L	0.00030094	0.0818008	mg/L	0.00030094	0.37%
Al 308.215†	137044.3	4.21462	mg/L	0.008225	4.21462	mg/L	0.008225	0.20%
As 188.979†	551.8	0.413767	mg/L	0.0015152	0.413767	mg/L	0.0015152	0.37%
Ba 233.527†	59035.6	0.421690	mg/L	0.0016892	0.421690	mg/L	0.0016892	0.40%
Be 313.107†	1363162.6	0.420995	mg/L	0.0004636	0.420995	mg/L	0.0004636	0.11%
Ca 315.887†	4694371.2	42.7108	mg/L	0.03886	42.7108	mg/L	0.03886	0.09%
Cd 228.802†	21838.8	0.415505	mg/L	0.0014292	0.415505	mg/L	0.0014292	0.34%
Co 228.616†	19794.2	0.425968	mg/L	0.0031638	0.425968	mg/L	0.0031638	0.74%
Cr 267.716†	39346.2	0.421621	mg/L	0.0016164	0.421621	mg/L	0.0016164	0.38%
Cu 327.393†	61426.0	0.428440	mg/L	0.0028479	0.428440	mg/L	0.0028479	0.66%
Fe 273.955†	101225.7	4.23994	mg/L	0.006439	4.23994	mg/L	0.006439	0.15%
K 404.721†	4910.8	40.4742	mg/L	1.04632	40.4742	mg/L	1.04632	2.59%
Mg 279.077†	780310.0	42.8620	mg/L	0.08559	42.8620	mg/L	0.08559	0.20%
Mn 257.610†	358762.4	0.420433	mg/L	0.0012556	0.420433	mg/L	0.0012556	0.30%
Mo 202.031†	7886.4	0.411478	mg/L	0.0010412	0.411478	mg/L	0.0010412	0.25%
Na 330.237†	51187.3	39.3671	mg/L	0.04626	39.3671	mg/L	0.04626	0.12%
Ni 231.604†	21173.0	0.426971	mg/L	0.0033016	0.426971	mg/L	0.0033016	0.77%
Pb 220.353†	4824.9	0.422934	mg/L	0.0029928	0.422934	mg/L	0.0029928	0.71%
Sb 206.836†	1227.8	0.412186	mg/L	0.0031391	0.412186	mg/L	0.0031391	0.76%
Se 196.026†	506.6	0.418791	mg/L	0.0009860	0.418791	mg/L	0.0009860	0.24%
Sn 189.927†	1878.7	0.419456	mg/L	0.0018730	0.419456	mg/L	0.0018730	0.45%
Ti 334.940†	306017.1	0.413354	mg/L	0.0024848	0.413354	mg/L	0.0024848	0.60%
Tl 190.801†	715.5	0.425471	mg/L	0.0009276	0.425471	mg/L	0.0009276	0.22%
V 290.880†	62047.8	0.409807	mg/L	0.0018306	0.409807	mg/L	0.0018306	0.45%
Zn 206.200†	22434.1	0.441088	mg/L	0.0015544	0.441088	mg/L	0.0015544	0.35%

Sequence No.: 15
 Sample ID: 83866-014
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 64
 Date Collected: 3/31/2015 10:56:52 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-014

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1190317.3	101	%	0.3				0.28%
Y 371.029	415616.4	98.4	%	0.41				0.42%
Ag 328.068†	124.0	0.0000855	mg/L	0.00000183	0.0000855	mg/L	0.00000183	2.14%
Al 308.215†	842.4	0.0030205	mg/L	0.00228174	0.0030205	mg/L	0.00228174	75.54%
As 188.979†	1.4	0.0004460	mg/L	0.00155293	0.0004460	mg/L	0.00155293	348.18%
Ba 233.527†	2048.4	0.0123527	mg/L	0.00004133	0.0123527	mg/L	0.00004133	0.33%
Be 313.107†	204.0	-0.0014003	mg/L	0.00000443	-0.0014003	mg/L	0.00000443	0.32%
Ca 315.887†	1494263.1	13.4349	mg/L	0.07278	13.4349	mg/L	0.07278	0.54%
Cd 228.802†	11.4	0.0000964	mg/L	0.00017964	0.0000964	mg/L	0.00017964	186.28%
Co 228.616†	14.2	-0.0021107	mg/L	0.00013453	-0.0021107	mg/L	0.00013453	6.37%
Cr 267.716†	46.7	-0.0014420	mg/L	0.00005921	-0.0014420	mg/L	0.00005921	4.11%
Cu 327.393†	126.7	0.0004115	mg/L	0.00031214	0.0004115	mg/L	0.00031214	75.85%
Fe 273.955†	529.3	-0.0025201	mg/L	0.00019659	-0.0025201	mg/L	0.00019659	7.80%
K 404.721†	409.3	3.91644	mg/L	0.381545	3.91644	mg/L	0.381545	9.74%
Mg 279.077†	89396.7	4.67494	mg/L	0.005036	4.67494	mg/L	0.005036	0.11%
Mn 257.610†	1472.3	-0.0008685	mg/L	0.00000649	-0.0008685	mg/L	0.00000649	0.75%
Mo 202.031†	64.8	0.0015225	mg/L	0.00052895	0.0015225	mg/L	0.00052895	34.74%
Na 330.237†	17889.3	14.2008	mg/L	0.07043	14.2008	mg/L	0.07043	0.50%
Ni 231.604†	21.0	-0.0028369	mg/L	0.00020684	-0.0028369	mg/L	0.00020684	7.29%
Pb 220.353†	22.4	0.0004450	mg/L	0.00107835	0.0004450	mg/L	0.00107835	242.33%
Sb 206.836†	-0.4	-0.0006368	mg/L	0.00073510	-0.0006368	mg/L	0.00073510	115.44%
Se 196.026†	3.7	0.0019491	mg/L	0.00288203	0.0019491	mg/L	0.00288203	147.86%
Sn 189.927†	-14.9	-0.0032572	mg/L	0.00070196	-0.0032572	mg/L	0.00070196	21.55%
Ti 334.940†	2.9	-0.0014591	mg/L	0.00003057	-0.0014591	mg/L	0.00003057	2.10%
Tl 190.801†	3.3	-0.0019715	mg/L	0.00129499	-0.0019715	mg/L	0.00129499	65.68%
V 290.880†	206.4	-0.0016073	mg/L	0.00056901	-0.0016073	mg/L	0.00056901	35.40%
Zn 206.200†	235.8	0.0020823	mg/L	0.00022977	0.0020823	mg/L	0.00022977	11.03%

Sequence No.: 16

Sample ID: 83866-014 MR

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 65

Date Collected: 3/31/2015 11:00:14 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-014 MR

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1189560.7	101	%	0.1				0.13%
Y 371.029	415428.4	98.3	%	0.10				0.10%
Ag 328.068†	26.7	-0.0003675	mg/L	0.00014163	-0.0003675	mg/L	0.00014163	38.54%
Al 308.215†	1132.9	0.0120038	mg/L	0.00203094	0.0120038	mg/L	0.00203094	16.92%
As 188.979†	2.8	0.0014703	mg/L	0.00014258	0.0014703	mg/L	0.00014258	9.70%
Ba 233.527†	2069.4	0.0125038	mg/L	0.00003249	0.0125038	mg/L	0.00003249	0.26%
Be 313.107†	-4.9	-0.0014651	mg/L	0.00000650	-0.0014651	mg/L	0.00000650	0.44%
Ca 315.887†	1531063.1	13.7715	mg/L	0.09241	13.7715	mg/L	0.09241	0.67%
Cd 228.802†	14.4	0.0001535	mg/L	0.00006849	0.0001535	mg/L	0.00006849	44.62%
Co 228.616†	7.5	-0.0022557	mg/L	0.00019861	-0.0022557	mg/L	0.00019861	8.80%
Cr 267.716†	44.4	-0.0014656	mg/L	0.00014897	-0.0014656	mg/L	0.00014897	10.16%
Cu 327.393†	78.9	0.0000899	mg/L	0.00006418	0.0000899	mg/L	0.00006418	71.36%
Fe 273.955†	462.9	-0.0053200	mg/L	0.00104638	-0.0053200	mg/L	0.00104638	19.67%
K 404.721†	477.7	4.47211	mg/L	0.781006	4.47211	mg/L	0.781006	17.46%
Mg 279.077†	91327.0	4.78163	mg/L	0.005750	4.78163	mg/L	0.005750	0.12%
Mn 257.610†	1432.6	-0.0009193	mg/L	0.00001066	-0.0009193	mg/L	0.00001066	1.16%
Mo 202.031†	69.1	0.0017344	mg/L	0.00015842	0.0017344	mg/L	0.00015842	9.13%
Na 330.237†	18229.7	14.4581	mg/L	0.02099	14.4581	mg/L	0.02099	0.15%
Ni 231.604†	9.8	-0.0030634	mg/L	0.00013322	-0.0030634	mg/L	0.00013322	4.35%
Pb 220.353†	8.2	-0.0008004	mg/L	0.00042093	-0.0008004	mg/L	0.00042093	52.59%
Sb 206.836†	2.9	0.0004624	mg/L	0.00135941	0.0004624	mg/L	0.00135941	294.02%
Se 196.026†	3.8	0.0019744	mg/L	0.00242997	0.0019744	mg/L	0.00242997	123.07%
Sn 189.927†	-21.8	-0.0047956	mg/L	0.00093901	-0.0047956	mg/L	0.00093901	19.58%
Ti 334.940†	3.4	-0.0014583	mg/L	0.00007081	-0.0014583	mg/L	0.00007081	4.86%
Tl 190.801†	0.3	-0.0037346	mg/L	0.00005682	-0.0037346	mg/L	0.00005682	1.52%
V 290.880†	331.2	-0.0007812	mg/L	0.00025199	-0.0007812	mg/L	0.00025199	32.26%
Zn 206.200†	239.9	0.0021631	mg/L	0.00001566	0.0021631	mg/L	0.00001566	0.72%

Sequence No.: 17

Sample ID: 83866-015 MS 1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 66

Date Collected: 3/31/2015 11:03:36 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-015 MS 1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1130373.4	96.2	%	0.38			0.39%
Y 371.029	389220.0	92.1	%	0.20			0.21%
Ag 328.068†	18707.4	0.0867278	mg/L	0.00131165	0.0867278 mg/L	0.00131165	1.51%
Al 308.215†	146152.1	4.49624	mg/L	0.050069	4.49624 mg/L	0.050069	1.11%
As 188.979†	597.5	0.448077	mg/L	0.0002497	0.448077 mg/L	0.0002497	0.06%
Ba 233.527†	64616.6	0.461783	mg/L	0.0055470	0.461783 mg/L	0.0055470	1.20%
Be 313.107†	1428745.6	0.441318	mg/L	0.0014114	0.441318 mg/L	0.0014114	0.32%
Ca 315.887†	6347880.7	57.8378	mg/L	0.09282	57.8378 mg/L	0.09282	0.16%
Cd 228.802†	23148.6	0.440434	mg/L	0.0053259	0.440434 mg/L	0.0053259	1.21%
Co 228.616†	20759.3	0.446892	mg/L	0.0054346	0.446892 mg/L	0.0054346	1.22%
Cr 267.716†	41502.0	0.444857	mg/L	0.0058412	0.444857 mg/L	0.0058412	1.31%
Cu 327.393†	63606.0	0.444133	mg/L	0.0043279	0.444133 mg/L	0.0043279	0.97%
Fe 273.955†	108006.1	4.52560	mg/L	0.060433	4.52560 mg/L	0.060433	1.34%
K 404.721†	5575.6	45.8732	mg/L	0.36393	45.8732 mg/L	0.36393	0.79%
Mg 279.077†	896435.5	49.2804	mg/L	0.08765	49.2804 mg/L	0.08765	0.18%
Mn 257.610†	383367.7	0.449313	mg/L	0.0057016	0.449313 mg/L	0.0057016	1.27%
Mo 202.031†	8410.9	0.438420	mg/L	0.0031262	0.438420 mg/L	0.0031262	0.71%
Na 330.237†	75424.8	57.6857	mg/L	0.57580	57.6857 mg/L	0.57580	1.00%
Ni 231.604†	22107.3	0.445954	mg/L	0.0061058	0.445954 mg/L	0.0061058	1.37%
Pb 220.353†	5099.9	0.447180	mg/L	0.0035718	0.447180 mg/L	0.0035718	0.80%
Sb 206.836†	1338.3	0.449165	mg/L	0.0066231	0.449165 mg/L	0.0066231	1.47%
Se 196.026†	553.5	0.457052	mg/L	0.0077381	0.457052 mg/L	0.0077381	1.69%
Sn 189.927†	2007.4	0.448698	mg/L	0.0044744	0.448698 mg/L	0.0044744	1.00%
Ti 334.940†	323534.2	0.437099	mg/L	0.0050036	0.437099 mg/L	0.0050036	1.14%
Tl 190.801†	752.8	0.448069	mg/L	0.0004953	0.448069 mg/L	0.0004953	0.11%
V 290.880†	65825.6	0.434436	mg/L	0.0054654	0.434436 mg/L	0.0054654	1.26%
Zn 206.200†	23173.9	0.455713	mg/L	0.0067204	0.455713 mg/L	0.0067204	1.47%

Sequence No.: 18

Sample ID: 83866-016 MS 2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 67

Date Collected: 3/31/2015 11:07:01 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 83866-016 MS 2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1131944.2	96.3	%	0.71				0.74%
Y 371.029	391427.9	92.6	%	0.19				0.20%
Ag 328.068†	18754.4	0.0869471	mg/L	0.00189404	0.0869471	mg/L	0.00189404	2.18%
Al 308.215†	145545.6	4.47749	mg/L	0.044104	4.47749	mg/L	0.044104	0.99%
As 188.979†	595.8	0.446825	mg/L	0.0009371	0.446825	mg/L	0.0009371	0.21%
Ba 233.527†	64934.9	0.464069	mg/L	0.0042843	0.464069	mg/L	0.0042843	0.92%
Be 313.107†	1418853.8	0.438251	mg/L	0.0013454	0.438251	mg/L	0.0013454	0.31%
Ca 315.887†	6314007.3	57.5279	mg/L	0.21123	57.5279	mg/L	0.21123	0.37%
Cd 228.802†	23271.2	0.442767	mg/L	0.0032125	0.442767	mg/L	0.0032125	0.73%
Co 228.616†	20945.0	0.450910	mg/L	0.0032284	0.450910	mg/L	0.0032284	0.72%
Cr 267.716†	41565.0	0.445536	mg/L	0.0043733	0.445536	mg/L	0.0043733	0.98%
Cu 327.393†	63961.5	0.446597	mg/L	0.0039806	0.446597	mg/L	0.0039806	0.89%
Fe 273.955†	108321.3	4.53888	mg/L	0.044384	4.53888	mg/L	0.044384	0.98%
K 404.721†	5385.4	44.3284	mg/L	2.07253	44.3284	mg/L	2.07253	4.68%
Mg 279.077†	893483.0	49.1172	mg/L	0.22207	49.1172	mg/L	0.22207	0.45%
Mn 257.610†	385431.6	0.451760	mg/L	0.0047608	0.451760	mg/L	0.0047608	1.05%
Mo 202.031†	8360.0	0.435752	mg/L	0.0026168	0.435752	mg/L	0.0026168	0.60%
Na 330.237†	75507.7	57.7483	mg/L	0.74772	57.7483	mg/L	0.74772	1.29%
Ni 231.604†	22179.1	0.447412	mg/L	0.0048057	0.447412	mg/L	0.0048057	1.07%
Pb 220.353†	5049.1	0.442715	mg/L	0.0037470	0.442715	mg/L	0.0037470	0.85%
Sb 206.836†	1324.1	0.444388	mg/L	0.0021411	0.444388	mg/L	0.0021411	0.48%
Se 196.026†	540.0	0.445916	mg/L	0.0005119	0.445916	mg/L	0.0005119	0.11%
Sn 189.927†	1999.4	0.446890	mg/L	0.0039809	0.446890	mg/L	0.0039809	0.89%
Ti 334.940†	324683.4	0.438656	mg/L	0.0031324	0.438656	mg/L	0.0031324	0.71%
Tl 190.801†	748.9	0.445721	mg/L	0.0037068	0.445721	mg/L	0.0037068	0.83%
V 290.880†	66172.7	0.436785	mg/L	0.0043972	0.436785	mg/L	0.0043972	1.01%
Zn 206.200†	23324.0	0.458682	mg/L	0.0069822	0.458682	mg/L	0.0069822	1.52%

Sequence No.: 19
 Sample ID: 83866-014 PS
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 68
 Date Collected: 3/31/2015 11:10:26 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-014 PS

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1130137.4	96.1 %	0.08			0.08%
Y 371.029	389558.5	92.2 %	0.12			0.13%
Ag 328.068†	16403.5	0.0760445 mg/L	0.00008251	0.0760445 mg/L	0.00008251	0.11%
Al 308.215†	164354.7	5.05910 mg/L	0.001157	5.05910 mg/L	0.001157	0.02%
As 188.979†	662.4	0.496844 mg/L	0.0006642	0.496844 mg/L	0.0006642	0.13%
Ba 233.527†	72381.6	0.517557 mg/L	0.0003996	0.517557 mg/L	0.0003996	0.08%
Be 313.107†	1585853.4	0.489982 mg/L	0.0007965	0.489982 mg/L	0.0007965	0.16%
Ca 315.887†	6906391.2	62.9473 mg/L	0.07972	62.9473 mg/L	0.07972	0.13%
Cd 228.802†	26192.8	0.498370 mg/L	0.0005903	0.498370 mg/L	0.0005903	0.12%
Co 228.616†	23303.6	0.501860 mg/L	0.0006583	0.501860 mg/L	0.0006583	0.13%
Cr 267.716†	46818.7	0.502084 mg/L	0.0002634	0.502084 mg/L	0.0002634	0.05%
Cu 327.393†	72245.1	0.504609 mg/L	0.0002616	0.504609 mg/L	0.0002616	0.05%
Fe 273.955†	122420.9	5.13291 mg/L	0.002877	5.13291 mg/L	0.002877	0.06%
K 404.721†	6044.8	49.6835 mg/L	1.32709	49.6835 mg/L	1.32709	2.67%
Mg 279.077†	998887.8	54.9429 mg/L	0.05294	54.9429 mg/L	0.05294	0.10%
Mn 257.610†	418748.0	0.490980 mg/L	0.0007393	0.490980 mg/L	0.0007393	0.15%
Mo 202.031†	10204.2	0.532488 mg/L	0.0004714	0.532488 mg/L	0.0004714	0.09%
Na 330.237†	82927.8	63.3564 mg/L	0.01217	63.3564 mg/L	0.01217	0.02%
Ni 231.604†	24708.6	0.498823 mg/L	0.0006822	0.498823 mg/L	0.0006822	0.14%
Pb 220.353†	5520.8	0.484317 mg/L	0.0019681	0.484317 mg/L	0.0019681	0.41%
Sb 206.836†	1619.3	0.543689 mg/L	0.0015723	0.543689 mg/L	0.0015723	0.29%
Se 196.026†	592.0	0.488914 mg/L	0.0017944	0.488914 mg/L	0.0017944	0.37%
Sn 189.927†	2492.5	0.556902 mg/L	0.0030698	0.556902 mg/L	0.0030698	0.55%
Ti 334.940†	400170.4	0.540982 mg/L	0.0015978	0.540982 mg/L	0.0015978	0.30%
Tl 190.801†	812.7	0.484276 mg/L	0.0003143	0.484276 mg/L	0.0003143	0.06%
V 290.880†	73352.5	0.484456 mg/L	0.0003038	0.484456 mg/L	0.0003038	0.06%
Zn 206.200†	26052.0	0.512630 mg/L	0.0004421	0.512630 mg/L	0.0004421	0.09%

Sequence No.: 20
 Sample ID: CCV V-202964
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/31/2015 11:13:54 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1127230.0	95.9 %		0.15			0.16%
Y 371.029	390268.7	92.4 %		0.21			0.23%
Ag 328.068†	21798.0	0.101125 mg/L		0.0005545	0.101125 mg/L	0.0005545	0.55%
QC value within limits for Ag		328.068	Recovery = 101.12%				
Al 308.215†	162877.9	5.01344 mg/L		0.043052	5.01344 mg/L	0.043052	0.86%
QC value within limits for Al		308.215	Recovery = 100.27%				
As 188.979†	648.5	0.486409 mg/L		0.0021007	0.486409 mg/L	0.0021007	0.43%
QC value within limits for As		188.979	Recovery = 97.28%				
Ba 233.527†	69576.2	0.497403 mg/L		0.0043477	0.497403 mg/L	0.0043477	0.87%
QC value within limits for Ba		233.527	Recovery = 99.48%				
Be 313.107†	1593713.8	0.492439 mg/L		0.0018130	0.492439 mg/L	0.0018130	0.37%
QC value within limits for Be		313.107	Recovery = 98.49%				
Ca 315.887†	5472242.9	49.8271 mg/L		0.16074	49.8271 mg/L	0.16074	0.32%
QC value within limits for Ca		315.887	Recovery = 99.65%				
Cd 228.802†	25986.8	0.494448 mg/L		0.0050317	0.494448 mg/L	0.0050317	1.02%
QC value within limits for Cd		228.802	Recovery = 98.89%				
Co 228.616†	23028.3	0.495937 mg/L		0.0047863	0.495937 mg/L	0.0047863	0.97%
QC value within limits for Co		228.616	Recovery = 99.19%				
Cr 267.716†	46361.7	0.497143 mg/L		0.0035021	0.497143 mg/L	0.0035021	0.70%
QC value within limits for Cr		267.716	Recovery = 99.43%				
Cu 327.393†	70914.5	0.494841 mg/L		0.0040002	0.494841 mg/L	0.0040002	0.81%
QC value within limits for Cu		327.393	Recovery = 98.97%				
Fe 273.955†	119820.5	5.02335 mg/L		0.048629	5.02335 mg/L	0.048629	0.97%
QC value within limits for Fe		273.955	Recovery = 100.47%				
K 404.721†	5629.5	46.3108 mg/L		0.45677	46.3108 mg/L	0.45677	0.99%
QC value within limits for K		404.721	Recovery = 92.62%				
Mg 279.077†	917477.5	50.4434 mg/L		0.13389	50.4434 mg/L	0.13389	0.27%
QC value within limits for Mg		279.077	Recovery = 100.89%				
Mn 257.610†	417130.0	0.489217 mg/L		0.0018743	0.489217 mg/L	0.0018743	0.38%
QC value within limits for Mn		257.610	Recovery = 97.84%				
Mo 202.031†	9430.4	0.492354 mg/L		0.0008687	0.492354 mg/L	0.0008687	0.18%
QC value within limits for Mo		202.031	Recovery = 98.47%				
Na 330.237†	61499.5	47.1610 mg/L		0.39743	47.1610 mg/L	0.39743	0.84%
QC value within limits for Na		330.237	Recovery = 94.32%				
Ni 231.604†	24599.3	0.496593 mg/L		0.0051749	0.496593 mg/L	0.0051749	1.04%
QC value within limits for Ni		231.604	Recovery = 99.32%				
Pb 220.353†	5551.1	0.486861 mg/L		0.0002022	0.486861 mg/L	0.0002022	0.04%
QC value within limits for Pb		220.353	Recovery = 97.37%				
Sb 206.836†	1482.2	0.497673 mg/L		0.0019909	0.497673 mg/L	0.0019909	0.40%
QC value within limits for Sb		206.836	Recovery = 99.53%				
Se 196.026†	585.3	0.483942 mg/L		0.0058484	0.483942 mg/L	0.0058484	1.21%
QC value within limits for Se		196.026	Recovery = 96.79%				
Sn 189.927†	2290.4	0.511382 mg/L		0.0022099	0.511382 mg/L	0.0022099	0.43%
QC value within limits for Sn		189.927	Recovery = 102.28%				
Ti 334.940†	368915.7	0.498615 mg/L		0.0012860	0.498615 mg/L	0.0012860	0.26%
QC value within limits for Ti		334.940	Recovery = 99.72%				
Tl 190.801†	818.8	0.487592 mg/L		0.0012242	0.487592 mg/L	0.0012242	0.25%
QC value within limits for Tl		190.801	Recovery = 97.52%				
V 290.880†	72568.1	0.479678 mg/L		0.0049161	0.479678 mg/L	0.0049161	1.02%
QC value within limits for V		290.880	Recovery = 95.94%				
Zn 206.200†	25455.4	0.500831 mg/L		0.0050642	0.500831 mg/L	0.0050642	1.01%
QC value within limits for Zn		206.200	Recovery = 100.17%				

All analyte(s) passed QC.

Sequence No.: 21
 Sample ID: LLCCV [aq] V-206357
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 3/31/2015 11:17:21 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LLCCV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1183720.6	101 %		0.5			0.54%
Y 371.029	417221.7	98.7 %		0.51			0.52%
Ag 328.068†	4294.6	0.0194934 mg/L	0.00021269		0.0194934 mg/L	0.00021269	1.09%
QC value within limits for Ag	328.068	Recovery = 97.47%					
Al 308.215†	8738.5	0.247180 mg/L	0.0025263		0.247180 mg/L	0.0025263	1.02%
QC value within limits for Al	308.215	Recovery = 123.59%					
As 188.979†	25.9	0.0188521 mg/L	0.00225839		0.0188521 mg/L	0.00225839	11.98%
QC value within limits for As	188.979	Recovery = 94.26%					
Ba 233.527†	7193.6	0.0493144 mg/L	0.00015215		0.0493144 mg/L	0.00015215	0.31%
QC value within limits for Ba	233.527	Recovery = 98.63%					
Be 313.107†	36815.5	0.0099282 mg/L	0.00004322		0.0099282 mg/L	0.00004322	0.44%
QC value within limits for Be	313.107	Recovery = 82.73%					
Ca 315.887†	579022.9	5.06186 mg/L	0.016207		5.06186 mg/L	0.016207	0.32%
QC value within limits for Ca	315.887	Recovery = 101.24%					
Cd 228.802†	611.4	0.0115194 mg/L	0.00017359		0.0115194 mg/L	0.00017359	1.51%
QC value within limits for Cd	228.802	Recovery = 95.99%					
Co 228.616†	948.5	0.0180319 mg/L	0.00003342		0.0180319 mg/L	0.00003342	0.19%
QC value within limits for Co	228.616	Recovery = 90.16%					
Cr 267.716†	4768.2	0.0493475 mg/L	0.00030093		0.0493475 mg/L	0.00030093	0.61%
QC value within limits for Cr	267.716	Recovery = 98.70%					
Cu 327.393†	7294.0	0.0500798 mg/L	0.00026202		0.0500798 mg/L	0.00026202	0.52%
QC value within limits for Cu	327.393	Recovery = 100.16%					
Fe 273.955†	7261.6	0.281120 mg/L	0.0000082		0.281120 mg/L	0.0000082	0.00%
QC value within limits for Fe	273.955	Recovery = 93.71%					
K 404.721†	843.5	7.44317 mg/L	0.373024		7.44317 mg/L	0.373024	5.01%
QC value greater than the upper limit for K 404.721		Recovery = 148.86%					
Mg 279.077†	95139.3	4.99234 mg/L	0.017540		4.99234 mg/L	0.017540	0.35%
QC value within limits for Mg	279.077	Recovery = 99.85%					
Mn 257.610†	34141.4	0.0377574 mg/L	0.00014620		0.0377574 mg/L	0.00014620	0.39%
QC value within limits for Mn	257.610	Recovery = 94.39%					
Mo 202.031†	395.2	0.0192211 mg/L	0.00057312		0.0192211 mg/L	0.00057312	2.98%
QC value within limits for Mo	202.031	Recovery = 96.11%					
Na 330.237†	5443.7	4.79456 mg/L	0.022312		4.79456 mg/L	0.022312	0.47%
QC value within limits for Na	330.237	Recovery = 95.89%					
Ni 231.604†	2549.2	0.0485346 mg/L	0.00037076		0.0485346 mg/L	0.00037076	0.76%
QC value within limits for Ni	231.604	Recovery = 97.07%					
Pb 220.353†	144.4	0.0111584 mg/L	0.00005360		0.0111584 mg/L	0.00005360	0.48%
QC value within limits for Pb	220.353	Recovery = 92.99%					
Sb 206.836†	58.1	0.0191084 mg/L	0.00052523		0.0191084 mg/L	0.00052523	2.75%
QC value within limits for Sb	206.836	Recovery = 95.54%					
Se 196.026†	45.2	0.0367878 mg/L	0.00441776		0.0367878 mg/L	0.00441776	12.01%
QC value within limits for Se	196.026	Recovery = 91.97%					
Sn 189.927†	230.1	0.0509523 mg/L	0.00048613		0.0509523 mg/L	0.00048613	0.95%
QC value within limits for Sn	189.927	Recovery = 101.90%					
Ti 334.940†	36835.3	0.0484685 mg/L	0.00000528		0.0484685 mg/L	0.00000528	0.01%
QC value within limits for Ti	334.940	Recovery = 96.94%					
Tl 190.801†	33.1	0.0158750 mg/L	0.00169495		0.0158750 mg/L	0.00169495	10.68%
QC value within limits for Tl	190.801	Recovery = 79.38%					
V 290.880†	7487.8	0.0473172 mg/L	0.00011289		0.0473172 mg/L	0.00011289	0.24%
QC value within limits for V	290.880	Recovery = 94.63%					
Zn 206.200†	2588.8	0.0486228 mg/L	0.00016989		0.0486228 mg/L	0.00016989	0.35%
QC value within limits for Zn	206.200	Recovery = 97.25%					
QC Failed. Continue with analysis.							

QC Failed. Continue with analysis.

Sequence No.: 22
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 3/31/2015 11:20:43 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1192733.3	101 %		0.2			0.19%
Y 371.029	427961.7	101 %		0.2			0.24%
Ag 328.068†	82.9	-0.0001068 mg/L	0.00007682	-0.0001068 mg/L	0.00007682	71.90%	
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 308.215†	507.4	-0.0073384 mg/L	0.00332243	-0.0073384 mg/L	0.00332243	45.27%	
QC value within limits for Al 308.215 Recovery = Not calculated							
As 188.979†	1.6	0.0006168 mg/L	0.00025014	0.0006168 mg/L	0.00025014	40.55%	
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	1.7	-0.0023534 mg/L	0.00012144	-0.0023534 mg/L	0.00012144	5.16%	
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	130.7	-0.0014231 mg/L	0.00002012	-0.0014231 mg/L	0.00002012	1.41%	
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 315.887†	787.2	-0.228083 mg/L	0.0003610	-0.228083 mg/L	0.0003610	0.16%	
QC value within limits for Ca 315.887 Recovery = Not calculated							
Cd 228.802†	2.8	-0.000687 mg/L	0.00015210	-0.000687 mg/L	0.00015210	221.24%	
QC value within limits for Cd 228.802 Recovery = Not calculated							
Co 228.616†	5.5	-0.0023482 mg/L	0.00002067	-0.0023482 mg/L	0.00002067	0.88%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	29.2	-0.0016572 mg/L	0.00023612	-0.0016572 mg/L	0.00023612	14.25%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 327.393†	112.5	-0.0001117 mg/L	0.00024225	-0.0001117 mg/L	0.00024225	216.80%	
QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe 273.955†	126.5	-0.0194924 mg/L	0.00007578	-0.0194924 mg/L	0.00007578	0.39%	
QC value within limits for Fe 273.955 Recovery = Not calculated							
K 404.721†	314.1	3.14314 mg/L	0.922718	3.14314 mg/L	0.922718	29.36%	
QC value within limits for K 404.721 Recovery = Not calculated							
Mg 279.077†	51.8	-0.263199 mg/L	0.0007033	-0.263199 mg/L	0.0007033	0.27%	
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	106.9	-0.0023105 mg/L	0.00000469	-0.0023105 mg/L	0.00000469	0.20%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	8.0	-0.0008909 mg/L	0.00008118	-0.0008909 mg/L	0.00008118	9.11%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 330.237†	61.3	0.726555 mg/L	0.0168280	0.726555 mg/L	0.0168280	2.32%	
QC value within limits for Na 330.237 Recovery = Not calculated							
Ni 231.604†	19.2	-0.0028743 mg/L	0.00002471	-0.0028743 mg/L	0.00002471	0.86%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	3.9	-0.0012304 mg/L	0.00070846	-0.0012304 mg/L	0.00070846	57.58%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	2.9	0.0006658 mg/L	0.00041413	0.0006658 mg/L	0.00041413	62.20%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-3.3	-0.0032469 mg/L	0.00238967	-0.0032469 mg/L	0.00238967	73.60%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Sn 189.927†	6.7	0.0010116 mg/L	0.00083112	0.0010116 mg/L	0.00083112	82.16%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	56.4	-0.0013866 mg/L	0.00001509	-0.0013866 mg/L	0.00001509	1.09%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	4.1	-0.0016874 mg/L	0.00054429	-0.0016874 mg/L	0.00054429	32.26%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	55.2	-0.0020158 mg/L	0.00041887	-0.0020158 mg/L	0.00041887	20.78%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	36.4	-0.0018619 mg/L	0.00018905	-0.0018619 mg/L	0.00018905	10.15%	
QC value within limits for Zn 206.200 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 23
 Sample ID: 83866-014 SD
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 69
 Date Collected: 3/31/2015 11:24:02 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-014 SD

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1214622.9	103	%	0.8			0.73%
Y 371.029	427875.4	101	%	0.0			0.05%
Ag 328.068†	59.8	-0.0002131	mg/L	0.00004969	-0.0002131 mg/L	0.00004969	23.32%
Al 308.215†	536.0	-0.0064549	mg/L	0.00118781	-0.0064549 mg/L	0.00118781	18.40%
As 188.979†	1.3	0.0003423	mg/L	0.00029738	0.0003423 mg/L	0.00029738	86.87%
Ba 233.527†	482.6	0.0011017	mg/L	0.00000536	0.0011017 mg/L	0.00000536	0.49%
Be 313.107†	48.4	-0.0014487	mg/L	0.00000014	-0.0014487 mg/L	0.00000014	0.01%
Ca 315.887†	319820.4	2.69057	mg/L	0.008587	2.69057 mg/L	0.008587	0.32%
Cd 228.802†	4.8	-0.0000296	mg/L	0.00002522	-0.0000296 mg/L	0.00002522	85.24%
Co 228.616†	13.3	-0.0021682	mg/L	0.00008231	-0.0021682 mg/L	0.00008231	3.80%
Cr 267.716†	14.1	-0.0018128	mg/L	0.00006074	-0.0018128 mg/L	0.00006074	3.35%
Cu 327.393†	123.7	0.0000579	mg/L	0.00007612	0.0000579 mg/L	0.00007612	131.44%
Fe 273.955†	482.4	-0.0044983	mg/L	0.00046322	-0.0044983 mg/L	0.00046322	10.30%
K 404.721†	299.6	3.02561	mg/L	0.381992	3.02561 mg/L	0.381992	12.63%
Mg 279.077†	19099.0	0.789548	mg/L	0.0038928	0.789548 mg/L	0.0038928	0.49%
Mn 257.610†	432.8	-0.0019610	mg/L	0.00000161	-0.0019610 mg/L	0.00000161	0.08%
Mo 202.031†	20.6	-0.0003522	mg/L	0.00015996	-0.0003522 mg/L	0.00015996	45.42%
Na 330.237†	3536.6	3.35315	mg/L	0.005308	3.35315 mg/L	0.005308	0.16%
Ni 231.604†	-19.0	-0.0036499	mg/L	0.00004764	-0.0036499 mg/L	0.00004764	1.31%
Pb 220.353†	1.5	-0.0014319	mg/L	0.00115155	-0.0014319 mg/L	0.00115155	80.42%
Sb 206.836†	-3.3	-0.0014595	mg/L	0.00329939	-0.0014595 mg/L	0.00329939	226.07%
Se 196.026†	1.9	0.0008638	mg/L	0.00053631	0.0008638 mg/L	0.00053631	62.09%
Sn 189.927†	-5.2	-0.0015171	mg/L	0.00005814	-0.0015171 mg/L	0.00005814	3.83%
Ti 334.940†	124.8	-0.0012938	mg/L	0.00002781	-0.0012938 mg/L	0.00002781	2.15%
Tl 190.801†	1.6	-0.0031066	mg/L	0.00099697	-0.0031066 mg/L	0.00099697	32.09%
V 290.880†	-18.4	-0.0026406	mg/L	0.00010395	-0.0026406 mg/L	0.00010395	3.94%
Zn 206.200†	110.2	-0.0004020	mg/L	0.00020954	-0.0004020 mg/L	0.00020954	52.13%

Sequence No.: 24
 Sample ID: 83866-002
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 70
 Date Collected: 3/31/2015 11:27:22 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-002

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1217678.0	104	%	0.1			0.06%
Y 371.029	428181.5	101	%	0.2			0.17%
Ag 328.068†	35.9	-0.0003246	mg/L	0.00023103	-0.0003246	mg/L	0.00023103 71.18%
Al 308.215†	968.0	0.0069040	mg/L	0.00099742	0.0069040	mg/L	0.00099742 14.45%
As 188.979†	1.6	0.0006051	mg/L	0.00038667	0.0006051	mg/L	0.00038667 63.91%
Ba 233.527†	2736.0	0.0172935	mg/L	0.00016924	0.0172935	mg/L	0.00016924 0.98%
Be 313.107†	-104.2	-0.0014959	mg/L	0.00001734	-0.0014959	mg/L	0.00001734 1.16%
Ca 315.887†	1654341.9	14.8993	mg/L	0.07212	14.8993	mg/L	0.07212 0.48%
Cd 228.802†	32.4	0.0004960	mg/L	0.00002938	0.0004960	mg/L	0.00002938 5.92%
Co 228.616†	8.9	-0.0022527	mg/L	0.00011530	-0.0022527	mg/L	0.00011530 5.12%
Cr 267.716†	212.5	0.0003261	mg/L	0.00013042	0.0003261	mg/L	0.00013042 40.00%
Cu 327.393†	208.6	0.0010249	mg/L	0.00008695	0.0010249	mg/L	0.00008695 8.48%
Fe 273.955†	446.6	-0.0060056	mg/L	0.00035600	-0.0060056	mg/L	0.00035600 5.93%
K 404.721†	505.0	4.69394	mg/L	0.008201	4.69394	mg/L	0.008201 0.17%
Mg 279.077†	38242.8	1.84764	mg/L	0.001727	1.84764	mg/L	0.001727 0.09%
Mn 257.610†	1050.3	-0.0012684	mg/L	0.00001859	-0.0012684	mg/L	0.00001859 1.47%
Mo 202.031†	86.8	0.0026134	mg/L	0.00015506	0.0026134	mg/L	0.00015506 5.93%
Na 330.237†	10321.7	8.48132	mg/L	0.027906	8.48132	mg/L	0.027906 0.33%
Ni 231.604†	-16.7	-0.0036028	mg/L	0.00015104	-0.0036028	mg/L	0.00015104 4.19%
Pb 220.353†	1.0	-0.0014027	mg/L	0.00037047	-0.0014027	mg/L	0.00037047 26.41%
Sb 206.836†	-8.5	-0.0033814	mg/L	0.00226939	-0.0033814	mg/L	0.00226939 67.11%
Se 196.026†	2.2	0.0005984	mg/L	0.00768406	0.0005984	mg/L	0.00768406 >999.9%
Sn 189.927†	-25.6	-0.0055841	mg/L	0.00052936	-0.0055841	mg/L	0.00052936 9.48%
Ti 334.940†	-61.6	-0.0015465	mg/L	0.00002869	-0.0015465	mg/L	0.00002869 1.86%
Tl 190.801†	-0.3	-0.0040907	mg/L	0.00012429	-0.0040907	mg/L	0.00012429 3.04%
V 290.880†	56.6	-0.0022622	mg/L	0.00023296	-0.0022622	mg/L	0.00023296 10.30%
Zn 206.200†	654.1	0.0103587	mg/L	0.00019535	0.0103587	mg/L	0.00019535 1.89%

Sequence No.: 25
 Sample ID: 83866-004
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 71
 Date Collected: 3/31/2015 11:30:44 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-004

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1204423.0	102	%	0.3			0.29%
Y 371.029	421736.6	99.8	%	0.13			0.13%
Ag 328.068†	3.4	-0.0004738	mg/L	0.00003380	-0.0004738 mg/L	0.00003380	7.13%
Al 308.215†	1598.4	0.0263959	mg/L	0.00392888	0.0263959 mg/L	0.00392888	14.88%
As 188.979†	1.2	0.0002794	mg/L	0.00018152	0.0002794 mg/L	0.00018152	64.97%
Ba 233.527†	2886.1	0.0183710	mg/L	0.00011756	0.0183710 mg/L	0.00011756	0.64%
Be 313.107†	-57.8	-0.0014818	mg/L	0.00000472	-0.0014818 mg/L	0.00000472	0.32%
Ca 315.887†	1762644.1	15.8901	mg/L	0.15678	15.8901 mg/L	0.15678	0.99%
Cd 228.802†	126.5	0.0022864	mg/L	0.00000381	0.0022864 mg/L	0.00000381	0.17%
Co 228.616†	17.1	-0.0020728	mg/L	0.00028164	-0.0020728 mg/L	0.00028164	13.59%
Cr 267.716†	5819.9	0.0606034	mg/L	0.00047031	0.0606034 mg/L	0.00047031	0.78%
Cu 327.393†	1179.5	0.0078032	mg/L	0.00047780	0.0078032 mg/L	0.00047780	6.12%
Fe 273.955†	1322.8	0.0309121	mg/L	0.00042871	0.0309121 mg/L	0.00042871	1.39%
K 404.721†	613.9	5.57820	mg/L	0.257354	5.57820 mg/L	0.257354	4.61%
Mg 279.077†	47801.7	2.37596	mg/L	0.031257	2.37596 mg/L	0.031257	1.32%
Mn 257.610†	2320.0	0.0002166	mg/L	0.00003265	0.0002166 mg/L	0.00003265	15.07%
Mo 202.031†	292.5	0.0133833	mg/L	0.00021921	0.0133833 mg/L	0.00021921	1.64%
Na 330.237†	28834.4	22.4730	mg/L	0.28583	22.4730 mg/L	0.28583	1.27%
Ni 231.604†	187.2	0.0005433	mg/L	0.00021080	0.0005433 mg/L	0.00021080	38.80%
Pb 220.353†	10.3	-0.0005638	mg/L	0.00025074	-0.0005638 mg/L	0.00025074	44.47%
Sb 206.836†	6.8	0.0017570	mg/L	0.00093929	0.0017570 mg/L	0.00093929	53.46%
Se 196.026†	5.8	0.0035163	mg/L	0.00715679	0.0035163 mg/L	0.00715679	203.53%
Sn 189.927†	-24.4	-0.0052915	mg/L	0.00012984	-0.0052915 mg/L	0.00012984	2.45%
Ti 334.940†	511.8	-0.0007691	mg/L	0.00003901	-0.0007691 mg/L	0.00003901	5.07%
Tl 190.801†	1.5	-0.0029643	mg/L	0.00064567	-0.0029643 mg/L	0.00064567	21.78%
V 290.880†	194.9	-0.0013847	mg/L	0.00005204	-0.0013847 mg/L	0.00005204	3.76%
Zn 206.200†	1789.9	0.0328271	mg/L	0.00011286	0.0328271 mg/L	0.00011286	0.34%

Sequence No.: 26
 Sample ID: 83866-006
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 72
 Date Collected: 3/31/2015 11:34:06 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-006

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1235772.5	105	%	0.5				0.45%
Y 371.029	435287.4	103	%	0.5				0.45%
Ag 328.068†	-18.0	-0.0005751	mg/L	0.00004532	-0.0005751	mg/L	0.00004532	7.88%
Al 308.215†	722.0	-0.0007013	mg/L	0.00566554	-0.0007013	mg/L	0.00566554	807.89%
As 188.979†	-0.8	-0.0011901	mg/L	0.00028780	-0.0011901	mg/L	0.00028780	24.18%
Ba 233.527†	775.9	0.0032092	mg/L	0.00002113	0.0032092	mg/L	0.00002113	0.66%
Be 313.107†	-117.3	-0.0015001	mg/L	0.00003807	-0.0015001	mg/L	0.00003807	2.54%
Ca 315.887†	935011.9	8.31859	mg/L	0.042214	8.31859	mg/L	0.042214	0.51%
Cd 228.802†	542.7	0.0102051	mg/L	0.00007553	0.0102051	mg/L	0.00007553	0.74%
Co 228.616†	12.5	-0.0021872	mg/L	0.00018935	-0.0021872	mg/L	0.00018935	8.66%
Cr 267.716†	243.5	0.0006527	mg/L	0.00028594	0.0006527	mg/L	0.00028594	43.81%
Cu 327.393†	1824.0	0.0120404	mg/L	0.00057098	0.0120404	mg/L	0.00057098	4.74%
Fe 273.955†	535.9	-0.0022426	mg/L	0.00096821	-0.0022426	mg/L	0.00096821	43.17%
K 404.721†	335.3	3.31542	mg/L	1.132025	3.31542	mg/L	1.132025	34.14%
Mg 279.077†	17172.3	0.683057	mg/L	0.0113658	0.683057	mg/L	0.0113658	1.66%
Mn 257.610†	1249.0	-0.0009923	mg/L	0.00006962	-0.0009923	mg/L	0.00006962	7.02%
Mo 202.031†	42.1	0.0005146	mg/L	0.00022725	0.0005146	mg/L	0.00022725	44.16%
Na 330.237†	4649.7	4.19444	mg/L	0.000326	4.19444	mg/L	0.000326	0.01%
Ni 231.604†	113.6	-0.0009547	mg/L	0.00007530	-0.0009547	mg/L	0.00007530	7.89%
Pb 220.353†	0.6	-0.0014693	mg/L	0.00083298	-0.0014693	mg/L	0.00083298	56.69%
Sb 206.836†	1.4	0.0000436	mg/L	0.00166139	0.0000436	mg/L	0.00166139	>999.9%
Se 196.026†	-0.7	-0.0015091	mg/L	0.00271180	-0.0015091	mg/L	0.00271180	179.69%
Sn 189.927†	-14.2	-0.0033100	mg/L	0.00006398	-0.0033100	mg/L	0.00006398	1.93%
Ti 334.940†	271.4	-0.0010951	mg/L	0.00000267	-0.0010951	mg/L	0.00000267	0.24%
Tl 190.801†	4.1	-0.0015514	mg/L	0.00078835	-0.0015514	mg/L	0.00078835	50.81%
V 290.880†	104.5	-0.0017995	mg/L	0.00047042	-0.0017995	mg/L	0.00047042	26.14%
Zn 206.200†	5041.3	0.0971520	mg/L	0.00063295	0.0971520	mg/L	0.00063295	0.65%

Sequence No.: 27
 Sample ID: 83866-008
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 73
 Date Collected: 3/31/2015 11:37:28 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-008

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1223988.0	104	%	0.4				0.35%
Y 371.029	440687.1	104	%	0.4				0.42%
Ag 328.068†	-12.2	-0.0005486	mg/L	0.00018607	-0.0005486	mg/L	0.00018607	33.92%
Al 308.215†	4350.2	0.111488	mg/L	0.0000564	0.111488	mg/L	0.0000564	0.05%
As 188.979†	2.8	0.0014872	mg/L	0.00176547	0.0014872	mg/L	0.00176547	118.71%
Ba 233.527†	6549.2	0.0446940	mg/L	0.00062555	0.0446940	mg/L	0.00062555	1.40%
Be 313.107†	611.0	-0.0012741	mg/L	0.00000674	-0.0012741	mg/L	0.00000674	0.53%
Ca 315.887†	1921393.7	17.3424	mg/L	0.15188	17.3424	mg/L	0.15188	0.88%
Cd 228.802†	16.2	0.0001860	mg/L	0.00003685	0.0001860	mg/L	0.00003685	19.81%
Co 228.616†	18.6	-0.0020403	mg/L	0.00003974	-0.0020403	mg/L	0.00003974	1.95%
Cr 267.716†	320.6	0.0015025	mg/L	0.00008631	0.0015025	mg/L	0.00008631	5.74%
Cu 327.393†	268.7	0.0015171	mg/L	0.00062509	0.0015171	mg/L	0.00062509	41.20%
Fe 273.955†	190.5	-0.0167960	mg/L	0.00027590	-0.0167960	mg/L	0.00027590	1.64%
K 404.721†	718.2	6.42498	mg/L	0.001490	6.42498	mg/L	0.001490	0.02%
Mg 279.077†	44914.2	2.21637	mg/L	0.015726	2.21637	mg/L	0.015726	0.71%
Mn 257.610†	17135.6	0.0177316	mg/L	0.00008857	0.0177316	mg/L	0.00008857	0.50%
Mo 202.031†	70.5	0.0016509	mg/L	0.00037483	0.0016509	mg/L	0.00037483	22.70%
Na 330.237†	15371.7	12.2980	mg/L	0.08110	12.2980	mg/L	0.08110	0.66%
Ni 231.604†	27.6	-0.0027028	mg/L	0.00017598	-0.0027028	mg/L	0.00017598	6.51%
Pb 220.353†	5.1	-0.0010153	mg/L	0.00029657	-0.0010153	mg/L	0.00029657	29.21%
Sb 206.836†	-5.1	-0.0022526	mg/L	0.00123308	-0.0022526	mg/L	0.00123308	54.74%
Se 196.026†	5.0	0.0027498	mg/L	0.00502178	0.0027498	mg/L	0.00502178	182.63%
Sn 189.927†	-27.2	-0.0058534	mg/L	0.00000979	-0.0058534	mg/L	0.00000979	0.17%
Ti 334.940†	-101.6	-0.0016007	mg/L	0.00004746	-0.0016007	mg/L	0.00004746	2.97%
Tl 190.801†	1.6	-0.0029465	mg/L	0.00071429	-0.0029465	mg/L	0.00071429	24.24%
V 290.880†	47.4	-0.0023652	mg/L	0.00000397	-0.0023652	mg/L	0.00000397	0.17%
Zn 206.200†	822.4	0.0136873	mg/L	0.00007384	0.0136873	mg/L	0.00007384	0.54%

Sequence No.: 28
 Sample ID: 83866-010
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 74
 Date Collected: 3/31/2015 11:40:51 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-010

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1236831.3	105	%	0.3				0.31%
Y 371.029	433568.4	103	%	0.4				0.41%
Ag 328.068†	-29.4	-0.0006276	mg/L	0.00020671	-0.0006276	mg/L	0.00020671	32.94%
Al 308.215†	2614.8	0.0578265	mg/L	0.00199526	0.0578265	mg/L	0.00199526	3.45%
As 188.979†	2.3	0.0011484	mg/L	0.00019820	0.0011484	mg/L	0.00019820	17.26%
Ba 233.527†	1606.7	0.0091787	mg/L	0.00002483	0.0091787	mg/L	0.00002483	0.27%
Be 313.107†	-62.6	-0.0014832	mg/L	0.00000176	-0.0014832	mg/L	0.00000176	0.12%
Ca 315.887†	886601.5	7.87572	mg/L	0.036920	7.87572	mg/L	0.036920	0.47%
Cd 228.802†	10.0	0.0000703	mg/L	0.00008123	0.0000703	mg/L	0.00008123	115.59%
Co 228.616†	16.9	-0.0020772	mg/L	0.00018126	-0.0020772	mg/L	0.00018126	8.73%
Cr 267.716†	100.6	-0.0008734	mg/L	0.00017962	-0.0008734	mg/L	0.00017962	20.57%
Cu 327.393†	112.6	0.0001428	mg/L	0.00015858	0.0001428	mg/L	0.00015858	111.01%
Fe 273.955†	696.3	0.0045158	mg/L	0.00033016	0.0045158	mg/L	0.00033016	7.31%
K 404.721†	160.3	1.89402	mg/L	0.799303	1.89402	mg/L	0.799303	42.20%
Mg 279.077†	47549.9	2.36204	mg/L	0.045634	2.36204	mg/L	0.045634	1.93%
Mn 257.610†	1585.2	-0.0006534	mg/L	0.00000938	-0.0006534	mg/L	0.00000938	1.44%
Mo 202.031†	45.9	0.0007610	mg/L	0.00030212	0.0007610	mg/L	0.00030212	39.70%
Na 330.237†	8667.2	7.23088	mg/L	0.071437	7.23088	mg/L	0.071437	0.99%
Ni 231.604†	34.8	-0.0025577	mg/L	0.00014908	-0.0025577	mg/L	0.00014908	5.83%
Pb 220.353†	11.9	-0.0004903	mg/L	0.00079655	-0.0004903	mg/L	0.00079655	162.46%
Sb 206.836†	1.9	0.0002113	mg/L	0.00089364	0.0002113	mg/L	0.00089364	422.97%
Se 196.026†	2.3	0.0009789	mg/L	0.00197767	0.0009789	mg/L	0.00197767	202.04%
Sn 189.927†	-16.0	-0.0037227	mg/L	0.00087422	-0.0037227	mg/L	0.00087422	23.48%
Ti 334.940†	346.2	-0.0009937	mg/L	0.00001427	-0.0009937	mg/L	0.00001427	1.44%
Tl 190.801†	-0.5	-0.0043237	mg/L	0.00359495	-0.0043237	mg/L	0.00359495	83.15%
V 290.880†	-2.3	-0.0027249	mg/L	0.00010045	-0.0027249	mg/L	0.00010045	3.69%
Zn 206.200†	411.5	0.0055579	mg/L	0.00026752	0.0055579	mg/L	0.00026752	4.81%

Sequence No.: 29
 Sample ID: 83866-018
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 75
 Date Collected: 3/31/2015 11:44:11 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-018

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1242015.3	106	%	0.5			0.43%
Y 371.029	433623.4	103	%	0.0			0.01%
Ag 328.068†	-52.4	-0.0007354	mg/L	0.00010645	-0.0007354	mg/L	0.00010645 14.47%
Al 308.215†	812.3	0.0020894	mg/L	0.00057681	0.0020894	mg/L	0.00057681 27.61%
As 188.979†	1.0	0.0001406	mg/L	0.00163211	0.0001406	mg/L	0.00163211 >999.9%
Ba 233.527†	2107.3	0.0127766	mg/L	0.00010407	0.0127766	mg/L	0.00010407 0.81%
Be 313.107†	-58.5	-0.0014817	mg/L	0.00000910	-0.0014817	mg/L	0.00000910 0.61%
Ca 315.887†	1477647.5	13.2829	mg/L	0.09735	13.2829	mg/L	0.09735 0.73%
Cd 228.802†	6.6	0.0000032	mg/L	0.00001242	0.0000032	mg/L	0.00001242 387.97%
Co 228.616†	10.8	-0.0021848	mg/L	0.00013462	-0.0021848	mg/L	0.00013462 6.16%
Cr 267.716†	41.7	-0.0014957	mg/L	0.00008189	-0.0014957	mg/L	0.00008189 5.48%
Cu 327.393†	150.9	0.0005745	mg/L	0.00042216	0.0005745	mg/L	0.00042216 73.48%
Fe 273.955†	357.4	-0.0097636	mg/L	0.00014331	-0.0097636	mg/L	0.00014331 1.47%
K 404.721†	332.4	3.29235	mg/L	0.497728	3.29235	mg/L	0.497728 15.12%
Mg 279.077†	89718.3	4.69271	mg/L	0.040754	4.69271	mg/L	0.040754 0.87%
Mn 257.610†	1524.9	-0.0008075	mg/L	0.00000474	-0.0008075	mg/L	0.00000474 0.59%
Mo 202.031†	59.0	0.0012222	mg/L	0.00003025	0.0012222	mg/L	0.00003025 2.48%
Na 330.237†	17939.9	14.2391	mg/L	0.01934	14.2391	mg/L	0.01934 0.14%
Ni 231.604†	-23.5	-0.0037414	mg/L	0.00016609	-0.0037414	mg/L	0.00016609 4.44%
Pb 220.353†	-1.0	-0.0016189	mg/L	0.00020899	-0.0016189	mg/L	0.00020899 12.91%
Sb 206.836†	2.6	0.0003903	mg/L	0.00108811	0.0003903	mg/L	0.00108811 278.79%
Se 196.026†	0.3	-0.0009153	mg/L	0.00171291	-0.0009153	mg/L	0.00171291 187.14%
Sn 189.927†	-23.9	-0.0052856	mg/L	0.00040385	-0.0052856	mg/L	0.00040385 7.64%
Ti 334.940†	-5.4	-0.0014703	mg/L	0.00001463	-0.0014703	mg/L	0.00001463 0.99%
Tl 190.801†	-1.2	-0.0046414	mg/L	0.00294853	-0.0046414	mg/L	0.00294853 63.53%
V 290.880†	43.5	-0.0027043	mg/L	0.00008743	-0.0027043	mg/L	0.00008743 3.23%
Zn 206.200†	300.8	0.0033688	mg/L	0.00001657	0.0033688	mg/L	0.00001657 0.49%

Sequence No.: 30
 Sample ID: ICSA V-202074
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/31/2015 11:47:33 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1029259.8	87.6 %		0.42			0.48%
Y 371.029	355866.2	84.2 %		0.34			0.41%
Ag 328.068†	-1759.0	0.0008825 mg/L		0.00011882	0.0008825 mg/L	0.00011882	13.46%
Al 308.215†	16183290.4	500.392 mg/L		4.8192	500.392 mg/L	4.8192	0.96%
QC value within limits for Al 308.215 Recovery = 100.08%							
As 188.979†	-5.8	-0.0030890 mg/L		0.00028567	-0.0030890 mg/L	0.00028567	9.25%
Ba 233.527†	1825.4	0.0040637 mg/L		0.00014400	0.0040637 mg/L	0.00014400	3.54%
Be 313.107†	-3222.2	-0.0024640 mg/L		0.00002098	-0.0024640 mg/L	0.00002098	0.85%
Ca 315.887†	52325326.1	478.459 mg/L		4.3422	478.459 mg/L	4.3422	0.91%
QC value within limits for Ca 315.887 Recovery = 95.69%							
Cd 228.802†	-406.3	-0.0016279 mg/L		0.00020189	-0.0016279 mg/L	0.00020189	12.40%
Co 228.616†	150.2	0.0055817 mg/L		0.00035893	0.0055817 mg/L	0.00035893	6.43%
Cr 267.716†	-353.3	0.0030533 mg/L		0.00015659	0.0030533 mg/L	0.00015659	5.13%
Cu 327.393†	-3480.2	0.0038804 mg/L		0.00023622	0.0038804 mg/L	0.00023622	6.09%
Fe 273.955†	4546885.8	191.541 mg/L		0.1248	191.541 mg/L	0.1248	0.07%
QC value within limits for Fe 273.955 Recovery = 95.77%							
K 404.721†	372.5	3.61807 mg/L		0.341598	3.61807 mg/L	0.341598	9.44%
Mg 279.077†	8881722.5	490.631 mg/L		4.6179	490.631 mg/L	4.6179	0.94%
QC value within limits for Mg 279.077 Recovery = 98.13%							
Mn 257.610†	9331.0	0.0051723 mg/L		0.00020484	0.0051723 mg/L	0.00020484	3.96%
Mo 202.031†	401.9	0.0012151 mg/L		0.00030904	0.0012151 mg/L	0.00030904	25.43%
Na 330.237†	479.4	1.04257 mg/L		0.004680	1.04257 mg/L	0.004680	0.45%
Ni 231.604†	166.8	-0.0075951 mg/L		0.00044526	-0.0075951 mg/L	0.00044526	5.86%
Pb 220.353†	-381.5	0.0091673 mg/L		0.00037543	0.0091673 mg/L	0.00037543	4.10%
Sb 206.836†	109.1	-0.0126100 mg/L		0.00163477	-0.0126100 mg/L	0.00163477	12.96%
Se 196.026†	-180.8	-0.0680555 mg/L		0.01034660	-0.0680555 mg/L	0.01034660	15.20%
Sn 189.927†	-135.0	-0.0179100 mg/L		0.00206480	-0.0179100 mg/L	0.00206480	11.53%
Ti 334.940†	2191.5	0.0015078 mg/L		0.00002514	0.0015078 mg/L	0.00002514	1.67%
Tl 190.801†	-5.1	-0.0008507 mg/L		0.00123691	-0.0008507 mg/L	0.00123691	145.40%
V 290.880†	7858.2	-0.0212069 mg/L		0.00144449	-0.0212069 mg/L	0.00144449	6.81%
Zn 206.200†	1487.6	0.0200763 mg/L		0.00005070	0.0200763 mg/L	0.00005070	0.25%

All analyte(s) passed QC.

Sequence No.: 31
 Sample ID: ICSAB V-202076
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/31/2015 11:52:25 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1026221.2	87.3 %		0.25			0.29%
Y 371.029	355060.2	84.0 %		0.44			0.52%
Ag 328.068†	226159.4	1.06072 mg/L		0.001787	1.06072 mg/L	0.001787	0.17%
QC value within limits for Ag		328.068 Recovery = 106.07%					
Al 308.215†	16269677.8	503.063 mg/L		0.2249	503.063 mg/L	0.2249	0.04%
QC value within limits for Al		308.215 Recovery = 100.61%					
As 188.979†	1332.2	1.00108 mg/L		0.005040	1.00108 mg/L	0.005040	0.50%
QC value within limits for As		188.979 Recovery = 100.11%					
Ba 233.527†	73038.9	0.515794 mg/L		0.0000195	0.515794 mg/L	0.0000195	0.00%
QC value within limits for Ba		233.527 Recovery = 103.16%					
Be 313.107†	1585050.5	0.489981 mg/L		0.0000941	0.489981 mg/L	0.0000941	0.02%
QC value within limits for Be		313.107 Recovery = 98.00%					
Ca 315.887†	52665250.4	481.568 mg/L		1.0928	481.568 mg/L	1.0928	0.23%
QC value within limits for Ca		315.887 Recovery = 96.31%					
Cd 228.802†	53118.5	1.01674 mg/L		0.001278	1.01674 mg/L	0.001278	0.13%
QC value within limits for Cd		228.802 Recovery = 101.67%					
Co 228.616†	21517.0	0.468557 mg/L		0.0030702	0.468557 mg/L	0.0030702	0.66%
QC value within limits for Co		228.616 Recovery = 93.71%					
Cr 267.716†	44716.7	0.487844 mg/L		0.0011878	0.487844 mg/L	0.0011878	0.24%
QC value within limits for Cr		267.716 Recovery = 97.57%					
Cu 327.393†	71559.9	0.525041 mg/L		0.0003439	0.525041 mg/L	0.0003439	0.07%
QC value within limits for Cu		327.393 Recovery = 105.01%					
Fe 273.955†	4532306.7	190.927 mg/L		0.0802	190.927 mg/L	0.0802	0.04%
QC value within limits for Fe		273.955 Recovery = 95.46%					
K 404.721†	413.1	3.94705 mg/L		0.777904	3.94705 mg/L	0.777904	19.71%
Mg 279.077†	8939470.7	493.823 mg/L		1.4011	493.823 mg/L	1.4011	0.28%
QC value within limits for Mg		279.077 Recovery = 98.76%					
Mn 257.610†	415299.1	0.484892 mg/L		0.0001001	0.484892 mg/L	0.0001001	0.02%
QC value within limits for Mn		257.610 Recovery = 96.98%					
Mo 202.031†	388.7	0.0001393 mg/L		0.00101244	0.0001393 mg/L	0.00101244	726.66%
Na 330.237†	1164.0	1.56003 mg/L		0.065800	1.56003 mg/L	0.065800	4.22%
Ni 231.604†	45388.2	0.911426 mg/L		0.0006581	0.911426 mg/L	0.0006581	0.07%
QC value within limits for Ni		231.604 Recovery = 91.14%					
Pb 220.353†	10284.8	0.945932 mg/L		0.0001534	0.945932 mg/L	0.0001534	0.02%
QC value within limits for Pb		220.353 Recovery = 94.59%					
Sb 206.836†	3147.2	1.01142 mg/L		0.005356	1.01142 mg/L	0.005356	0.53%
QC value within limits for Sb		206.836 Recovery = 101.14%					
Se 196.026†	1021.0	0.925834 mg/L		0.0025084	0.925834 mg/L	0.0025084	0.27%
QC value within limits for Se		196.026 Recovery = 92.58%					
Sn 189.927†	-134.8	-0.0177941 mg/L		0.00321813	-0.0177941 mg/L	0.00321813	18.09%
Ti 334.940†	2362.2	0.0017391 mg/L		0.00000146	0.0017391 mg/L	0.00000146	0.08%
Tl 190.801†	1540.8	0.923934 mg/L		0.0003528	0.923934 mg/L	0.0003528	0.04%
QC value within limits for Tl		190.801 Recovery = 92.39%					
V 290.880†	78480.6	0.453127 mg/L		0.0004000	0.453127 mg/L	0.0004000	0.09%
QC value within limits for V		290.880 Recovery = 90.63%					
Zn 206.200†	49256.6	0.965140 mg/L		0.0003642	0.965140 mg/L	0.0003642	0.04%
QC value within limits for Zn		206.200 Recovery = 96.51%					

All analyte(s) passed QC.

Sequence No.: 32
 Sample ID: CCV V-202964
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/31/2015 11:57:20 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1148174.0	97.7 %		0.66			0.67%
Y 371.029	395978.2	93.7 %		0.48			0.51%
Ag 328.068†	21535.9	0.0999027 mg/L		0.00022034	0.0999027 mg/L	0.00022034	0.22%
QC value within limits for Ag		328.068 Recovery = 99.90%					
Al 308.215†	160132.5	4.92854 mg/L		0.029642	4.92854 mg/L	0.029642	0.60%
QC value within limits for Al		308.215 Recovery = 98.57%					
As 188.979†	633.6	0.475214 mg/L		0.0035339	0.475214 mg/L	0.0035339	0.74%
QC value within limits for As		188.979 Recovery = 95.04%					
Ba 233.527†	68474.2	0.489486 mg/L		0.0024525	0.489486 mg/L	0.0024525	0.50%
QC value within limits for Ba		233.527 Recovery = 97.90%					
Be 313.107†	1530314.3	0.472791 mg/L		0.0017648	0.472791 mg/L	0.0017648	0.37%
QC value within limits for Be		313.107 Recovery = 94.56%					
Ca 315.887†	5260808.4	47.8928 mg/L		0.10721	47.8928 mg/L	0.10721	0.22%
QC value within limits for Ca		315.887 Recovery = 95.79%					
Cd 228.802†	25533.0	0.485811 mg/L		0.0034073	0.485811 mg/L	0.0034073	0.70%
QC value within limits for Cd		228.802 Recovery = 97.16%					
Co 228.616†	22712.3	0.489113 mg/L		0.0031630	0.489113 mg/L	0.0031630	0.65%
QC value within limits for Co		228.616 Recovery = 97.82%					
Cr 267.716†	45714.3	0.490159 mg/L		0.0027218	0.490159 mg/L	0.0027218	0.56%
QC value within limits for Cr		267.716 Recovery = 98.03%					
Cu 327.393†	69631.8	0.485815 mg/L		0.0039165	0.485815 mg/L	0.0039165	0.81%
QC value within limits for Cu		327.393 Recovery = 97.16%					
Fe 273.955†	118381.1	4.96271 mg/L		0.027965	4.96271 mg/L	0.027965	0.56%
QC value within limits for Fe		273.955 Recovery = 99.25%					
K 404.721†	5807.4	47.7558 mg/L		0.14906	47.7558 mg/L	0.14906	0.31%
QC value within limits for K		404.721 Recovery = 95.51%					
Mg 279.077†	881488.8	48.4542 mg/L		0.09753	48.4542 mg/L	0.09753	0.20%
QC value within limits for Mg		279.077 Recovery = 96.91%					
Mn 257.610†	401282.9	0.470551 mg/L		0.0017320	0.470551 mg/L	0.0017320	0.37%
QC value within limits for Mn		257.610 Recovery = 94.11%					
Mo 202.031†	9181.7	0.479363 mg/L		0.0058671	0.479363 mg/L	0.0058671	1.22%
QC value within limits for Mo		202.031 Recovery = 95.87%					
Na 330.237†	59881.3	45.9380 mg/L		0.08705	45.9380 mg/L	0.08705	0.19%
QC value within limits for Na		330.237 Recovery = 91.88%					
Ni 231.604†	24097.2	0.486388 mg/L		0.0026593	0.486388 mg/L	0.0026593	0.55%
QC value within limits for Ni		231.604 Recovery = 97.28%					
Pb 220.353†	5424.2	0.475701 mg/L		0.0051612	0.475701 mg/L	0.0051612	1.08%
QC value within limits for Pb		220.353 Recovery = 95.14%					
Sb 206.836†	1451.8	0.487480 mg/L		0.0046568	0.487480 mg/L	0.0046568	0.96%
QC value within limits for Sb		206.836 Recovery = 97.50%					
Se 196.026†	579.0	0.478743 mg/L		0.0142958	0.478743 mg/L	0.0142958	2.99%
QC value within limits for Se		196.026 Recovery = 95.75%					
Sn 189.927†	2241.3	0.500392 mg/L		0.0036914	0.500392 mg/L	0.0036914	0.74%
QC value within limits for Sn		189.927 Recovery = 100.08%					
Ti 334.940†	354197.0	0.478663 mg/L		0.0015233	0.478663 mg/L	0.0015233	0.32%
QC value within limits for Ti		334.940 Recovery = 95.73%					
Tl 190.801†	795.8	0.473777 mg/L		0.0065782	0.473777 mg/L	0.0065782	1.39%
QC value within limits for Tl		190.801 Recovery = 94.76%					
V 290.880†	71197.5	0.470687 mg/L		0.0028191	0.470687 mg/L	0.0028191	0.60%
QC value within limits for V		290.880 Recovery = 94.14%					
Zn 206.200†	25092.8	0.493659 mg/L		0.0024221	0.493659 mg/L	0.0024221	0.49%
QC value within limits for Zn		206.200 Recovery = 98.73%					

All analyte(s) passed QC.

Autosampler Location: 5
Date Collected: 3/31/2015 12:00:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analyte		Mean Data: 2000-2007	Mean Corrected	Calib	Std.Dev.	Sample	Std.Dev.	RSD
		Intensity	Conc. Units			Conc. Units		
Sc	361.383	1225252.6	104 %		0.4			0.41%
Y	371.029	431359.1	102 %		0.2			0.18%
Ag	328.068†	4049.8	0.0183548 mg/L	0.00025447		0.0183548 mg/L	0.00025447	1.39%
	QC value within limits for Ag	328.068	Recovery = 91.77%					
Al	308.215†	8206.6	0.230735 mg/L	0.0002479		0.230735 mg/L	0.0002479	0.11%
	QC value within limits for Al	308.215	Recovery = 115.37%					
As	188.979†	24.3	0.0176664 mg/L	0.00137193		0.0176664 mg/L	0.00137193	7.77%
	QC value within limits for As	188.979	Recovery = 88.33%					
Ba	233.527†	6902.5	0.0472231 mg/L	0.00059249		0.0472231 mg/L	0.00059249	1.25%
	QC value within limits for Ba	233.527	Recovery = 94.45%					
Be	313.107†	35008.3	0.0093690 mg/L	0.00010293		0.0093690 mg/L	0.00010293	1.10%
	QC value within limits for Be	313.107	Recovery = 78.07%					
Ca	315.887†	559964.8	4.88751 mg/L	0.042136		4.88751 mg/L	0.042136	0.86%
	QC value within limits for Ca	315.887	Recovery = 97.75%					
Cd	228.802†	585.5	0.0110267 mg/L	0.00002033		0.0110267 mg/L	0.00002033	0.18%
	QC value within limits for Cd	228.802	Recovery = 91.89%					
Co	228.616†	908.5	0.0171679 mg/L	0.00023695		0.0171679 mg/L	0.00023695	1.38%
	QC value within limits for Co	228.616	Recovery = 85.84%					
Cr	267.716†	4523.0	0.0467093 mg/L	0.00034863		0.0467093 mg/L	0.00034863	0.75%
	QC value within limits for Cr	267.716	Recovery = 93.42%					
Cu	327.393†	6878.9	0.0471842 mg/L	0.00071987		0.0471842 mg/L	0.00071987	1.53%
	QC value within limits for Cu	327.393	Recovery = 94.37%					
Fe	273.955†	6958.8	0.268362 mg/L	0.0043694		0.268362 mg/L	0.0043694	1.63%
	QC value within limits for Fe	273.955	Recovery = 89.45%					
K	404.721†	765.9	6.81276 mg/L	0.438652		6.81276 mg/L	0.438652	6.44%
	QC value greater than the upper limit for K 404.721		Recovery = 136.26%					
Mg	279.077†	90989.3	4.76296 mg/L	0.051920		4.76296 mg/L	0.051920	1.09%
	QC value within limits for Mg	279.077	Recovery = 95.26%					
Mn	257.610†	32535.8	0.0358666 mg/L	0.00032413		0.0358666 mg/L	0.00032413	0.90%
	QC value within limits for Mn	257.610	Recovery = 89.67%					
Mo	202.031†	385.6	0.0187269 mg/L	0.00013844		0.0187269 mg/L	0.00013844	0.74%
	QC value within limits for Mo	202.031	Recovery = 93.63%					
Na	330.237†	5155.4	4.57667 mg/L	0.146308		4.57667 mg/L	0.146308	3.20%
	QC value within limits for Na	330.237	Recovery = 91.53%					
Ni	231.604†	2392.7	0.0453553 mg/L	0.00063548		0.0453553 mg/L	0.00063548	1.40%
	QC value within limits for Ni	231.604	Recovery = 90.71%					
Pb	220.353†	141.5	0.0109069 mg/L	0.00057816		0.0109069 mg/L	0.00057816	5.30%
	QC value within limits for Pb	220.353	Recovery = 90.89%					
Sb	206.836†	59.6	0.0196393 mg/L	0.00049442		0.0196393 mg/L	0.00049442	2.52%
	QC value within limits for Sb	206.836	Recovery = 98.20%					
Se	196.026†	42.3	0.0					

Sequence No.: 34
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 3/31/2015 12:04:08 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Mean Data: 002			Mean Corrected		Calib		Sample			
Analyte			Intensity		Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD	
Sc 361.383			1245066.9		106 %	0.2			0.22%	
Y 371.029			446229.9		106 %	0.0			0.04%	
Ag 328.068†			15.6	-0.0004194	mg/L	0.00012873	-0.0004194	mg/L	0.00012873	30.69%
	QC value	within limits	for Ag 328.068		Recovery =	Not calculated				
Al 308.215†			444.8	-0.0092756	mg/L	0.00105762	-0.0092756	mg/L	0.00105762	11.40%
	QC value	within limits	for Al 308.215		Recovery =	Not calculated				
As 188.979†			0.4	-0.0003297	mg/L	0.00075534	-0.0003297	mg/L	0.00075534	229.10%
	QC value	within limits	for As 188.979		Recovery =	Not calculated				
Ba 233.527†			24.1	-0.0021922	mg/L	0.00001154	-0.0021922	mg/L	0.00001154	0.53%
	QC value	within limits	for Ba 233.527		Recovery =	Not calculated				
Be 313.107†			-11.7	-0.0014673	mg/L	0.00003266	-0.0014673	mg/L	0.00003266	2.23%
	QC value	within limits	for Be 313.107		Recovery =	Not calculated				
Ca 315.887†			961.5	-0.226488	mg/L	0.0000298	-0.226488	mg/L	0.0000298	0.01%
	QC value	within limits	for Ca 315.887		Recovery =	Not calculated				
Cd 228.802†			-0.0	-0.0001224	mg/L	0.00000286	-0.0001224	mg/L	0.00000286	2.34%
	QC value	within limits	for Cd 228.802		Recovery =	Not calculated				
Co 228.616†			11.5	-0.0022186	mg/L	0.00008732	-0.0022186	mg/L	0.00008732	3.94%
	QC value	within limits	for Co 228.616		Recovery =	Not calculated				
Cr 267.716†			30.3	-0.0016446	mg/L	0.00007396	-0.0016446	mg/L	0.00007396	4.50%
	QC value	within limits	for Cr 267.716		Recovery =	Not calculated				
Cu 327.393†			84.8	-0.0003038	mg/L	0.00020392	-0.0003038	mg/L	0.00020392	67.11%
	QC value	within limits	for Cu 327.393		Recovery =	Not calculated				
Fe 273.955†			156.9	-0.0182121	mg/L	0.00019742	-0.0182121	mg/L	0.00019742	1.08%
	QC value	within limits	for Fe 273.955		Recovery =	Not calculated				
K 404.721†			313.9	3.14146	mg/L	0.711503	3.14146	mg/L	0.711503	22.65%
	QC value	within limits	for K 404.721		Recovery =	Not calculated				
Mg 279.077†			104.8	-0.260269	mg/L	0.0020722	-0.260269	mg/L	0.0020722	0.80%
	QC value	within limits	for Mg 279.077		Recovery =	Not calculated				
Mn 257.610†			-12.7	-0.0024519	mg/L	0.00002361	-0.0024519	mg/L	0.00002361	0.96%
	QC value	within limits	for Mn 257.610		Recovery =	Not calculated				
Mo 202.031†			1.3	-0.0012431	mg/L	0.00005368	-0.0012431	mg/L	0.00005368	4.32%
	QC value	within limits	for Mo 202.031		Recovery =	Not calculated				
Na 330.237†			88.3	0.746970	mg/L	0.0044010	0.746970	mg/L	0.0044010	0.59%
	QC value	within limits	for Na 330.237		Recovery =	Not calculated				
Ni 231.604†			-21.5	-0.0037016	mg/L	0.00002888	-0.0037016	mg/L	0.00002888	0.78%
	QC value	within limits	for Ni 231.604		Recovery =	Not calculated				
Pb 220.353†			6.2	-0.0010275	mg/L	0.00038887	-0.0010275	mg/L	0.00038887	37.85%
	QC value	within limits	for Pb 220.353		Recovery =	Not calculated				
Sb 206.836†			2.0	0.0003635	mg/L	0.00134080	0.0003635	mg/L	0.00134080	368.90%
	QC value	within limits	for Sb 206.836		Recovery =	Not calculated				
Se 196.026†			-1.1	-0.0014958	mg/L	0.00339810	-0.0014958	mg/L	0.00339810	227.18%
	QC value	within limits	for Se 196.026		Recovery =	Not calculated				
Sn 189.927†			-2.2	-0.0009715	mg/L	0.00063779	-0.0009715	mg/L	0.00063779	65.65%
	QC value	within limits	for Sn 189.927		Recovery =	Not calculated				
Ti 334.940†			76.1	-0.0013597	mg/L	0.00001389	-0.0013597	mg/L	0.00001389	1.02%
	QC value	within limits	for Ti 334.940		Recovery =	Not calculated				
Tl 190.801†			7.6	0.0004479	mg/L	0.00058565	0.0004479	mg/L	0.00058565	130.75%
	QC value	within limits	for Tl 190.801		Recovery =	Not calculated				
V 290.880†			-72.0	-0.0028715	mg/L	0.00010358	-0.0028715	mg/L	0.00010358	3.61%
	QC value	within limits	for V 290.880		Recovery =	Not calculated				
Zn 206.200†			31.8	-0.0019537	mg/L	0.00004729	-0.0019537	mg/L	0.00004729	2.42%
	QC value	within limits	for Zn 206.200		Recovery =	Not calculated				
All analyte(s) passed QC.										

All analyte(s) passed QC.

Sequence No.: 35
 Sample ID: 83866-020
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 76
 Date Collected: 3/31/2015 12:07:27 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-020

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1247520.2	106	%	0.7			0.62%
Y 371.029	434317.8	103	%	0.7			0.65%
Ag 328.068†	-44.0	-0.0006963	mg/L	0.00042985	-0.0006963 mg/L	0.00042985	61.74%
Al 308.215†	607.1	-0.0042559	mg/L	0.00003984	-0.0042559 mg/L	0.00003984	0.94%
As 188.979†	2.0	0.0008900	mg/L	0.00145552	0.0008900 mg/L	0.00145552	163.55%
Ba 233.527†	1760.0	0.0102807	mg/L	0.00002259	0.0102807 mg/L	0.00002259	0.22%
Be 313.107†	-89.9	-0.0014915	mg/L	0.00001995	-0.0014915 mg/L	0.00001995	1.34%
Ca 315.887†	1808366.3	16.3084	mg/L	0.03450	16.3084 mg/L	0.03450	0.21%
Cd 228.802†	18.9	0.0002375	mg/L	0.00016529	0.0002375 mg/L	0.00016529	69.58%
Co 228.616†	19.5	-0.0020149	mg/L	0.00001317	-0.0020149 mg/L	0.00001317	0.65%
Cr 267.716†	108.5	-0.0007629	mg/L	0.00025226	-0.0007629 mg/L	0.00025226	33.07%
Cu 327.393†	198.5	0.0009989	mg/L	0.00027445	0.0009989 mg/L	0.00027445	27.48%
Fe 273.955†	387.6	-0.0084909	mg/L	0.00043782	-0.0084909 mg/L	0.00043782	5.16%
K 404.721†	900.8	7.90854	mg/L	0.416875	7.90854 mg/L	0.416875	5.27%
Mg 279.077†	53603.6	2.69663	mg/L	0.037431	2.69663 mg/L	0.037431	1.39%
Mn 257.610†	29980.9	0.0328991	mg/L	0.00040119	0.0328991 mg/L	0.00040119	1.22%
Mo 202.031†	64.9	0.0014035	mg/L	0.00023282	0.0014035 mg/L	0.00023282	16.59%
Na 330.237†	19193.5	15.1865	mg/L	0.08229	15.1865 mg/L	0.08229	0.54%
Ni 231.604†	-20.6	-0.0036814	mg/L	0.00040769	-0.0036814 mg/L	0.00040769	11.07%
Pb 220.353†	0.9	-0.0014079	mg/L	0.00083911	-0.0014079 mg/L	0.00083911	59.60%
Sb 206.836†	-1.1	-0.0008895	mg/L	0.00019474	-0.0008895 mg/L	0.00019474	21.89%
Se 196.026†	5.2	0.0029884	mg/L	0.00369657	0.0029884 mg/L	0.00369657	123.70%
Sn 189.927†	-23.7	-0.0051268	mg/L	0.00172221	-0.0051268 mg/L	0.00172221	33.59%
Ti 334.940†	14.6	-0.0014432	mg/L	0.00001553	-0.0014432 mg/L	0.00001553	1.08%
Tl 190.801†	4.2	-0.0014180	mg/L	0.00051494	-0.0014180 mg/L	0.00051494	36.32%
V 290.880†	14.4	-0.0026431	mg/L	0.00005294	-0.0026431 mg/L	0.00005294	2.00%
Zn 206.200†	264.1	0.0026427	mg/L	0.00017493	0.0026427 mg/L	0.00017493	6.62%

Sequence No.: 36
 Sample ID: 83866-022
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 77
 Date Collected: 3/31/2015 12:10:48 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-022

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1242074.6	106 %	%	0.3			0.25%
Y 371.029	435954.6	103 %	%	0.3			0.32%
Ag 328.068†	-14.9	-0.0005606	mg/L	0.00015953	-0.0005606	0.00015953	28.45%
Al 308.215†	558.6	-0.0057546	mg/L	0.00078076	-0.0057546	0.00078076	13.57%
As 188.979†	3.4	0.0019270	mg/L	0.00023694	0.0019270	0.00023694	12.30%
Ba 233.527†	3170.6	0.0204164	mg/L	0.00002940	0.0204164	0.00002940	0.14%
Be 313.107†	-137.7	-0.0015062	mg/L	0.00000832	-0.0015062	0.00000832	0.55%
Ca 315.887†	2182792.7	19.7338	mg/L	0.16875	19.7338	0.16875	0.86%
Cd 228.802†	1648.8	0.0312495	mg/L	0.00008767	0.0312495	0.00008767	0.28%
Co 228.616†	25.1	-0.0018899	mg/L	0.00001212	-0.0018899	0.00001212	0.64%
Cr 267.716†	7859.5	0.0825306	mg/L	0.00001126	0.0825306	0.00001126	0.01%
Cu 327.393†	43.2	0.0000263	mg/L	0.00050460	0.0000263	0.00050460	>999.9%
Fe 273.955†	453.6	-0.0057083	mg/L	0.00046998	-0.0057083	0.00046998	8.23%
K 404.721†	610.4	5.54943	mg/L	0.032949	5.54943	0.032949	0.59%
Mg 279.077†	59680.5	3.03251	mg/L	0.003661	3.03251	0.003661	0.12%
Mn 257.610†	5428.0	0.0038647	mg/L	0.00000232	0.0038647	0.00000232	0.06%
Mo 202.031†	105.0	0.0033691	mg/L	0.00054539	0.0033691	0.00054539	16.19%
Na 330.237†	13172.4	10.6358	mg/L	0.05560	10.6358	0.05560	0.52%
Ni 231.604†	91.4	-0.0014056	mg/L	0.00056722	-0.0014056	0.00056722	40.35%
Pb 220.353†	2.7	-0.0012332	mg/L	0.00078364	-0.0012332	0.00078364	63.55%
Sb 206.836†	6.7	0.0016868	mg/L	0.00011201	0.0016868	0.00011201	6.64%
Se 196.026†	0.9	-0.0006820	mg/L	0.00035090	-0.0006820	0.00035090	51.45%
Sn 189.927†	-32.3	-0.0069014	mg/L	0.00013416	-0.0069014	0.00013416	1.94%
Ti 334.940†	-75.1	-0.0015648	mg/L	0.00003072	-0.0015648	0.00003072	1.96%
Tl 190.801†	-1.4	-0.0046706	mg/L	0.00089092	-0.0046706	0.00089092	19.08%
V 290.880†	-30.5	-0.0029916	mg/L	0.00023169	-0.0029916	0.00023169	7.74%
Zn 206.200†	329.0	0.0039272	mg/L	0.00002462	0.0039272	0.00002462	0.63%

Sequence No.: 37
 Sample ID: 83866-024
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 78
 Date Collected: 3/31/2015 12:14:10 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-024

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1243972.1	106	%	0.9			0.86%
Y 371.029	441683.7	105	%	1.0			0.93%
Ag 328.068†	17.4	-0.0004112	mg/L	0.00020332	-0.0004112	mg/L	0.00020332 49.45%
Al 308.215†	6044.8	0.163887	mg/L	0.0023045	0.163887	mg/L	0.0023045 1.41%
As 188.979†	2.4	0.0011632	mg/L	0.00016938	0.0011632	mg/L	0.00016938 14.56%
Ba 233.527†	23193.7	0.164294	mg/L	0.0007519	0.164294	mg/L	0.0007519 0.46%
Be 313.107†	781.2	-0.0012214	mg/L	0.00003786	-0.0012214	mg/L	0.00003786 3.10%
Ca 315.887†	1337494.5	12.0007	mg/L	0.10388	12.0007	mg/L	0.10388 0.87%
Cd 228.802†	192.5	0.0035410	mg/L	0.00014357	0.0035410	mg/L	0.00014357 4.05%
Co 228.616†	20.8	-0.0019803	mg/L	0.00005531	-0.0019803	mg/L	0.00005531 2.79%
Cr 267.716†	114.1	-0.0004722	mg/L	0.00014563	-0.0004722	mg/L	0.00014563 30.84%
Cu 327.393†	1287.8	0.0084293	mg/L	0.00018254	0.0084293	mg/L	0.00018254 2.17%
Fe 273.955†	211.5	-0.0159107	mg/L	0.00052104	-0.0159107	mg/L	0.00052104 3.27%
K 404.721†	559.5	5.13627	mg/L	0.168859	5.13627	mg/L	0.168859 3.29%
Mg 279.077†	65256.9	3.34072	mg/L	0.028203	3.34072	mg/L	0.028203 0.84%
Mn 257.610†	294420.5	0.345457	mg/L	0.0032457	0.345457	mg/L	0.0032457 0.94%
Mo 202.031†	56.0	0.0011114	mg/L	0.00012539	0.0011114	mg/L	0.00012539 11.28%
Na 330.237†	10665.8	8.74135	mg/L	0.016956	8.74135	mg/L	0.016956 0.19%
Ni 231.604†	376.3	0.0043844	mg/L	0.00002511	0.0043844	mg/L	0.00002511 0.57%
Pb 220.353†	3.3	-0.0012164	mg/L	0.00020344	-0.0012164	mg/L	0.00020344 16.72%
Sb 206.836†	-0.3	-0.0005994	mg/L	0.00068479	-0.0005994	mg/L	0.00068479 114.24%
Se 196.026†	2.4	0.0007203	mg/L	0.00102325	0.0007203	mg/L	0.00102325 142.06%
Sn 189.927†	-26.6	-0.0059331	mg/L	0.00023653	-0.0059331	mg/L	0.00023653 3.99%
Ti 334.940†	60.7	-0.0013807	mg/L	0.00001760	-0.0013807	mg/L	0.00001760 1.27%
Tl 190.801†	-1.2	-0.0050675	mg/L	0.00173166	-0.0050675	mg/L	0.00173166 34.17%
V 290.880†	-70.0	-0.0032032	mg/L	0.00002253	-0.0032032	mg/L	0.00002253 0.70%
Zn 206.200†	1073.8	0.0186611	mg/L	0.00012538	0.0186611	mg/L	0.00012538 0.67%

Sequence No.: 38
 Sample ID: 83866-026
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 79
 Date Collected: 3/31/2015 12:17:31 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-026

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	1235537.7	105 %	%	0.2			0.23%
Y 371.029	431075.2	102 %	%	0.0			0.03%
Ag 328.068†	29.0	-0.0003562	mg/L	0.00002042	-0.0003562	0.00002042	5.73%
Al 308.215†	3061.2	0.0716295	mg/L	0.00499396	0.0716295	0.00499396	6.97%
As 188.979†	0.1	-0.0005270	mg/L	0.00152866	-0.0005270	0.00152866	290.05%
Ba 233.527†	8190.9	0.0564903	mg/L	0.00000683	0.0564903	0.00000683	0.01%
Be 313.107†	-79.5	-0.0014883	mg/L	0.00000312	-0.0014883	0.00000312	0.21%
Ca 315.887†	1349847.2	12.1137	mg/L	0.04369	12.1137	0.04369	0.36%
Cd 228.802†	7.9	0.0000297	mg/L	0.00023213	0.0000297	0.00023213	782.30%
Co 228.616†	11.7	-0.0021664	mg/L	0.00012592	-0.0021664	0.00012592	5.81%
Cr 267.716†	1318.4	0.0122458	mg/L	0.00003957	0.0122458	0.00003957	0.32%
Cu 327.393†	91.6	0.0001271	mg/L	0.00014268	0.0001271	0.00014268	112.28%
Fe 273.955†	647.0	0.0024386	mg/L	0.00052072	0.0024386	0.00052072	21.35%
K 404.721†	668.6	6.02230	mg/L	0.501558	6.02230	0.501558	8.33%
Mg 279.077†	87976.4	4.59644	mg/L	0.029490	4.59644	0.029490	0.64%
Mn 257.610†	23204.0	0.0248227	mg/L	0.00018484	0.0248227	0.00018484	0.74%
Mo 202.031†	58.7	0.0012558	mg/L	0.00017405	0.0012558	0.00017405	13.86%
Na 330.237†	16070.5	12.8262	mg/L	0.11546	12.8262	0.11546	0.90%
Ni 231.604†	-2.5	-0.0033152	mg/L	0.00012018	-0.0033152	0.00012018	3.63%
Pb 220.353†	-1.9	-0.0016952	mg/L	0.00008147	-0.0016952	0.00008147	4.81%
Sb 206.836†	1.6	0.0000523	mg/L	0.00059612	0.0000523	0.00059612	>999.9%
Se 196.026†	2.4	0.0008708	mg/L	0.00353996	0.0008708	0.00353996	406.53%
Sn 189.927†	-19.4	-0.0043308	mg/L	0.00025441	-0.0043308	0.00025441	5.87%
Ti 334.940†	69.3	-0.0013690	mg/L	0.00002343	-0.0013690	0.00002343	1.71%
Tl 190.801†	4.2	-0.0014579	mg/L	0.00222701	-0.0014579	0.00222701	152.75%
V 290.880†	53.6	-0.0026180	mg/L	0.00010949	-0.0026180	0.00010949	4.18%
Zn 206.200†	456.5	0.0064481	mg/L	0.00008533	0.0064481	0.00008533	1.32%

Sequence No.: 39
 Sample ID: 83866-028
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 80
 Date Collected: 3/31/2015 12:20:53 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-028

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1237974.3	105	%	0.6			0.55%
Y 371.029	432323.4	102	%	0.3			0.33%
Ag 328.068†	40.1	-0.0003057	mg/L	0.00029416	-0.0003057	mg/L	0.00029416 96.24%
Al 308.215†	2775.2	0.0627849	mg/L	0.00098103	0.0627849	mg/L	0.00098103 1.56%
As 188.979†	3.0	0.0016093	mg/L	0.00125094	0.0016093	mg/L	0.00125094 77.73%
Ba 233.527†	4092.1	0.0270383	mg/L	0.00006683	0.0270383	mg/L	0.00006683 0.25%
Be 313.107†	-76.1	-0.0014872	mg/L	0.00002690	-0.0014872	mg/L	0.00002690 1.81%
Ca 315.887†	1435021.1	12.8929	mg/L	0.05041	12.8929	mg/L	0.05041 0.39%
Cd 228.802†	5.1	-0.0000250	mg/L	0.00020980	-0.0000250	mg/L	0.00020980 840.62%
Co 228.616†	3.6	-0.0023260	mg/L	0.00001662	-0.0023260	mg/L	0.00001662 0.71%
Cr 267.716†	84.0	-0.0010310	mg/L	0.00018658	-0.0010310	mg/L	0.00018658 18.10%
Cu 327.393†	138.1	0.0004729	mg/L	0.00002983	0.0004729	mg/L	0.00002983 6.31%
Fe 273.955†	209.2	-0.0160066	mg/L	0.00028097	-0.0160066	mg/L	0.00028097 1.76%
K 404.721†	533.4	4.92441	mg/L	0.298229	4.92441	mg/L	0.298229 6.06%
Mg 279.077†	116392.1	6.16698	mg/L	0.005791	6.16698	mg/L	0.005791 0.09%
Mn 257.610†	3896.2	0.0019434	mg/L	0.00002010	0.0019434	mg/L	0.00002010 1.03%
Mo 202.031†	59.6	0.0012666	mg/L	0.00028485	0.0012666	mg/L	0.00028485 22.49%
Na 330.237†	16935.3	13.4798	mg/L	0.01844	13.4798	mg/L	0.01844 0.14%
Ni 231.604†	-1.8	-0.0033006	mg/L	0.00009724	-0.0033006	mg/L	0.00009724 2.95%
Pb 220.353†	4.0	-0.0011828	mg/L	0.00008418	-0.0011828	mg/L	0.00008418 7.12%
Sb 206.836†	-5.1	-0.0022181	mg/L	0.00012614	-0.0022181	mg/L	0.00012614 5.69%
Se 196.026†	1.8	0.0003605	mg/L	0.00319961	0.0003605	mg/L	0.00319961 887.59%
Sn 189.927†	-21.2	-0.0047014	mg/L	0.00050217	-0.0047014	mg/L	0.00050217 10.68%
Ti 334.940†	1.6	-0.0014607	mg/L	0.00002686	-0.0014607	mg/L	0.00002686 1.84%
Tl 190.801†	1.0	-0.0033066	mg/L	0.00011544	-0.0033066	mg/L	0.00011544 3.49%
V 290.880†	-26.3	-0.0033546	mg/L	0.00041700	-0.0033546	mg/L	0.00041700 12.43%
Zn 206.200†	406.8	0.0054665	mg/L	0.00001336	0.0054665	mg/L	0.00001336 0.24%

Sequence No.: 40
 Sample ID: 83866-030
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 81
 Date Collected: 3/31/2015 12:24:15 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-030

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1214682.1	103	%	0.2				0.17%
Y 371.029	423461.1	100	%	0.2				0.18%
Ag 328.068†	78.5	-0.0001259	mg/L	0.00012870	-0.0001259	mg/L	0.00012870	102.20%
Al 308.215†	1694.7	0.0293748	mg/L	0.00009192	0.0293748	mg/L	0.00009192	0.31%
As 188.979†	3.0	0.0016245	mg/L	0.00234856	0.0016245	mg/L	0.00234856	144.57%
Ba 233.527†	8414.0	0.0580929	mg/L	0.00027858	0.0580929	mg/L	0.00027858	0.48%
Be 313.107†	-81.7	-0.0014889	mg/L	0.00001416	-0.0014889	mg/L	0.00001416	0.95%
Ca 315.887†	3150399.2	28.5859	mg/L	0.13095	28.5859	mg/L	0.13095	0.46%
Cd 228.802†	244.8	0.0045364	mg/L	0.00011520	0.0045364	mg/L	0.00011520	2.54%
Co 228.616†	29.9	-0.0017513	mg/L	0.00003584	-0.0017513	mg/L	0.00003584	2.05%
Cr 267.716†	40.1	-0.0014899	mg/L	0.00016184	-0.0014899	mg/L	0.00016184	10.86%
Cu 327.393†	89.4	0.0006221	mg/L	0.00004604	0.0006221	mg/L	0.00004604	7.40%
Fe 273.955†	596.8	0.0003250	mg/L	0.00033080	0.0003250	mg/L	0.00033080	101.79%
K 404.721†	746.3	6.65306	mg/L	0.666042	6.65306	mg/L	0.666042	10.01%
Mg 279.077†	126427.4	6.72164	mg/L	0.006630	6.72164	mg/L	0.006630	0.10%
Mn 257.610†	15655.6	0.0158253	mg/L	0.00003671	0.0158253	mg/L	0.00003671	0.23%
Mo 202.031†	107.8	0.0031330	mg/L	0.00003078	0.0031330	mg/L	0.00003078	0.98%
Na 330.237†	40588.1	31.3564	mg/L	0.01325	31.3564	mg/L	0.01325	0.04%
Ni 231.604†	76.3	-0.0017131	mg/L	0.00021284	-0.0017131	mg/L	0.00021284	12.42%
Pb 220.353†	6.9	-0.0008403	mg/L	0.00064799	-0.0008403	mg/L	0.00064799	77.12%
Sb 206.836†	2.6	0.0002097	mg/L	0.00138863	0.0002097	mg/L	0.00138863	662.15%
Se 196.026†	5.8	0.0029707	mg/L	0.00229439	0.0029707	mg/L	0.00229439	77.23%
Sn 189.927†	-47.6	-0.0099629	mg/L	0.00089082	-0.0099629	mg/L	0.00089082	8.94%
Ti 334.940†	2.8	-0.0014592	mg/L	0.00001822	-0.0014592	mg/L	0.00001822	1.25%
Tl 190.801†	-1.6	-0.0046526	mg/L	0.00223783	-0.0046526	mg/L	0.00223783	48.10%
V 290.880†	255.0	-0.0015267	mg/L	0.00011243	-0.0015267	mg/L	0.00011243	7.36%
Zn 206.200†	2369.2	0.0442891	mg/L	0.00000554	0.0442891	mg/L	0.00000554	0.01%

Sequence No.: 41
 Sample ID: 83866-032
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 82
 Date Collected: 3/31/2015 12:27:37 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-032

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1181543.0	101	%	0.6				0.61%
Y 371.029	410969.1	97.3	%	0.81				0.83%
Ag 328.068†	86.9	-0.0000841	mg/L	0.00023994	-0.0000841	mg/L	0.00023994	285.15%
Al 308.215†	1097.1	0.0108975	mg/L	0.00512820	0.0108975	mg/L	0.00512820	47.06%
As 188.979†	1.7	0.0006441	mg/L	0.00049169	0.0006441	mg/L	0.00049169	76.33%
Ba 233.527†	4582.5	0.0305597	mg/L	0.00014046	0.0305597	mg/L	0.00014046	0.46%
Be 313.107†	-67.5	-0.0014846	mg/L	0.00002139	-0.0014846	mg/L	0.00002139	1.44%
Ca 315.887†	998959.4	8.90361	mg/L	0.034613	8.90361	mg/L	0.034613	0.39%
Cd 228.802†	137.8	0.0025030	mg/L	0.00010201	0.0025030	mg/L	0.00010201	4.08%
Co 228.616†	22.1	-0.0019682	mg/L	0.00009492	-0.0019682	mg/L	0.00009492	4.82%
Cr 267.716†	3508.5	0.0358372	mg/L	0.00045606	0.0358372	mg/L	0.00045606	1.27%
Cu 327.393†	86.0	-0.0000062	mg/L	0.00001855	-0.0000062	mg/L	0.00001855	297.31%
Fe 273.955†	2089.0	0.0631896	mg/L	0.00050861	0.0631896	mg/L	0.00050861	0.80%
K 404.721†	614.1	5.57961	mg/L	0.571836	5.57961	mg/L	0.571836	10.25%
Mg 279.077†	36641.4	1.75912	mg/L	0.009471	1.75912	mg/L	0.009471	0.54%
Mn 257.610†	95954.7	0.110922	mg/L	0.0005061	0.110922	mg/L	0.0005061	0.46%
Mo 202.031†	50.0	0.0009245	mg/L	0.00002768	0.0009245	mg/L	0.00002768	2.99%
Na 330.237†	125575.9	95.5894	mg/L	0.42144	95.5894	mg/L	0.42144	0.44%
Ni 231.604†	154.7	-0.0001216	mg/L	0.00022903	-0.0001216	mg/L	0.00022903	188.34%
Pb 220.353†	11.1	-0.0005522	mg/L	0.00097280	-0.0005522	mg/L	0.00097280	176.18%
Sb 206.836†	5.1	0.0012666	mg/L	0.00162558	0.0012666	mg/L	0.00162558	128.35%
Se 196.026†	-2.0	-0.0026472	mg/L	0.00179866	-0.0026472	mg/L	0.00179866	67.95%
Sn 189.927†	-13.7	-0.0031718	mg/L	0.00028354	-0.0031718	mg/L	0.00028354	8.94%
Ti 334.940†	172.0	-0.0012298	mg/L	0.00001518	-0.0012298	mg/L	0.00001518	1.23%
Tl 190.801†	-0.5	-0.0044012	mg/L	0.00106180	-0.0044012	mg/L	0.00106180	24.13%
V 290.880†	252.1	-0.0009128	mg/L	0.00070719	-0.0009128	mg/L	0.00070719	77.48%
Zn 206.200†	1714.8	0.0313396	mg/L	0.00020570	0.0313396	mg/L	0.00020570	0.66%

Sequence No.: 42
 Sample ID: 83866-034
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 83
 Date Collected: 3/31/2015 12:30:58 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-034

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1254370.4	107	%	1.0			0.91%
Y 371.029	445129.1	105	%	0.7			0.70%
Ag 328.068†	-31.5	-0.0006386	mg/L	0.00006646	-0.0006386	0.00006646	10.41%
Al 308.215†	320.1	-0.0131316	mg/L	0.00404091	-0.0131316	0.00404091	30.77%
As 188.979†	1.7	0.0007006	mg/L	0.00051367	0.0007006	0.00051367	73.31%
Ba 233.527†	152.7	-0.0012682	mg/L	0.00008864	-0.0012682	0.00008864	6.99%
Be 313.107†	-101.7	-0.0014952	mg/L	0.00001372	-0.0014952	0.00001372	0.92%
Ca 315.887†	46933.2	0.194079	mg/L	0.0000586	0.194079	0.0000586	0.03%
Cd 228.802†	-0.3	-0.0001278	mg/L	0.00020098	-0.0001278	0.00020098	157.30%
Co 228.616†	17.7	-0.0020835	mg/L	0.00013663	-0.0020835	0.00013663	6.56%
Cr 267.716†	1.4	-0.0019556	mg/L	0.00005129	-0.0019556	0.00005129	2.62%
Cu 327.393†	155.6	0.0002009	mg/L	0.00004025	0.0002009	0.00004025	20.04%
Fe 273.955†	217.1	-0.0156726	mg/L	0.00049681	-0.0156726	0.00049681	3.17%
K 404.721†	291.2	2.95737	mg/L	0.585558	2.95737	0.585558	19.80%
Mg 279.077†	216.3	-0.254105	mg/L	0.0015430	-0.254105	0.0015430	0.61%
Mn 257.610†	142.6	-0.0022683	mg/L	0.00001679	-0.0022683	0.00001679	0.74%
Mo 202.031†	3.3	-0.0011562	mg/L	0.00002014	-0.0011562	0.00002014	1.74%
Na 330.237†	59.6	0.725276	mg/L	0.0312099	0.725276	0.0312099	4.30%
Ni 231.604†	-55.7	-0.0043967	mg/L	0.00005617	-0.0043967	0.00005617	1.28%
Pb 220.353†	5.8	-0.0010555	mg/L	0.00018129	-0.0010555	0.00018129	17.18%
Sb 206.836†	-5.1	-0.0020609	mg/L	0.00379817	-0.0020609	0.00379817	184.29%
Se 196.026†	3.3	0.0021529	mg/L	0.00346652	0.0021529	0.00346652	161.01%
Sn 189.927†	0.7	-0.0003134	mg/L	0.00080315	-0.0003134	0.00080315	256.26%
Ti 334.940†	127.7	-0.0012899	mg/L	0.00005692	-0.0012899	0.00005692	4.41%
Tl 190.801†	3.1	-0.0022442	mg/L	0.00104173	-0.0022442	0.00104173	46.42%
V 290.880†	-172.9	-0.0035498	mg/L	0.00062747	-0.0035498	0.00062747	17.68%
Zn 206.200†	165.9	0.0006994	mg/L	0.00000447	0.0006994	0.00000447	0.64%

Sequence No.: 43
 Sample ID: ICSA V-202074
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/31/2015 12:34:18 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1024970.7	87.2 %	0.08			0.09%
Y 371.029	353723.4	83.7 %	0.05			0.06%
Ag 328.068†	-1718.8	0.0009944 mg/L	0.00001692	0.0009944 mg/L	0.00001692	1.70%
Al 308.215†	16063820.4	496.698 mg/L	2.7905	496.698 mg/L	2.7905	0.56%
QC value within limits for Al 308.215 Recovery = 99.34%						
As 188.979†	-5.8	-0.0031080 mg/L	0.00315753	-0.0031080 mg/L	0.00315753	101.59%
Ba 233.527†	1807.8	0.0039897 mg/L	0.00016366	0.0039897 mg/L	0.00016366	4.10%
Be 313.107†	-3224.8	-0.0024648 mg/L	0.00000596	-0.0024648 mg/L	0.00000596	0.24%
Ca 315.887†	51979634.7	475.296 mg/L	2.7747	475.296 mg/L	2.7747	0.58%
QC value within limits for Ca 315.887 Recovery = 95.06%						
Cd 228.802†	-423.3	-0.0020006 mg/L	0.00010826	-0.0020006 mg/L	0.00010826	5.41%
Co 228.616†	159.7	0.0057561 mg/L	0.00005635	0.0057561 mg/L	0.00005635	0.98%
Cr 267.716†	-359.8	0.0029176 mg/L	0.00010153	0.0029176 mg/L	0.00010153	3.48%
Cu 327.393†	-3417.1	0.0041099 mg/L	0.00009435	0.0041099 mg/L	0.00009435	2.30%
Fe 273.955†	4511146.8	190.035 mg/L	0.1116	190.035 mg/L	0.1116	0.06%
QC value within limits for Fe 273.955 Recovery = 95.02%						
K 404.721†	418.4	3.99037 mg/L	1.321890	3.99037 mg/L	1.321890	33.13%
Mg 279.077†	8823332.5	487.404 mg/L	3.2950	487.404 mg/L	3.2950	0.68%
QC value within limits for Mg 279.077 Recovery = 97.48%						
Mn 257.610†	9116.4	0.0049234 mg/L	0.00000552	0.0049234 mg/L	0.00000552	0.11%
Mo 202.031†	400.2	0.0012471 mg/L	0.00057304	0.0012471 mg/L	0.00057304	45.95%
Na 330.237†	467.1	1.03331 mg/L	0.000755	1.03331 mg/L	0.000755	0.07%
Ni 231.604†	189.3	-0.0070771 mg/L	0.00002198	-0.0070771 mg/L	0.00002198	0.31%
Pb 220.353†	-394.7	0.0076897 mg/L	0.00024220	0.0076897 mg/L	0.00024220	3.15%
Sb 206.836†	114.8	-0.0103319 mg/L	0.00130433	-0.0103319 mg/L	0.00130433	12.62%
Se 196.026†	-174.3	-0.0633044 mg/L	0.00357122	-0.0633044 mg/L	0.00357122	5.64%
Sn 189.927†	-133.6	-0.0176834 mg/L	0.00081285	-0.0176834 mg/L	0.00081285	4.60%
Ti 334.940†	2206.7	0.0015282 mg/L	0.00010998	0.0015282 mg/L	0.00010998	7.20%
Tl 190.801†	-10.4	-0.0040215 mg/L	0.00158723	-0.0040215 mg/L	0.00158723	39.47%
V 290.880†	7731.4	-0.0215740 mg/L	0.00208093	-0.0215740 mg/L	0.00208093	9.65%
Zn 206.200†	1514.2	0.0206546 mg/L	0.00001675	0.0206546 mg/L	0.00001675	0.08%

All analyte(s) passed QC.

Sequence No.: 44
 Sample ID: ICSAB V-202076
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/31/2015 12:39:10 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1023778.8	87.1 %	0.32			0.37%
Y 371.029	353961.2	83.8 %	0.43			0.52%
Ag 328.068†	225219.6	1.05634 mg/L	0.002980	1.05634 mg/L	0.002980	0.28%
QC value within limits for Ag		328.068 Recovery = 105.63%				
Al 308.215†	16170583.3	499.999 mg/L	1.8533	499.999 mg/L	1.8533	0.37%
QC value within limits for Al		308.215 Recovery = 100.00%				
As 188.979†	1314.1	0.987553 mg/L	0.0016540	0.987553 mg/L	0.0016540	0.17%
QC value within limits for As		188.979 Recovery = 98.76%				
Ba 233.527†	72992.0	0.515466 mg/L	0.0007860	0.515466 mg/L	0.0007860	0.15%
QC value within limits for Ba		233.527 Recovery = 103.09%				
Be 313.107†	1580841.1	0.488676 mg/L	0.0015363	0.488676 mg/L	0.0015363	0.31%
QC value within limits for Be		313.107 Recovery = 97.74%				
Ca 315.887†	52304837.9	478.271 mg/L	3.0876	478.271 mg/L	3.0876	0.65%
QC value within limits for Ca		315.887 Recovery = 95.65%				
Cd 228.802†	53019.8	1.01484 mg/L	0.000863	1.01484 mg/L	0.000863	0.09%
QC value within limits for Cd		228.802 Recovery = 101.48%				
Co 228.616†	21374.5	0.465432 mg/L	0.0009074	0.465432 mg/L	0.0009074	0.19%
QC value within limits for Co		228.616 Recovery = 93.09%				
Cr 267.716†	44552.4	0.486049 mg/L	0.0015808	0.486049 mg/L	0.0015808	0.33%
QC value within limits for Cr		267.716 Recovery = 97.21%				
Cu 327.393†	71230.6	0.522634 mg/L	0.0015429	0.522634 mg/L	0.0015429	0.30%
QC value within limits for Cu		327.393 Recovery = 104.53%				
Fe 273.955†	4525628.7	190.645 mg/L	0.3480	190.645 mg/L	0.3480	0.18%
QC value within limits for Fe		273.955 Recovery = 95.32%				
K 404.721†	399.1	3.83352 mg/L	0.553354	3.83352 mg/L	0.553354	14.43%
Mg 279.077†	8871476.0	490.065 mg/L	3.7782	490.065 mg/L	3.7782	0.77%
QC value within limits for Mg		279.077 Recovery = 98.01%				
Mn 257.610†	414680.7	0.484272 mg/L	0.0007675	0.484272 mg/L	0.0007675	0.16%
QC value within limits for Mn		257.610 Recovery = 96.85%				
Mo 202.031†	405.3	0.0011459 mg/L	0.00072885	0.0011459 mg/L	0.00072885	63.61%
Na 330.237†	1151.2	1.55030 mg/L	0.019978	1.55030 mg/L	0.019978	1.29%
Ni 231.604†	45225.2	0.908124 mg/L	0.0019030	0.908124 mg/L	0.0019030	0.21%
QC value within limits for Ni		231.604 Recovery = 90.81%				
Pb 220.353†	10199.4	0.938140 mg/L	0.0005859	0.938140 mg/L	0.0005859	0.06%
QC value within limits for Pb		220.353 Recovery = 93.81%				
Sb 206.836†	3112.0	0.999792 mg/L	0.0031165	0.999792 mg/L	0.0031165	0.31%
QC value within limits for Sb		206.836 Recovery = 99.98%				
Se 196.026†	1029.3	0.932596 mg/L	0.0030004	0.932596 mg/L	0.0030004	0.32%
QC value within limits for Se		196.026 Recovery = 93.26%				
Sn 189.927†	-145.7	-0.0203024 mg/L	0.00290115	-0.0203024 mg/L	0.00290115	14.29%
Ti 334.940†	2293.9	0.0016465 mg/L	0.00013119	0.0016465 mg/L	0.00013119	7.97%
Tl 190.801†	1514.9	0.908353 mg/L	0.0031050	0.908353 mg/L	0.0031050	0.34%
QC value within limits for Tl		190.801 Recovery = 90.84%				
V 290.880†	77923.1	0.449864 mg/L	0.0008045	0.449864 mg/L	0.0008045	0.18%
QC value within limits for V		290.880 Recovery = 89.97%				
Zn 206.200†	49140.2	0.962845 mg/L	0.0001383	0.962845 mg/L	0.0001383	0.01%
QC value within limits for Zn		206.200 Recovery = 96.28%				

All analyte(s) passed QC.

Sequence No.: 45
 Sample ID: CCV V-202964
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/31/2015 12:44:06 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1154579.4	98.2 %		0.03			0.03%
Y 371.029	398143.1	94.2 %		0.31			0.33%
Ag 328.068†	21110.2	0.0979192 mg/L		0.00007374	0.0979192 mg/L	0.00007374	0.08%
QC value within limits for Ag	328.068	Recovery = 97.92%					
Al 308.215†	158125.9	4.86650 mg/L		0.004781	4.86650 mg/L	0.004781	0.10%
QC value within limits for Al	308.215	Recovery = 97.33%					
As 188.979†	621.2	0.465896 mg/L		0.0001582	0.465896 mg/L	0.0001582	0.03%
QC value within limits for As	188.979	Recovery = 93.18%					
Ba 233.527†	67381.5	0.481637 mg/L		0.0002995	0.481637 mg/L	0.0002995	0.06%
QC value within limits for Ba	233.527	Recovery = 96.33%					
Be 313.107†	1526259.1	0.471534 mg/L		0.00020732	0.471534 mg/L	0.00020732	0.44%
QC value within limits for Be	313.107	Recovery = 94.31%					
Ca 315.887†	5248572.8	47.7808 mg/L		0.11502	47.7808 mg/L	0.11502	0.24%
QC value within limits for Ca	315.887	Recovery = 95.56%					
Cd 228.802†	25129.3	0.478129 mg/L		0.0001116	0.478129 mg/L	0.0001116	0.02%
QC value within limits for Cd	228.802	Recovery = 95.63%					
Co 228.616†	22338.5	0.481017 mg/L		0.0011113	0.481017 mg/L	0.0011113	0.23%
QC value within limits for Co	228.616	Recovery = 96.20%					
Cr 267.716†	45006.6	0.482548 mg/L		0.0001588	0.482548 mg/L	0.0001588	0.03%
QC value within limits for Cr	267.716	Recovery = 96.51%					
Cu 327.393†	68489.3	0.477866 mg/L		0.0005565	0.477866 mg/L	0.0005565	0.12%
QC value within limits for Cu	327.393	Recovery = 95.57%					
Fe 273.955†	116565.0	4.88620 mg/L		0.003133	4.88620 mg/L	0.003133	0.06%
QC value within limits for Fe	273.955	Recovery = 97.72%					
K 404.721†	5679.5	46.7170 mg/L		0.14445	46.7170 mg/L	0.14445	0.31%
QC value within limits for K	404.721	Recovery = 93.43%					
Mg 279.077†	880031.5	48.3737 mg/L		0.11107	48.3737 mg/L	0.11107	0.23%
QC value within limits for Mg	279.077	Recovery = 96.75%					
Mn 257.610†	400301.4	0.469388 mg/L		0.0015039	0.469388 mg/L	0.0015039	0.32%
QC value within limits for Mn	257.610	Recovery = 93.88%					
Mo 202.031†	9037.0	0.471759 mg/L		0.0009898	0.471759 mg/L	0.0009898	0.21%
QC value within limits for Mo	202.031	Recovery = 94.35%					
Na 330.237†	59160.3	45.3931 mg/L		0.04381	45.3931 mg/L	0.04381	0.10%
QC value within limits for Na	330.237	Recovery = 90.79%					
Ni 231.604†	23774.4	0.479828 mg/L		0.0011845	0.479828 mg/L	0.0011845	0.25%
QC value within limits for Ni	231.604	Recovery = 95.97%					
Pb 220.353†	5347.8	0.468971 mg/L		0.0009539	0.468971 mg/L	0.0009539	0.20%
QC value within limits for Pb	220.353	Recovery = 93.79%					
Sb 206.836†	1432.1	0.480831 mg/L		0.0001121	0.480831 mg/L	0.0001121	0.02%
QC value within limits for Sb	206.836	Recovery = 96.17%					
Se 196.026†	567.5	0.469257 mg/L		0.0008605	0.469257 mg/L	0.0008605	0.18%
QC value within limits for Se	196.026	Recovery = 93.85%					
Sn 189.927†	2217.3	0.495029 mg/L		0.0019412	0.495029 mg/L	0.0019412	0.39%
QC value within limits for Sn	189.927	Recovery = 99.01%					
Ti 334.940†	352624.9	0.476532 mg/L		0.0030512	0.476532 mg/L	0.0030512	0.64%
QC value within limits for Ti	334.940	Recovery = 95.31%					
Tl 190.801†	792.0	0.471503 mg/L		0.0025570	0.471503 mg/L	0.0025570	0.54%
QC value within limits for Tl	190.801	Recovery = 94.30%					
V 290.880†	69783.7	0.461189 mg/L		0.0001141	0.461189 mg/L	0.0001141	0.02%
QC value within limits for V	290.880	Recovery = 92.24%					
Zn 206.200†	24705.6	0.486003 mg/L		0.0006397	0.486003 mg/L	0.0006397	0.13%
QC value within limits for Zn	206.200	Recovery = 97.20%					

All analyte(s) passed QC.

Autosampler Location: 5
Date Collected: 3/31/2015 12:47:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analyte	Mean Corrected		Calib		Sample			RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	
Sc 361.383	1213045.9	103	%	0.4				0.36%
Y 371.029	427645.8	101	%	0.3				0.32%
Ag 328.068†	4114.4	0.0186551	mg/L	0.00018924	0.0186551	mg/L	0.00018924	1.01%
QC value	within limits	for Ag	328.068	Recovery = 93.28%				
Al 308.215†	8305.1	0.233781	mg/L	0.0025510	0.233781	mg/L	0.0025510	1.09%
QC value	within limits	for Al	308.215	Recovery = 116.89%				
As 188.979†	25.0	0.0181630	mg/L	0.00044870	0.0181630	mg/L	0.00044870	2.47%
QC value	within limits	for As	188.979	Recovery = 90.81%				
Ba 233.527†	6963.4	0.0476605	mg/L	0.00007989	0.0476605	mg/L	0.00007989	0.17%
QC value	within limits	for Ba	233.527	Recovery = 95.32%				
Be 313.107†	35375.3	0.0094823	mg/L	0.00003010	0.0094823	mg/L	0.00003010	0.32%
QC value	within limits	for Be	313.107	Recovery = 79.02%				
Ca 315.887†	560230.4	4.88894	mg/L	0.038333	4.88894	mg/L	0.038333	0.78%
QC value	within limits	for Ca	315.887	Recovery = 97.80%				
Cd 228.802†	597.8	0.0112607	mg/L	0.00001910	0.0112607	mg/L	0.00001910	0.17%
QC value	within limits	for Cd	228.802	Recovery = 93.84%				
Co 228.616†	903.8	0.0170650	mg/L	0.00003147	0.0170650	mg/L	0.00003147	0.18%
QC value	within limits	for Co	228.616	Recovery = 85.32%				
Cr 267.716†	4568.0	0.0471933	mg/L	0.00001521	0.0471933	mg/L	0.00001521	0.03%
QC value	within limits	for Cr	267.716	Recovery = 94.39%				
Cu 327.393†	7052.6	0.0483936	mg/L	0.00009580	0.0483936	mg/L	0.00009580	0.20%
QC value	within limits	for Cu	327.393	Recovery = 96.79%				
Fe 273.955†	7055.2	0.272424	mg/L	0.0002621	0.272424	mg/L	0.0002621	0.10%
QC value	within limits	for Fe	273.955	Recovery = 90.81%				
K 404.721†	751.7	6.69714	mg/L	0.394663	6.69714	mg/L	0.394663	5.89%
QC value	greater than the upper limit	for K 404.721	Recovery = 133.94%					
Mg 279.077†	92152.6	4.82726	mg/L	0.013548	4.82726	mg/L	0.013548	0.28%
QC value	within limits	for Mg	279.077	Recovery = 96.55%				
Mn 257.610†	32911.8	0.0363091	mg/L	0.00006815	0.0363091	mg/L	0.00006815	0.19%
QC value	within limits	for Mn	257.610	Recovery = 90.77%				
Mo 202.031†	381.7	0.0185214	mg/L	0.00018390	0.0185214	mg/L	0.00018390	0.99%
QC value	within limits	for Mo	202.031	Recovery = 92.61%				
Na 330.237†	5187.4	4.60085	mg/L	0.005325	4.60085	mg/L	0.005325	0.12%
QC value	within limits	for Na	330.237	Recovery = 92.02%				
Ni 231.604†	2433.7	0.0461889	mg/L	0.00040332	0.0461889	mg/L	0.00040332	0.87%
QC value	within limits	for Ni	231.604	Recovery = 92.38%				
Pb 220.353†	133.3	0.0101853	mg/L	0.00071157	0.0101853	mg/L	0.00071157	6.99%
QC value	within limits	for Pb	220.353	Recovery = 84.88%				
Sb 206.836†	54.1	0.0177730	mg/L	0.00125914	0.0177730	mg/L	0.00125914	7.08%
QC value	within limits	for Sb	206.836	Recovery = 88.87%				
Se 196.026†	48.6	0.0395987	mg/L	0.00615100	0.0395987	mg/L	0.00615100	15.53%
QC value	within limits	for Se	196.026	Recovery = 99.00%				
Sn 189.927†	221.1	0.0489395	mg/L	0.00059380	0.0489395	mg/L	0.00059380	1.21%
QC value	within limits	for Sn	189.927	Recovery = 97.88%				
Ti 334.940†	35756.5	0.0470062						

Sequence No.: 47
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 3/31/2015 12:50:54 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

			Mean Corrected		Calib		Sample			
Analyte			Intensity		Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD	
Sc 361.383			1235263.8		105 %	0.0			0.01%	
Y 371.029			443359.2		105 %	0.1			0.13%	
Ag 328.068†			66.9	-0.0001810	mg/L	0.00015089	-0.0001810	mg/L	0.00015089	83.37%
QC value	within	limits	for Ag 328.068	Recovery	=	Not calculated				
Al 308.215†			301.7	-0.0136976	mg/L	0.00021580	-0.0136976	mg/L	0.00021580	1.58%
QC value	within	limits	for Al 308.215	Recovery	=	Not calculated				
As 188.979†			2.2	0.0010347	mg/L	0.00082107	0.0010347	mg/L	0.00082107	79.36%
QC value	within	limits	for As 188.979	Recovery	=	Not calculated				
Ba 233.527†			35.3	-0.0021116	mg/L	0.00003896	-0.0021116	mg/L	0.00003896	1.84%
QC value	within	limits	for Ba 233.527	Recovery	=	Not calculated				
Be 313.107†			-24.8	-0.0014713	mg/L	0.00000907	-0.0014713	mg/L	0.00000907	0.62%
QC value	within	limits	for Be 313.107	Recovery	=	Not calculated				
Ca 315.887†			982.7	-0.226295	mg/L	0.0002147	-0.226295	mg/L	0.0002147	0.09%
QC value	within	limits	for Ca 315.887	Recovery	=	Not calculated				
Cd 228.802†			3.1	-0.0000619	mg/L	0.00001624	-0.0000619	mg/L	0.00001624	26.22%
QC value	within	limits	for Cd 228.802	Recovery	=	Not calculated				
Co 228.616†			9.0	-0.0022716	mg/L	0.00000811	-0.0022716	mg/L	0.00000811	0.36%
QC value	within	limits	for Co 228.616	Recovery	=	Not calculated				
Cr 267.716†			24.0	-0.0017121	mg/L	0.00019679	-0.0017121	mg/L	0.00019679	11.49%
QC value	within	limits	for Cr 267.716	Recovery	=	Not calculated				
Cu 327.393†			88.9	-0.0002755	mg/L	0.00013547	-0.0002755	mg/L	0.00013547	49.18%
QC value	within	limits	for Cu 327.393	Recovery	=	Not calculated				
Fe 273.955†			169.1	-0.0176973	mg/L	0.00029899	-0.0176973	mg/L	0.00029899	1.69%
QC value	within	limits	for Fe 273.955	Recovery	=	Not calculated				
K 404.721†			353.1	3.46018	mg/L	0.519555	3.46018	mg/L	0.519555	15.02%
QC value	within	limits	for K 404.721	Recovery	=	Not calculated				
Mg 279.077†			55.9	-0.262974	mg/L	0.0038077	-0.262974	mg/L	0.0038077	1.45%
QC value	within	limits	for Mg 279.077	Recovery	=	Not calculated				
Mn 257.610†			-1.3	-0.0024382	mg/L	0.00000340	-0.0024382	mg/L	0.00000340	0.14%
QC value	within	limits	for Mn 257.610	Recovery	=	Not calculated				
Mo 202.031†			13.1	-0.0006234	mg/L	0.00039852	-0.0006234	mg/L	0.00039852	63.92%
QC value	within	limits	for Mo 202.031	Recovery	=	Not calculated				
Na 330.237†			-34.1	0.654462	mg/L	0.0297111	0.654462	mg/L	0.0297111	4.54%
QC value	within	limits	for Na 330.237	Recovery	=	Not calculated				
Ni 231.604†			-25.7	-0.0037862	mg/L	0.00001548	-0.0037862	mg/L	0.00001548	0.41%
QC value	within	limits	for Ni 231.604	Recovery	=	Not calculated				
Pb 220.353†			-0.1	-0.0015744	mg/L	0.00068729	-0.0015744	mg/L	0.00068729	43.65%
QC value	within	limits	for Pb 220.353	Recovery	=	Not calculated				
Sb 206.836†			-3.9	-0.0016312	mg/L	0.00233126	-0.0016312	mg/L	0.00233126	142.92%
QC value	within	limits	for Sb 206.836	Recovery	=	Not calculated				
Se 196.026†			0.3	-0.0003231	mg/L	0.00057651	-0.0003231	mg/L	0.00057651	178.45%
QC value	within	limits	for Se 196.026	Recovery	=	Not calculated				
Sn 189.927†			0.1	-0.0004547	mg/L	0.00091673	-0.0004547	mg/L	0.00091673	201.63%
QC value	within	limits	for Sn 189.927	Recovery	=	Not calculated				
Ti 334.940†			99.5	-0.0013280	mg/L	0.00006114	-0.0013280	mg/L	0.00006114	4.60%
QC value	within	limits	for Ti 334.940	Recovery	=	Not calculated				
Tl 190.801†			7.5	0.0003606	mg/L	0.00257077	0.0003606	mg/L	0.00257077	712.99%
QC value	within	limits	for Tl 190.801	Recovery	=	Not calculated				
V 290.880†			-117.4	-0.0031750	mg/L	0.00005017	-0.0031750	mg/L	0.00005017	1.58%
QC value	within	limits	for V 290.880	Recovery	=	Not calculated				
Zn 206.200†			21.5	-0.0021559	mg/L	0.00015375	-0.0021559	mg/L	0.00015375	7.13%
QC value	within	limits	for Zn 206.200	Recovery	=	Not calculated				

All analyte(s) passed QC.

File SW1760062

5032012 0643

Batch 17600 SW846 (reset)

Method: PE 2 4300DV RADIAL

Page 19

Date: 3/31/2015 6:12:06 PM

Analyst S Be 4/1/15

Method Loaded

Method Name: PE 2 4300DV RADIAL

IEC File: IECrad101413.iec

Method Description: 200.7/6010B/6010C

Method Last Saved: 3/23/2015 4:35:41 PM

MSF File:

Sequence No.: 1

Sample ID: CALBLK V-205362

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/31/2015 6:09:46 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALBLK V-205362

Analyte	Mean Corrected		Std.Dev.	RSD	Conc.	Calib Units
	Intensity					
Y 371.029	31151.0		209.95	0.67%	100.000	%
Sc 361.383	77930.8		602.29	0.77%	100	%
Al 308.215†	181.6		12.76	7.03%	[0.00]	mg/L
Ca 315.887†	1085.0		23.08	2.13%	[0.00]	mg/L
Fe 273.955†	-100.1		9.59	9.59%	[0.00]	mg/L
Mg 279.077†	-121.8		13.13	10.78%	[0.00]	mg/L
Mn 257.610†	419.1		5.12	1.22%	[0.00]	mg/L
K 766.490†	1029.2		30.19	2.93%	[0.00]	mg/L
Na 589.592†	6433.5		222.82	3.46%	[0.00]	mg/L
Ti 334.940†	120.4		3.39	2.82%	[0.00]	mg/L

reset
17600
42399

K reported

Sequence No.: 2

Sample ID: CALST2 V-202401

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/31/2015 6:13:07 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST2 V-202401

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Y 371.029	30466.9	61.87	0.20%	97.8036 %
Sc 361.383	76977.2	51.56	0.07%	98.8 %
Al 308.215†	161.5	4.20	2.60%	[0.1] mg/L
Ca 315.887†	7250.9	43.07	0.59%	[1] mg/L
Fe 273.955†	124.9	0.89	0.71%	[0.1] mg/L
Mg 279.077†	1054.2	3.15	0.30%	[1] mg/L
Mn 257.610†	420.9	6.00	1.43%	[0.01] mg/L
K 766.490†	1608.3	16.35	1.02%	[1] mg/L
Na 589.592†	7688.9	111.40	1.45%	[1] mg/L
Ti 334.940†	457.6	30.74	6.72%	[0.01] mg/L

Sequence No.: 3

Sample ID: CALST3 V-202402

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/31/2015 6:16:23 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST3 V-202402

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	28775.9	9.71	0.03%	92.3753	%
Sc 361.383	74006.5	412.44	0.56%	95.0	%
Al 308.215†	6849.6	48.23	0.70%	[5]	mg/L
Ca 315.887†	357462.2	475.51	0.13%	[50]	mg/L
Fe 273.955†	6404.2	18.22	0.28%	[5]	mg/L
Mg 279.077†	52563.6	34.77	0.07%	[50]	mg/L
Mn 257.610†	20451.2	27.17	0.13%	[0.5]	mg/L
K 766.490†	79853.6	162.66	0.20%	[50]	mg/L
Na 589.592†	384329.8	288.47	0.08%	[50]	mg/L
Ti 334.940†	22611.9	42.60	0.19%	[0.5]	mg/L

Sequence No.: 4

Sample ID: CALST4 V-203077

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/31/2015 6:19:09 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CALST4 V-203077

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Y 371.029	28734.6	22.37	0.08%	92.2429 %	
Sc 361.383	73906.7	145.29	0.20%	94.8 %	
Al 308.215†	13298.7	23.65	0.18%	[10] mg/L	
Ca 315.887†	716222.4	8714.47	1.22%	[100] mg/L	
Fe 273.955†	12613.0	25.19	0.20%	[10] mg/L	
Mg 279.077†	104522.0	71.74	0.07%	[100] mg/L	
Mn 257.610†	40108.6	24.48	0.06%	[1.0] mg/L	
K 766.490†	163359.4	2277.65	1.39%	[100] mg/L	
Na 589.592†	771477.5	9144.11	1.19%	[100] mg/L	
Ti 334.940†	44513.3	90.52	0.20%	[1.0] mg/L	

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Al 308.215	3	Lin, Calc Int	49.4	1332	0.00000	0.999886	
Ca 315.887	3	Lin, Calc Int	-77.9	7161	0.00000	1.000000	
Fe 273.955	3	Lin, Calc Int	17.2	1263	0.00000	0.999968	
Mg 279.077	3	Lin, Calc Int	59.1	1046	0.00000	0.999996	
Mn 257.610	3	Lin, Calc Int	81.2	40170	0.00000	0.999949	
K 766.490	3	Lin, Calc Int	-343.8	1630	0.00000	0.999933	
Na 589.592	3	Lin, Calc Int	-268.2	7712	0.00000	0.999998	
Ti 334.940	3	Lin, Calc Int	70.3	44570	0.00000	0.999967	

Sequence No.: 5

Sample ID: ICS3 V-202402

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 3/31/2015 6:21:56 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICS3 V-202402

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28756.2	92.3121 %		1.00298			1.09%
Sc 361.383	74232.3	95.3 %		0.18			0.19%
Al 308.215†	6846.3	5.10306 mg/L		0.093888	5.10306 mg/L	0.093888	1.84%
QC value within limits for Al 308.215 Recovery = 102.06%							
Ca 315.887†	361249.2	50.4606 mg/L		0.26420	50.4606 mg/L	0.26420	0.52%
QC value within limits for Ca 315.887 Recovery = 100.92%							
Fe 273.955†	6411.2	5.06206 mg/L		0.095293	5.06206 mg/L	0.095293	1.88%
QC value within limits for Fe 273.955 Recovery = 101.24%							
Mg 279.077†	52978.1	50.6054 mg/L		1.15424	50.6054 mg/L	1.15424	2.28%
QC value within limits for Mg 279.077 Recovery = 101.21%							
Mn 257.610†	20504.3	0.511723 mg/L		0.0110499	0.511723 mg/L	0.0110499	2.16%
QC value within limits for Mn 257.610 Recovery = 102.34%							
K 766.490†	80455.9	49.5570 mg/L		0.10558	49.5570 mg/L	0.10558	0.21%
QC value within limits for K 766.490 Recovery = 99.11%							
Na 589.592†	384290.6	49.8626 mg/L		0.21358	49.8626 mg/L	0.21358	0.43%
QC value within limits for Na 589.592 Recovery = 99.73%							
Ti 334.940†	22593.2	0.505331 mg/L		0.0118533	0.505331 mg/L	0.0118533	2.35%
QC value within limits for Ti 334.940 Recovery = 101.07%							

All analyte(s) passed QC.

Sequence No.: 6

Sample ID: ICV V-202964

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/31/2015 6:24:43 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICV V-202964

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27438.7	88.0827 %		6.58668			7.48%
Sc 361.383	73469.5	94.3 %		2.69			2.85%
Al 308.215†	6954.5	5.18423 mg/L		0.244126	5.18423 mg/L	0.244126	4.71%
QC value within limits for Al 308.215 Recovery = 103.68%							
Ca 315.887†	365519.9	51.0570 mg/L		2.31289	51.0570 mg/L	2.31289	4.53%
QC value within limits for Ca 315.887 Recovery = 102.11%							
Fe 273.955†	6496.8	5.12983 mg/L		0.264383	5.12983 mg/L	0.264383	5.15%
QC value within limits for Fe 273.955 Recovery = 102.60%							
Mg 279.077†	53870.6	51.4589 mg/L		2.64748	51.4589 mg/L	2.64748	5.14%
QC value within limits for Mg 279.077 Recovery = 102.92%							
Mn 257.610†	20367.0	0.508350 mg/L		0.0258463	0.508350 mg/L	0.0258463	5.08%
QC value within limits for Mn 257.610 Recovery = 101.67%							
K 766.490†	81610.1	50.2649 mg/L		2.47169	50.2649 mg/L	2.47169	4.92%
QC value within limits for K 766.490 Recovery = 100.53%							
Na 589.592†	388329.8	50.3863 mg/L		2.40399	50.3863 mg/L	2.40399	4.77%
QC value within limits for Na 589.592 Recovery = 100.77%							
Ti 334.940†	23045.4	0.515478 mg/L		0.0266000	0.515478 mg/L	0.0266000	5.16%
QC value within limits for Ti 334.940 Recovery = 103.10%							

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV [aq] V-206357

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/31/2015 6:27:27 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV [aq] V-206357

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29699.9	95.3417 %	0.21075			0.22%
Sc 361.383	75379.5	96.7 %	0.01			0.01%
Al 308.215†	409.8	0.270644 mg/L	0.0022285	0.270644 mg/L	0.0022285	0.82%
QC value greater than the upper limit for Al 308.215 Recovery = 135.32%						
Ca 315.887†	39381.0	5.51057 mg/L	0.023187	5.51057 mg/L	0.023187	0.42%
QC value within limits for Ca 315.887 Recovery = 110.21%						
Fe 273.955†	399.1	0.302278 mg/L	0.0037882	0.302278 mg/L	0.0037882	1.25%
QC value within limits for Fe 273.955 Recovery = 100.76%						
Mg 279.077†	5592.6	5.29158 mg/L	0.006469	5.29158 mg/L	0.006469	0.12%
QC value within limits for Mg 279.077 Recovery = 105.83%						
Mn 257.610†	1667.9	0.0396974 mg/L	0.00016566	0.0396974 mg/L	0.00016566	0.42%
QC value within limits for Mn 257.610 Recovery = 99.24%						
K 766.490†	8578.3	5.47220 mg/L	0.053709	5.47220 mg/L	0.053709	0.98%
QC value within limits for K 766.490 Recovery = 109.44%						
Na 589.592†	39671.9	5.17870 mg/L	0.013842	5.17870 mg/L	0.013842	0.27%
QC value within limits for Na 589.592 Recovery = 103.57%						
Ti 334.940†	2312.5	0.0503055 mg/L	0.00068537	0.0503055 mg/L	0.00068537	1.36%
QC value within limits for Ti 334.940 Recovery = 100.61%						
QC Failed. Continue with analysis.						

Sequence No.: 8
 Sample ID: ICB V-205362
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 3/31/2015 6:30:45 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICB V-205362

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Y 371.029	30837.3	98.9927 %		0.67514				0.68%
Sc 361.383	77009.7	98.8 %		0.61				0.62%
Al 308.215†	-9.4	-0.0441591 mg/L		0.00584437	-0.0441591 mg/L		0.00584437	13.23%
QC value within limits for Al 308.215			Recovery = Not calculated					
Ca 315.887†	28.7	0.0148803 mg/L		0.00027443	0.0148803 mg/L		0.00027443	1.84%
QC value within limits for Ca 315.887			Recovery = Not calculated					
Fe 273.955†	-13.4	-0.0242322 mg/L		0.00714112	-0.0242322 mg/L		0.00714112	29.47%
QC value within limits for Fe 273.955			Recovery = Not calculated					
Mg 279.077†	-7.4	-0.0636113 mg/L		0.00429597	-0.0636113 mg/L		0.00429597	6.75%
QC value within limits for Mg 279.077			Recovery = Not calculated					
Mn 257.610†	-4.0	-0.0021366 mg/L		0.00000867	-0.0021366 mg/L		0.00000867	0.41%
QC value within limits for Mn 257.610			Recovery = Not calculated					
K 766.490†	29.7	0.229100 mg/L		0.0443611	0.229100 mg/L		0.0443611	19.36%
QC value within limits for K 766.490			Recovery = Not calculated					
Na 589.592†	-1255.4	-0.128000 mg/L		0.0068116	-0.128000 mg/L		0.0068116	5.32%
QC value within limits for Na 589.592			Recovery = Not calculated					
Ti 334.940†	2.3	-0.0015268 mg/L		0.00046962	-0.0015268 mg/L		0.00046962	30.76%
QC value within limits for Ti 334.940			Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSA V-202074

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/31/2015 6:33:59 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	26855.7	86.2114 %		0.17642			0.20%
Sc 361.383	69241.2	88.8 %		0.24			0.27%
Al 308.215†	681992.3	511.992 mg/L		0.4663	511.992 mg/L	0.4663	0.09%
QC value within limits for Al 308.215 Recovery = 102.40%							
Ca 315.887†	3537784.8	494.075 mg/L		0.7489	494.075 mg/L	0.7489	0.15%
QC value within limits for Ca 315.887 Recovery = 98.82%							
Fe 273.955†	242399.4	191.891 mg/L		0.0411	191.891 mg/L	0.0411	0.02%
QC value within limits for Fe 273.955 Recovery = 95.95%							
Mg 279.077†	518753.5	496.018 mg/L		1.0612	496.018 mg/L	1.0612	0.21%
QC value within limits for Mg 279.077 Recovery = 99.20%							
Mn 257.610†	-1991.2	0.0734884 mg/L		0.00008925	0.0734884 mg/L	0.00008925	0.12%
QC value within limits for Mn 257.610 Recovery = 7.35%							
K 766.490†	406.2	0.460028 mg/L		0.0255205	0.460028 mg/L	0.0255205	5.55%
QC value within limits for K 766.490 Recovery = 46.00%							
Na 589.592†	4878.3	0.667301 mg/L		0.0333123	0.667301 mg/L	0.0333123	4.99%
QC value within limits for Na 589.592 Recovery = 66.73%							
Ti 334.940†	-1973.5	-0.0458557 mg/L		0.00029018	-0.0458557 mg/L	0.00029018	0.63%
QC value within limits for Ti 334.940 Recovery = -4.59%							

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSAB V-202076
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/31/2015 6:37:08 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	26856.7	86.2146 %		2.01110			2.33%
Sc 361.383	69152.3	88.7 %		1.92			2.16%
Al 308.215†	699704.7	525.291 mg/L		17.4572	525.291 mg/L	17.4572	3.32%
QC value within limits for Al 308.215 Recovery = 105.06%							
Ca 315.887†	3626196.0	506.422 mg/L		17.9630	506.422 mg/L	17.9630	3.55%
QC value within limits for Ca 315.887 Recovery = 101.28%							
Fe 273.955†	249388.8	197.425 mg/L		7.0788	197.425 mg/L	7.0788	3.59%
QC value within limits for Fe 273.955 Recovery = 98.71%							
Mg 279.077†	533122.2	509.758 mg/L		18.2421	509.758 mg/L	18.2421	3.58%
QC value within limits for Mg 279.077 Recovery = 101.95%							
Mn 257.610†	17708.3	0.567507 mg/L		0.0049944	0.567507 mg/L	0.0049944	0.88%
QC value within limits for Mn 257.610 Recovery = 113.50%							
K 766.490†	314.9	0.404027 mg/L		0.0007495	0.404027 mg/L	0.0007495	0.19%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	4444.1	0.611002 mg/L		0.0250536	0.611002 mg/L	0.0250536	4.10%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	-2011.3	-0.0467030 mg/L		0.00112870	-0.0467030 mg/L	0.00112870	2.42%

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: MB 42399 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 38
 Date Collected: 3/31/2015 6:40:17 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 42399 (1)

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	31351.0	100.642	%	0.1971			0.20%
Sc 361.383	79251.6	102	%	0.1			0.06%
Al 308.215†	26.8	-0.0169479	mg/L	0.00510624	-0.0169479 mg/L	0.00510624	30.13%
Ca 315.887†	1096.4	0.163994	mg/L	0.0034457	0.163994 mg/L	0.0034457	2.10%
Fe 273.955†	15.4	-0.0014692	mg/L	0.00275781	-0.0014692 mg/L	0.00275781	187.71%
Mg 279.077†	28.5	-0.0293373	mg/L	0.02028957	-0.0293373 mg/L	0.02028957	69.16%
Mn 257.610†	-0.2	-0.0020275	mg/L	0.00004051	-0.0020275 mg/L	0.00004051	2.00%
K 766.490†	-62.4	0.172600	mg/L	0.0168514	0.172600 mg/L	0.0168514	9.76%
Na 589.592†	-912.5	-0.0835479	mg/L	0.00189631	-0.0835479 mg/L	0.00189631	2.27%
Ti 334.940†	0.9	-0.0015566	mg/L	0.00006796	-0.0015566 mg/L	0.00006796	4.37%

Sequence No.: 12
Sample ID: LCSW 42399
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 3/31/2015 6:43:32 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCSW 42399

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29774.0	95.5795	%	1.03772			1.09%
Sc 361.383	76788.7	98.5	%	0.45			0.46%
Al 308.215†	6192.8	4.61241	mg/L	0.095741	4.61241 mg/L	0.095741	2.08%
Ca 315.887†	330102.5	46.1109	mg/L	0.08153	46.1109 mg/L	0.08153	0.18%
Fe 273.955†	5826.4	4.59907	mg/L	0.090061	4.59907 mg/L	0.090061	1.96%
Mg 279.077†	48333.0	46.1634	mg/L	0.65591	46.1634 mg/L	0.65591	1.42%
Mn 257.610†	18664.2	0.465614	mg/L	0.0056156	0.465614 mg/L	0.0056156	1.21%
K 766.490†	72061.0	44.4081	mg/L	0.26321	44.4081 mg/L	0.26321	0.59%
Na 589.592†	347105.2	45.0410	mg/L	0.00574	45.0410 mg/L	0.00574	0.01%
Ti 334.940†	20597.6	0.460556	mg/L	0.0049866	0.460556 mg/L	0.0049866	1.08%

Sequence No.: 13
Sample ID: LCSW MR 42399
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 40
Date Collected: 3/31/2015 6:46:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCSW MR 42399

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29399.1	94.3760	%	0.38716			0.41%
Sc 361.383	76859.3	98.6	%	0.65			0.66%
Al 308.215†	6123.6	4.56042	mg/L	0.009778	4.56042 mg/L	0.009778	0.21%
Ca 315.887†	329706.8	46.0556	mg/L	0.24882	46.0556 mg/L	0.24882	0.54%
Fe 273.955†	5786.1	4.56712	mg/L	0.008349	4.56712 mg/L	0.008349	0.18%
Mg 279.077†	47436.3	45.3059	mg/L	0.07074	45.3059 mg/L	0.07074	0.16%
Mn 257.610†	18491.6	0.461295	mg/L	0.0014156	0.461295 mg/L	0.0014156	0.31%
K 766.490†	72032.2	44.3905	mg/L	0.52087	44.3905 mg/L	0.52087	1.17%
Na 589.592†	347519.0	45.0947	mg/L	0.44081	45.0947 mg/L	0.44081	0.98%
Ti 334.940†	20418.5	0.456539	mg/L	0.0008046	0.456539 mg/L	0.0008046	0.18%

Sequence No.: 14
 Sample ID: 83866-014
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 41
 Date Collected: 3/31/2015 6:49:04 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-014

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30677.8	98.4809	%	0.66530			0.68%
Sc 361.383	78727.8	101	%	0.2			0.23%
Al 308.215†	14.5	-0.0261827	mg/L	0.01107048	-0.0261827 mg/L	0.01107048	42.28%
Ca 315.887†	94161.2	13.1608	mg/L	0.04824	13.1608 mg/L	0.04824	0.37%
Fe 273.955†	11.5	-0.0045829	mg/L	0.00462903	-0.0045829 mg/L	0.00462903	101.01%
Mg 279.077†	5030.7	4.75422	mg/L	0.028772	4.75422 mg/L	0.028772	0.61%
Mn 257.610†	56.1	-0.0006284	mg/L	0.00002951	-0.0006284 mg/L	0.00002951	4.70%
K 766.490†	1263.4	0.985771	mg/L	0.0219012	0.985771 mg/L	0.0219012	2.22%
Na 589.592†	120209.8	15.6214	mg/L	0.01469	15.6214 mg/L	0.01469	0.09%
Ti 334.940†	-37.1	-0.0024098	mg/L	0.00011600	-0.0024098 mg/L	0.00011600	4.81%

Sequence No.: 15
 Sample ID: 83866-014 MR
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 42
 Date Collected: 3/31/2015 6:52:20 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-014 MR

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	30517.0	97.9646	%	0.33946			0.35%
Sc 361.383	78263.7	100	%	0.0			0.04%
Al 308.215†	14.8	-0.0259215	mg/L	0.00110774	-0.0259215 mg/L	0.00110774	4.27%
Ca 315.887†	98936.8	13.8278	mg/L	0.01372	13.8278 mg/L	0.01372	0.10%
Fe 273.955†	6.3	-0.0086523	mg/L	0.00482959	-0.0086523 mg/L	0.00482959	55.82%
Mg 279.077†	5265.0	4.97828	mg/L	0.011617	4.97828 mg/L	0.011617	0.23%
Mn 257.610†	51.2	-0.0007523	mg/L	0.00005247	-0.0007523 mg/L	0.00005247	6.98%
K 766.490†	1288.8	1.00132	mg/L	0.019465	1.00132 mg/L	0.019465	1.94%
Na 589.592†	127247.9	16.5340	mg/L	0.02193	16.5340 mg/L	0.02193	0.13%
Ti 334.940†	-38.8	-0.0024478	mg/L	0.00010358	-0.0024478 mg/L	0.00010358	4.23%

Sequence No.: 16
 Sample ID: 83866-015 MS 1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 43
 Date Collected: 3/31/2015 6:55:35 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: 83866-015 MS 1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29019.2	93.1565	%	0.72622			0.78%
Sc 361.383	76376.0	98.0	%	0.07			0.07%
Al 308.215†	6167.4	4.59334	mg/L	0.003163	4.59334 mg/L	0.003163	0.07%
Ca 315.887†	437142.6	61.0594	mg/L	0.35227	61.0594 mg/L	0.35227	0.58%
Fe 273.955†	5874.6	4.63720	mg/L	0.003042	4.63720 mg/L	0.003042	0.07%
Mg 279.077†	53834.5	51.4244	mg/L	0.03089	51.4244 mg/L	0.03089	0.06%
Mn 257.610†	18818.0	0.469466	mg/L	0.0006451	0.469466 mg/L	0.0006451	0.14%
K 766.490†	76269.5	46.9893	mg/L	0.18998	46.9893 mg/L	0.18998	0.40%
Na 589.592†	488655.4	63.3947	mg/L	0.33604	63.3947 mg/L	0.33604	0.53%
Ti 334.940†	20608.3	0.460797	mg/L	0.0001675	0.460797 mg/L	0.0001675	0.04%

Sequence No.: 17
Sample ID: 83866-016 MS 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 3/31/2015 6:58:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 83866-016 MS 2

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28912.9	92.8152 %	1.51397			1.63%
Sc 361.383	74969.1	96.2 %	0.43			0.45%
Al 308.215†	6199.3	4.61730 mg/L	0.100961	4.61730 mg/L	0.100961	2.19%
Ca 315.887†	429703.6	60.0205 mg/L	0.04711	60.0205 mg/L	0.04711	0.08%
Fe 273.955†	5894.1	4.65264 mg/L	0.061118	4.65264 mg/L	0.061118	1.31%
Mg 279.077†	53931.4	51.5171 mg/L	1.14454	51.5171 mg/L	1.14454	2.22%
Mn 257.610†	18913.1	0.471845 mg/L	0.0094069	0.471845 mg/L	0.0094069	1.99%
K 766.490†	75754.6	46.6735 mg/L	0.27130	46.6735 mg/L	0.27130	0.58%
Na 589.592†	483267.3	62.6960 mg/L	0.09821	62.6960 mg/L	0.09821	0.16%
Ti 334.940†	20670.6	0.462195 mg/L	0.0082817	0.462195 mg/L	0.0082817	1.79%

Sequence No.: 18
Sample ID: 83866-014 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 45
Date Collected: 3/31/2015 7:01:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 83866-014 PS

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29193.3	93.7152	%	0.12753			0.14%
Sc 361.383	75715.5	97.2	%	1.02			1.05%
Al 308.215†	6676.7	4.97573	mg/L	0.041862	4.97573 mg/L	0.041862	0.84%
Ca 315.887†	438662.2	61.2716	mg/L	0.04027	61.2716 mg/L	0.04027	0.07%
Fe 273.955†	6265.5	4.94665	mg/L	0.061910	4.94665 mg/L	0.061910	1.25%
Mg 279.077†	55771.4	53.2766	mg/L	0.54935	53.2766 mg/L	0.54935	1.03%
Mn 257.610†	19580.7	0.488654	mg/L	0.0043728	0.488654 mg/L	0.0043728	0.89%
K 766.490†	79158.2	48.7610	mg/L	0.00246	48.7610 mg/L	0.00246	0.01%
Na 589.592†	492718.7	63.9215	mg/L	0.31705	63.9215 mg/L	0.31705	0.50%
Ti 334.940†	21724.1	0.485831	mg/L	0.0070707	0.485831 mg/L	0.0070707	1.46%

Sequence No.: 19
 Sample ID: CCV V-202964
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/31/2015 7:03:54 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28826.9	92.5393 %		0.52989			0.57%
Sc 361.383	74406.8	95.5 %		0.29			0.31%
Al 308.215†	6989.1	5.21025 mg/L		0.050931	5.21025 mg/L	0.050931	0.98%
QC value within limits for Al 308.215 Recovery = 104.21%							
Ca 315.887†	363130.4	50.7233 mg/L		0.19643	50.7233 mg/L	0.19643	0.39%
QC value within limits for Ca 315.887 Recovery = 101.45%							
Fe 273.955†	6482.4	5.11836 mg/L		0.035390	5.11836 mg/L	0.035390	0.69%
QC value within limits for Fe 273.955 Recovery = 102.37%							
Mg 279.077†	53739.2	51.3333 mg/L		0.50477	51.3333 mg/L	0.50477	0.98%
QC value within limits for Mg 279.077 Recovery = 102.67%							
Mn 257.610†	20403.7	0.509256 mg/L		0.0057268	0.509256 mg/L	0.0057268	1.12%
QC value within limits for Mn 257.610 Recovery = 101.85%							
K 766.490†	81452.4	50.1682 mg/L		0.08476	50.1682 mg/L	0.08476	0.17%
QC value within limits for K 766.490 Recovery = 100.34%							
Na 589.592†	387857.5	50.3250 mg/L		0.11251	50.3250 mg/L	0.11251	0.22%
QC value within limits for Na 589.592 Recovery = 100.65%							
Ti 334.940†	23242.1	0.519889 mg/L		0.0067886	0.519889 mg/L	0.0067886	1.31%
QC value within limits for Ti 334.940 Recovery = 103.98%							

All analyte(s) passed QC.

Sequence No.: 20
 Sample ID: LLCCV [aq] V-206357
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 3/31/2015 7:06:38 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LLCCV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29898.4	95.9789 %		0.29354			0.31%
Sc 361.383	75761.6	97.2 %		0.54			0.55%
Al 308.215†	402.5	0.265151 mg/L		0.0042684	0.265151 mg/L	0.0042684	1.61%
QC value	greater than the upper limit for Al 308.215 Recovery = 132.58%						
Ca 315.887†	39091.8	5.47018 mg/L		0.000072	5.47018 mg/L	0.000072	0.00%
QC value	within limits for Ca 315.887 Recovery = 109.40%						
Fe 273.955†	398.8	0.302046 mg/L		0.0038191	0.302046 mg/L	0.0038191	1.26%
QC value	within limits for Fe 273.955 Recovery = 100.68%						
Mg 279.077†	5566.2	5.26633 mg/L		0.023267	5.26633 mg/L	0.023267	0.44%
QC value	within limits for Mg 279.077 Recovery = 105.33%						
Mn 257.610†	1655.8	0.0393957 mg/L		0.00019113	0.0393957 mg/L	0.00019113	0.49%
QC value	within limits for Mn 257.610 Recovery = 98.49%						
K 766.490†	8342.2	5.32739 mg/L		0.010773	5.32739 mg/L	0.010773	0.20%
QC value	within limits for K 766.490 Recovery = 106.55%						
Na 589.592†	37968.5	4.95783 mg/L		0.010041	4.95783 mg/L	0.010041	0.20%
QC value	within limits for Na 589.592 Recovery = 99.16%						
Ti 334.940†	2295.3	0.0499207 mg/L		0.00022557	0.0499207 mg/L	0.00022557	0.45%
QC value	within limits for Ti 334.940 Recovery = 99.84%						
QC Failed. Continue with analysis.							

Sequence No.: 21
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 3/31/2015 7:09:56 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	31023.3	99.5900	%	0.91890				0.92%
Sc 361.383	77382.8	99.3	%	0.89				0.89%
Al 308.215†	20.0	-0.0220592	mg/L	0.01406439	-0.0220592	mg/L	0.01406439	63.76%
QC value within limits for Al	308.215	Recovery =	Not calculated					
Ca 315.887†	54.9	0.0185419	mg/L	0.00021838	0.0185419	mg/L	0.00021838	1.18%
QC value within limits for Ca	315.887	Recovery =	Not calculated					
Fe 273.955†	-3.0	-0.0160390	mg/L	0.00130695	-0.0160390	mg/L	0.00130695	8.15%
QC value within limits for Fe	273.955	Recovery =	Not calculated					
Mg 279.077†	4.7	-0.0520195	mg/L	0.00977488	-0.0520195	mg/L	0.00977488	18.79%
QC value within limits for Mg	279.077	Recovery =	Not calculated					
Mn 257.610†	-6.5	-0.0021928	mg/L	0.00004830	-0.0021928	mg/L	0.00004830	2.20%
QC value within limits for Mn	257.610	Recovery =	Not calculated					
K 766.490†	-71.1	0.167304	mg/L	0.0104775	0.167304	mg/L	0.0104775	6.26%
QC value within limits for K	766.490	Recovery =	Not calculated					
Na 589.592†	-2617.4	-0.304602	mg/L	0.0114432	-0.304602	mg/L	0.0114432	3.76%
QC value within limits for Na	589.592	Recovery =	Not calculated					
Ti 334.940†	1.6	-0.0015407	mg/L	0.00013752	-0.0015407	mg/L	0.00013752	8.93%
QC value within limits for Ti	334.940	Recovery =	Not calculated					

All analyte(s) passed QC.

Sequence No.: 22
 Sample ID: 83866-014 SD
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 46
 Date Collected: 3/31/2015 7:13:10 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-014 SD

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	31211.6	100.194	%	1.3191			1.32%
Sc 361.383	79277.5	102	%	1.3			1.27%
Al 308.215†	-2.0	-0.0385925	mg/L	0.01036158	-0.0385925 mg/L	0.01036158	26.85%
Ca 315.887†	18520.6	2.59735	mg/L	0.009150	2.59735 mg/L	0.009150	0.35%
Fe 273.955†	1.4	-0.0125434	mg/L	0.00563803	-0.0125434 mg/L	0.00563803	44.95%
Mg 279.077†	996.9	0.896741	mg/L	0.0033359	0.896741 mg/L	0.0033359	0.37%
Mn 257.610†	-13.3	-0.0023610	mg/L	0.00021129	-0.0023610 mg/L	0.00021129	8.95%
K 766.490†	219.5	0.345535	mg/L	0.0285795	0.345535 mg/L	0.0285795	8.27%
Na 589.592†	21740.6	2.85370	mg/L	0.049889	2.85370 mg/L	0.049889	1.75%
Ti 334.940†	-11.1	-0.0018264	mg/L	0.00016867	-0.0018264 mg/L	0.00016867	9.23%

Sequence No.: 23
 Sample ID: 83866-002
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 47
 Date Collected: 3/31/2015 7:16:27 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-002

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30016.4	96.3578	%	1.61246			1.67%
Sc 361.383	76448.1	98.1	%	1.88			1.91%
Al 308.215†	26.5	-0.0171616	mg/L	0.00424325	-0.0171616 mg/L	0.00424325	24.73%
Ca 315.887†	105702.2	14.7726	mg/L	0.05574	14.7726 mg/L	0.05574	0.38%
Fe 273.955†	11.2	-0.0047488	mg/L	0.00973820	-0.0047488 mg/L	0.00973820	205.06%
Mg 279.077†	2163.8	2.01267	mg/L	0.012780	2.01267 mg/L	0.012780	0.63%
Mn 257.610†	31.7	-0.0012362	mg/L	0.00020221	-0.0012362 mg/L	0.00020221	16.36%
K 766.490†	2189.8	1.55397	mg/L	0.028717	1.55397 mg/L	0.028717	1.85%
Na 589.592†	72364.7	9.41771	mg/L	0.094374	9.41771 mg/L	0.094374	1.00%
Ti 334.940†	-74.4	-0.0032457	mg/L	0.00020456	-0.0032457 mg/L	0.00020456	6.30%

Sequence No.: 24
 Sample ID: 83866-004
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 48
 Date Collected: 3/31/2015 7:19:44 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-004

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30937.7	99.3150	%	1.52621			1.54%
Sc 361.383	79138.9	102	%	1.5			1.48%
Al 308.215†	40.0	-0.0070282	mg/L	0.00603794	-0.0070282 mg/L	0.00603794	85.91%
Ca 315.887†	109094.3	15.2463	mg/L	0.03582	15.2463 mg/L	0.03582	0.23%
Fe 273.955†	47.7	0.0240954	mg/L	0.00151034	0.0240954 mg/L	0.00151034	6.27%
Mg 279.077†	2612.1	2.44132	mg/L	0.040005	2.44132 mg/L	0.040005	1.64%
Mn 257.610†	82.2	0.0000414	mg/L	0.00031750	0.0000414 mg/L	0.00031750	767.35%
K 766.490†	3254.6	2.20704	mg/L	0.011775	2.20704 mg/L	0.011775	0.53%
Na 589.592†	189095.4	24.5532	mg/L	0.02633	24.5532 mg/L	0.02633	0.11%
Ti 334.940†	-31.7	-0.0022895	mg/L	0.00041848	-0.0022895 mg/L	0.00041848	18.28%

Sequence No.: 25
 Sample ID: 83866-006
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 49
 Date Collected: 3/31/2015 7:23:02 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-006

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30198.6	96.9425	%	1.53966			1.59%
Sc 361.383	76725.2	98.5	%	1.43			1.45%
Al 308.215†	33.6	-0.0118384	mg/L	0.00401856	-0.0118384 mg/L	0.00401856	33.95%
Ca 315.887†	70999.1	9.92615	mg/L	0.064957	9.92615 mg/L	0.064957	0.65%
Fe 273.955†	37.5	0.0160256	mg/L	0.00665993	0.0160256 mg/L	0.00665993	41.56%
Mg 279.077†	1150.3	1.04344	mg/L	0.022787	1.04344 mg/L	0.022787	2.18%
Mn 257.610†	174.6	0.0023347	mg/L	0.00023390	0.0023347 mg/L	0.00023390	10.02%
K 766.490†	2008.7	1.44288	mg/L	0.003051	1.44288 mg/L	0.003051	0.21%
Na 589.592†	37874.7	4.94568	mg/L	0.043145	4.94568 mg/L	0.043145	0.87%
Ti 334.940†	-9.4	-0.0017890	mg/L	0.00027661	-0.0017890 mg/L	0.00027661	15.46%

Sequence No.: 26
 Sample ID: 83866-008
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 50
 Date Collected: 3/31/2015 7:26:19 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-008

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	31036.1	99.6311	%	1.33378				1.34%
Sc 361.383	76973.6	98.8	%	1.29				1.31%
Al 308.215†	146.0	0.0725407	mg/L	0.00076386	0.0725407	mg/L	0.00076386	1.05%
Ca 315.887†	127730.7	17.8489	mg/L	0.11076	17.8489	mg/L	0.11076	0.62%
Fe 273.955†	4.8	-0.0098354	mg/L	0.00703374	-0.0098354	mg/L	0.00703374	71.51%
Mg 279.077†	2582.6	2.41318	mg/L	0.010042	2.41318	mg/L	0.010042	0.42%
Mn 257.610†	814.5	0.0182477	mg/L	0.00014411	0.0182477	mg/L	0.00014411	0.79%
K 766.490†	4270.6	2.83017	mg/L	0.037027	2.83017	mg/L	0.037027	1.31%
Na 589.592†	109090.6	14.1796	mg/L	0.11909	14.1796	mg/L	0.11909	0.84%
Ti 334.940†	-84.7	-0.0034769	mg/L	0.00000998	-0.0034769	mg/L	0.00000998	0.29%

Sequence No.: 27
 Sample ID: 83866-010
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 51
 Date Collected: 3/31/2015 7:29:35 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-010

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30411.0	97.6243	%	3.05816			3.13%
Sc 361.383	77833.2	99.9	%	3.02			3.03%
Al 308.215†	31.2	-0.0136449	mg/L	0.00853127	-0.0136449 mg/L	0.00853127	62.52%
Ca 315.887†	58412.0	8.16832	mg/L	0.108929	8.16832 mg/L	0.108929	1.33%
Fe 273.955†	14.2	-0.0023852	mg/L	0.00263400	-0.0023852 mg/L	0.00263400	110.43%
Mg 279.077†	2741.1	2.56468	mg/L	0.095328	2.56468 mg/L	0.095328	3.72%
Mn 257.610†	55.0	-0.0006531	mg/L	0.00043161	-0.0006531 mg/L	0.00043161	66.09%
K 766.490†	751.9	0.672074	mg/L	0.0145103	0.672074 mg/L	0.0145103	2.16%
Na 589.592†	62592.5	8.15062	mg/L	0.140576	8.15062 mg/L	0.140576	1.72%
Ti 334.940†	-21.2	-0.0020542	mg/L	0.00006324	-0.0020542 mg/L	0.00006324	3.08%

Sequence No.: 28
 Sample ID: 83866-018
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 52
 Date Collected: 3/31/2015 7:32:51 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-018

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	29845.4	95.8086	%	1.96588				2.05%
Sc 361.383	76489.0	98.1	%	1.79				1.82%
Al 308.215†	-3.8	-0.0399337	mg/L	0.00105317	-0.0399337	mg/L	0.00105317	2.64%
Ca 315.887†	94580.4	13.2194	mg/L	0.08599	13.2194	mg/L	0.08599	0.65%
Fe 273.955†	5.3	-0.0094405	mg/L	0.00005757	-0.0094405	mg/L	0.00005757	0.61%
Mg 279.077†	5028.6	4.75219	mg/L	0.132495	4.75219	mg/L	0.132495	2.79%
Mn 257.610†	44.9	-0.0009101	mg/L	0.00021203	-0.0009101	mg/L	0.00021203	23.30%
K 766.490†	1240.5	0.971721	mg/L	0.0416290	0.971721	mg/L	0.0416290	4.28%
Na 589.592†	123171.5	16.0054	mg/L	0.17157	16.0054	mg/L	0.17157	1.07%
Ti 334.940†	-40.3	-0.0024814	mg/L	0.00002616	-0.0024814	mg/L	0.00002616	1.05%

Sequence No.: 29
 Sample ID: ICSA V-202074
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/31/2015 7:36:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	26478.9	85.0018 %	0.70443			0.83%
Sc 361.383	69539.9	89.2 %	1.13			1.26%
Al 308.215†	690357.0	518.273 mg/L	4.1658	518.273 mg/L	4.1658	0.80%
QC value within limits for Al 308.215 Recovery = 103.65%						
Ca 315.887†	3482218.5	486.315 mg/L	3.1681	486.315 mg/L	3.1681	0.65%
QC value within limits for Ca 315.887 Recovery = 97.26%						
Fe 273.955†	238805.6	189.046 mg/L	1.3519	189.046 mg/L	1.3519	0.72%
QC value within limits for Fe 273.955 Recovery = 94.52%						
Mg 279.077†	505039.4	482.903 mg/L	2.6778	482.903 mg/L	2.6778	0.55%
QC value within limits for Mg 279.077 Recovery = 96.58%						
Mn 257.610†	-1916.1	0.0735033 mg/L	0.00079616	0.0735033 mg/L	0.00079616	1.08%
QC value within limits for Mn 257.610 Recovery = 7.35%						
K 766.490†	47.2	0.239834 mg/L	0.0041844	0.239834 mg/L	0.0041844	1.74%
QC value within limits for K 766.490 Recovery = 23.98%						
Na 589.592†	743.1	0.131125 mg/L	0.0014675	0.131125 mg/L	0.0014675	1.12%
QC value within limits for Na 589.592 Recovery = 13.11%						
Ti 334.940†	-2099.3	-0.0486782 mg/L	0.00030059	-0.0486782 mg/L	0.00030059	0.62%
QC value within limits for Ti 334.940 Recovery = -4.87%						

All analyte(s) passed QC.

Sequence No.: 30
 Sample ID: ICSAB V-202076
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/31/2015 7:39:14 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	26123.0	83.8592 %		0.92870			1.11%
Sc 361.383	69352.5	89.0 %		0.31			0.35%
Al 308.215†	691666.5	519.256 mg/L		2.6263	519.256 mg/L	2.6263	0.51%
QC value within limits for Al 308.215		Recovery = 103.85%					
Ca 315.887†	3491885.3	487.665 mg/L		1.9871	487.665 mg/L	1.9871	0.41%
QC value within limits for Ca 315.887		Recovery = 97.53%					
Fe 273.955†	239423.5	189.535 mg/L		0.6645	189.535 mg/L	0.6645	0.35%
QC value within limits for Fe 273.955		Recovery = 94.77%					
Mg 279.077†	507353.0	485.116 mg/L		1.7772	485.116 mg/L	1.7772	0.37%
QC value within limits for Mg 279.077		Recovery = 97.02%					
Mn 257.610†	16921.7	0.542782 mg/L		0.0047733	0.542782 mg/L	0.0047733	0.88%
QC value within limits for Mn 257.610		Recovery = 108.56%					
K 766.490†	16.4	0.220966 mg/L		0.0226864	0.220966 mg/L	0.0226864	10.27%
QC value within limits for K 766.490		Recovery = Not calculated					
Na 589.592†	393.4	0.0857822 mg/L		0.01858639	0.0857822 mg/L	0.01858639	21.67%
QC value within limits for Na 589.592		Recovery = Not calculated					
Ti 334.940†	-2102.7	-0.0487540 mg/L		0.00108933	-0.0487540 mg/L	0.00108933	2.23%

All analyte(s) passed QC.

Sequence No.: 31
 Sample ID: CCV V-202964
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/31/2015 7:42:23 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27960.7	89.7584 %		0.97990			1.09%
Sc 361.383	72975.7	93.6 %		1.93			2.06%
Al 308.215†	6827.5	5.08890 mg/L		0.130128	5.08890 mg/L	0.130128	2.56%
QC value within limits for Al 308.215 Recovery = 101.78%							
Ca 315.887†	358641.2	50.0964 mg/L		0.35267	50.0964 mg/L	0.35267	0.70%
QC value within limits for Ca 315.887 Recovery = 100.19%							
Fe 273.955†	6263.0	4.94471 mg/L		0.120233	4.94471 mg/L	0.120233	2.43%
QC value within limits for Fe 273.955 Recovery = 98.89%							
Mg 279.077†	50884.6	48.6035 mg/L		1.15240	48.6035 mg/L	1.15240	2.37%
QC value within limits for Mg 279.077 Recovery = 97.21%							
Mn 257.610†	19663.5	0.490715 mg/L		0.0119322	0.490715 mg/L	0.0119322	2.43%
QC value within limits for Mn 257.610 Recovery = 98.14%							
K 766.490†	81297.7	50.0733 mg/L		0.05248	50.0733 mg/L	0.05248	0.10%
QC value within limits for K 766.490 Recovery = 100.15%							
Na 589.592†	388074.5	50.3532 mg/L		0.51349	50.3532 mg/L	0.51349	1.02%
QC value within limits for Na 589.592 Recovery = 100.71%							
Ti 334.940†	22636.8	0.506310 mg/L		0.0120287	0.506310 mg/L	0.0120287	2.38%
QC value within limits for Ti 334.940 Recovery = 101.26%							

All analyte(s) passed QC.

Sequence No.: 32
 Sample ID: LLCCV [aq] V-206357
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 3/31/2015 7:45:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LLCCV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28627.7	91.8998 %		0.31948			0.35%
Sc 361.383	72378.8	92.9 %		0.50			0.54%
Al 308.215†	413.9	0.273677 mg/L		0.0111178	0.273677 mg/L	0.0111178	4.06%
QC value greater than the upper limit for Al 308.215 Recovery = 136.84%							
Ca 315.887†	38889.5	5.44194 mg/L		0.000955	5.44194 mg/L	0.000955	0.02%
QC value within limits for Ca 315.887 Recovery = 108.84%							
Fe 273.955†	410.6	0.311449 mg/L		0.0041998	0.311449 mg/L	0.0041998	1.35%
QC value within limits for Fe 273.955 Recovery = 103.82%							
Mg 279.077†	5507.4	5.21010 mg/L		0.006987	5.21010 mg/L	0.006987	0.13%
QC value within limits for Mg 279.077 Recovery = 104.20%							
Mn 257.610†	1661.3	0.0395396 mg/L		0.00009088	0.0395396 mg/L	0.00009088	0.23%
QC value within limits for Mn 257.610 Recovery = 98.85%							
K 766.490†	8297.2	5.29984 mg/L		0.042115	5.29984 mg/L	0.042115	0.79%
QC value within limits for K 766.490 Recovery = 106.00%							
Na 589.592†	38126.0	4.97825 mg/L		0.011408	4.97825 mg/L	0.011408	0.23%
QC value within limits for Na 589.592 Recovery = 99.57%							
Ti 334.940†	2363.5	0.0514517 mg/L		0.00023653	0.0514517 mg/L	0.00023653	0.46%
QC value within limits for Ti 334.940 Recovery = 102.90%							
QC Failed. Continue with analysis.							

Sequence No.: 33

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/31/2015 7:48:25 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28809.3	92.4826 %		1.53418			1.66%
Sc 361.383	72202.6	92.6 %		1.44			1.56%
Al 308.215†	4.5	-0.0337114 mg/L		0.00176484	-0.0337114 mg/L	0.00176484	5.24%
QC value within limits for Al 308.215							
Ca 315.887†	20.6	0.0137474 mg/L		0.00330726	0.0137474 mg/L	0.00330726	24.06%
QC value within limits for Ca 315.887							
Fe 273.955†	5.5	-0.0092828 mg/L		0.00411926	-0.0092828 mg/L	0.00411926	44.37%
QC value within limits for Fe 273.955							
Mg 279.077†	5.3	-0.0514718 mg/L		0.00748295	-0.0514718 mg/L	0.00748295	14.54%
QC value within limits for Mg 279.077							
Mn 257.610†	-12.8	-0.0023456 mg/L		0.00033162	-0.0023456 mg/L	0.00033162	14.14%
QC value within limits for Mn 257.610							
K 766.490†	-139.5	0.125324 mg/L		0.0007616	0.125324 mg/L	0.0007616	0.61%
QC value within limits for K 766.490							
Na 589.592†	-3119.7	-0.369738 mg/L		0.0112803	-0.369738 mg/L	0.0112803	3.05%
QC value within limits for Na 589.592							
Ti 334.940†	7.7	-0.0014043 mg/L		0.00013969	-0.0014043 mg/L	0.00013969	9.95%
QC value within limits for Ti 334.940							

All analyte(s) passed QC.

Sequence No.: 34
 Sample ID: 83866-020
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 53
 Date Collected: 3/31/2015 7:51:39 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-020

Analyte	Mean Corrected Intensity	Conc.	Units	Calib Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	27428.5	88.0501	%	0.66038				0.75%
Sc 361.383	70355.3	90.3	%	0.67				0.74%
Al 308.215†	47.2	-0.0016249	mg/L	0.00683309	-0.0016249	mg/L	0.00683309	420.54%
Ca 315.887†	124383.9	17.3815	mg/L	0.01109	17.3815	mg/L	0.01109	0.06%
Fe 273.955†	-15.7	-0.0260667	mg/L	0.00860240	-0.0260667	mg/L	0.00860240	33.00%
Mg 279.077†	3285.0	3.08486	mg/L	0.029344	3.08486	mg/L	0.029344	0.95%
Mn 257.610†	1647.6	0.0389776	mg/L	0.00050422	0.0389776	mg/L	0.00050422	1.29%
K 766.490†	6627.0	4.27546	mg/L	0.003512	4.27546	mg/L	0.003512	0.08%
Na 589.592†	136602.4	17.7469	mg/L	0.09346	17.7469	mg/L	0.09346	0.53%
Ti 334.940†	-23.1	-0.0020950	mg/L	0.00008648	-0.0020950	mg/L	0.00008648	4.13%

Sequence No.: 35
 Sample ID: 83866-022
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 54
 Date Collected: 3/31/2015 7:54:56 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-022

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27589.7	88.5674	%	0.23091			0.26%
Sc 361.383	70667.3	90.7	%	0.27			0.30%
Al 308.215†	58.6	0.0069612	mg/L	0.00990059	0.0069612 mg/L	0.00990059	142.23%
Ca 315.887†	166348.2	23.2420	mg/L	0.00276	23.2420 mg/L	0.00276	0.01%
Fe 273.955†	19.2	0.0015817	mg/L	0.00060179	0.0015817 mg/L	0.00060179	38.05%
Mg 279.077†	3860.0	3.63473	mg/L	0.004292	3.63473 mg/L	0.004292	0.12%
Mn 257.610†	387.9	0.0076364	mg/L	0.00017109	0.0076364 mg/L	0.00017109	2.24%
K 766.490†	3985.5	2.65528	mg/L	0.011046	2.65528 mg/L	0.011046	0.42%
Na 589.592†	101252.5	13.1633	mg/L	0.06598	13.1633 mg/L	0.06598	0.50%
Ti 334.940†	-34.1	-0.0023425	mg/L	0.00022754	-0.0023425 mg/L	0.00022754	9.71%

Sequence No.: 36
 Sample ID: 83866-024
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 55
 Date Collected: 3/31/2015 7:58:12 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-024

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	27084.8	86.9469	%	0.19784				0.23%
Sc 361.383	68824.7	88.3	%	0.03				0.03%
Al 308.215†	323.4	0.205711	mg/L	0.0058336	0.205711	mg/L	0.0058336	2.84%
Ca 315.887†	97660.2	13.6495	mg/L	0.04326	13.6495	mg/L	0.04326	0.32%
Fe 273.955†	16.6	-0.0005268	mg/L	0.00629364	-0.0005268	mg/L	0.00629364	>999.9%
Mg 279.077†	4131.1	3.89398	mg/L	0.009856	3.89398	mg/L	0.009856	0.25%
Mn 257.610†	15332.2	0.379666	mg/L	0.0014307	0.379666	mg/L	0.0014307	0.38%
K 766.490†	7309.3	4.69390	mg/L	0.072247	4.69390	mg/L	0.072247	1.54%
Na 589.592†	81258.0	10.5708	mg/L	0.03894	10.5708	mg/L	0.03894	0.37%
Ti 334.940†	-16.9	-0.0019577	mg/L	0.00048631	-0.0019577	mg/L	0.00048631	24.84%

Sequence No.: 37
 Sample ID: 83866-026
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 56
 Date Collected: 3/31/2015 8:01:28 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-026

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27528.4	88.3708 %		0.05224			0.06%
Sc 361.383	70681.1	90.7 %		0.08			0.09%
Al 308.215†	38.1	-0.0084319 mg/L		0.00157626	-0.0084319 mg/L	0.00157626	18.69%
Ca 315.887†	91613.1	12.8050 mg/L		0.06274	12.8050 mg/L	0.06274	0.49%
Fe 273.955†	58.2	0.0324506 mg/L		0.00721003	0.0324506 mg/L	0.00721003	22.22%
Mg 279.077†	5151.7	4.86993 mg/L		0.048181	4.86993 mg/L	0.048181	0.99%
Mn 257.610†	1168.0	0.0270752 mg/L		0.00042291	0.0270752 mg/L	0.00042291	1.56%
K 766.490†	7571.1	4.85446 mg/L		0.004038	4.85446 mg/L	0.004038	0.08%
Na 589.592†	115653.9	15.0307 mg/L		0.10393	15.0307 mg/L	0.10393	0.69%
Ti 334.940†	-13.0	-0.0018689 mg/L		0.00002429	-0.0018689 mg/L	0.00002429	1.30%

Sequence No.: 38
 Sample ID: 83866-028
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 57
 Date Collected: 3/31/2015 8:04:44 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-028

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27348.7	87.7937	%	2.49177			2.84%
Sc 361.383	70269.6	90.2	%	2.56			2.84%
Al 308.215†	30.5	-0.0141899	mg/L	0.01111297	-0.0141899 mg/L	0.01111297	78.32%
Ca 315.887†	106916.9	14.9422	mg/L	0.21075	14.9422 mg/L	0.21075	1.41%
Fe 273.955†	4.1	-0.0104307	mg/L	0.00474876	-0.0104307 mg/L	0.00474876	45.53%
Mg 279.077†	7549.0	7.16242	mg/L	0.231708	7.16242 mg/L	0.231708	3.24%
Mn 257.610†	288.9	0.0051642	mg/L	0.00069323	0.0051642 mg/L	0.00069323	13.42%
K 766.490†	2126.7	1.51527	mg/L	0.011640	1.51527 mg/L	0.011640	0.77%
Na 589.592†	132262.3	17.1841	mg/L	0.34330	17.1841 mg/L	0.34330	2.00%
Ti 334.940†	-31.9	-0.0022932	mg/L	0.00009090	-0.0022932 mg/L	0.00009090	3.96%

Sequence No.: 39
 Sample ID: 83866-030
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 58
 Date Collected: 3/31/2015 8:08:00 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-030

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27588.0	88.5621	%	0.50613			0.57%
Sc 361.383	70846.1	90.9	%	0.55			0.60%
Al 308.215†	56.7	0.0055251	mg/L	0.00631021	0.0055251 mg/L	0.00631021	114.21%
Ca 315.887†	233431.3	32.6104	mg/L	0.52792	32.6104 mg/L	0.52792	1.62%
Fe 273.955†	17.6	0.0003211	mg/L	0.00854521	0.0003211 mg/L	0.00854521	>999.9%
Mg 279.077†	8226.4	7.81017	mg/L	0.109603	7.81017 mg/L	0.109603	1.40%
Mn 257.610†	882.9	0.0199582	mg/L	0.00059614	0.0199582 mg/L	0.00059614	2.99%
K 766.490†	4825.9	3.17077	mg/L	0.021565	3.17077 mg/L	0.021565	0.68%
Na 589.592†	306144.6	39.7300	mg/L	0.63589	39.7300 mg/L	0.63589	1.60%
Ti 334.940†	-77.4	-0.0033141	mg/L	0.00021012	-0.0033141 mg/L	0.00021012	6.34%

Sequence No.: 40
 Sample ID: 83866-032
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 59
 Date Collected: 3/31/2015 8:11:17 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-032

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	26229.9	84.2022	%	1.63305			1.94%
Sc 361.383	67427.3	86.5	%	1.56			1.80%
Al 308.215†	67.2	0.0133876	mg/L	0.00280329	0.0133876 mg/L	0.00280329	20.94%
Ca 315.887†	71538.3	10.0015	mg/L	0.05816	10.0015 mg/L	0.05816	0.58%
Fe 273.955†	105.5	0.0698734	mg/L	0.00710181	0.0698734 mg/L	0.00710181	10.16%
Mg 279.077†	2314.4	2.15663	mg/L	0.029736	2.15663 mg/L	0.029736	1.38%
Mn 257.610†	5125.8	0.125628	mg/L	0.0008036	0.125628 mg/L	0.0008036	0.64%
K 766.490†	5797.7	3.76682	mg/L	0.007657	3.76682 mg/L	0.007657	0.20%
Na 589.592†	869486.5	112.774	mg/L	0.4418	112.774 mg/L	0.4418	0.39%
Ti 334.940†	-5.9	-0.0017099	mg/L	0.00004930	-0.0017099 mg/L	0.00004930	2.88%

Sequence No.: 41
 Sample ID: 83866-034
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 60
 Date Collected: 3/31/2015 8:14:35 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 83866-034

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	27077.4	86.9228	%	1.81558				2.09%
Sc 361.383	68481.7	87.9	%	1.86				2.12%
Al 308.215†	42.4	-0.0052091	mg/L	0.01752012	-0.0052091	mg/L	0.01752012	336.34%
Ca 315.887†	1388.4	0.204769	mg/L	0.0099425	0.204769	mg/L	0.0099425	4.86%
Fe 273.955†	-7.9	-0.0198839	mg/L	0.00664501	-0.0198839	mg/L	0.00664501	33.42%
Mg 279.077†	13.3	-0.0438155	mg/L	0.00825990	-0.0438155	mg/L	0.00825990	18.85%
Mn 257.610†	141.5	0.0014866	mg/L	0.00006328	0.0014866	mg/L	0.00006328	4.26%
K 766.490†	-82.4	0.160353	mg/L	0.0495010	0.160353	mg/L	0.0495010	30.87%
Na 589.592†	-2079.3	-0.234831	mg/L	0.0142535	-0.234831	mg/L	0.0142535	6.07%
Ti 334.940†	34.9	-0.0007941	mg/L	0.00031536	-0.0007941	mg/L	0.00031536	39.71%

Sequence No.: 42
 Sample ID: ICSA V-202074
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/31/2015 8:17:52 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-202074

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	23281.1	74.7363 %		0.27245			0.36%
Sc 361.383	60602.6	77.8 %		0.29			0.37%
Al 308.215†	707960.6	531.489 mg/L		5.0946	531.489 mg/L	5.0946	0.96%
QC value within limits for Al 308.215		Recovery = 106.30%					
Ca 315.887†	3562033.2	497.461 mg/L		4.2123	497.461 mg/L	4.2123	0.85%
QC value within limits for Ca 315.887		Recovery = 99.49%					
Fe 273.955†	244978.0	193.933 mg/L		2.0750	193.933 mg/L	2.0750	1.07%
QC value within limits for Fe 273.955		Recovery = 96.97%					
Mg 279.077†	517290.3	494.619 mg/L		4.3326	494.619 mg/L	4.3326	0.88%
QC value within limits for Mg 279.077		Recovery = 98.92%					
Mn 257.610†	-1909.9	0.0768443 mg/L		0.00107256	0.0768443 mg/L	0.00107256	1.40%
QC value within limits for Mn 257.610		Recovery = 7.68%					
K 766.490†	86.6	0.263970 mg/L		0.0246056	0.263970 mg/L	0.0246056	9.32%
QC value within limits for K 766.490		Recovery = 26.40%					
Na 589.592†	308.6	0.0747845 mg/L		0.00642605	0.0747845 mg/L	0.00642605	8.59%
QC value within limits for Na 589.592		Recovery = 7.48%					
Ti 334.940†	-2196.7	-0.0508635 mg/L		0.00015291	-0.0508635 mg/L	0.00015291	0.30%
QC value within limits for Ti 334.940		Recovery = -5.09%					

All analyte(s) passed QC.

Sequence No.: 43
 Sample ID: ICSAB V-202076
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/31/2015 8:21:00 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-202076

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	23475.6	75.3606 %	0.28523			0.38%
Sc 361.383	60672.4	77.9 %	0.35			0.45%
Al 308.215†	717572.2	538.705 mg/L	2.6386	538.705 mg/L	2.6386	0.49%
QC value within limits for Al 308.215 Recovery = 107.74%						
Ca 315.887†	3629138.5	506.833 mg/L	3.5029	506.833 mg/L	3.5029	0.69%
QC value within limits for Ca 315.887 Recovery = 101.37%						
Fe 273.955†	249583.8	197.579 mg/L	0.9479	197.579 mg/L	0.9479	0.48%
QC value within limits for Fe 273.955 Recovery = 98.79%						
Mg 279.077†	528424.2	505.266 mg/L	3.7753	505.266 mg/L	3.7753	0.75%
QC value within limits for Mg 279.077 Recovery = 101.05%						
Mn 257.610†	17870.8	0.571652 mg/L	0.0065098	0.571652 mg/L	0.0065098	1.14%
QC value within limits for Mn 257.610 Recovery = 114.33%						
K 766.490†	82.7	0.261604 mg/L	0.0336600	0.261604 mg/L	0.0336600	12.87%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	133.3	0.0520627 mg/L	0.01490807	0.0520627 mg/L	0.01490807	28.63%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940†	-2144.0	-0.0496809 mg/L	0.00112522	-0.0496809 mg/L	0.00112522	2.26%

All analyte(s) passed QC.

Sequence No.: 44
 Sample ID: CCV V-202964
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/31/2015 8:24:08 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-202964

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	24902.5	79.9412 %		0.18618			0.23%
Sc 361.383	64906.5	83.3 %		0.27			0.33%
Al 308.215†	7173.1	5.34837 mg/L		0.065832	5.34837 mg/L	0.065832	1.23%
QC value within limits for Al 308.215 Recovery = 106.97%							
Ca 315.887†	368990.6	51.5417 mg/L		0.41791	51.5417 mg/L	0.41791	0.81%
QC value within limits for Ca 315.887 Recovery = 103.08%							
Fe 273.955†	6572.5	5.18974 mg/L		0.046897	5.18974 mg/L	0.046897	0.90%
QC value within limits for Fe 273.955 Recovery = 103.79%							
Mg 279.077†	54266.6	51.8376 mg/L		0.64161	51.8376 mg/L	0.64161	1.24%
QC value within limits for Mg 279.077 Recovery = 103.68%							
Mn 257.610†	20738.1	0.517627 mg/L		0.0052642	0.517627 mg/L	0.0052642	1.02%
QC value within limits for Mn 257.610 Recovery = 103.53%							
K 766.490†	83212.3	51.2476 mg/L		0.76573	51.2476 mg/L	0.76573	1.49%
QC value within limits for K 766.490 Recovery = 102.50%							
Na 589.592†	398992.0	51.7688 mg/L		0.27810	51.7688 mg/L	0.27810	0.54%
QC value within limits for Na 589.592 Recovery = 103.54%							
Ti 334.940†	23599.9	0.527917 mg/L		0.0050221	0.527917 mg/L	0.0050221	0.95%
QC value within limits for Ti 334.940 Recovery = 105.58%							

All analyte(s) passed QC.

Sequence No.: 45

Sample ID: LLCCV [aq] V-206357

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 3/31/2015 8:26:52 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV [aq] V-206357

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25628.4	82.2715 %		0.35355			0.43%
Sc 361.383	64824.1	83.2 %		0.29			0.35%
Al 308.215†	440.3	0.293476 mg/L		0.0173223	0.293476 mg/L	0.0173223	5.90%
QC value greater than the upper limit for Al 308.215 Recovery = 146.74%							
Ca 315.887†	39812.7	5.57086 mg/L		0.016571	5.57086 mg/L	0.016571	0.30%
QC value within limits for Ca 315.887 Recovery = 111.42%							
Fe 273.955†	383.7	0.290088 mg/L		0.0060923	0.290088 mg/L	0.0060923	2.10%
QC value within limits for Fe 273.955 Recovery = 96.70%							
Mg 279.077†	5581.3	5.28070 mg/L		0.094829	5.28070 mg/L	0.094829	1.80%
QC value within limits for Mg 279.077 Recovery = 105.61%							
Mn 257.610†	1730.0	0.0412354 mg/L		0.00080974	0.0412354 mg/L	0.00080974	1.96%
QC value within limits for Mn 257.610 Recovery = 103.09%							
K 766.490†	8521.8	5.43759 mg/L		0.003157	5.43759 mg/L	0.003157	0.06%
QC value within limits for K 766.490 Recovery = 108.75%							
Na 589.592†	38472.6	5.02320 mg/L		0.026958	5.02320 mg/L	0.026958	0.54%
QC value within limits for Na 589.592 Recovery = 100.46%							
Ti 334.940†	2384.0	0.0519103 mg/L		0.00034030	0.0519103 mg/L	0.00034030	0.66%
QC value within limits for Ti 334.940 Recovery = 103.82%							
QC Failed. Continue with analysis.							

Sequence No.: 46
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 3/31/2015 8:30:10 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	26357.6	84.6121 %		1.18567			1.40%
Sc 361.383	65664.2	84.3 %		1.06			1.26%
Al 308.215†	37.2	-0.0091004 mg/L		0.01108743	-0.0091004 mg/L	0.01108743	121.83%
QC value within limits for Al 308.215 Recovery = Not calculated							
Ca 315.887†	146.6	0.0313564 mg/L		0.00268636	0.0313564 mg/L	0.00268636	8.57%
QC value within limits for Ca 315.887 Recovery = Not calculated							
Fe 273.955†	-12.0	-0.0231285 mg/L		0.00060877	-0.0231285 mg/L	0.00060877	2.63%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	-13.8	-0.0697603 mg/L		0.01827853	-0.0697603 mg/L	0.01827853	26.20%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	37.1	-0.0011127 mg/L		0.00028899	-0.0011127 mg/L	0.00028899	25.97%
QC value within limits for Mn 257.610 Recovery = Not calculated							
K 766.490†	-74.2	0.165365 mg/L		0.0453798	0.165365 mg/L	0.0453798	27.44%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	-3662.7	-0.440143 mg/L		0.0059446	-0.440143 mg/L	0.0059446	1.35%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	40.3	-0.0006731 mg/L		0.00064493	-0.0006731 mg/L	0.00064493	95.81%
QC value within limits for Ti 334.940 Recovery = Not calculated							

All analyte(s) passed QC.

Method: HgCV1 SWH20 (7470A)

Page 1

Date: 3/27/2015 1:07:48 PM

3/27/15
Analysis Begun

V-207084

Logged In Analyst: usermet
Spectrometer Model: FIMS-100, S/N B050-9550

Technique: AA FIMS-MHS
Autosampler Model: AS-91

Sample Information File: C:\data-AA\johns\Sample Information\H17600SW.sif
Batch ID: H17600SW
Results Data Set: H17600SW
Results Library: C:\data-AA\johns\Results\Results.mdb

Method Loaded

Method Name: HgCV1 SWH20 (7470A)
Method Description: HgCV1 SW846H20

Method Last Saved: 7/5/2013 12:40:17 PM

Sequence No.: 1
Sample ID: Calibration Blank
Analyst:

Autosampler Location: 1
Date Collected: 3/27/2015 1:02:54 PM
Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0000	-0.0018	0.0000	13:03:43	Yes
2		[0.00]	-0.0000	-0.0013	-0.0000	13:04:16	Yes
Mean:		[0.00]	-0.0000				
SD:		0.00	0.0000				
%RSD:		0.00	327.54				

Auto-zero performed.

Sequence No.: 2
Sample ID: .2 PPB
Analyst:

Autosampler Location: 2
Date Collected: 3/27/2015 1:04:17 PM
Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0015	0.0063	0.0014	13:05:04	Yes
2		[0.2]	0.0016	0.0073	0.0016	13:05:37	Yes
Mean:		[0.2]	0.0015				
SD:		0.0	0.0001				
%RSD:		0.0	5.54				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00755 Intercept: 0.00000

Sequence No.: 3
Sample ID: .5 PPB
Analyst:

Autosampler Location: 3
Date Collected: 3/27/2015 1:05:39 PM
Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0031	0.0109	0.0030	13:06:25	Yes
2		[0.5]	0.0033	0.0125	0.0032	13:06:59	Yes
Mean:		[0.5]	0.0032				
SD:		0.0	0.0001				
%RSD:		0.0	4.38				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.995900 Slope: 0.00624 Intercept: 0.00010

Sequence No.: 4
Sample ID: 1 PPB
Analyst:

Autosampler Location: 4
Date Collected: 3/27/2015 1:07:00 PM
Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1							

Method: HgCV1 SWH20 (7470A)

Page 2

Date: 3/27/2015 1:13:47 PM

1	[1]	0.0064	0.0261	0.0064	13:07:47	Yes
2	[1]	0.0063	0.0245	0.0062	13:08:20	Yes
Mean:	[1]	0.0063				
SD:	0	0.0001				
%RSD:	0	1.81				

Standard number 3 applied. [1]
Correlation Coef.: 0.999079 Slope: 0.00624 Intercept: 0.00010

Sequence No.: 5
Sample ID: 2 PPB
Analyst:

Autosampler Location: 5
Date Collected: 3/27/2015 1:08:21 PM
Data Type: Original

Replicate Data: 2 PPB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[2]	0.0128	0.0541	0.0128	13:09:08	Yes
2		[2]	0.0123	0.0503	0.0123	13:09:41	Yes
Mean:		[2]	0.0125				
SD:	0		0.0003				
%RSD:	0		2.73				

Standard number 4 applied. [2]
Correlation Coef.: 0.999793 Slope: 0.00622 Intercept: 0.00010

Sequence No.: 6
Sample ID: 5 PPB
Analyst:

Autosampler Location: 6
Date Collected: 3/27/2015 1:09:43 PM
Data Type: Original

Replicate Data: 5 PPB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[5]	0.0316	0.1296	0.0316	13:10:29	Yes
2		[5]	0.0319	0.1306	0.0319	13:11:03	Yes
Mean:		[5]	0.0318				
SD:	0		0.0002				
%RSD:	0		0.58				

Standard number 5 applied. [5]
Correlation Coef.: 0.999946 Slope: 0.00633 Intercept: 0.00004

Sequence No.: 7
Sample ID: 10 PPB
Analyst:

Autosampler Location: 7
Date Collected: 3/27/2015 1:11:04 PM
Data Type: Original

Replicate Data: 10 PPB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[10]	0.0624	0.2551	0.0624	13:11:51	Yes
2		[10]	0.0623	0.2545	0.0623	13:12:24	Yes
Mean:		[10]	0.0624				
SD:	0		0.0001				
%RSD:	0		0.09				

Standard number 6 applied. [10]
Correlation Coef.: 0.999958 Slope: 0.00624 Intercept: 0.00014

Sequence No.: 8
Sample ID: 25 PPB
Analyst:

Autosampler Location: 8
Date Collected: 3/27/2015 1:12:25 PM
Data Type: Original

Replicate Data: 25 PPB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[25]	0.1549	0.6313	0.1549	13:13:12	Yes
2		[25]	0.1548	0.6291	0.1548	13:13:45	Yes
Mean:		[25]	0.1548				
SD:	0		0.0001				
%RSD:	0		0.05				

Standard number 7 applied. [25]
Correlation Coef.: 0.999987 Slope: 0.00619 Intercept: 0.00025

Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calibration Blank	0.0000	0	-0.040	0.00	327.5
.2 PPB	0.0015	0.2	0.204	0.00	5.5
.5 PPB	0.0032	0.5	0.469	0.00	4.4
1 PPB	0.0063	1.0	0.983	0.00	1.8
2 PPB	0.0125	2.0	1.986	0.00	2.7
5 PPB	0.0318	5.0	5.091	0.00	0.6
10 PPB	0.0624	10.0	10.036	0.00	0.1
25 PPB	0.1548	25.0	24.970	0.00	0.0

Correlation Coef.: 0.999987 Slope: 0.00619 Intercept: 0.00025

Sequence No.: 9

Sample ID: ICV (2)

Analyst:

Autosampler Location: 10

Date Collected: 3/27/2015 1:13:47 PM

Data Type: Original

Replicate Data: ICV (2)

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	20.00	20.00	0.1240	0.5051	0.1240	13:14:37	Yes
2	20.20	20.20	0.1253	0.5087	0.1253	13:15:10	Yes
Mean:	20.10	20.10	0.1247				
SD:	0.147	0.147	0.0009				
%RSD:	0.730	0.730	0.73				

QC value within limits for Hg 253.7 Recovery = 100.50%
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICB

Analyst:

Autosampler Location: 1

Date Collected: 3/27/2015 1:15:11 PM

Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.025	-0.025	0.0001	-0.0010	0.0001	13:15:58	Yes
2	-0.054	-0.054	-0.0001	-0.0037	-0.0001	13:16:32	Yes
Mean:	-0.040	-0.040	0.0000				
SD:	0.021	0.021	0.0001				
%RSD:	51.90	51.90	>999.9%				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11

Sample ID: MB 42363 (1)

Analyst:

Autosampler Location: 11

Date Collected: 3/27/2015 1:16:33 PM

Data Type: Original

Replicate Data: MB 42363 (1)

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.042	-0.042	-0.0000	-0.0019	-0.0000	13:17:21	Yes
2	-0.041	-0.041	-0.0000	-0.0018	-0.0000	13:17:54	Yes
Mean:	-0.042	-0.042	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.303	1.303	35.32				

Sequence No.: 12

Sample ID: LCS 42363

Analyst:

Autosampler Location: 12

Date Collected: 3/27/2015 1:17:56 PM

Data Type: Original

Replicate Data: LCS 42363

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.961	9.961	0.0619	0.2523	0.0619	13:18:42	Yes
2	9.903	9.903	0.0616	0.2505	0.0615	13:19:15	Yes
Mean:	9.932	9.932	0.0617				

SD: 0.041 0.041 0.0003
 %RSD: 0.410 0.410 0.41

Sequence No.: 13
 Sample ID: LCS MR 42363
 Analyst:

Autosampler Location: 13
 Date Collected: 3/27/2015 1:19:17 PM
 Data Type: Original

Replicate Data: LCS MR 42363

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	10.02	10.02	0.0623	0.2528	0.0623	13:20:03	Yes
2	9.955	9.955	0.0619	0.2504	0.0619	13:20:37	Yes
Mean:	9.987	9.987	0.0621				
SD:	0.045	0.045	0.0003				
%RSD:	0.448	0.448	0.45				

Sequence No.: 14
 Sample ID: 83866-014
 Analyst:

Autosampler Location: 14
 Date Collected: 3/27/2015 1:20:38 PM
 Data Type: Original

Replicate Data: 83866-014

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.025	-0.025	0.0001	-0.0003	0.0001	13:21:24	Yes
2	-0.040	-0.040	-0.0000	-0.0008	-0.0000	13:21:58	Yes
Mean:	-0.033	-0.033	0.0000				
SD:	0.011	0.011	0.0001				
%RSD:	32.98	32.98	142.95				

Sequence No.: 15
 Sample ID: 83866-014 MR
 Analyst:

Autosampler Location: 15
 Date Collected: 3/27/2015 1:21:59 PM
 Data Type: Original

Replicate Data: 83866-014 MR

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.043	-0.043	-0.0000	-0.0030	-0.0000	13:22:46	Yes
2	-0.024	-0.024	0.0001	0.0004	0.0001	13:23:19	Yes
Mean:	-0.033	-0.033	0.0000				
SD:	0.014	0.014	0.0001				
%RSD:	40.81	40.81	206.38				

Sequence No.: 16
 Sample ID: 83866-015 MS 1
 Analyst:

Autosampler Location: 16
 Date Collected: 3/27/2015 1:23:20 PM
 Data Type: Original

Replicate Data: 83866-015 MS 1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.836	9.836	0.0611	0.2518	0.0611	13:24:07	Yes
2	9.793	9.793	0.0609	0.2511	0.0609	13:24:40	Yes
Mean:	9.814	9.814	0.0610				
SD:	0.030	0.030	0.0002				
%RSD:	0.308	0.308	0.31				

Sequence No.: 17
 Sample ID: 83866-016 MS 2
 Analyst:

Autosampler Location: 17
 Date Collected: 3/27/2015 1:24:42 PM
 Data Type: Original

Replicate Data: 83866-016 MS 2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.639	9.639	0.0599	0.2468	0.0599	13:25:28	Yes
2	9.323	9.323	0.0580	0.2381	0.0580	13:26:01	Yes
Mean:	9.481	9.481	0.0589				
SD:	0.224	0.224	0.0014				

%RSD: 2.361 2.361 2.35

Sequence No.: 18
 Sample ID: 83866-002
 Analyst:

Autosampler Location: 18
 Date Collected: 3/27/2015 1:26:03 PM
 Data Type: Original

Replicate Data: 83866-002

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.015	-0.015	0.0002	0.0014	0.0001	13:26:50	Yes
2	0.001	0.001	0.0003	0.0023	0.0002	13:27:23	Yes
Mean:	-0.007	-0.007	0.0002				
SD:	0.011	0.011	0.0001				
%RSD:	171.4	171.4	33.56				

Sequence No.: 19
 Sample ID: 83866-004
 Analyst:

Autosampler Location: 19
 Date Collected: 3/27/2015 1:27:24 PM
 Data Type: Original

Replicate Data: 83866-004

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.023	-0.023	0.0001	0.0007	0.0001	13:28:14	Yes
2	-0.032	-0.032	0.0000	-0.0001	0.0000	13:28:47	Yes
Mean:	-0.028	-0.028	0.0001				
SD:	0.006	0.006	0.0000				
%RSD:	23.15	23.15	52.31				

Sequence No.: 20
 Sample ID: 83866-006
 Analyst:

Autosampler Location: 20
 Date Collected: 3/27/2015 1:28:49 PM
 Data Type: Original

Replicate Data: 83866-006

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.010	-0.010	0.0002	0.0007	0.0002	13:29:35	Yes
2	-0.022	-0.022	0.0001	0.0002	0.0001	13:30:09	Yes
Mean:	-0.016	-0.016	0.0001				
SD:	0.008	0.008	0.0001				
%RSD:	52.60	52.60	35.35				

Sequence No.: 21
 Sample ID: CCV
 Analyst:

Autosampler Location: 9
 Date Collected: 3/27/2015 1:30:10 PM
 Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.696	9.696	0.0603	0.2468	0.0603	13:30:57	Yes
2	9.452	9.452	0.0588	0.2417	0.0588	13:31:30	Yes
Mean:	9.574	9.574	0.0595				
SD:	0.173	0.173	0.0011				
%RSD:	1.804	1.804	1.80				

QC value within limits for Hg 253.7 Recovery = 95.74%
 All analyte(s) passed QC.

Sequence No.: 22
 Sample ID: CCB
 Analyst:

Autosampler Location: 1
 Date Collected: 3/27/2015 1:31:32 PM
 Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.033	-0.033	0.0000	-0.0007	0.0000	13:32:19	Yes
2	-0.027	-0.027	0.0001	-0.0007	0.0001	13:32:52	Yes
Mean:	-0.030	-0.030	0.0001				

Method: HgCV1 SWH2O (7470A)

Page 6

Date: 3/27/2015 1:39:41 PM

SD: 0.004 0.004 0.0000

%RSD: 14.80 14.80 44.68

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 23

Sample ID: 83866-008

Analyst:

Autosampler Location: 21

Date Collected: 3/27/2015 1:32:53 PM

Data Type: Original

Replicate Data: 83866-008

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.040	-0.040	0.0000	-0.0016	-0.0000	13:33:42	Yes
2	-0.040	-0.040	0.0000	-0.0033	-0.0000	13:34:15	Yes
Mean:	-0.040	-0.040	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.776	0.776	249.01				

Sequence No.: 24

Sample ID: 83866-010

Analyst:

Autosampler Location: 22

Date Collected: 3/27/2015 1:34:16 PM

Data Type: Original

Replicate Data: 83866-010

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.035	-0.035	0.0000	-0.0009	0.0000	13:35:03	Yes
2	-0.028	-0.028	0.0001	0.0001	0.0001	13:35:36	Yes
Mean:	-0.031	-0.031	0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	15.82	15.82	57.18				

Sequence No.: 25

Sample ID: 83866-018

Analyst:

Autosampler Location: 23

Date Collected: 3/27/2015 1:35:37 PM

Data Type: Original

Replicate Data: 83866-018

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.026	-0.026	0.0001	-0.0005	0.0001	13:36:24	Yes
2	-0.034	-0.034	0.0000	-0.0005	0.0000	13:36:57	Yes
Mean:	-0.030	-0.030	0.0001				
SD:	0.006	0.006	0.0000				
%RSD:	18.78	18.78	54.77				

Sequence No.: 26

Sample ID: 83866-020

Analyst:

Autosampler Location: 24

Date Collected: 3/27/2015 1:36:59 PM

Data Type: Original

Replicate Data: 83866-020

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.037	-0.037	0.0000	-0.0015	0.0000	13:37:45	Yes
2	-0.028	-0.028	0.0001	-0.0006	0.0001	13:38:18	Yes
Mean:	-0.033	-0.033	0.0000				
SD:	0.006	0.006	0.0000				
%RSD:	19.31	19.31	86.13				

Sequence No.: 27

Sample ID: 83866-022

Analyst:

Autosampler Location: 25

Date Collected: 3/27/2015 1:38:20 PM

Data Type: Original

Replicate Data: 83866-022

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.044	-0.044	-0.0000	-0.0013	-0.0000	13:39:06	Yes
2	-0.019	-0.019	0.0001	0.0004	0.0001	13:39:40	Yes

Mean: -0.031 -0.031 0.0001
SD: 0.017 0.017 0.0001
%RSD: 54.85 54.85 200.05

Sequence No.: 28
Sample ID: 83866-024
Analyst:

Autosampler Location: 26
Date Collected: 3/27/2015 1:39:41 PM
Data Type: Original

Replicate Data: 83866-024

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.021	-0.021	0.0001	0.0002	0.0001	13:40:28	Yes
2	-0.031	-0.031	0.0001	-0.0002	0.0000	13:41:01	Yes
Mean:	-0.026	-0.026	0.0001				
SD:	0.007	0.007	0.0000				
%RSD:	25.46	25.46	47.30				

Sequence No.: 29
Sample ID: 83866-026
Analyst:

Autosampler Location: 27
Date Collected: 3/27/2015 1:41:02 PM
Data Type: Original

Replicate Data: 83866-026

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.016	-0.016	0.0002	0.0011	0.0001	13:41:49	Yes
2	-0.001	-0.001	0.0002	0.0019	0.0002	13:42:22	Yes
Mean:	-0.008	-0.008	0.0002				
SD:	0.010	0.010	0.0001				
%RSD:	124.0	124.0	32.64				

Sequence No.: 30
Sample ID: 83866-028
Analyst:

Autosampler Location: 28
Date Collected: 3/27/2015 1:42:23 PM
Data Type: Original

Replicate Data: 83866-028

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.008	-0.008	0.0002	0.0017	0.0002	13:43:13	Yes
2	-0.029	-0.029	0.0001	0.0002	0.0001	13:43:46	Yes
Mean:	-0.018	-0.018	0.0001				
SD:	0.014	0.014	0.0001				
%RSD:	78.42	78.42	66.71				

Sequence No.: 31
Sample ID: 83866-030
Analyst:

Autosampler Location: 29
Date Collected: 3/27/2015 1:43:48 PM
Data Type: Original

Replicate Data: 83866-030

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.029	-0.029	0.0001	-0.0005	0.0001	13:44:34	Yes
2	-0.039	-0.039	0.0000	-0.0016	-0.0000	13:45:07	Yes
Mean:	-0.034	-0.034	0.0000				
SD:	0.007	0.007	0.0000				
%RSD:	20.22	20.22	121.93				

Sequence No.: 32
Sample ID: 83866-032
Analyst:

Autosampler Location: 30
Date Collected: 3/27/2015 1:45:09 PM
Data Type: Original

Replicate Data: 83866-032

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.045	-0.045	-0.0000	-0.0016	-0.0000	13:45:55	Yes
2	-0.042	-0.042	-0.0000	-0.0030	-0.0000	13:46:29	Yes
Mean:	-0.043	-0.043	-0.0000				

3/27/15
Analysis Begun

V-207084

Logged In Analyst: usermet
Spectrometer Model: FIMS-100, S/N B050-9550

Technique: AA FIMS-MHS
Autosampler Model: AS-91

Sample Information File: C:\data-AA\johns\Sample Information\H17600SW.sif
Batch ID: H17600SW
Results Data Set: H17600SWB
Results Library: C:\data-AA\johns\Results\Results.mdb

Sequence No.: 1
Sample ID: Calibration Blank
Analyst:
Autosampler Location: 1
Date Collected: 3/27/2015 2:43:22 PM
Data Type: Original

Replicate Data: Calibration Blank

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0002	0.0023	0.0002	14:44:10	Yes
2		[0.00]	-0.0000	-0.0013	-0.0000	14:44:44	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0002				
%RSD:		0.00	186.67				

Auto-zero performed.

Sequence No.: 2
Sample ID: .2 PPB
Analyst:
Autosampler Location: 2
Date Collected: 3/27/2015 2:44:45 PM
Data Type: Original

Replicate Data: .2 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0012	0.0048	0.0013	14:45:32	Yes
2		[0.2]	0.0011	0.0047	0.0012	14:46:05	Yes
Mean:		[0.2]	0.0011				
SD:		0.0	0.0000				
%RSD:		0.0	2.61				

Standard number 1 applied. [0.2]

Correlation Coef.: 1.000000 Slope: 0.00574 Intercept: 0.00000

Sequence No.: 3
Sample ID: .5 PPB
Analyst:
Autosampler Location: 3
Date Collected: 3/27/2015 2:46:06 PM
Data Type: Original

Replicate Data: .5 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0030	0.0118	0.0031	14:46:53	Yes
2		[0.5]	0.0029	0.0119	0.0030	14:47:26	Yes
Mean:		[0.5]	0.0029				
SD:		0.0	0.0001				
%RSD:		0.0	1.84				

Standard number 2 applied. [0.5]

Correlation Coef.: 0.999929 Slope: 0.00590 Intercept: -0.00001

Sequence No.: 4
Sample ID: 1 PPB
Analyst:
Autosampler Location: 4
Date Collected: 3/27/2015 2:47:28 PM
Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0060	0.0227	0.0061	14:48:14	Yes
2		[1]	0.0059	0.0225	0.0060	14:48:47	Yes
Mean:		[1]	0.0060				
SD:		0	0.0001				
%RSD:		0	1.08				

Method: HgCV1 SWH20 (7470A)

Page: 2

Date: 3/27/2015 2:54:15 PM

Standard number 3 applied. [1]

Correlation Coef.: 0.999949 Slope: 0.00600 Intercept: -0.00003

Sequence No.: 5

Sample ID: 2 PPB

Analyst:

Autosampler Location: 5

Date Collected: 3/27/2015 2:48:49 PM

Data Type: Original

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0121	0.0486	0.0122	14:49:35	Yes
2		[2]	0.0120	0.0455	0.0121	14:50:09	Yes
Mean:		[2]	0.0120				
SD:		0	0.0000				
%RSD:		0	0.38				

Standard number 4 applied. [2]

Correlation Coef.: 0.999985 Slope: 0.00603 Intercept: -0.00004

Sequence No.: 6

Sample ID: 5 PPB

Analyst:

Autosampler Location: 6

Date Collected: 3/27/2015 2:50:10 PM

Data Type: Original

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0310	0.1245	0.0311	14:50:57	Yes
2		[5]	0.0308	0.1245	0.0308	14:51:30	Yes
Mean:		[5]	0.0309				
SD:		0	0.0002				
%RSD:		0	0.61				

Standard number 5 applied. [5]

Correlation Coef.: 0.999944 Slope: 0.00619 Intercept: -0.00014

Sequence No.: 7

Sample ID: 10 PPB

Analyst:

Autosampler Location: 7

Date Collected: 3/27/2015 2:51:31 PM

Data Type: Original

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.0611	0.2483	0.0612	14:52:18	Yes
2		[10]	0.0610	0.2475	0.0611	14:52:51	Yes
Mean:		[10]	0.0611				
SD:		0	0.0000				
%RSD:		0	0.04				

Standard number 6 applied. [10]

Correlation Coef.: 0.999973 Slope: 0.00612 Intercept: -0.00007

Sequence No.: 8

Sample ID: 25 PPB

Analyst:

Autosampler Location: 8

Date Collected: 3/27/2015 2:52:53 PM

Data Type: Original

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[25]	0.1506	0.6109	0.1506	14:53:40	Yes
2		[25]	0.1477	0.6081	0.1478	14:54:13	Yes
Mean:		[25]	0.1491				
SD:		0	0.0020				
%RSD:		0	1.33				

Standard number 7 applied. [25]

Correlation Coef.: 0.999940 Slope: 0.00598 Intercept: 0.00025

Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
----	-------------------	--------------------	-----------------------	--------------------	------

Method: HgCV1 SWH2O (7470A)

Page 3

Date: 3/27/2015 2:59:46 PM

Calibration Blank	0.0000	0	-0.042	0.00	186.7
.2 PPB	0.0011	0.2	0.150	0.00	2.6
.5 PPB	0.0029	0.5	0.451	0.00	1.8
1 PPB	0.0060	1.0	0.959	0.00	1.1
2 PPB	0.0120	2.0	1.971	0.00	0.4
5 PPB	0.0309	5.0	5.126	0.00	0.6
10 PPB	0.0611	10.0	10.172	0.00	0.0
25 PPB	0.1491	25.0	24.911	0.00	1.3

Correlation Coef.: 0.999940 Slope: 0.00598 Intercept: 0.00025

Sequence No.: 9

Sample ID: ICV (2)

Analyst:

Autosampler Location: 10

Date Collected: 3/27/2015 2:54:15 PM

Data Type: Original

Replicate Data: ICV (2)

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	19.63	19.63	0.1176	0.4856	0.1177	14:55:04	Yes
2	19.46	19.46	0.1166	0.4846	0.1167	14:55:38	Yes
Mean:	19.55	19.55	0.1171				
SD:	0.122	0.122	0.0007				
%RSD:	0.626	0.626	0.62				

QC value within limits for Hg 253.7 Recovery = 97.73%
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICB

Analyst:

Autosampler Location: 1

Date Collected: 3/27/2015 2:55:39 PM

Data Type: Original

Replicate Data: ICB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.000	0.000	0.0003	0.0028	0.0003	14:56:27	Yes
2	-0.005	-0.005	0.0002	0.0029	0.0003	14:57:00	Yes
Mean:	-0.002	-0.002	0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	148.1	148.1	8.38				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11

Sample ID: 83866-008

Analyst:

Autosampler Location: 21

Date Collected: 3/27/2015 2:57:01 PM

Data Type: Original

Replicate Data: 83866-008

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.023	-0.023	0.0001	0.0003	0.0002	14:57:50	Yes
2	-0.015	-0.015	0.0002	0.0020	0.0003	14:58:23	Yes
Mean:	-0.019	-0.019	0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	26.97	26.97	22.40				

Sequence No.: 12

Sample ID: 83866-010

Analyst:

Autosampler Location: 22

Date Collected: 3/27/2015 2:58:25 PM

Data Type: Original

Replicate Data: 83866-010

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.029	-0.029	0.0001	0.0010	0.0002	14:59:11	Yes
2	-0.052	-0.052	-0.0001	-0.0004	0.0000	14:59:45	Yes
Mean:	-0.041	-0.041	0.0000				
SD:	0.017	0.017	0.0001				
%RSD:	40.84	40.84	>999.9%				

Sequence No.: 13

Autosampler Location: 23

Sample ID: 83866-018
Analyst:

Date Collected: 3/27/2015 2:59:46 PM
Data Type: Original

Replicate Data: 83866-018

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.008	-0.008	0.0002	0.0027	0.0003	15:00:33	Yes
2	-0.046	-0.046	-0.0000	0.0002	0.0001	15:01:07	Yes
Mean:	-0.027	-0.027	0.0001				
SD:	0.027	0.027	0.0002				
%RSD:	99.58	99.58	176.75				

Sequence No.: 14

Autosampler Location: 24

Sample ID: 83866-020

Date Collected: 3/27/2015 3:01:08 PM

Analyst:

Data Type: Original

Replicate Data: 83866-020

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.057	-0.057	-0.0001	-0.0021	0.0000	15:01:55	Yes
2	-0.071	-0.071	-0.0002	-0.0027	-0.0001	15:02:28	Yes
Mean:	-0.064	-0.064	-0.0001				
SD:	0.010	0.010	0.0001				
%RSD:	15.89	15.89	46.25				

Sequence No.: 15

Autosampler Location: 25

Sample ID: 83866-022

Date Collected: 3/27/2015 3:02:30 PM

Analyst:

Data Type: Original

Replicate Data: 83866-022

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.064	-0.064	-0.0001	-0.0014	-0.0000	15:03:16	Yes
2	-0.056	-0.056	-0.0001	-0.0015	0.0000	15:03:49	Yes
Mean:	-0.060	-0.060	-0.0001				
SD:	0.006	0.006	0.0000				
%RSD:	9.393	9.393	31.44				

Sequence No.: 16

Autosampler Location: 26

Sample ID: 83866-024

Date Collected: 3/27/2015 3:03:51 PM

Analyst:

Data Type: Original

Replicate Data: 83866-024

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.060	-0.060	-0.0001	-0.0016	-0.0000	15:04:37	Yes
2	-0.035	-0.035	0.0000	0.0011	0.0001	15:05:11	Yes
Mean:	-0.048	-0.048	-0.0000				
SD:	0.018	0.018	0.0001				
%RSD:	37.89	37.89	307.91				

Sequence No.: 17

Autosampler Location: 27

Sample ID: 83866-026

Date Collected: 3/27/2015 3:05:12 PM

Analyst:

Data Type: Original

Replicate Data: 83866-026

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.038	-0.038	0.0000	0.0013	0.0001	15:05:59	Yes
2	-0.063	-0.063	-0.0001	-0.0034	-0.0000	15:06:32	Yes
Mean:	-0.051	-0.051	-0.0001				
SD:	0.017	0.017	0.0001				
%RSD:	34.09	34.09	197.49				

Sequence No.: 18

Autosampler Location: 28

Sample ID: 83866-028

Date Collected: 3/27/2015 3:06:33 PM

Analyst:

Data Type: Original

Replicate Data: 83866-028

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.052	-0.052	-0.0001	-0.0001	0.0000	15:07:24	Yes
2	-0.053	-0.053	-0.0001	-0.0013	0.0000	15:07:57	Yes
Mean:	-0.052	-0.052	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	0.974	0.974	4.84				

Sequence No.: 19

Autosampler Location: 29

Sample ID: 83866-030

Date Collected: 3/27/2015 3:07:58 PM

Analyst:

Data Type: Original

Replicate Data: 83866-030

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.058	-0.058	-0.0001	-0.0015	-0.0000	15:08:45	Yes
2	-0.056	-0.056	-0.0001	-0.0033	0.0000	15:09:18	Yes
Mean:	-0.057	-0.057	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	3.241	3.241	12.17				

Sequence No.: 20

Autosampler Location: 30

Sample ID: 83866-032

Date Collected: 3/27/2015 3:09:19 PM

Analyst:

Data Type: Original

Replicate Data: 83866-032

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.063	-0.063	-0.0001	-0.0013	-0.0000	15:10:06	Yes
2	-0.065	-0.065	-0.0001	-0.0014	-0.0000	15:10:39	Yes
Mean:	-0.064	-0.064	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.853	1.853	5.37				

Sequence No.: 21

Autosampler Location: 9

Sample ID: CCV

Date Collected: 3/27/2015 3:10:41 PM

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.910	9.910	0.0595	0.2448	0.0596	15:11:29	Yes
2	9.514	9.514	0.0571	0.2428	0.0572	15:12:02	Yes
Mean:	9.712	9.712	0.0583				
SD:	0.280	0.280	0.0017				
%RSD:	2.882	2.882	2.87				

QC value within limits for Hg 253.7 Recovery = 97.12%

All analyte(s) passed QC.

Sequence No.: 22

Autosampler Location: 1

Sample ID: CCB

Date Collected: 3/27/2015 3:12:03 PM

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.012	0.012	0.0003	0.0036	0.0004	15:12:50	Yes
2	-0.051	-0.051	-0.0001	-0.0009	0.0000	15:13:23	Yes
Mean:	-0.019	-0.019	0.0001				
SD:	0.045	0.045	0.0003				
%RSD:	231.1	231.1	200.02				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 23
Sample ID: 83866-034
Analyst:

Autosampler Location: 31
Date Collected: 3/27/2015 3:13:25 PM
Data Type: Original

Replicate Data: 83866-034

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.015	0.015	0.0003	0.0030	0.0004	15:14:14	Yes
2	-0.025	-0.025	0.0001	0.0021	0.0002	15:14:47	Yes
Mean:	-0.005	-0.005	0.0002				
SD:	0.028	0.028	0.0002				
%RSD:	562.3	562.3	77.18				

Sequence No.: 24
Sample ID: CCV
Analyst:

Autosampler Location: 9
Date Collected: 3/27/2015 3:14:49 PM
Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	10.39	10.39	0.0624	0.2487	0.0625	15:15:37	Yes
2	10.45	10.45	0.0627	0.2495	0.0628	15:16:10	Yes
Mean:	10.42	10.42	0.0626				
SD:	0.044	0.044	0.0003				
%RSD:	0.420	0.420	0.42				

QC value within limits for Hg 253.7 Recovery = 104.24%
All analyte(s) passed QC.

Sequence No.: 25
Sample ID: CCB
Analyst:

Autosampler Location: 1
Date Collected: 3/27/2015 3:16:12 PM
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.057	-0.057	-0.0001	-0.0017	0.0000	15:16:58	Yes
2	-0.065	-0.065	-0.0001	-0.0027	-0.0000	15:17:32	Yes
Mean:	-0.061	-0.061	-0.0001				
SD:	0.006	0.006	0.0000				
%RSD:	9.297	9.297	29.16				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

C:\ICPCHEM\1\DATA\SW33015A.b\001CALB.D\001CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\001CALB.D\001CALB.D#
 Date Acquired: Mar 30 2015 10:44 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: Rinse
 Misc Info: MS_7500 CALIBRATION
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 10:48 am
 Sample Type: CalBlk

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
9 Be	45	2	77	32.83
23 Na	45	1	120229	1.13
24 Mg	45	1	249	12.13
27 Al	45	1	373	7.15
39 K	45	1	60335	2.98
44 Ca	45	1	1290	6.09
51 V	45	1	101	13.95
52 Cr	45	1	712	7.88
55 Mn	45	1	335	7.86
56 Fe	45	1	11431	3.53
59 Co	45	1	116	7.87
60 Ni	45	1	104	11.11
65 Cu	45	1	679	4.97
66 Zn	45	1	8471	6.44
75 As	115	1	22	19.87
78 Se	115	1	38	4.00
83 Kr	115	2	280	12.54
95 Mo	115	2	123	22.12
107 Ag	115	2	304	9.12
111 Cd	115	2	14	4.56
121 Sb	115	2	2263	5.01
137 Ba	159	2	703	9.59
205 Tl	165	2	4225	2.93
206 (Pb)	165	2	592	7.56
207 (Pb)	165	2	481	15.33
208 Pb	165	2	2324	1.69

17600
(42363)

8LL reported.

J. Galin
03.30.15

Internal Standard Elements

Element	Tune	CPS Mean	RSD(%)
45 Sc	1	61109	3.12
45 Sc	2	660020	0.66
115 In	1	226864	4.70
115 In	2	848438	0.70
159 Tb	1	539540	2.48
159 Tb	2	1350228	0.96
165 Ho	1	526487	2.77
165 Ho	2	1331742	0.97

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#
 Date Acquired: Mar 30 2015 10:50 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalBlk V-206937
 Misc Info: MS_7500 CALIBRATION
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 10:48 am
 Sample Type: CalBlk

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	49	20.83
23	Na	45	1	127962	0.94
24	Mg	45	1	290	2.11
27	Al	45	1	412	6.99
39	K	45	1	68441	1.14
44	Ca	45	1	1383	4.69
51	V	45	1	105	10.19
52	Cr	45	1	726	2.88
55	Mn	45	1	403	0.89
56	Fe	45	1	12578	1.45
59	Co	45	1	90	5.12
60	Ni	45	1	111	8.53
65	Cu	45	1	746	3.39
66	Zn	45	1	7359	3.23
75	As	115	1	24	11.36
78	Se	115	1	50	6.07
83	Kr	115	2	326	5.15
95	Mo	115	2	97	19.20
107	Ag	115	2	152	33.23
111	Cd	115	2	16	20.83
121	Sb	115	2	1091	0.64
137	Ba	159	2	700	8.66
205	Tl	165	2	1887	4.12
206	(Pb)	165	2	613	6.68
207	(Pb)	165	2	522	9.24
208	Pb	165	2	2401	1.86

Internal Standard Elements

Element	Tune	CPS Mean	RSD(%)	
45	Sc	1	65759	1.04
45	Sc	2	655675	0.80
115	In	1	253217	1.28
115	In	2	856794	0.87
159	Tb	1	590996	1.46
159	Tb	2	1335152	0.53
165	Ho	1	580759	1.28
165	Ho	2	1322545	1.47

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

C:\ICPCHEM\1\DATA\SW33015A.b\003CALI.D\003CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\003CALI.D\003CALI.D#
 Date Acquired: Mar 30 2015 10:56 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd1 V-206938
 Misc Info: MS 7500 CALIBRATION
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 10:54 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	2258	2.15
23	Na	45	1	186612	0.51
24	Mg	45	1	35951	1.76
27	Al	45	1	6343	2.26
39	K	45	1	94866	1.04
44	Ca	45	1	2588	1.29
51	V	45	1	1826	2.60
52	Cr	45	1	2584	4.61
55	Mn	45	1	1791	5.26
56	Fe	45	1	197977	2.12
59	Co	45	1	3021	3.06
60	Ni	45	1	818	6.41
65	Cu	45	1	1396	6.22
66	Zn	45	1	5367	4.50
75	As	115	1	232	5.40
78	Se	115	1	152	8.12
83	Kr	115	2	303	2.91
95	Mo	115	2	1794	5.03
107	Ag	115	2	4968	3.38
111	Cd	115	2	1027	3.43
121	Sb	115	2	4440	3.90
137	Ba	159	2	1594	8.30
205	Tl	165	2	12762	2.95
206	(Pb)	165	2	4484	4.18
207	(Pb)	165	2	3905	1.31
208	Pb	165	2	18059	0.62

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	65570	0.49	65759	99.7	80 - 120
45	Sc	2	666514	0.40	655675	101.7	80 - 120
115	In	1	254905	0.91	253217	100.7	80 - 120
115	In	2	855753	0.36	856794	99.9	80 - 120
159	Tb	1	604107	1.61	590996	102.2	80 - 120
159	Tb	2	1364151	1.54	1335152	102.2	80 - 120
165	Ho	1	595927	1.33	580759	102.6	80 - 120
165	Ho	2	1345058	1.55	1322545	101.7	80 - 120

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\SW33015A.b\004CALI.D\004CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\004CALI.D\004CALI.D#
 Date Acquired: Mar 30 2015 11:02 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd2 V-206939
 Misc Info: MS 7500 CALIBRATION
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:00 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
9	Be	45	21907	0.58
23	Na	45	781831	4.91
24	Mg	45	368304	0.48
27	Al	45	61381	0.62
39	K	45	357347	0.24
44	Ca	45	15133	0.87
51	V	45	17405	1.06
52	Cr	45	20338	1.01
55	Mn	45	16232	0.43
56	Fe	45	1964243	1.04
59	Co	45	29870	0.93
60	Ni	45	7626	0.75
65	Cu	45	13201	1.06
66	Zn	45	7132	1.40
75	As	115	2102	1.60
78	Se	115	1243	3.51
83	Kr	115	287	13.71
95	Mo	115	17508	1.22
107	Ag	115	48977	1.16
111	Cd	115	10107	2.10
121	Sb	115	35506	1.91
137	Ba	159	15287	0.83
205	Tl	165	120594	0.79
206	(Pb)	165	40399	1.40
207	(Pb)	165	35072	2.01
208	Pb	165	161981	1.42

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	66907	0.27	65759	101.7	80 - 120
45	Sc	2	673244	0.63	655675	102.7	80 - 120
115	In	1	257333	0.79	253217	101.6	80 - 120
115	In	2	867490	1.44	856794	101.2	80 - 120
159	Tb	1	631056	0.45	590996	106.8	80 - 120
159	Tb	2	1364505	1.03	1335152	102.2	80 - 120
165	Ho	1	620250	0.33	580759	106.8	80 - 120
165	Ho	2	1335083	0.67	1322545	100.9	80 - 120

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\SW33015A.b\005CALI.D\005CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\005CALI.D\005CALI.D#
 Date Acquired: Mar 30 2015 11:08 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd3 V-206940
 Misc Info: MS 7500 CALIBRATION
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:06 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	43645	0.50
23	Na	45	1	1447861	0.47
24	Mg	45	1	725121	0.48
27	Al	45	1	121417	1.36
39	K	45	1	638409	1.02
44	Ca	45	1	28339	0.37
51	V	45	1	34145	1.16
52	Cr	45	1	40170	1.14
55	Mn	45	1	31825	0.82
56	Fe	45	1	3829012	1.71
59	Co	45	1	58699	1.27
60	Ni	45	1	15184	1.63
65	Cu	45	1	19371	1.02
66	Zn	45	1	9621	1.90
75	As	115	1	4050	0.68
78	Se	115	1	2344	2.91
83	Kr	115	2	336	9.95
95	Mo	115	2	35275	0.79
107	Ag	115	2	99164	1.56
111	Cd	115	2	20135	1.67
121	Sb	115	2	71070	1.39
137	Ba	159	2	29930	0.50
205	Tl	165	2	238387	1.13
206	(Pb)	165	2	80288	2.35
207	(Pb)	165	2	70182	2.85
208	Pb	165	2	322245	1.77

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	65945	0.64	65759	100.3	80 - 120
45	Sc	2	671518	0.25	655675	102.4	80 - 120
115	In	1	255091	1.18	253217	100.7	80 - 120
115	In	2	864182	0.24	856794	100.9	80 - 120
159	Tb	1	634362	1.29	590996	107.3	80 - 120
159	Tb	2	1349563	1.93	1335152	101.1	80 - 120
165	Ho	1	621278	1.31	580759	107.0	80 - 120
165	Ho	2	1332588	1.87	1322545	100.8	80 - 120

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\SW33015A.b\006CALI.D\006CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\006CALI.D\006CALI.D#
 Date Acquired: Mar 30 2015 11:13 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd4 V-206941
 Misc Info: MS 7500 CALIBRATION
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:12 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	225163	0.92
23	Na	45	1	6833801	0.80
24	Mg	45	1	3864731	1.23
27	Al	45	1	643800	0.83
39	K	45	1	3160930	1.26
44	Ca	45	1	145988	0.83
51	V	45	1	182669	1.22
52	Cr	45	1	210000	0.75
55	Mn	45	1	166163	0.64
56	Fe	45	1	19670090	0.60
59	Co	45	1	308455	1.05
60	Ni	45	1	78790	0.80
65	Cu	45	1	99236	0.63
66	Zn	45	1	39553	0.16
75	As	115	1	21425	0.58
78	Se	115	1	12270	0.39
83	Kr	115	2	294	8.65
95	Mo	115	2	182758	2.06
107	Ag	115	2	511733	2.01
111	Cd	115	2	103866	1.18
121	Sb	115	2	365001	1.79
137	Ba	159	2	157233	0.88
205	Tl	165	2	1304661	1.48
206	(Pb)	165	2	401863	1.63
207	(Pb)	165	2	352190	0.74
208	Pb	165	2	1621269	0.78

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	70227	0.57	65759	106.8	80 - 120
45	Sc	2	697527	0.33	655675	106.4	80 - 120
115	In	1	265267	0.88	253217	104.8	80 - 120
115	In	2	886290	1.60	856794	103.4	80 - 120
159	Tb	1	655585	0.46	590996	110.9	80 - 120
159	Tb	2	1411831	0.68	1335152	105.7	80 - 120
165	Ho	1	643970	1.22	580759	110.9	80 - 120
165	Ho	2	1394764	0.23	1322545	105.5	80 - 120

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\SW33015A.b\007CALI.D\007CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\007CALI.D\007CALI.D#
 Date Acquired: Mar 30 2015 11:19 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd5 V-206942
 Misc Info: MS 7500 CALIBRATION
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:18 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	432697	0.36
23	Na	45	1	13163050	0.80
24	Mg	45	1	7385662	0.94
27	Al	45	1	1290282	1.79
39	K	45	1	5908826	0.84
44	Ca	45	1	279543	0.33
51	V	45	1	352440	0.94
52	Cr	45	1	403427	0.98
55	Mn	45	1	319343	1.02
56	Fe	45	1	37738640	1.19
59	Co	45	1	592447	0.75
60	Ni	45	1	150808	0.99
65	Cu	45	1	188469	1.22
66	Zn	45	1	72951	0.72
75	As	115	1	41124	1.12
78	Se	115	1	23325	0.86
83	Kr	115	2	298	2.59
95	Mo	115	2	351616	1.05
107	Ag	115	2	979947	0.50
111	Cd	115	2	198055	0.10
121	Sb	115	2	704783	1.35
137	Ba	159	2	304270	1.07
205	Tl	165	2	2510902	0.67
206	(Pb)	165	2	790884	0.87
207	(Pb)	165	2	689157	1.12
208	Pb	165	2	3232167	1.03

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	68190	0.36	65759	103.7	80 - 120
45	Sc	2	681121	0.49	655675	103.9	80 - 120
115	In	1	257694	0.46	253217	101.8	80 - 120
115	In	2	862394	0.59	856794	100.7	80 - 120
159	Tb	1	649241	0.11	590996	109.9	80 - 120
159	Tb	2	1369687	1.77	1335152	102.6	80 - 120
165	Ho	1	642351	0.42	580759	110.6	80 - 120
165	Ho	2	1366263	1.19	1322545	103.3	80 - 120

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0
 0

C:\ICPCHEM\1\DATA\SW33015A.b\008_ICV.D\008_ICV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\008_ICV.D\008_ICV.D#
 Date Acquired: Mar 30 2015 11:25 am
 Operator: GK
 Sample Name: ICV V-206943
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1109
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: 6-ICV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Fail
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	47.52 ppb	0.53	207985	50	95.0	90 - 110	
23 Na	45	1	4929.00 ppb	1.57	6392726	5000	98.6	90 - 110	
24 Mg	45	1	4932.00 ppb	1.02	3564286	5000	98.6	90 - 110	
27 Al	45	1	4781.00 ppb	0.51	1991822	5000	95.6	90 - 110	
39 K	45	1	4855.00 ppb	1.03	2848249	5000	97.1	90 - 110	
44 Ca	45	1	4829.00 ppb	0.93	132597	5000	96.6	90 - 110	
51 V	45	1	48.20 ppb	0.73	165928	50	96.4	90 - 110	
52 Cr	45	1	47.74 ppb	0.52	188553	50	95.5	90 - 110	
55 Mn	45	1	47.44 ppb	1.10	148253	50	94.9	90 - 110	
56 Fe	45	1	4890.00 ppb	1.36	18054030	5000	97.8	90 - 110	
59 Co	45	1	47.84 ppb	1.46	277125	50	95.7	90 - 110	
60 Ni	45	1	47.44 ppb	1.27	70034	50	94.9	90 - 110	
65 Cu	45	1	49.00 ppb	1.21	90848	50	98.0	90 - 110	
66 Zn	45	1	43.91 ppb	0.82	34885	50	87.8	90 - 110	Fail
75 As	115	1	47.25 ppb	0.62	19410	50	94.5	90 - 110	
78 Se	115	1	47.50 ppb	2.55	2261	50	95.0	90 - 110	
83 Kr	115	2	----- ppb	-----	290	50	#VALUE! #####	90 - 110	
95 Mo	115	2	46.41 ppb	3.17	169436	50	92.8	90 - 110	
107 Ag	115	2	9.52 ppb	3.22	97079	10	95.2	90 - 110	
111 Cd	115	2	47.50 ppb	1.96	97868	50	95.0	90 - 110	
121 Sb	115	2	47.31 ppb	2.28	346414	50	94.6	90 - 110	
137 Ba	159	2	47.24 ppb	1.71	148044	50	94.5	90 - 110	
205 Tl	165	2	47.55 ppb	1.06	1208184	50	95.1	90 - 110	
206 (Pb)	165	2	46.70 ppb	1.53	372413	50	93.4	90 - 110	
207 (Pb)	165	2	49.34 ppb	1.69	343222	50	98.7	90 - 110	
208 Pb	165	2	47.45 ppb	1.02	1542225	50	94.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	66502	0.85	65759	101.1	80 - 120	
45 Sc	2	686600	1.12	655675	104.7	80 - 120	
115 In	1	256657	0.94	253217	101.4	80 - 120	
115 In	2	893530	1.78	856794	104.3	80 - 120	
159 Tb	1	651334	0.79	590996	110.2	80 - 120	
159 Tb	2	1406979	0.43	1335152	105.4	80 - 120	
165 Ho	1	647324	0.37	580759	111.5	80 - 120	
165 Ho	2	1377277	1.06	1322545	104.1	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\009_CCV.D\009_CCV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\009_CCV.D\009_CCV.D#
 Date Acquired: Mar 30 2015 11:31 am
 Operator: GK
 Sample Name: LLICV V-206949
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3105
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: LL-ICV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Fail
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.51 ppb	3.98	2277	1	101.2	70 - 130	
23 Na	45	1	231.00 ppb	0.36	424982	250	92.4	70 - 130	
24 Mg	45	1	251.10 ppb	0.59	182609	250	100.4	70 - 130	
27 Al	45	1	96.60 ppb	0.22	40856	100	96.6	70 - 130	
39 K	45	1	234.30 ppb	1.25	204334	250	93.7	70 - 130	
44 Ca	45	1	230.60 ppb	2.99	7703	250	92.2	70 - 130	
51 V	45	1	0.99 ppb	1.59	3542	1	99.4	70 - 130	
52 Cr	45	1	0.88 ppb	3.44	4218	1	88.0	70 - 130	
55 Mn	45	1	2.90 ppb	2.45	9478	3	96.5	70 - 130	
56 Fe	45	1	153.30 ppb	1.44	581002	150	102.2	70 - 130	
59 Co	45	1	1.01 ppb	1.43	5967	1	101.0	70 - 130	
60 Ni	45	1	1.47 ppb	2.74	2291	2	98.1	70 - 130	
65 Cu	45	1	4.89 ppb	3.57	9790	5	97.8	70 - 130	
66 Zn	45	1	1.53 ppb	39.07	8442	10	15.3	70 - 130	FAIL
75 As	115	1	0.97 ppb	2.21	424	1	97.4	70 - 130	
78 Se	115	1	4.77 ppb	9.20	272	5	95.4	70 - 130	
83 Kr	115	2	----- ppb	-----	267	1	#VALUE! #####	70 - 130	
95 Mo	115	2	0.97 ppb	2.66	3670	1	96.7	70 - 130	
107 Ag	115	2	0.51 ppb	1.41	5358	1	101.0	70 - 130	
111 Cd	115	2	0.99 ppb	2.20	2086	1	99.4	70 - 130	
121 Sb	115	2	1.34 ppb	5.23	11046	2	89.5	70 - 130	
137 Ba	159	2	2.18 ppb	3.46	7541	3	87.1	70 - 130	
205 Tl	165	2	0.89 ppb	1.16	24470	1	89.0	70 - 130	
206 (Pb)	165	2	1.47 ppb	2.56	12294	2	98.0	70 - 130	
207 (Pb)	165	2	1.48 ppb	1.62	10805	2	98.8	70 - 130	
208 Pb	165	2	1.45 ppb	0.67	49400	2	96.7	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	66824	0.13	65759	101.6	80 - 120	
45 Sc	2	689716	0.53	655675	105.2	80 - 120	
115 In	1	256537	0.79	253217	101.3	80 - 120	
115 In	2	902879	1.50	856794	105.4	80 - 120	
159 Tb	1	648656	0.43	590996	109.8	80 - 120	
159 Tb	2	1409274	1.10	1335152	105.6	80 - 120	
165 Ho	1	644323	0.31	580759	110.9	80 - 120	
165 Ho	2	1372479	1.35	1322545	103.8	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\010_ICB.D\010_ICB.D#

Initial Calibration Blank (ICB) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\010_ICB.D\010_ICB.D#
 Date Acquired: Mar 30 2015 11:37 am
 Operator: GK
 Sample Name: ICB V-206944
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3102
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: 6-ICB
 Total Dil Factor: 1.00

QC Summary:

Analytes: Pass

ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.00 ppb	82.23	44	0.50	
23 Na	45	1	-3.31 ppb	34.06	123547	250.00	
24 Mg	45	1	0.35 ppb	2.72	542	250.00	
27 Al	45	1	0.32 ppb	18.87	542	100.00	
39 K	45	1	-9.81 ppb	9.72	62752	250.00	
44 Ca	45	1	-18.23 ppb	2.40	892	250.00	
51 V	45	1	0.01 ppb	83.68	124	1.00	
52 Cr	45	1	-0.06 ppb	13.51	473	1.00	
55 Mn	45	1	-0.07 ppb	0.13	200	3.00	
56 Fe	45	1	-1.18 ppb	3.62	8244	150.00	
59 Co	45	1	-0.01 ppb	30.00	59	1.00	
60 Ni	45	1	-0.05 ppb	8.77	42	1.50	
65 Cu	45	1	-0.19 ppb	8.09	407	5.00	
66 Zn	45	1	-9.73 ppb	0.98	1345	10.00	
75 As	115	1	0.00 ppb	108.95	23	1.00	
78 Se	115	1	-0.06 ppb	195.68	46	5.00	
83 Kr	115	2	----- ppb	-----	306	1.00	
95 Mo	115	2	0.00 ppb	165.06	89	1.00	
107 Ag	115	2	-0.01 ppb	16.33	67	0.50	
111 Cd	115	2	0.00 ppb	384.10	18	1.00	
121 Sb	115	2	-0.12 ppb	1.68	289	1.00	
137 Ba	159	2	-0.14 ppb	10.95	304	2.50	
205 Tl	165	2	-0.05 ppb	1.64	663	1.00	
206 (Pb)	165	2	-0.02 ppb	19.38	456	1.50	
207 (Pb)	165	2	-0.02 ppb	25.17	373	1.50	
208 Pb	165	2	-0.02 ppb	8.07	1881	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	65617	1.03	65759	99.8	80 - 120	
45 Sc	2	666508	1.70	655675	101.7	80 - 120	
115 In	1	251521	0.56	253217	99.3	80 - 120	
115 In	2	865945	2.29	856794	101.1	80 - 120	
159 Tb	1	636459	1.17	590996	107.7	80 - 120	
159 Tb	2	1368098	2.58	1335152	102.5	80 - 120	
165 Ho	1	630168	0.82	580759	108.5	80 - 120	
165 Ho	2	1352832	2.74	1322545	102.3	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\011ICSA.D\011ICSA.D#

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\011ICSA.D\011ICSA.D#
 Date Acquired: Mar 30 2015 11:43 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: ICSA V-206945
 Misc Info: MS 7500 6020 AQUEOUS
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: 6-ICSA
 Dilution Factor: 1.00

QC Summary:
 Analytes: Fail
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	45	2	0.00 ppb	17.72	0.50	
23 Na	45	1	116600.00 ppb	4.40	250.00	
24 Mg	45	1	45710.00 ppb	3.85	250.00	
27 Al	45	1	44750.00 ppb	3.42	100.00	
39 K	45	1	45470.00 ppb	3.35	250.00	
44 Ca	45	1	142700.00 ppb	3.12	250.00	
51 V	45	1	0.05 ppb	19.04	1.00	
52 Cr	45	1	0.36 ppb	7.93	1.00	
55 Mn	45	1	3.11 ppb	2.98	3.00	**
56 Fe	45	1	112700.00 ppb	3.22	150.00	
59 Co	45	1	0.53 ppb	4.45	1.00	
60 Ni	45	1	0.51 ppb	3.98	1.50	
65 Cu	45	1	0.50 ppb	4.03	5.00	
66 Zn	45	1	-9.47 ppb	0.52	10.00	
75 As	115	1	0.29 ppb	14.06	1.00	
78 Se	115	1	-0.01 ppb	2830.30	5.00	
83 Kr	115	2	----- ppb	-----	1.00	
95 Mo	115	2	980.00 ppb	2.22	1.00	
107 Ag	115	2	0.03 ppb	11.08	0.50	
111 Cd	115	2	1.41 ppb	2.45	1.00	**
121 Sb	115	2	0.11 ppb	9.93	1.00	
137 Ba	159	2	0.66 ppb	1.92	2.50	
205 Tl	165	2	-0.05 ppb	1.67	1.00	
206 (Pb)	165	2	0.09 ppb	11.10	1.50	
207 (Pb)	165	2	0.07 ppb	7.24	1.50	
208 Pb	165	2	0.08 ppb	2.68	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	62263	3.54	65759	94.7	70 - 150	
45 Sc	2	664860	1.57	655675	101.4	70 - 150	
115 In	1	227618	3.37	253217	89.9	70 - 150	
115 In	2	810038	0.54	856794	94.5	70 - 150	
159 Tb	1	613059	3.24	590996	103.7	70 - 150	
159 Tb	2	1332663	1.64	1335152	99.8	70 - 150	
165 Ho	1	606058	3.61	580759	104.4	70 - 150	
165 Ho	2	1311058	1.91	1322545	99.1	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

2 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\012ICSB.D\012ICSB.D#

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\012ICSB.D\012ICSB.D#
 Date Acquired: Mar 30 2015 11:49 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: ICSAB V-206946
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1108
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: 6-ICSAB
 Dilution Factor: 1.00

QC Summary:

Analytes: Pass

ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	45	2		0.00	78.43	---		-	
23 Na	45	1		120800.00	0.95	---		-	
24 Mg	45	1		47650.00	0.84	---		-	
27 Al	45	1		46490.00	0.74	---		-	
39 K	45	1		46920.00	0.50	---		-	
44 Ca	45	1		147800.00	0.34	---		-	
51 V	45	1		195.90	1.09	200	98.0	80 - 120	
52 Cr	45	1		192.50	0.89	200	96.3	80 - 120	
55 Mn	45	1		191.50	0.87	200	95.8	80 - 120	
56 Fe	45	1		116800.00	1.19	---		-	
59 Co	45	1		191.70	1.53	200	95.9	80 - 120	
60 Ni	45	1		178.40	1.05	200	89.2	80 - 120	
65 Cu	45	1		182.40	0.19	---		-	
66 Zn	45	1		87.41	0.67	100	87.4	80 - 120	
75 As	115	1		97.92	0.64	100	97.9	80 - 120	
78 Se	115	1		90.95	1.94	100	91.0	80 - 120	
83 Kr	115	2		-----	---	---		-	
95 Mo	115	2		983.00	0.91	---		-	
107 Ag	115	2		45.96	0.54	50	91.9	80 - 120	
111 Cd	115	2		93.79	0.63	100	93.8	80 - 120	
121 Sb	115	2		0.11	10.54	---		-	
137 Ba	159	2		0.69	1.08	---		-	
205 Tl	165	2		-0.06	0.90	---		-	
206 (Pb)	165	2		0.06	2.69	---		-	
207 (Pb)	165	2		0.06	8.30	---		-	
208 Pb	165	2		0.06	7.03	---		-	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	60293	0.54	65759	91.7	70 - 150	
45 Sc	2	682614	1.07	655675	104.1	70 - 150	
115 In	1	220795	0.34	253217	87.2	70 - 150	
115 In	2	824185	1.20	856794	96.2	70 - 150	
159 Tb	1	597694	0.44	590996	101.1	70 - 150	
159 Tb	2	1349113	0.48	1335152	101.0	70 - 150	
165 Ho	1	593519	0.67	580759	102.2	70 - 150	
165 Ho	2	1330646	0.80	1322545	100.6	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\013_CCV.D\013_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\013_CCV.D\013_CCV.D#
 Date Acquired: Mar 30 2015 11:55 am
 Operator: GK
 Sample Name: CCV V-206947
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3103
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: 6-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	50.53 ppb	0.90	218771	50	101.1	90 - 110	
23 Na	45	1	5238.00 ppb	0.98	5945638	5000	104.8	90 - 110	
24 Mg	45	1	5351.00 ppb	1.58	3388670	5000	107.0	90 - 110	
27 Al	45	1	1564.00 ppb	1.34	571108	1500	104.3	90 - 110	
39 K	45	1	5066.00 ppb	1.75	2601512	5000	101.3	90 - 110	
44 Ca	45	1	5101.00 ppb	1.60	122665	5000	102.0	90 - 110	
51 V	45	1	51.68 ppb	1.21	155894	50	103.4	90 - 110	
52 Cr	45	1	52.33 ppb	0.93	181040	50	104.7	90 - 110	
55 Mn	45	1	52.08 ppb	0.93	142586	50	104.2	90 - 110	
56 Fe	45	1	5276.00 ppb	1.72	17066250	5000	105.5	90 - 110	
59 Co	45	1	53.77 ppb	1.72	272862	50	107.5	90 - 110	
60 Ni	45	1	54.12 ppb	2.35	69991	50	108.2	90 - 110	
65 Cu	45	1	54.89 ppb	2.27	89085	50	109.8	90 - 110	
66 Zn	45	1	49.43 ppb	1.34	33592	50	98.9	90 - 110	
75 As	115	1	49.86 ppb	1.38	18214	50	99.7	90 - 110	
78 Se	115	1	241.50 ppb	0.23	10043	250	96.6	90 - 110	
83 Kr	115	2	----- ppb	-----	332	50	#VALUE!	##### - #####	
95 Mo	115	2	50.33 ppb	0.66	181780	50	100.7	90 - 110	
107 Ag	115	2	50.30 ppb	0.75	506734	50	100.6	90 - 110	
111 Cd	115	2	50.46 ppb	0.80	102832	50	100.9	90 - 110	
121 Sb	115	2	50.03 ppb	0.44	362274	50	100.1	90 - 110	
137 Ba	159	2	50.00 ppb	0.47	156030	50	100.0	90 - 110	
205 Tl	165	2	50.69 ppb	1.20	1286539	50	101.4	90 - 110	
206 (Pb)	165	2	50.51 ppb	0.07	402284	50	101.0	90 - 110	
207 (Pb)	165	2	50.67 ppb	0.33	352055	50	101.3	90 - 110	
208 Pb	165	2	49.90 ppb	0.22	1619866	50	99.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	58275	1.45	65759	88.6	80 - 120	
45 Sc	2	679219	1.03	655675	103.6	80 - 120	
115 In	1	228282	1.36	253217	90.2	80 - 120	
115 In	2	883611	0.10	856794	103.1	80 - 120	
159 Tb	1	598389	0.57	590996	101.3	80 - 120	
159 Tb	2	1401524	0.57	1335152	105.0	80 - 120	
165 Ho	1	589987	1.10	580759	101.6	80 - 120	
165 Ho	2	1375653	0.84	1322545	104.0	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\014_CCV.D\014_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\014_CCV.D\014_CCV.D#
 Date Acquired: Mar 30 2015 12:01 pm
 Operator: GK
 Sample Name: LLCCV V-206949
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3105
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Fail
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.49 ppb	1.12	2180	1	98.3	70 - 130	
23 Na	45	1	249.20 ppb	0.84	379659	250	99.7	70 - 130	
24 Mg	45	1	260.90 ppb	1.12	160744	250	104.4	70 - 130	
27 Al	45	1	99.74 ppb	1.61	35715	100	99.7	70 - 130	
39 K	45	1	229.00 ppb	1.10	170502	250	91.6	70 - 130	
44 Ca	45	1	229.20 ppb	1.75	6492	250	91.7	70 - 130	
51 V	45	1	1.00 ppb	2.22	3014	1	99.9	70 - 130	
52 Cr	45	1	0.94 ppb	1.27	3765	1	93.8	70 - 130	
55 Mn	45	1	2.95 ppb	1.20	8179	3	98.4	70 - 130	
56 Fe	45	1	159.30 ppb	1.72	510914	150	106.2	70 - 130	
59 Co	45	1	1.04 ppb	1.75	5222	1	104.4	70 - 130	
60 Ni	45	1	1.52 ppb	1.53	2005	2	101.5	70 - 130	
65 Cu	45	1	5.16 ppb	1.92	8717	5	103.2	70 - 130	
66 Zn	45	1	1.51 ppb	36.86	7137	10	15.1	70 - 130	FAIL
75 As	115	1	0.97 ppb	4.84	373	1	96.9	70 - 130	
78 Se	115	1	4.37 ppb	11.09	224	5	87.4	70 - 130	
83 Kr	115	2	----- ppb	-----	332	1	#VALUE!	#####	
95 Mo	115	2	1.03 ppb	3.50	3826	1	102.7	70 - 130	
107 Ag	115	2	0.48 ppb	4.58	5056	1	96.8	70 - 130	
111 Cd	115	2	0.97 ppb	3.59	2009	1	97.3	70 - 130	
121 Sb	115	2	1.33 ppb	2.08	10743	2	88.3	70 - 130	
137 Ba	159	2	2.12 ppb	3.51	7232	3	84.7	70 - 130	
205 Tl	165	2	0.88 ppb	2.10	24003	1	88.0	70 - 130	
206 (Pb)	165	2	1.45 ppb	2.42	12018	2	96.5	70 - 130	
207 (Pb)	165	2	1.47 ppb	3.34	10598	2	97.7	70 - 130	
208 Pb	165	2	1.43 ppb	2.39	48243	2	95.2	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	56604	0.84	65759	86.1	80 - 120	
45 Sc	2	680059	0.63	655675	103.7	80 - 120	
115 In	1	226854	0.80	253217	89.6	80 - 120	
115 In	2	888042	0.60	856794	103.6	80 - 120	
159 Tb	1	598665	1.32	590996	101.3	80 - 120	
159 Tb	2	1386644	0.94	1335152	103.9	80 - 120	
165 Ho	1	587691	0.94	580759	101.2	80 - 120	
165 Ho	2	1360760	0.47	1322545	102.9	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\015_CCB.D\015_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\015_CCB.D\015_CCB.D#
 Date Acquired: Mar 30 2015 12:07 pm
 Operator: GK
 Sample Name: CCB V-206944
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3102
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: 6-CCB
 Total Dil Factor: 1.00

QC Summary:

Analytes: Pass

ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.001 ppb	409.75	46	0.50	
23 Na	45	1	7.025 ppb	32.74	115654	250.00	
24 Mg	45	1	1.038 ppb	19.20	873	250.00	
27 Al	45	1	0.747 ppb	12.04	609	100.00	
39 K	45	1	-10.260 ppb	20.66	52952	250.00	
44 Ca	45	1	-20.730 ppb	10.21	699	250.00	
51 V	45	1	0.005 ppb	130.78	103	1.00	
52 Cr	45	1	-0.054 ppb	5.23	437	1.00	
55 Mn	45	1	-0.056 ppb	12.71	194	3.00	
56 Fe	45	1	0.078 ppb	290.36	10877	150.00	
59 Co	45	1	-0.003 ppb	9.39	61	1.00	
60 Ni	45	1	-0.041 ppb	11.42	43	1.50	
65 Cu	45	1	-0.122 ppb	29.15	443	5.00	
66 Zn	45	1	-9.936 ppb	1.69	1030	10.00	
75 As	115	1	-0.011 ppb	85.92	18	1.00	
78 Se	115	1	-0.220 ppb	67.11	35	5.00	
83 Kr	115	2	----- ppb	-----	334	1.00	
95 Mo	115	2	0.029 ppb	15.72	203	1.00	
107 Ag	115	2	-0.008 ppb	19.37	80	0.50	
111 Cd	115	2	-0.001 ppb	223.04	14	1.00	
121 Sb	115	2	-0.128 ppb	2.14	201	1.50	
137 Ba	159	2	-0.152 ppb	5.78	258	2.50	
205 Tl	165	2	-0.057 ppb	0.90	512	1.00	
206 (Pb)	165	2	-0.020 ppb	14.95	472	1.50	
207 (Pb)	165	2	-0.015 ppb	39.66	432	1.50	
208 Pb	165	2	-0.016 ppb	23.01	1935	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	55597	0.84	65759	84.5	80 - 120	
45 Sc	2	676700	1.72	655675	103.2	80 - 120	
115 In	1	222428	0.51	253217	87.8	80 - 120	
115 In	2	881958	0.67	856794	102.9	80 - 120	
159 Tb	1	585605	0.31	590996	99.1	80 - 120	
159 Tb	2	1369986	2.49	1335152	102.6	80 - 120	
165 Ho	1	577073	1.57	580759	99.4	80 - 120	
165 Ho	2	1351840	0.92	1322545	102.2	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\016SMPL.D\016SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\016SMPL.D\016SMPL.D#
 Date Acquired: Mar 30 2015 12:13 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: MB 42363
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2301
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.00	0.00	ppb	85.95	59	2700	
23 Na	45	1	50.18	50.18	ppb	0.67	148204	225000	
24 Mg	45	1	9.13	9.13	ppb	2.28	5286	225000	
27 Al	45	1	20.06	20.06	ppb	1.21	6729	67500	
39 K	45	1	1.54	1.54	ppb	58.72	53778	225000	
44 Ca	45	1	281.30	281.30	ppb	1.87	6937	225000	
51 V	45	1	0.62	0.62	ppb	1.75	1728	2700	
52 Cr	45	1	0.19	0.19	ppb	8.41	1132	2700	
55 Mn	45	1	0.25	0.25	ppb	3.16	917	2700	
56 Fe	45	1	11.57	11.57	ppb	2.30	42513	202500	
59 Co	45	1	0.00	0.00	ppb	113.26	74	2700	
60 Ni	45	1	0.05	0.05	ppb	8.27	141	2700	
65 Cu	45	1	1.21	1.21	ppb	2.50	2286	2700	
66 Zn	45	1	-3.91	-3.91	ppb	13.95	3834	2700	
75 As	115	1	0.18	0.18	ppb	5.59	77	2250	
78 Se	115	1	-0.13	-0.13	ppb	68.72	35	2700	
83 Kr	115	2	----	-----	ppb	-----	269	2700	
95 Mo	115	2	0.05	0.05	ppb	37.42	267	2700	
107 Ag	115	2	0.01	0.01	ppb	23.92	282	900	
111 Cd	115	2	0.01	0.01	ppb	22.67	39	2700	
121 Sb	115	2	-0.05	-0.05	ppb	30.07	707	1125	
137 Ba	159	2	0.11	0.11	ppb	13.29	1032	1350	
205 Tl	165	2	-0.01	-0.01	ppb	34.90	1569	900	
206 (Pb)	165	2	0.15	0.15	ppb	6.37	1731	2700	
207 (Pb)	165	2	0.15	0.15	ppb	2.55	1487	2700	
208 Pb	165	2	0.14	0.14	ppb	4.51	6829	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	51019	0.71	65759	77.6	70 - 150	
45 Sc	2	658688	0.68	655675	100.5	70 - 150	
115 In	1	205247	0.39	253217	81.1	70 - 150	
115 In	2	845168	0.33	856794	98.6	70 - 150	
159 Tb	1	557658	0.29	590996	94.4	70 - 150	
159 Tb	2	1338537	1.78	1335152	100.3	70 - 150	
165 Ho	1	546623	0.55	580759	94.1	70 - 150	
165 Ho	2	1316194	0.55	1322545	99.5	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\017SMPL.D\017SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\017SMPL.D\017SMPL.D#
 Date Acquired: Mar 30 2015 12:19 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW 42363
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2302
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	216.30	216.30	ppb	0.81	915738	2700	
23 Na	45		1	21,430.00	21430.00	ppb	0.96	21498230	225000	
24 Mg	45		1	21,380.00	21380.00	ppb	1.83	12137740	225000	
27 Al	45		1	2,072.00	2072.00	ppb	1.40	678397	67500	
39 K	45		1	19,750.00	19750.00	ppb	0.93	8937160	225000	
44 Ca	45		1	20,880.00	20880.00	ppb	0.98	446792	225000	
51 V	45		1	214.00	214.00	ppb	1.28	578415	2700	
52 Cr	45		1	214.20	214.20	ppb	0.98	662645	2700	
55 Mn	45		1	210.10	210.10	ppb	1.38	514763	2700	
56 Fe	45		1	2,158.00	2158.00	ppb	1.75	6265394	202500	
59 Co	45		1	223.80	223.80	ppb	1.20	1018226	2700	
60 Ni	45		1	218.00	218.00	ppb	1.59	252508	2700	
65 Cu	45		1	227.40	227.40	ppb	2.36	329071	2700	
66 Zn	45		1	230.40	230.40	ppb	1.74	118979	2700	
75 As	115		1	206.20	206.20	ppb	0.48	66964	2250	
78 Se	115		1	200.80	200.80	ppb	0.49	7436	2700	
83 Kr	115		2	----	-----	ppb	-----	352	2700	
95 Mo	115		2	208.50	208.50	ppb	1.64	698187	2700	
107 Ag	115		2	41.23	41.23	ppb	1.66	385334	900	
111 Cd	115		2	207.30	207.30	ppb	1.20	391889	2700	
121 Sb	115		2	212.30	212.30	ppb	1.08	1423049	1125	
137 Ba	159		2	201.80	201.80	ppb	0.57	599987	1350	
205 Tl	165		2	199.00	199.00	ppb	1.35	4840167	900	
206 (Pb)	165		2	215.30	215.30	ppb	2.30	1642996	2700	
207 (Pb)	165		2	216.50	216.50	ppb	1.96	1441281	2700	
208 Pb	165		2	209.60	209.60	ppb	1.31	6519646	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	52253	2.36	65759	79.5	70 - 150	
45 Sc	2	664176	0.59	655675	101.3	70 - 150	
115 In	1	203123	1.67	253217	80.2	70 - 150	
115 In	2	819720	1.60	856794	95.7	70 - 150	
159 Tb	1	565105	1.58	590996	95.6	70 - 150	
159 Tb	2	1340233	0.84	1335152	100.4	70 - 150	
165 Ho	1	559127	0.97	580759	96.3	70 - 150	
165 Ho	2	1319896	0.79	1322545	99.8	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\018SMPL.D\018SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\018SMPL.D\018SMPL.D#
 Date Acquired: Mar 30 2015 12:25 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW MR 42363
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2303
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	215.50	215.50	ppb	0.86	921711	2700	
23 Na	45	1	21,600.00	21600.00	ppb	1.67	21522620	225000	
24 Mg	45	1	21,680.00	21680.00	ppb	1.43	12225200	225000	
27 Al	45	1	2,088.00	2088.00	ppb	1.72	679071	67500	
39 K	45	1	19,930.00	19930.00	ppb	0.56	8956632	225000	
44 Ca	45	1	20,670.00	20670.00	ppb	1.54	439249	225000	
51 V	45	1	214.70	214.70	ppb	1.07	576454	2700	
52 Cr	45	1	214.80	214.80	ppb	2.01	659943	2700	
55 Mn	45	1	212.20	212.20	ppb	1.65	516424	2700	
56 Fe	45	1	2,152.00	2152.00	ppb	1.61	6204495	202500	
59 Co	45	1	225.70	225.70	ppb	2.25	1019747	2700	
60 Ni	45	1	219.80	219.80	ppb	1.87	252842	2700	
65 Cu	45	1	233.50	233.50	ppb	1.16	335596	2700	
66 Zn	45	1	237.20	237.20	ppb	1.86	121489	2700	
75 As	115	1	207.30	207.30	ppb	0.71	66630	2250	
78 Se	115	1	200.00	200.00	ppb	0.61	7332	2700	
83 Kr	115	2	----	-----	ppb	-----	311	2700	
95 Mo	115	2	205.50	205.50	ppb	2.51	709720	2700	
107 Ag	115	2	40.05	40.05	ppb	2.32	386028	900	
111 Cd	115	2	202.60	202.60	ppb	2.16	394961	2700	
121 Sb	115	2	211.40	211.40	ppb	2.47	1460511	1125	
137 Ba	159	2	204.50	204.50	ppb	2.57	608425	1350	
205 Tl	165	2	198.40	198.40	ppb	2.45	4840931	900	
206 (Pb)	165	2	216.00	216.00	ppb	2.60	1653902	2700	
207 (Pb)	165	2	215.10	215.10	ppb	3.08	1436768	2700	
208 Pb	165	2	210.20	210.20	ppb	2.55	6559794	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	51894	1.33	65759	78.9	70 - 150	
45 Sc	2	671138	2.06	655675	102.4	70 - 150	
115 In	1	201044	0.30	253217	79.4	70 - 150	
115 In	2	845464	2.02	856794	98.7	70 - 150	
159 Tb	1	559105	0.37	590996	94.6	70 - 150	
159 Tb	2	1341560	2.43	1335152	100.5	70 - 150	
165 Ho	1	552274	0.18	580759	95.1	70 - 150	
165 Ho	2	1324756	1.88	1322545	100.2	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\019SMPL.D\019SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\019SMPL.D\019SMPL.D#
 Date Acquired: Mar 30 2015 12:31 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-014
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2304
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.12	0.12	ppb	4.65	573	2700	
23 Na	45	1	8,621.00	8621.00	ppb	1.44	9276024	225000	
24 Mg	45	1	2,607.00	2607.00	ppb	0.85	1576694	225000	
27 Al	45	1	17.97	17.97	ppb	2.12	6611	67500	
39 K	45	1	448.80	448.80	ppb	1.26	272894	225000	
44 Ca	45	1	6,940.00	6940.00	ppb	1.79	158972	225000	
51 V	45	1	0.58	0.58	ppb	2.51	1746	2700	
52 Cr	45	1	0.44	0.44	ppb	3.10	2061	2700	
55 Mn	45	1	1.01	1.01	ppb	3.32	2964	2700	
56 Fe	45	1	13.13	13.13	ppb	2.62	51196	202500	
59 Co	45	1	0.13	0.13	ppb	4.15	710	2700	
60 Ni	45	1	0.36	0.36	ppb	6.09	543	2700	
65 Cu	45	1	1.57	1.57	ppb	1.45	3040	2700	
66 Zn	45	1	-4.65	-4.65	ppb	9.80	3794	2700	
75 As	115	1	0.34	0.34	ppb	7.00	141	2250	
78 Se	115	1	0.15	0.15	ppb	90.38	49	2700	
83 Kr	115	2	----	-----	ppb	-----	358	2700	
95 Mo	115	2	0.18	0.18	ppb	2.43	758	2700	
107 Ag	115	2	0.03	0.03	ppb	13.47	440	900	
111 Cd	115	2	0.12	0.12	ppb	5.40	264	2700	
121 Sb	115	2	0.07	0.07	ppb	8.42	1619	1125	
137 Ba	159	2	7.06	7.06	ppb	0.69	22193	1350	
205 Tl	165	2	0.32	0.32	ppb	4.67	9885	900	
206 (Pb)	165	2	0.20	0.20	ppb	7.20	2181	2700	
207 (Pb)	165	2	0.21	0.21	ppb	4.40	1964	2700	
208 Pb	165	2	0.20	0.20	ppb	1.48	8987	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	55654	1.07	65759	84.6	70 - 150	
45 Sc	2	704102	1.40	655675	107.4	70 - 150	
115 In	1	218319	0.34	253217	86.2	70 - 150	
115 In	2	883483	0.99	856794	103.1	70 - 150	
159 Tb	1	585848	0.81	590996	99.1	70 - 150	
159 Tb	2	1372436	0.96	1335152	102.8	70 - 150	
165 Ho	1	576975	0.43	580759	99.3	70 - 150	
165 Ho	2	1357984	1.32	1322545	102.7	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\020SMPL.D\020SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\020SMPL.D\020SMPL.D#
 Date Acquired: Mar 30 2015 12:37 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-014 MR
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2305
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.04	0.04	ppb	5.24	219	2700	
23 Na	45	1	8,075.00	8075.00	ppb	0.41	8741415	225000	
24 Mg	45	1	2,446.00	2446.00	ppb	0.89	1487213	225000	
27 Al	45	1	16.03	16.03	ppb	0.55	5967	67500	
39 K	45	1	411.20	411.20	ppb	0.51	256214	225000	
44 Ca	45	1	6,563.00	6563.00	ppb	0.43	151192	225000	
51 V	45	1	0.91	0.91	ppb	5.94	2713	2700	
52 Cr	45	1	0.29	0.29	ppb	2.89	1567	2700	
55 Mn	45	1	0.88	0.88	ppb	2.39	2654	2700	
56 Fe	45	1	9.45	9.45	ppb	2.86	40045	202500	
59 Co	45	1	0.05	0.05	ppb	6.87	334	2700	
60 Ni	45	1	0.32	0.32	ppb	2.82	490	2700	
65 Cu	45	1	0.60	0.60	ppb	3.40	1563	2700	
66 Zn	45	1	-4.94	-4.94	ppb	5.72	3666	2700	
75 As	115	1	0.34	0.34	ppb	8.60	142	2250	
78 Se	115	1	0.13	0.13	ppb	183.36	48	2700	
83 Kr	115	2	----	-----	ppb	-----	313	2700	
95 Mo	115	2	0.09	0.09	ppb	15.10	421	2700	
107 Ag	115	2	0.01	0.01	ppb	28.82	220	900	
111 Cd	115	2	0.04	0.04	ppb	9.53	96	2700	
121 Sb	115	2	-0.04	-0.04	ppb	7.56	822	1125	
137 Ba	159	2	6.66	6.66	ppb	1.33	21465	1350	
205 Tl	165	2	0.07	0.07	ppb	6.21	3875	900	
206 (Pb)	165	2	0.15	0.15	ppb	4.14	1814	2700	
207 (Pb)	165	2	0.14	0.14	ppb	11.58	1535	2700	
208 Pb	165	2	0.15	0.15	ppb	5.41	7271	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	55942	0.43	65759	85.1	70 - 150	
45 Sc	2	704605	0.88	655675	107.5	70 - 150	
115 In	1	219603	1.00	253217	86.7	70 - 150	
115 In	2	882030	1.23	856794	102.9	70 - 150	
159 Tb	1	594762	0.50	590996	100.6	70 - 150	
159 Tb	2	1405656	1.29	1335152	105.3	70 - 150	
165 Ho	1	583007	1.06	580759	100.4	70 - 150	
165 Ho	2	1383961	1.39	1322545	104.6	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\021SMPL.D\021SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\021SMPL.D\021SMPL.D#
 Date Acquired: Mar 30 2015 12:43 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-014 SD
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2309
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.03	0.03	ppb	13.17	186	2700	
23 Na	45	1	1,857.00	1857.00	ppb	0.84	2341517	225000	
24 Mg	45	1	535.30	535.30	ppb	1.30	364129	225000	
27 Al	45	1	12.89	12.89	ppb	3.60	5444	67500	
39 K	45	1	110.30	110.30	ppb	0.55	124493	225000	
44 Ca	45	1	1,480.00	1480.00	ppb	1.40	39131	225000	
51 V	45	1	0.42	0.42	ppb	0.91	1445	2700	
52 Cr	45	1	0.28	0.28	ppb	8.02	1724	2700	
55 Mn	45	1	1.02	1.02	ppb	2.18	3378	2700	
56 Fe	45	1	28.60	28.60	ppb	0.92	111217	202500	
59 Co	45	1	0.04	0.04	ppb	1.64	303	2700	
60 Ni	45	1	0.24	0.24	ppb	10.08	433	2700	
65 Cu	45	1	4.97	4.97	ppb	1.94	9309	2700	
66 Zn	45	1	-4.99	-4.99	ppb	3.28	4069	2700	
75 As	115	1	0.13	0.13	ppb	7.44	75	2250	
78 Se	115	1	-0.20	-0.20	ppb	42.12	39	2700	
83 Kr	115	2	-----	-----	ppb	-----	333	2700	
95 Mo	115	2	0.05	0.05	ppb	16.08	297	2700	
107 Ag	115	2	0.00	0.00	ppb	71.89	216	900	
111 Cd	115	2	0.03	0.03	ppb	30.75	86	2700	
121 Sb	115	2	-0.08	-0.08	ppb	9.76	599	1125	
137 Ba	159	2	1.91	1.91	ppb	3.10	7064	1350	
205 Tl	165	2	0.01	0.01	ppb	21.17	2357	900	
206 (Pb)	165	2	0.87	0.87	ppb	5.54	8010	2700	
207 (Pb)	165	2	0.84	0.84	ppb	5.05	6788	2700	
208 Pb	165	2	0.84	0.84	ppb	4.29	31701	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	62558	0.92	65759	95.1	70 - 150	
45 Sc	2	740950	0.66	655675	113.0	70 - 150	
115 In	1	245521	0.35	253217	97.0	70 - 150	
115 In	2	952012	1.09	856794	111.1	70 - 150	
159 Tb	1	639061	0.53	590996	108.1	70 - 150	
159 Tb	2	1484060	0.99	1335152	111.2	70 - 150	
165 Ho	1	625392	0.44	580759	107.7	70 - 150	
165 Ho	2	1463325	2.70	1322545	110.6	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\022SMPL.D\022SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\022SMPL.D\022SMPL.D#
 Date Acquired: Mar 30 2015 12:49 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-015 MS 1
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2306
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	241.50	241.50	ppb	2.22	1114281	2700	
23 Na	45	1	33,330.00	33330.00	ppb	1.08	37203752	225000	
24 Mg	45	1	27,160.00	27160.00	ppb	1.35	17186760	225000	
27 Al	45	1	2,486.00	2486.00	ppb	1.55	907204	67500	
39 K	45	1	23,380.00	23380.00	ppb	0.98	11780360	225000	
44 Ca	45	1	30,810.00	30810.00	ppb	1.62	734376	225000	
51 V	45	1	244.30	244.30	ppb	1.63	736106	2700	
52 Cr	45	1	242.80	242.80	ppb	1.63	837229	2700	
55 Mn	45	1	239.50	239.50	ppb	1.79	653908	2700	
56 Fe	45	1	2,451.00	2451.00	ppb	1.93	7928095	202500	
59 Co	45	1	252.10	252.10	ppb	2.82	1278346	2700	
60 Ni	45	1	243.40	243.40	ppb	1.89	314287	2700	
65 Cu	45	1	254.00	254.00	ppb	1.77	409623	2700	
66 Zn	45	1	254.40	254.40	ppb	2.15	145743	2700	
75 As	115	1	242.20	242.20	ppb	0.55	84599	2250	
78 Se	115	1	228.60	228.60	ppb	0.41	9098	2700	
83 Kr	115	2	----	-----	ppb	-----	384	2700	
95 Mo	115	2	244.90	244.90	ppb	2.61	862936	2700	
107 Ag	115	2	47.14	47.14	ppb	1.39	463584	900	
111 Cd	115	2	239.30	239.30	ppb	1.00	476010	2700	
121 Sb	115	2	243.50	243.50	ppb	1.97	1716901	1125	
137 Ba	159	2	242.60	242.60	ppb	0.66	752061	1350	
205 Tl	165	2	224.10	224.10	ppb	0.30	5689464	900	
206 (Pb)	165	2	245.00	245.00	ppb	0.67	1951950	2700	
207 (Pb)	165	2	244.20	244.20	ppb	1.03	1697160	2700	
208 Pb	165	2	237.00	237.00	ppb	0.93	7698032	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	58240	1.68	65759	88.6	70 - 150	
45 Sc	2	723813	0.70	655675	110.4	70 - 150	
115 In	1	218421	0.54	253217	86.3	70 - 150	
115 In	2	862505	1.27	856794	100.7	70 - 150	
159 Tb	1	602772	0.45	590996	102.0	70 - 150	
159 Tb	2	1397548	1.32	1335152	104.7	70 - 150	
165 Ho	1	589515	0.37	580759	101.5	70 - 150	
165 Ho	2	1377974	0.77	1322545	104.2	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\023SMPL.D\023SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\023SMPL.D\023SMPL.D#
 Date Acquired: Mar 30 2015 12:55 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-016 MS 2
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2307
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		228.20	228.20	ppb	1.64	1067663	2700	
23 Na	45	1		31,520.00	31520.00	ppb	1.53	35730032	225000	
24 Mg	45	1		25,630.00	25630.00	ppb	1.59	16469020	225000	
27 Al	45	1		2,322.00	2322.00	ppb	2.13	860387	67500	
39 K	45	1		22,020.00	22020.00	ppb	0.76	11268460	225000	
44 Ca	45	1		28,940.00	28940.00	ppb	1.06	700317	225000	
51 V	45	1		230.60	230.60	ppb	1.50	705269	2700	
52 Cr	45	1		229.10	229.10	ppb	2.03	801988	2700	
55 Mn	45	1		227.80	227.80	ppb	2.11	631437	2700	
56 Fe	45	1		2,292.00	2292.00	ppb	2.23	7529021	202500	
59 Co	45	1		238.50	238.50	ppb	2.52	1227855	2700	
60 Ni	45	1		231.80	231.80	ppb	1.70	303881	2700	
65 Cu	45	1		241.30	241.30	ppb	2.48	395156	2700	
66 Zn	45	1		240.80	240.80	ppb	1.59	140419	2700	
75 As	115	1		228.10	228.10	ppb	0.53	81065	2250	
78 Se	115	1		217.10	217.10	ppb	0.51	8797	2700	
83 Kr	115	2		----	-----	ppb	-----	346	2700	
95 Mo	115	2		228.70	228.70	ppb	0.72	824782	2700	
107 Ag	115	2		44.39	44.39	ppb	1.62	446747	900	
111 Cd	115	2		222.90	222.90	ppb	1.21	453781	2700	
121 Sb	115	2		229.60	229.60	ppb	0.36	1656327	1125	
137 Ba	159	2		226.30	226.30	ppb	1.39	717918	1350	
205 Tl	165	2		210.80	210.80	ppb	0.48	5503310	900	
206 (Pb)	165	2		228.60	228.60	ppb	1.24	1873038	2700	
207 (Pb)	165	2		228.30	228.30	ppb	1.63	1631757	2700	
208 Pb	165	2		220.30	220.30	ppb	1.15	7356967	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	59128	1.21	65759	89.9	70 - 150	
45 Sc	2	734190	1.86	655675	112.0	70 - 150	
115 In	1	222285	0.80	253217	87.8	70 - 150	
115 In	2	882611	0.66	856794	103.0	70 - 150	
159 Tb	1	614809	1.00	590996	104.0	70 - 150	
159 Tb	2	1430291	1.11	1335152	107.1	70 - 150	
165 Ho	1	605251	1.10	580759	104.2	70 - 150	
165 Ho	2	1416912	0.64	1322545	107.1	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\024SMPL.D\024SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\024SMPL.D\024SMPL.D#
 Date Acquired: Mar 30 2015 01:00 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-014 PS
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2308
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	50.83	50.83	ppb	1.13	243727	2700	
23 Na	45	1	13,710.00	13710.00	ppb	0.97	16093580	225000	
24 Mg	45	1	7,804.00	7804.00	ppb	1.08	5169321	225000	
27 Al	45	1	1,580.00	1580.00	ppb	0.98	603630	67500	
39 K	45	1	5,449.00	5449.00	ppb	0.28	2922694	225000	
44 Ca	45	1	11,850.00	11850.00	ppb	0.96	296337	225000	
51 V	45	1	52.07	52.07	ppb	1.14	164295	2700	
52 Cr	45	1	52.49	52.49	ppb	1.43	189939	2700	
55 Mn	45	1	52.68	52.68	ppb	1.29	150844	2700	
56 Fe	45	1	5,231.00	5231.00	ppb	0.79	17700320	202500	
59 Co	45	1	53.93	53.93	ppb	0.78	286316	2700	
60 Ni	45	1	54.84	54.84	ppb	0.75	74198	2700	
65 Cu	45	1	57.59	57.59	ppb	1.91	97757	2700	
66 Zn	45	1	51.58	51.58	ppb	0.76	36370	2700	
75 As	115	1	51.30	51.30	ppb	0.83	19066	2250	
78 Se	115	1	236.50	236.50	ppb	1.06	10006	2700	
83 Kr	115	2	----	-----	ppb	-----	343	2700	
95 Mo	115	2	51.37	51.37	ppb	0.54	192174	2700	
107 Ag	115	2	51.36	51.36	ppb	0.48	536028	900	
111 Cd	115	2	50.91	50.91	ppb	0.63	107467	2700	
121 Sb	115	2	50.85	50.85	ppb	0.52	381373	1125	
137 Ba	159	2	57.76	57.76	ppb	0.54	187925	1350	
205 Tl	165	2	49.92	49.92	ppb	0.37	1326355	900	
206 (Pb)	165	2	49.86	49.86	ppb	1.52	415723	2700	
207 (Pb)	165	2	50.05	50.05	ppb	1.65	364064	2700	
208 Pb	165	2	48.99	48.99	ppb	1.75	1664808	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	60953	0.46	65759	92.7	70 - 150	
45 Sc	2	752237	1.15	655675	114.7	70 - 150	
115 In	1	232258	0.61	253217	91.7	70 - 150	
115 In	2	915267	0.94	856794	106.8	70 - 150	
159 Tb	1	628207	1.58	590996	106.3	70 - 150	
159 Tb	2	1462452	1.52	1335152	109.5	70 - 150	
165 Ho	1	619157	1.05	580759	106.6	70 - 150	
165 Ho	2	1440220	1.21	1322545	108.9	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\025SMPL.D\025SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\025SMPL.D\025SMPL.D#
 Date Acquired: Mar 30 2015 01:06 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: RINSE
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3101
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.42	0.42	ppb	6.85	2025	2700	
23 Na	45	1	188.10	188.10	ppb	1.75	344188	225000	
24 Mg	45	1	94.25	94.25	ppb	0.77	63903	225000	
27 Al	45	1	50.14	50.14	ppb	0.55	19901	67500	
39 K	45	1	92.78	92.78	ppb	0.37	114284	225000	
44 Ca	45	1	152.20	152.20	ppb	3.24	5171	225000	
51 V	45	1	1.01	1.01	ppb	1.94	3339	2700	
52 Cr	45	1	0.46	0.46	ppb	1.72	2358	2700	
55 Mn	45	1	0.44	0.44	ppb	6.54	1668	2700	
56 Fe	45	1	124.50	124.50	ppb	1.55	441045	202500	
59 Co	45	1	0.54	0.54	ppb	2.29	2986	2700	
60 Ni	45	1	0.50	0.50	ppb	5.08	789	2700	
65 Cu	45	1	0.65	0.65	ppb	11.50	1821	2700	
66 Zn	45	1	-10.55	-10.55	ppb	0.31	789	2700	
75 As	115	1	0.65	0.65	ppb	6.44	273	2250	
78 Se	115	1	0.90	0.90	ppb	10.65	86	2700	
83 Kr	115	2	----	-----	ppb	-----	329	2700	
95 Mo	115	2	1.22	1.22	ppb	1.07	4719	2700	
107 Ag	115	2	0.19	0.19	ppb	1.56	2170	900	
111 Cd	115	2	0.44	0.44	ppb	2.19	969	2700	
121 Sb	115	2	0.31	0.31	ppb	5.20	3531	1125	
137 Ba	159	2	0.20	0.20	ppb	14.34	1380	1350	
205 Tl	165	2	0.52	0.52	ppb	3.43	15572	900	
206 (Pb)	165	2	0.38	0.38	ppb	1.08	3801	2700	
207 (Pb)	165	2	0.40	0.40	ppb	1.75	3394	2700	
208 Pb	165	2	0.38	0.38	ppb	2.02	15394	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	62128	1.17	65759	94.5	70 - 150	
45 Sc	2	730144	0.15	655675	111.4	70 - 150	
115 In	1	240605	0.97	253217	95.0	70 - 150	
115 In	2	927939	1.45	856794	108.3	70 - 150	
159 Tb	1	631650	0.74	590996	106.9	70 - 150	
159 Tb	2	1437926	0.77	1335152	107.7	70 - 150	
165 Ho	1	626623	0.77	580759	107.9	70 - 150	
165 Ho	2	1415265	1.13	1322545	107.0	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\026_CCV.D\026_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\026_CCV.D\026_CCV.D#
 Date Acquired: Mar 30 2015 01:12 pm
 Operator: GK
 Sample Name: CCV V-206947
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3103
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: 6-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	49.26 ppb	0.73	229707	50	98.5	90 - 110	
23 Na	45	1	5115.00 ppb	1.09	6688099	5000	102.3	90 - 110	
24 Mg	45	1	5197.00 ppb	1.03	3788806	5000	103.9	90 - 110	
27 Al	45	1	1536.00 ppb	0.90	645779	1500	102.4	90 - 110	
39 K	45	1	4945.00 ppb	0.91	2925647	5000	98.9	90 - 110	
44 Ca	45	1	4932.00 ppb	0.55	136607	5000	98.6	90 - 110	
51 V	45	1	50.41 ppb	0.42	175089	50	100.8	90 - 110	
52 Cr	45	1	50.70 ppb	1.12	201988	50	101.4	90 - 110	
55 Mn	45	1	50.59 ppb	0.30	159461	50	101.2	90 - 110	
56 Fe	45	1	5104.00 ppb	0.82	19009790	5000	102.1	90 - 110	
59 Co	45	1	51.86 ppb	1.24	303039	50	103.7	90 - 110	
60 Ni	45	1	52.93 ppb	1.08	78829	50	105.9	90 - 110	
65 Cu	45	1	53.35 ppb	1.98	99723	50	106.7	90 - 110	
66 Zn	45	1	45.20 ppb	1.50	36004	50	90.4	90 - 110	
75 As	115	1	50.45 ppb	1.08	20409	50	100.9	90 - 110	
78 Se	115	1	243.50 ppb	0.85	11211	250	97.4	90 - 110	
83 Kr	115	2	----- ppb	-----	332	50	#VALUE!	##### - #####	
95 Mo	115	2	49.55 ppb	1.04	188003	50	99.1	90 - 110	
107 Ag	115	2	49.82 ppb	0.82	527288	50	99.6	90 - 110	
111 Cd	115	2	49.70 ppb	1.28	106402	50	99.4	90 - 110	
121 Sb	115	2	49.19 ppb	0.69	374210	50	98.4	90 - 110	
137 Ba	159	2	49.68 ppb	1.02	161476	50	99.4	90 - 110	
205 Tl	165	2	49.13 ppb	0.76	1296098	50	98.3	90 - 110	
206 (Pb)	165	2	49.06 ppb	1.26	406084	50	98.1	90 - 110	
207 (Pb)	165	2	49.18 ppb	1.30	355132	50	98.4	90 - 110	
208 Pb	165	2	48.20 ppb	0.82	1626193	50	96.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	67093	1.67	65759	102.0	80 - 120	
45 Sc	2	731509	0.50	655675	111.6	80 - 120	
115 In	1	252744	1.27	253217	99.8	80 - 120	
115 In	2	928308	0.16	856794	108.3	80 - 120	
159 Tb	1	650398	0.73	590996	110.1	80 - 120	
159 Tb	2	1459872	1.30	1335152	109.3	80 - 120	
165 Ho	1	642814	0.80	580759	110.7	80 - 120	
165 Ho	2	1429888	1.44	1322545	108.1	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\027_CCV.D\027_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\027_CCV.D\027_CCV.D#
 Date Acquired: Mar 30 2015 01:18 pm
 Operator: GK
 Sample Name: LLCCV V-206949
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3105
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Fail
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.49 ppb	2.78	2340	1	98.5	70 - 130	
23 Na	45	1	246.70 ppb	0.97	435602	250	98.7	70 - 130	
24 Mg	45	1	255.50 ppb	0.81	181843	250	102.2	70 - 130	
27 Al	45	1	99.40 ppb	1.62	41129	100	99.4	70 - 130	
39 K	45	1	235.30 ppb	0.52	200524	250	94.1	70 - 130	
44 Ca	45	1	215.00 ppb	0.87	7123	250	86.0	70 - 130	
51 V	45	1	1.00 ppb	3.36	3478	1	99.7	70 - 130	
52 Cr	45	1	0.92 ppb	0.14	4277	1	91.9	70 - 130	
55 Mn	45	1	2.82 ppb	1.03	9033	3	93.9	70 - 130	
56 Fe	45	1	154.40 ppb	1.00	572823	150	102.9	70 - 130	
59 Co	45	1	1.01 ppb	2.79	5845	1	101.1	70 - 130	
60 Ni	45	1	1.53 ppb	3.01	2322	2	101.7	70 - 130	
65 Cu	45	1	4.96 ppb	2.19	9711	5	99.2	70 - 130	
66 Zn	45	1	-0.04 ppb	222.66	7294	10	-0.4	70 - 130	FAIL
75 As	115	1	0.98 ppb	4.19	417	1	98.1	70 - 130	
78 Se	115	1	4.65 ppb	8.57	260	5	92.9	70 - 130	
83 Kr	115	2	----- ppb -----		339	1	#VALUE! #####		
95 Mo	115	2	0.98 ppb	3.16	3867	1	98.3	70 - 130	
107 Ag	115	2	0.49 ppb	2.54	5355	1	97.2	70 - 130	
111 Cd	115	2	0.98 ppb	2.85	2129	1	97.7	70 - 130	
121 Sb	115	2	1.34 ppb	2.06	11436	2	89.2	70 - 130	
137 Ba	159	2	2.19 ppb	0.26	7905	3	87.6	70 - 130	
205 Tl	165	2	0.91 ppb	0.82	26511	1	91.3	70 - 130	
206 (Pb)	165	2	1.41 ppb	1.35	12475	2	93.7	70 - 130	
207 (Pb)	165	2	1.39 ppb	3.96	10724	2	92.3	70 - 130	
208 Pb	165	2	1.38 ppb	2.83	49818	2	91.9	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	65402	1.08	65759	99.5	80 - 120	
45 Sc	2	728404	1.10	655675	111.1	80 - 120	
115 In	1	250797	0.70	253217	99.0	80 - 120	
115 In	2	936882	1.64	856794	109.3	80 - 120	
159 Tb	1	640393	0.68	590996	108.4	80 - 120	
159 Tb	2	1469540	0.86	1335152	110.1	80 - 120	
165 Ho	1	633310	0.69	580759	109.0	80 - 120	
165 Ho	2	1453420	0.88	1322545	109.9	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\028_CCB.D\028_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\028_CCB.D\028_CCB.D#
 Date Acquired: Mar 30 2015 01:24 pm
 Operator: GK
 Sample Name: CCB V-206944
 Misc Info: MS 7500 6020 AQUEOUS
 Vial Number: 3102
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: 6-CCB
 Total Dil Factor: 1.00

QC Summary:

Analytes: Pass

ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.004 ppb	40.53	74	0.50	
23 Na	45	1	16.700 ppb	119.40	136151	250.00	
24 Mg	45	1	0.888 ppb	13.53	853	250.00	
27 Al	45	1	0.814 ppb	20.64	688	100.00	
39 K	45	1	6.636 ppb	334.69	65961	250.00	
44 Ca	45	1	-24.930 ppb	15.48	654	250.00	
51 V	45	1	0.019 ppb	58.42	153	1.00	
52 Cr	45	1	-0.040 ppb	65.28	520	1.00	
55 Mn	45	1	-0.066 ppb	10.69	184	3.00	
56 Fe	45	1	-0.040 ppb	836.82	11446	150.00	
59 Co	45	1	-0.006 ppb	14.58	52	1.00	
60 Ni	45	1	-0.042 ppb	17.09	45	1.50	
65 Cu	45	1	-0.164 ppb	24.28	409	5.00	
66 Zn	45	1	-11.300 ppb	0.65	344	10.00	
75 As	115	1	0.017 ppb	155.99	28	1.00	
78 Se	115	1	-0.056 ppb	551.14	42	5.00	
83 Kr	115	2	----- ppb	-----	329	1.00	
95 Mo	115	2	0.002 ppb	126.64	114	1.00	
107 Ag	115	2	-0.008 ppb	49.34	84	0.50	
111 Cd	115	2	0.003 ppb	174.52	23	1.00	
121 Sb	115	2	-0.121 ppb	0.83	266	1.50	
137 Ba	159	2	-0.152 ppb	7.18	276	2.50	
205 Tl	165	2	-0.003 ppb	51.66	1970	1.00	
206 (Pb)	165	2	-0.010 ppb	47.78	582	1.50	
207 (Pb)	165	2	-0.009 ppb	72.23	499	1.50	
208 Pb	165	2	-0.009 ppb	24.26	2279	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	61172	15.61	65759	93.0	80 - 120	
45 Sc	2	729891	0.38	655675	111.3	80 - 120	
115 In	1	233062	14.46	253217	92.0	80 - 120	
115 In	2	935661	1.00	856794	109.2	80 - 120	
159 Tb	1	604152	13.52	590996	102.2	80 - 120	
159 Tb	2	1474462	0.98	1335152	110.4	80 - 120	
165 Ho	1	590023	13.06	580759	101.6	80 - 120	
165 Ho	2	1430664	0.73	1322545	108.2	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\029SMPL.D\029SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\029SMPL.D\029SMPL.D#
 Date Acquired: Mar 30 2015 01:30 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW MR 42363
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2303
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	219.40	219.40	ppb	0.13	966003	2700	
23 Na	45		1	21,990.00	21990.00	ppb	2.20	24927840	225000	
24 Mg	45		1	21,770.00	21770.00	ppb	1.72	13967040	225000	
27 Al	45		1	2,144.00	2144.00	ppb	0.66	793799	67500	
39 K	45		1	20,550.00	20550.00	ppb	0.78	10508740	225000	
44 Ca	45		1	20,990.00	20990.00	ppb	1.48	507576	225000	
51 V	45		1	215.60	215.60	ppb	1.53	658705	2700	
52 Cr	45		1	214.00	214.00	ppb	1.49	748365	2700	
55 Mn	45		1	214.60	214.60	ppb	1.75	594041	2700	
56 Fe	45		1	2,146.00	2146.00	ppb	1.86	7040357	202500	
59 Co	45		1	222.70	222.70	ppb	2.01	1144746	2700	
60 Ni	45		1	218.00	218.00	ppb	1.99	285441	2700	
65 Cu	45		1	231.70	231.70	ppb	2.13	378871	2700	
66 Zn	45		1	243.50	243.50	ppb	1.76	141719	2700	
75 As	115		1	213.30	213.30	ppb	0.35	75388	2250	
78 Se	115		1	207.60	207.60	ppb	0.21	8363	2700	
83 Kr	115		2	----	-----	ppb	-----	344	2700	
95 Mo	115		2	212.20	212.20	ppb	0.49	745987	2700	
107 Ag	115		2	41.81	41.81	ppb	1.44	410218	900	
111 Cd	115		2	210.10	210.10	ppb	1.17	416891	2700	
121 Sb	115		2	214.40	214.40	ppb	1.00	1508165	1125	
137 Ba	159		2	205.70	205.70	ppb	0.91	638061	1350	
205 Tl	165		2	197.80	197.80	ppb	0.20	5040092	900	
206 (Pb)	165		2	215.20	215.20	ppb	0.02	1720364	2700	
207 (Pb)	165		2	214.70	214.70	ppb	0.24	1497575	2700	
208 Pb	165		2	208.10	208.10	ppb	0.14	6782590	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	59061	2.61	65759	89.8	70 - 150	
45 Sc	2	690809	0.75	655675	105.4	70 - 150	
115 In	1	221003	1.20	253217	87.3	70 - 150	
115 In	2	860477	1.32	856794	100.4	70 - 150	
159 Tb	1	601348	1.72	590996	101.8	70 - 150	
159 Tb	2	1398535	0.89	1335152	104.7	70 - 150	
165 Ho	1	591431	0.65	580759	101.8	70 - 150	
165 Ho	2	1382860	1.62	1322545	104.6	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\030SMPL.D\030SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\030SMPL.D\030SMPL.D#
 Date Acquired: Mar 30 2015 01:36 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-002
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2310
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.03	0.03	ppb	19.95	172	2700	
23 Na	45	1		4,761.00	4761.00	ppb	2.43	5447891	225000	
24 Mg	45	1		1,016.00	1016.00	ppb	2.07	647387	225000	
27 Al	45	1		14.11	14.11	ppb	1.34	5551	67500	
39 K	45	1		687.60	687.60	ppb	1.20	408065	225000	
44 Ca	45	1		7,175.00	7175.00	ppb	2.18	173091	225000	
51 V	45	1		0.48	0.48	ppb	6.77	1555	2700	
52 Cr	45	1		1.24	1.24	ppb	4.88	4943	2700	
55 Mn	45	1		0.60	0.60	ppb	3.46	2019	2700	
56 Fe	45	1		8.83	8.83	ppb	4.11	39946	202500	
59 Co	45	1		0.05	0.05	ppb	15.45	311	2700	
60 Ni	45	1		0.28	0.28	ppb	4.36	467	2700	
65 Cu	45	1		1.04	1.04	ppb	6.73	2357	2700	
66 Zn	45	1		-4.06	-4.06	ppb	7.96	4322	2700	
75 As	115	1		0.23	0.23	ppb	13.70	107	2250	
78 Se	115	1		0.08	0.08	ppb	232.89	48	2700	
83 Kr	115	2		----	-----	ppb	-----	383	2700	
95 Mo	115	2		0.67	0.67	ppb	6.65	2564	2700	
107 Ag	115	2		0.01	0.01	ppb	37.20	250	900	
111 Cd	115	2		0.26	0.26	ppb	6.07	562	2700	
121 Sb	115	2		-0.04	-0.04	ppb	5.02	832	1125	
137 Ba	159	2		8.74	8.74	ppb	2.24	28206	1350	
205 Tl	165	2		0.20	0.20	ppb	1.41	7190	900	
206 (Pb)	165	2		0.08	0.08	ppb	12.57	1328	2700	
207 (Pb)	165	2		0.09	0.09	ppb	7.32	1171	2700	
208 Pb	165	2		0.09	0.09	ppb	4.32	5436	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	58638	1.86	65759	89.2	70 - 150	
45 Sc	2	715775	0.56	655675	109.2	70 - 150	
115 In	1	227682	0.73	253217	89.9	70 - 150	
115 In	2	905596	1.27	856794	105.7	70 - 150	
159 Tb	1	602207	0.70	590996	101.9	70 - 150	
159 Tb	2	1418765	1.40	1335152	106.3	70 - 150	
165 Ho	1	597359	0.59	580759	102.9	70 - 150	
165 Ho	2	1394851	1.32	1322545	105.5	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\031SMPL.D\031SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\031SMPL.D\031SMPL.D#
 Date Acquired: Mar 30 2015 01:42 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW MR 42363
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2303
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		217.70	217.70	ppb	1.18	959797	2700	
23 Na	45	1		21,690.00	21690.00	ppb	0.81	23609090	225000	
24 Mg	45	1		21,640.00	21640.00	ppb	1.28	13334330	225000	
27 Al	45	1		2,111.00	2111.00	ppb	1.42	750316	67500	
39 K	45	1		20,050.00	20050.00	ppb	1.11	9844510	225000	
44 Ca	45	1		20,990.00	20990.00	ppb	0.81	487510	225000	
51 V	45	1		214.80	214.80	ppb	1.53	630233	2700	
52 Cr	45	1		213.60	213.60	ppb	1.34	717248	2700	
55 Mn	45	1		210.20	210.20	ppb	1.85	558941	2700	
56 Fe	45	1		2,133.00	2133.00	ppb	2.02	6721061	202500	
59 Co	45	1		222.60	222.60	ppb	1.48	1099284	2700	
60 Ni	45	1		218.20	218.20	ppb	1.06	274356	2700	
65 Cu	45	1		227.30	227.30	ppb	0.98	357001	2700	
66 Zn	45	1		227.90	227.90	ppb	1.20	127784	2700	
75 As	115	1		209.80	209.80	ppb	0.65	72065	2250	
78 Se	115	1		202.50	202.50	ppb	0.45	7934	2700	
83 Kr	115	2		----	-----	ppb	-----	418	2700	
95 Mo	115	2		210.00	210.00	ppb	1.81	742220	2700	
107 Ag	115	2		41.04	41.04	ppb	1.19	404760	900	
111 Cd	115	2		206.90	206.90	ppb	1.15	412659	2700	
121 Sb	115	2		211.20	211.20	ppb	0.76	1493701	1125	
137 Ba	159	2		203.10	203.10	ppb	1.53	625761	1350	
205 Tl	165	2		198.90	198.90	ppb	0.69	4980429	900	
206 (Pb)	165	2		215.80	215.80	ppb	1.47	1695468	2700	
207 (Pb)	165	2		215.90	215.90	ppb	0.65	1479555	2700	
208 Pb	165	2		209.40	209.40	ppb	0.55	6704060	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	56701	0.70	65759	86.2	70 - 150	
45 Sc	2	691763	1.20	655675	105.5	70 - 150	
115 In	1	214856	0.42	253217	84.9	70 - 150	
115 In	2	864969	1.13	856794	101.0	70 - 150	
159 Tb	1	590708	0.30	590996	100.0	70 - 150	
159 Tb	2	1388752	1.53	1335152	104.0	70 - 150	
165 Ho	1	576600	0.45	580759	99.3	70 - 150	
165 Ho	2	1358664	0.88	1322545	102.7	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\032SMPL.D\032SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\032SMPL.D\032SMPL.D#
 Date Acquired: Mar 30 2015 01:48 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-004
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2401
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.03	0.03	ppb	29.45	186	2700	
23 Na	45	1		13,250.00	13250.00	ppb	1.41	15410290	225000	
24 Mg	45	1		1,362.00	1362.00	ppb	0.91	894222	225000	
27 Al	45	1		23.48	23.48	ppb	1.70	9262	67500	
39 K	45	1		1,110.00	1110.00	ppb	1.52	639937	225000	
44 Ca	45	1		8,044.00	8044.00	ppb	1.95	199745	225000	
51 V	45	1		0.67	0.67	ppb	2.60	2189	2700	
52 Cr	45	1		31.25	31.25	ppb	1.82	112323	2700	
55 Mn	45	1		1.38	1.38	ppb	2.36	4266	2700	
56 Fe	45	1		26.87	26.87	ppb	1.26	101600	202500	
59 Co	45	1		0.16	0.16	ppb	3.54	905	2700	
60 Ni	45	1		2.07	2.07	ppb	2.15	2878	2700	
65 Cu	45	1		4.84	4.84	ppb	2.25	8761	2700	
66 Zn	45	1		9.51	9.51	ppb	6.46	12153	2700	
75 As	115	1		0.45	0.45	ppb	6.71	189	2250	
78 Se	115	1		0.05	0.05	ppb	217.19	47	2700	
83 Kr	115	2		----	-----	ppb	-----	378	2700	
95 Mo	115	2		5.94	5.94	ppb	1.59	22563	2700	
107 Ag	115	2		0.01	0.01	ppb	76.67	222	900	
111 Cd	115	2		1.20	1.20	ppb	2.19	2570	2700	
121 Sb	115	2		0.01	0.01	ppb	34.28	1250	1125	
137 Ba	159	2		9.83	9.83	ppb	0.76	32319	1350	
205 Tl	165	2		0.22	0.22	ppb	3.82	8008	900	
206 (Pb)	165	2		0.29	0.29	ppb	5.15	3061	2700	
207 (Pb)	165	2		0.28	0.28	ppb	3.41	2588	2700	
208 Pb	165	2		0.27	0.27	ppb	0.26	11926	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	60399	1.30	65759	91.9	70 - 150	
45 Sc	2	737949	1.03	655675	112.5	70 - 150	
115 In	1	230591	0.83	253217	91.1	70 - 150	
115 In	2	925018	1.50	856794	108.0	70 - 150	
159 Tb	1	618515	0.16	590996	104.7	70 - 150	
159 Tb	2	1448479	1.14	1335152	108.5	70 - 150	
165 Ho	1	609660	0.43	580759	105.0	70 - 150	
165 Ho	2	1442414	0.92	1322545	109.1	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\033SMPL.D\033SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\033SMPL.D\033SMPL.D#
 Date Acquired: Mar 30 2015 01:54 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-006
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2402
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	0.01	0.01	ppb	30.29	91	2700	
23 Na	45		1	2,301.00	2301.00	ppb	0.79	2762618	225000	
24 Mg	45		1	473.10	473.10	ppb	0.66	309613	225000	
27 Al	45		1	14.76	14.76	ppb	2.67	5940	67500	
39 K	45		1	556.00	556.00	ppb	0.27	350581	225000	
44 Ca	45		1	4,177.00	4177.00	ppb	0.61	103957	225000	
51 V	45		1	0.77	0.77	ppb	0.61	2506	2700	
52 Cr	45		1	1.46	1.46	ppb	0.81	5856	2700	
55 Mn	45		1	0.81	0.81	ppb	1.37	2666	2700	
56 Fe	45		1	14.40	14.40	ppb	2.80	59579	202500	
59 Co	45		1	0.04	0.04	ppb	20.03	267	2700	
60 Ni	45		1	1.70	1.70	ppb	3.97	2371	2700	
65 Cu	45		1	7.02	7.02	ppb	3.04	12361	2700	
66 Zn	45		1	46.96	46.96	ppb	1.80	33288	2700	
75 As	115		1	0.33	0.33	ppb	12.33	145	2250	
78 Se	115		1	-0.12	-0.12	ppb	97.16	40	2700	
83 Kr	115		2	----	-----	ppb	-----	368	2700	
95 Mo	115		2	0.13	0.13	ppb	5.35	580	2700	
107 Ag	115		2	0.01	0.01	ppb	56.64	240	900	
111 Cd	115		2	5.31	5.31	ppb	1.23	11229	2700	
121 Sb	115		2	-0.01	-0.01	ppb	106.32	1062	1125	
137 Ba	159		2	2.48	2.48	ppb	2.55	8669	1350	
205 Tl	165		2	0.05	0.05	ppb	5.88	3345	900	
206 (Pb)	165		2	0.22	0.22	ppb	2.40	2494	2700	
207 (Pb)	165		2	0.22	0.22	ppb	8.06	2129	2700	
208 Pb	165		2	0.22	0.22	ppb	2.94	9898	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	60167	0.70	65759	91.5	70 - 150	
45 Sc	2	725311	0.77	655675	110.6	70 - 150	
115 In	1	232281	0.45	253217	91.7	70 - 150	
115 In	2	916243	0.66	856794	106.9	70 - 150	
159 Tb	1	618949	0.82	590996	104.7	70 - 150	
159 Tb	2	1438909	1.03	1335152	107.8	70 - 150	
165 Ho	1	610008	0.43	580759	105.0	70 - 150	
165 Ho	2	1423961	1.32	1322545	107.7	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\034SMPL.D\034SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\034SMPL.D\034SMPL.D#
 Date Acquired: Mar 30 2015 02:00 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-008
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2403
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	0.11	0.11	ppb	6.16	574	2700	
23 Na	45		1	6,866.00	6866.00	ppb	0.72	7771578	225000	
24 Mg	45		1	1,176.00	1176.00	ppb	0.75	746048	225000	
27 Al	45		1	60.64	60.64	ppb	1.11	22534	67500	
39 K	45		1	1,258.00	1258.00	ppb	0.71	693012	225000	
44 Ca	45		1	8,196.00	8196.00	ppb	0.86	196685	225000	
51 V	45		1	0.63	0.63	ppb	3.22	1993	2700	
52 Cr	45		1	1.69	1.69	ppb	2.26	6485	2700	
55 Mn	45		1	9.37	9.37	ppb	1.78	25985	2700	
56 Fe	45		1	6.24	6.24	ppb	8.44	31359	202500	
59 Co	45		1	0.05	0.05	ppb	10.21	349	2700	
60 Ni	45		1	0.62	0.62	ppb	6.98	903	2700	
65 Cu	45		1	0.61	0.61	ppb	7.63	1649	2700	
66 Zn	45		1	-2.64	-2.64	ppb	6.98	5086	2700	
75 As	115		1	0.31	0.31	ppb	17.47	134	2250	
78 Se	115		1	0.18	0.18	ppb	54.25	52	2700	
83 Kr	115		2	----	-----	ppb	-----	377	2700	
95 Mo	115		2	0.03	0.03	ppb	12.45	213	2700	
107 Ag	115		2	0.00	0.00	ppb	441.34	171	900	
111 Cd	115		2	0.12	0.12	ppb	4.31	270	2700	
121 Sb	115		2	-0.10	-0.10	ppb	9.64	439	1125	
137 Ba	159		2	20.53	20.53	ppb	1.60	66857	1350	
205 Tl	165		2	0.02	0.02	ppb	16.09	2550	900	
206 (Pb)	165		2	0.05	0.05	ppb	11.88	1033	2700	
207 (Pb)	165		2	0.04	0.04	ppb	27.81	878	2700	
208 Pb	165		2	0.04	0.04	ppb	10.34	3989	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	58366	0.73	65759	88.8	70 - 150	
45 Sc	2	728881	0.33	655675	111.2	70 - 150	
115 In	1	226865	0.46	253217	89.6	70 - 150	
115 In	2	928162	1.41	856794	108.3	70 - 150	
159 Tb	1	611043	1.05	590996	103.4	70 - 150	
159 Tb	2	1452778	1.22	1335152	108.8	70 - 150	
165 Ho	1	606340	0.73	580759	104.4	70 - 150	
165 Ho	2	1427058	1.28	1322545	107.9	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\035SMPL.D\035SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\035SMPL.D\035SMPL.D#
 Date Acquired: Mar 30 2015 02:06 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-010
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2404
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.01	0.01	ppb	26.78	118	2700	
23 Na	45	1	4,355.00	4355.00	ppb	0.64	4863663	225000	
24 Mg	45	1	1,364.00	1364.00	ppb	0.71	846654	225000	
27 Al	45	1	43.80	43.80	ppb	0.79	16026	67500	
39 K	45	1	310.00	310.00	ppb	1.07	211864	225000	
44 Ca	45	1	4,074.00	4074.00	ppb	0.42	96267	225000	
51 V	45	1	1.11	1.11	ppb	5.58	3374	2700	
52 Cr	45	1	0.54	0.54	ppb	0.08	2464	2700	
55 Mn	45	1	2.33	2.33	ppb	1.37	6587	2700	
56 Fe	45	1	18.17	18.17	ppb	2.33	68482	202500	
59 Co	45	1	0.08	0.08	ppb	4.75	490	2700	
60 Ni	45	1	0.85	0.85	ppb	4.07	1178	2700	
65 Cu	45	1	1.00	1.00	ppb	5.87	2231	2700	
66 Zn	45	1	-4.36	-4.36	ppb	3.09	4054	2700	
75 As	115	1	0.36	0.36	ppb	9.43	152	2250	
78 Se	115	1	0.07	0.07	ppb	164.59	46	2700	
83 Kr	115	2	----	-----	ppb	-----	362	2700	
95 Mo	115	2	0.11	0.11	ppb	5.08	529	2700	
107 Ag	115	2	0.00	0.00	ppb	46.93	202	900	
111 Cd	115	2	0.06	0.06	ppb	6.38	141	2700	
121 Sb	115	2	-0.08	-0.08	ppb	8.05	576	1125	
137 Ba	159	2	5.23	5.23	ppb	1.34	17300	1350	
205 Tl	165	2	0.01	0.01	ppb	62.03	2193	900	
206 (Pb)	165	2	0.16	0.16	ppb	8.98	1977	2700	
207 (Pb)	165	2	0.15	0.15	ppb	16.07	1626	2700	
208 Pb	165	2	0.16	0.16	ppb	2.78	7765	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	57111	0.40	65759	86.8	70 - 150	
45 Sc	2	732181	1.49	655675	111.7	70 - 150	
115 In	1	223588	1.23	253217	88.3	70 - 150	
115 In	2	916322	0.85	856794	106.9	70 - 150	
159 Tb	1	603829	1.37	590996	102.2	70 - 150	
159 Tb	2	1429310	0.46	1335152	107.1	70 - 150	
165 Ho	1	595058	1.11	580759	102.5	70 - 150	
165 Ho	2	1411801	0.45	1322545	106.7	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\036SMPL.D\036SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\036SMPL.D\036SMPL.D#
 Date Acquired: Mar 30 2015 02:12 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-018
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2405
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.01	0.01	ppb	24.20	113	2700	
23 Na	45	1	8,158.00	8158.00	ppb	2.08	9138467	225000	
24 Mg	45	1	2,457.00	2457.00	ppb	1.79	1545941	225000	
27 Al	45	1	13.24	13.24	ppb	2.71	5166	67500	
39 K	45	1	416.40	416.40	ppb	1.86	267795	225000	
44 Ca	45	1	6,368.00	6368.00	ppb	1.52	151879	225000	
51 V	45	1	1.21	1.21	ppb	3.65	3723	2700	
52 Cr	45	1	0.28	0.28	ppb	3.86	1598	2700	
55 Mn	45	1	1.01	1.01	ppb	3.34	3106	2700	
56 Fe	45	1	7.03	7.03	ppb	1.76	33673	202500	
59 Co	45	1	0.02	0.02	ppb	10.39	174	2700	
60 Ni	45	1	0.29	0.29	ppb	9.09	473	2700	
65 Cu	45	1	0.62	0.62	ppb	3.25	1647	2700	
66 Zn	45	1	-6.82	-6.82	ppb	3.41	2767	2700	
75 As	115	1	0.35	0.35	ppb	8.03	149	2250	
78 Se	115	1	0.06	0.06	ppb	210.11	47	2700	
83 Kr	115	2	----	-----	ppb	-----	347	2700	
95 Mo	115	2	0.04	0.04	ppb	10.59	259	2700	
107 Ag	115	2	0.00	0.00	ppb	43.70	194	900	
111 Cd	115	2	0.02	0.02	ppb	32.84	52	2700	
121 Sb	115	2	-0.10	-0.10	ppb	1.51	401	1125	
137 Ba	159	2	6.82	6.82	ppb	0.58	22373	1350	
205 Tl	165	2	-0.01	-0.01	ppb	7.20	1637	900	
206 (Pb)	165	2	0.04	0.04	ppb	3.65	1007	2700	
207 (Pb)	165	2	0.04	0.04	ppb	17.24	823	2700	
208 Pb	165	2	0.04	0.04	ppb	3.12	3887	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	57906	1.00	65759	88.1	70 - 150	
45 Sc	2	728790	1.09	655675	111.2	70 - 150	
115 In	1	227055	0.61	253217	89.7	70 - 150	
115 In	2	911652	1.08	856794	106.4	70 - 150	
159 Tb	1	616498	1.37	590996	104.3	70 - 150	
159 Tb	2	1430593	1.29	1335152	107.1	70 - 150	
165 Ho	1	609146	1.57	580759	104.9	70 - 150	
165 Ho	2	1396612	0.57	1322545	105.6	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\037SMPL.D\037SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\037SMPL.D\037SMPL.D#
 Date Acquired: Mar 30 2015 02:18 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-020
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2406
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	0.01	0.01	ppb	77.51	82	2700	
23 Na	45		1	9,462.00	9462.00	ppb	1.19	10754310	225000	
24 Mg	45		1	1,613.00	1613.00	ppb	0.53	1031513	225000	
27 Al	45		1	12.38	12.38	ppb	1.12	4931	67500	
39 K	45		1	2,176.00	2176.00	ppb	0.43	1163683	225000	
44 Ca	45		1	8,556.00	8556.00	ppb	0.86	206951	225000	
51 V	45		1	1.30	1.30	ppb	3.31	4047	2700	
52 Cr	45		1	0.76	0.76	ppb	2.66	3308	2700	
55 Mn	45		1	18.39	18.39	ppb	0.63	51084	2700	
56 Fe	45		1	8.70	8.70	ppb	3.93	39666	202500	
59 Co	45		1	0.04	0.04	ppb	3.76	267	2700	
60 Ni	45		1	0.34	0.34	ppb	7.76	541	2700	
65 Cu	45		1	0.97	0.97	ppb	4.30	2246	2700	
66 Zn	45		1	-6.24	-6.24	ppb	1.86	3136	2700	
75 As	115		1	0.40	0.40	ppb	6.20	169	2250	
78 Se	115		1	0.04	0.04	ppb	293.56	47	2700	
83 Kr	115		2	----	-----	ppb	-----	334	2700	
95 Mo	115		2	0.03	0.03	ppb	12.67	226	2700	
107 Ag	115		2	0.00	0.00	ppb	121.57	178	900	
111 Cd	115		2	0.15	0.15	ppb	8.96	339	2700	
121 Sb	115		2	-0.09	-0.09	ppb	9.92	472	1125	
137 Ba	159		2	6.13	6.13	ppb	0.88	20357	1350	
205 Tl	165		2	-0.03	-0.03	ppb	9.69	1350	900	
206 (Pb)	165		2	0.07	0.07	ppb	9.65	1252	2700	
207 (Pb)	165		2	0.06	0.06	ppb	18.91	997	2700	
208 Pb	165		2	0.06	0.06	ppb	7.22	4714	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	58844	0.56	65759	89.5	70 - 150	
45 Sc	2	729643	0.22	655675	111.3	70 - 150	
115 In	1	230868	0.43	253217	91.2	70 - 150	
115 In	2	926836	0.87	856794	108.2	70 - 150	
159 Tb	1	623713	0.14	590996	105.5	70 - 150	
159 Tb	2	1443327	0.71	1335152	108.1	70 - 150	
165 Ho	1	613408	0.47	580759	105.6	70 - 150	
165 Ho	2	1429613	1.69	1322545	108.1	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\038SMPL.D\038SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\038SMPL.D\038SMPL.D#
 Date Acquired: Mar 30 2015 02:24 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: RINSE
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3101
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.56	0.56	ppb	6.19	2617	2700	
23 Na	45	1		217.10	217.10	ppb	2.60	360213	225000	
24 Mg	45	1		110.70	110.70	ppb	2.83	71317	225000	
27 Al	45	1		49.96	49.96	ppb	2.56	18862	67500	
39 K	45	1		105.80	105.80	ppb	3.96	115352	225000	
44 Ca	45	1		175.80	175.80	ppb	3.32	5489	225000	
51 V	45	1		1.75	1.75	ppb	1.49	5455	2700	
52 Cr	45	1		0.58	0.58	ppb	8.23	2668	2700	
55 Mn	45	1		0.59	0.59	ppb	4.20	2006	2700	
56 Fe	45	1		123.40	123.40	ppb	1.99	415743	202500	
59 Co	45	1		0.67	0.67	ppb	3.39	3539	2700	
60 Ni	45	1		0.63	0.63	ppb	6.50	927	2700	
65 Cu	45	1		0.66	0.66	ppb	8.96	1745	2700	
66 Zn	45	1		-10.75	-10.75	ppb	1.04	640	2700	
75 As	115	1		0.90	0.90	ppb	7.55	352	2250	
78 Se	115	1		0.88	0.88	ppb	19.40	82	2700	
83 Kr	115	2		----	-----	ppb	-----	409	2700	
95 Mo	115	2		1.27	1.27	ppb	0.47	4828	2700	
107 Ag	115	2		0.24	0.24	ppb	2.43	2619	900	
111 Cd	115	2		0.59	0.59	ppb	5.95	1260	2700	
121 Sb	115	2		0.43	0.43	ppb	7.24	4390	1125	
137 Ba	159	2		0.36	0.36	ppb	6.45	1906	1350	
205 Tl	165	2		0.48	0.48	ppb	2.80	14550	900	
206 (Pb)	165	2		0.53	0.53	ppb	3.51	4964	2700	
207 (Pb)	165	2		0.52	0.52	ppb	1.41	4292	2700	
208 Pb	165	2		0.52	0.52	ppb	1.34	19761	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	59106	1.40	65759	89.9	70 - 150	
45 Sc	2	719265	1.01	655675	109.7	70 - 150	
115 In	1	229680	0.33	253217	90.7	70 - 150	
115 In	2	913588	0.40	856794	106.6	70 - 150	
159 Tb	1	616831	0.56	590996	104.4	70 - 150	
159 Tb	2	1430042	0.60	1335152	107.1	70 - 150	
165 Ho	1	606675	0.63	580759	104.5	70 - 150	
165 Ho	2	1414130	1.37	1322545	106.9	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\039_CCV.D\039_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\039_CCV.D\039_CCV.D#
 Date Acquired: Mar 30 2015 02:30 pm
 Operator: GK
 Sample Name: CCV V-206947
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3103
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: 6-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	48.31 ppb	1.37	229159	50	96.6	90 - 110	
23 Na	45	1	5134.00 ppb	2.00	6519007	5000	102.7	90 - 110	
24 Mg	45	1	5227.00 ppb	2.44	3700587	5000	104.5	90 - 110	
27 Al	45	1	1538.00 ppb	1.56	628261	1500	102.5	90 - 110	
39 K	45	1	4884.00 ppb	2.39	2806997	5000	97.7	90 - 110	
44 Ca	45	1	4869.00 ppb	1.21	130990	5000	97.4	90 - 110	
51 V	45	1	50.04 ppb	1.59	168770	50	100.1	90 - 110	
52 Cr	45	1	50.74 ppb	2.42	196283	50	101.5	90 - 110	
55 Mn	45	1	50.08 ppb	0.99	153308	50	100.2	90 - 110	
56 Fe	45	1	5081.00 ppb	2.05	18378350	5000	101.6	90 - 110	
59 Co	45	1	52.36 ppb	1.70	297129	50	104.7	90 - 110	
60 Ni	45	1	53.10 ppb	1.83	76801	50	106.2	90 - 110	
65 Cu	45	1	54.00 ppb	3.43	98007	50	108.0	90 - 110	
66 Zn	45	1	45.63 ppb	3.14	35229	50	91.3	90 - 110	
75 As	115	1	48.96 ppb	0.38	19584	50	97.9	90 - 110	
78 Se	115	1	232.00 ppb	0.92	10563	250	92.8	90 - 110	
83 Kr	115	2	----- ppb	-----	323	50	#VALUE!	##### - #####	
95 Mo	115	2	48.74 ppb	1.34	188801	50	97.5	90 - 110	
107 Ag	115	2	48.98 ppb	0.71	529313	50	98.0	90 - 110	
111 Cd	115	2	48.73 ppb	1.21	106528	50	97.5	90 - 110	
121 Sb	115	2	48.16 ppb	0.41	374106	50	96.3	90 - 110	
137 Ba	159	2	48.74 ppb	0.73	162429	50	97.5	90 - 110	
205 Tl	165	2	48.49 ppb	1.75	1316150	50	97.0	90 - 110	
206 (Pb)	165	2	47.79 ppb	0.73	407147	50	95.6	90 - 110	
207 (Pb)	165	2	47.71 ppb	0.73	354572	50	95.4	90 - 110	
208 Pb	165	2	47.03 ppb	0.18	1633052	50	94.1	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	65164	1.58	65759	99.1	80 - 120	
45 Sc	2	744101	1.07	655675	113.5	80 - 120	
115 In	1	249931	0.30	253217	98.7	80 - 120	
115 In	2	947853	2.12	856794	110.6	80 - 120	
159 Tb	1	656501	0.76	590996	111.1	80 - 120	
159 Tb	2	1496783	1.89	1335152	112.1	80 - 120	
165 Ho	1	646220	1.06	580759	111.3	80 - 120	
165 Ho	2	1471337	1.54	1322545	111.3	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\040_CCV.D\040_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\040_CCV.D\040_CCV.D#
 Date Acquired: Mar 30 2015 02:36 pm
 Operator: GK
 Sample Name: LLCCV V-206949
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3105
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Fail
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.48 ppb	3.57	2301	1	95.9	70 - 130	
23 Na	45	1	244.20 ppb	0.70	422788	250	97.7	70 - 130	
24 Mg	45	1	255.10 ppb	0.61	177538	250	102.0	70 - 130	
27 Al	45	1	97.69 ppb	0.90	39521	100	97.7	70 - 130	
39 K	45	1	228.10 ppb	0.84	192074	250	91.2	70 - 130	
44 Ca	45	1	207.90 ppb	1.63	6777	250	83.2	70 - 130	
51 V	45	1	0.97 ppb	2.09	3301	1	96.7	70 - 130	
52 Cr	45	1	0.91 ppb	2.23	4139	1	90.8	70 - 130	
55 Mn	45	1	2.78 ppb	2.36	8722	3	92.7	70 - 130	
56 Fe	45	1	152.60 ppb	0.90	553551	150	101.7	70 - 130	
59 Co	45	1	1.02 ppb	2.55	5782	1	102.3	70 - 130	
60 Ni	45	1	1.46 ppb	2.12	2179	2	97.5	70 - 130	
65 Cu	45	1	5.22 ppb	3.69	9957	5	104.4	70 - 130	
66 Zn	45	1	-0.37 ppb	95.80	6930	10	-3.7	70 - 130	FAIL
75 As	115	1	0.94 ppb	3.83	395	1	94.0	70 - 130	
78 Se	115	1	4.57 ppb	2.20	253	5	91.5	70 - 130	
83 Kr	115	2	----- ppb -----		308	1	#VALUE! #####		
95 Mo	115	2	0.93 ppb	0.74	3755	1	93.1	70 - 130	
107 Ag	115	2	0.47 ppb	2.36	5251	1	93.0	70 - 130	
111 Cd	115	2	0.94 ppb	0.70	2091	1	93.8	70 - 130	
121 Sb	115	2	1.25 ppb	2.24	10998	2	83.2	70 - 130	
137 Ba	159	2	2.09 ppb	5.22	7635	3	83.7	70 - 130	
205 Tl	165	2	0.84 ppb	1.34	24689	1	84.0	70 - 130	
206 (Pb)	165	2	1.40 ppb	4.37	12470	2	93.2	70 - 130	
207 (Pb)	165	2	1.39 ppb	1.90	10822	2	92.7	70 - 130	
208 Pb	165	2	1.35 ppb	3.08	49179	2	90.2	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	63933	0.62	65759	97.2	80 - 120	
45 Sc	2	734929	0.80	655675	112.1	80 - 120	
115 In	1	246718	0.71	253217	97.4	80 - 120	
115 In	2	958564	1.01	856794	111.9	80 - 120	
159 Tb	1	650597	0.45	590996	110.1	80 - 120	
159 Tb	2	1479603	0.52	1335152	110.8	80 - 120	
165 Ho	1	630706	0.58	580759	108.6	80 - 120	
165 Ho	2	1460429	1.83	1322545	110.4	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\041_CCB.D\041_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\041_CCB.D\041_CCB.D#
 Date Acquired: Mar 30 2015 02:42 pm
 Operator: GK
 Sample Name: CCB V-206944
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3102
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: 6-CCB
 Total Dil Factor: 1.00

QC Summary:

Analytes: Pass

ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.002 ppb	125.81	67	0.50	
23 Na	45	1	6.401 ppb	7.25	133801	250.00	
24 Mg	45	1	1.125 ppb	9.44	1077	250.00	
27 Al	45	1	0.910 ppb	22.26	774	100.00	
39 K	45	1	-2.977 ppb	45.05	65670	250.00	
44 Ca	45	1	-31.130 ppb	3.19	539	250.00	
51 V	45	1	0.011 ppb	10.58	140	1.00	
52 Cr	45	1	-0.055 ppb	25.74	502	1.00	
55 Mn	45	1	-0.062 ppb	5.36	210	3.00	
56 Fe	45	1	0.092 ppb	393.18	12712	150.00	
59 Co	45	1	-0.003 ppb	30.61	71	1.00	
60 Ni	45	1	-0.046 ppb	11.26	44	1.50	
65 Cu	45	1	-0.170 ppb	22.40	430	5.00	
66 Zn	45	1	-11.410 ppb	0.13	302	10.00	
75 As	115	1	0.001 ppb	677.34	25	1.00	
78 Se	115	1	-0.102 ppb	30.60	44	5.00	
83 Kr	115	2	----- ppb	-----	343	1.00	
95 Mo	115	2	-0.007 ppb	48.73	80	1.00	
107 Ag	115	2	-0.008 ppb	6.82	82	0.50	
111 Cd	115	2	0.001 ppb	163.62	21	1.00	
121 Sb	115	2	-0.129 ppb	4.87	209	1.50	
137 Ba	159	2	-0.157 ppb	3.60	263	2.50	
205 Tl	165	2	-0.036 ppb	3.89	1117	1.00	
206 (Pb)	165	2	-0.018 ppb	18.11	530	1.50	
207 (Pb)	165	2	-0.022 ppb	40.25	417	1.50	
208 Pb	165	2	-0.019 ppb	1.15	2003	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	64691	0.93	65759	98.4	80 - 120	
45 Sc	2	740651	0.66	655675	113.0	80 - 120	
115 In	1	249488	0.68	253217	98.5	80 - 120	
115 In	2	960191	1.13	856794	112.1	80 - 120	
159 Tb	1	655494	1.05	590996	110.9	80 - 120	
159 Tb	2	1497444	0.70	1335152	112.2	80 - 120	
165 Ho	1	636289	0.54	580759	109.6	80 - 120	
165 Ho	2	1474901	1.24	1322545	111.5	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\042SMPL.D\042SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\042SMPL.D\042SMPL.D#
 Date Acquired: Mar 30 2015 02:48 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-022
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2407
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.01	0.01	ppb	14.56	101	2700	
23 Na	45	1		6,381.00	6381.00	ppb	0.57	6958289	225000	
24 Mg	45	1		1,738.00	1738.00	ppb	1.18	1061335	225000	
27 Al	45	1		10.81	10.81	ppb	1.60	4156	67500	
39 K	45	1		1,169.00	1169.00	ppb	0.13	623838	225000	
44 Ca	45	1		10,100.00	10100.00	ppb	0.77	233055	225000	
51 V	45	1		0.46	0.46	ppb	0.69	1423	2700	
52 Cr	45	1		43.39	43.39	ppb	1.05	144811	2700	
55 Mn	45	1		3.32	3.32	ppb	0.98	9089	2700	
56 Fe	45	1		9.41	9.41	ppb	4.50	40060	202500	
59 Co	45	1		0.17	0.17	ppb	2.44	919	2700	
60 Ni	45	1		1.49	1.49	ppb	0.76	1949	2700	
65 Cu	45	1		0.61	0.61	ppb	10.15	1589	2700	
66 Zn	45	1		-6.21	-6.21	ppb	2.67	3010	2700	
75 As	115	1		0.23	0.23	ppb	11.59	102	2250	
78 Se	115	1		0.07	0.07	ppb	177.84	46	2700	
83 Kr	115	2		----	-----	ppb	-----	377	2700	
95 Mo	115	2		0.70	0.70	ppb	1.07	2633	2700	
107 Ag	115	2		0.00	0.00	ppb	96.95	187	900	
111 Cd	115	2		16.31	16.31	ppb	0.73	33350	2700	
121 Sb	115	2		-0.09	-0.09	ppb	1.52	468	1125	
137 Ba	159	2		10.85	10.85	ppb	0.96	34277	1350	
205 Tl	165	2		0.00	0.00	ppb	581.91	1977	900	
206 (Pb)	165	2		0.08	0.08	ppb	6.50	1267	2700	
207 (Pb)	165	2		0.08	0.08	ppb	12.34	1083	2700	
208 Pb	165	2		0.08	0.08	ppb	3.60	5054	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	56165	0.32	65759	85.4	70 - 150	
45 Sc	2	695992	1.42	655675	106.1	70 - 150	
115 In	1	220991	1.15	253217	87.3	70 - 150	
115 In	2	886378	0.81	856794	103.5	70 - 150	
159 Tb	1	594560	1.08	590996	100.6	70 - 150	
159 Tb	2	1394956	0.95	1335152	104.5	70 - 150	
165 Ho	1	588536	0.69	580759	101.3	70 - 150	
165 Ho	2	1375292	0.14	1322545	104.0	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\043SMPL.D\043SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\043SMPL.D\043SMPL.D#
 Date Acquired: Mar 30 2015 02:54 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-024
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2408
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	0.14	0.14	ppb	2.38	692	2700	
23 Na	45		1	4,794.00	4794.00	ppb	1.47	5396133	225000	
24 Mg	45		1	1,759.00	1759.00	ppb	1.22	1102771	225000	
27 Al	45		1	91.37	91.37	ppb	0.98	33370	67500	
39 K	45		1	2,045.00	2045.00	ppb	0.85	1075276	225000	
44 Ca	45		1	5,682.00	5682.00	ppb	1.44	135117	225000	
51 V	45		1	0.51	0.51	ppb	2.59	1616	2700	
52 Cr	45		1	0.74	0.74	ppb	3.65	3149	2700	
55 Mn	45		1	161.80	161.80	ppb	1.62	437650	2700	
56 Fe	45		1	83.39	83.39	ppb	1.65	277852	202500	
59 Co	45		1	0.07	0.07	ppb	5.32	419	2700	
60 Ni	45		1	4.26	4.26	ppb	1.05	5544	2700	
65 Cu	45		1	4.57	4.57	ppb	1.16	7947	2700	
66 Zn	45		1	3.49	3.49	ppb	9.87	8345	2700	
75 As	115		1	0.19	0.19	ppb	2.75	90	2250	
78 Se	115		1	0.03	0.03	ppb	531.42	46	2700	
83 Kr	115		2	----	-----	ppb	-----	331	2700	
95 Mo	115		2	0.00	0.00	ppb	296.60	97	2700	
107 Ag	115		2	0.01	0.01	ppb	21.05	222	900	
111 Cd	115		2	1.68	1.68	ppb	1.13	3589	2700	
121 Sb	115		2	-0.10	-0.10	ppb	6.18	387	1125	
137 Ba	159		2	73.82	73.82	ppb	0.31	239499	1350	
205 Tl	165		2	-0.03	-0.03	ppb	8.34	1267	900	
206 (Pb)	165		2	0.06	0.06	ppb	9.07	1133	2700	
207 (Pb)	165		2	0.06	0.06	ppb	5.62	1016	2700	
208 Pb	165		2	0.06	0.06	ppb	4.01	4559	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	57672	0.49	65759	87.7	70 - 150	
45 Sc	2	735944	0.72	655675	112.2	70 - 150	
115 In	1	225699	1.00	253217	89.1	70 - 150	
115 In	2	924429	2.06	856794	107.9	70 - 150	
159 Tb	1	614534	0.83	590996	104.0	70 - 150	
159 Tb	2	1459416	1.25	1335152	109.3	70 - 150	
165 Ho	1	604424	1.60	580759	104.1	70 - 150	
165 Ho	2	1424357	0.94	1322545	107.7	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\044SMPL.D\044SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\044SMPL.D\044SMPL.D#
 Date Acquired: Mar 30 2015 03:00 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-026
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2409
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.01	0.01	ppb	34.10	117	2700	
23 Na	45	1		8,179.00	8179.00	ppb	13.45	8326905	225000	
24 Mg	45	1		2,690.00	2690.00	ppb	12.27	1539864	225000	
27 Al	45	1		53.26	53.26	ppb	13.42	17886	67500	
39 K	45	1		2,530.00	2530.00	ppb	13.89	1200818	225000	
44 Ca	45	1		6,818.00	6818.00	ppb	12.69	147788	225000	
51 V	45	1		0.79	0.79	ppb	9.96	2238	2700	
52 Cr	45	1		7.84	7.84	ppb	13.80	24995	2700	
55 Mn	45	1		14.84	14.84	ppb	12.84	36924	2700	
56 Fe	45	1		17.67	17.67	ppb	15.77	61657	202500	
59 Co	45	1		0.07	0.07	ppb	14.90	371	2700	
60 Ni	45	1		0.48	0.48	ppb	18.74	645	2700	
65 Cu	45	1		0.75	0.75	ppb	30.25	1678	2700	
66 Zn	45	1		-4.73	-4.73	ppb	22.62	3547	2700	
75 As	115	1		0.30	0.30	ppb	21.65	119	2250	
78 Se	115	1		-0.18	-0.18	ppb	78.40	34	2700	
83 Kr	115	2		----	-----	ppb	-----	330	2700	
95 Mo	115	2		0.02	0.02	ppb	18.78	181	2700	
107 Ag	115	2		0.01	0.01	ppb	15.10	223	900	
111 Cd	115	2		0.08	0.08	ppb	10.69	189	2700	
121 Sb	115	2		-0.11	-0.11	ppb	1.25	361	1125	
137 Ba	159	2		27.33	27.33	ppb	0.69	87271	1350	
205 Tl	165	2		-0.04	-0.04	ppb	4.04	1096	900	
206 (Pb)	165	2		0.08	0.08	ppb	11.24	1339	2700	
207 (Pb)	165	2		0.07	0.07	ppb	20.58	1023	2700	
208 Pb	165	2		0.08	0.08	ppb	3.50	5134	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	53257	13.52	65759	81.0	70 - 150	
45 Sc	2	724490	0.68	655675	110.5	70 - 150	
115 In	1	210424	12.47	253217	83.1	70 - 150	
115 In	2	907299	0.27	856794	105.9	70 - 150	
159 Tb	1	568459	13.51	590996	96.2	70 - 150	
159 Tb	2	1428842	1.48	1335152	107.0	70 - 150	
165 Ho	1	560162	13.35	580759	96.5	70 - 150	
165 Ho	2	1408906	0.78	1322545	106.5	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\045SMPL.D\045SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\045SMPL.D\045SMPL.D#
 Date Acquired: Mar 30 2015 03:06 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-028
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2410
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.01	0.01	ppb	56.27	86	2700	
23 Na	45	1		7,625.00	7625.00	ppb	1.32	8536795	225000	
24 Mg	45	1		3,137.00	3137.00	ppb	1.17	1971171	225000	
27 Al	45	1		45.05	45.05	ppb	2.20	16676	67500	
39 K	45	1		590.60	590.60	ppb	1.07	354100	225000	
44 Ca	45	1		6,337.00	6337.00	ppb	1.31	150918	225000	
51 V	45	1		0.96	0.96	ppb	4.08	2972	2700	
52 Cr	45	1		0.36	0.36	ppb	5.70	1871	2700	
55 Mn	45	1		2.15	2.15	ppb	0.58	6174	2700	
56 Fe	45	1		7.86	7.86	ppb	1.83	36255	202500	
59 Co	45	1		0.04	0.04	ppb	4.42	303	2700	
60 Ni	45	1		0.36	0.36	ppb	3.07	554	2700	
65 Cu	45	1		0.94	0.94	ppb	3.81	2161	2700	
66 Zn	45	1		-0.96	-0.96	ppb	8.10	5950	2700	
75 As	115	1		0.28	0.28	ppb	0.78	122	2250	
78 Se	115	1		-0.05	-0.05	ppb	116.35	42	2700	
83 Kr	115	2		----	-----	ppb	-----	328	2700	
95 Mo	115	2		0.00	0.00	ppb	211.59	107	2700	
107 Ag	115	2		0.00	0.00	ppb	421.39	164	900	
111 Cd	115	2		0.03	0.03	ppb	24.31	82	2700	
121 Sb	115	2		-0.11	-0.11	ppb	1.88	319	1125	
137 Ba	159	2		13.10	13.10	ppb	1.32	41600	1350	
205 Tl	165	2		-0.05	-0.05	ppb	1.51	797	900	
206 (Pb)	165	2		0.02	0.02	ppb	14.71	815	2700	
207 (Pb)	165	2		0.01	0.01	ppb	57.44	634	2700	
208 Pb	165	2		0.02	0.02	ppb	26.57	3131	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	57815	0.76	65759	87.9	70 - 150	
45 Sc	2	724552	1.20	655675	110.5	70 - 150	
115 In	1	225352	0.13	253217	89.0	70 - 150	
115 In	2	902294	2.18	856794	105.3	70 - 150	
159 Tb	1	609295	0.55	590996	103.1	70 - 150	
159 Tb	2	1407189	0.78	1335152	105.4	70 - 150	
165 Ho	1	602219	0.07	580759	103.7	70 - 150	
165 Ho	2	1396109	0.48	1322545	105.6	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\046SMPL.D\046SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\046SMPL.D\046SMPL.D#
 Date Acquired: Mar 30 2015 03:12 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-030
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2501
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	0.01	0.01	ppb	49.91	99	2700	
23 Na	45		1	17,410.00	17410.00	ppb	1.67	20124590	225000	
24 Mg	45		1	3,482.00	3482.00	ppb	1.89	2275543	225000	
27 Al	45		1	19.36	19.36	ppb	0.97	7670	67500	
39 K	45		1	1,307.00	1307.00	ppb	1.13	738931	225000	
44 Ca	45		1	13,630.00	13630.00	ppb	1.06	336174	225000	
51 V	45		1	1.49	1.49	ppb	3.16	4740	2700	
52 Cr	45		1	0.21	0.21	ppb	2.72	1400	2700	
55 Mn	45		1	8.69	8.69	ppb	1.33	24844	2700	
56 Fe	45		1	15.42	15.42	ppb	1.97	62954	202500	
59 Co	45		1	0.13	0.13	ppb	2.18	763	2700	
60 Ni	45		1	1.03	1.03	ppb	0.59	1473	2700	
65 Cu	45		1	0.53	0.53	ppb	11.15	1561	2700	
66 Zn	45		1	13.82	13.82	ppb	0.25	14541	2700	
75 As	115		1	0.44	0.44	ppb	5.55	184	2250	
78 Se	115		1	0.05	0.05	ppb	179.50	48	2700	
83 Kr	115		2	----	-----	ppb	-----	392	2700	
95 Mo	115		2	0.15	0.15	ppb	10.24	658	2700	
107 Ag	115		2	0.00	0.00	ppb	46.31	132	900	
111 Cd	115		2	2.20	2.20	ppb	1.30	4728	2700	
121 Sb	115		2	0.05	0.05	ppb	17.93	1528	1125	
137 Ba	159		2	27.63	27.63	ppb	0.51	90860	1350	
205 Tl	165		2	-0.04	-0.04	ppb	3.86	983	900	
206 (Pb)	165		2	0.21	0.21	ppb	5.77	2461	2700	
207 (Pb)	165		2	0.20	0.20	ppb	6.34	2054	2700	
208 Pb	165		2	0.20	0.20	ppb	1.95	9608	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	60138	1.06	65759	91.5	70 - 150	
45 Sc	2	741166	0.75	655675	113.0	70 - 150	
115 In	1	231317	0.81	253217	91.4	70 - 150	
115 In	2	930065	1.16	856794	108.6	70 - 150	
159 Tb	1	627039	0.77	590996	106.1	70 - 150	
159 Tb	2	1471419	0.26	1335152	110.2	70 - 150	
165 Ho	1	617362	0.96	580759	106.3	70 - 150	
165 Ho	2	1447916	0.88	1322545	109.5	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\047SMPL.D\047SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\047SMPL.D\047SMPL.D#
 Date Acquired: Mar 30 2015 03:18 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-032
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2502
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		0.00	0.00	ppb	148.50	73	2700	
23 Na	45	1		51,050.00	51050.00	ppb	2.04	56610728	225000	
24 Mg	45	1		1,014.00	1014.00	ppb	1.64	638350	225000	
27 Al	45	1		15.43	15.43	ppb	0.47	5961	67500	
39 K	45	1		1,616.00	1616.00	ppb	0.82	865766	225000	
44 Ca	45	1		4,487.00	4487.00	ppb	0.88	107401	225000	
51 V	45	1		1.33	1.33	ppb	2.28	4090	2700	
52 Cr	45	1		18.78	18.78	ppb	1.40	64999	2700	
55 Mn	45	1		54.66	54.66	ppb	1.46	148708	2700	
56 Fe	45	1		42.79	42.79	ppb	0.80	148566	202500	
59 Co	45	1		0.18	0.18	ppb	0.77	971	2700	
60 Ni	45	1		1.56	1.56	ppb	1.44	2095	2700	
65 Cu	45	1		0.49	0.49	ppb	5.63	1437	2700	
66 Zn	45	1		6.20	6.20	ppb	1.63	9855	2700	
75 As	115	1		0.42	0.42	ppb	3.59	172	2250	
78 Se	115	1		-0.07	-0.07	ppb	133.73	41	2700	
83 Kr	115	2		----	-----	ppb	-----	381	2700	
95 Mo	115	2		0.08	0.08	ppb	15.75	388	2700	
107 Ag	115	2		0.00	0.00	ppb	53.19	152	900	
111 Cd	115	2		1.20	1.20	ppb	1.39	2511	2700	
121 Sb	115	2		0.07	0.07	ppb	9.26	1690	1125	
137 Ba	159	2		15.06	15.06	ppb	0.87	48747	1350	
205 Tl	165	2		-0.05	-0.05	ppb	7.49	777	900	
206 (Pb)	165	2		0.21	0.21	ppb	3.18	2353	2700	
207 (Pb)	165	2		0.21	0.21	ppb	1.85	2045	2700	
208 Pb	165	2		0.21	0.21	ppb	2.39	9475	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	57921	0.81	65759	88.1	70 - 150	
45 Sc	2	720709	0.15	655675	109.9	70 - 150	
115 In	1	223088	0.03	253217	88.1	70 - 150	
115 In	2	897928	0.56	856794	104.8	70 - 150	
159 Tb	1	607565	0.53	590996	102.8	70 - 150	
159 Tb	2	1437641	0.86	1335152	107.7	70 - 150	
165 Ho	1	598339	0.26	580759	103.0	70 - 150	
165 Ho	2	1412580	0.93	1322545	106.8	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\048SMPL.D\048SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\048SMPL.D\048SMPL.D#
 Date Acquired: Mar 30 2015 03:24 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 83866-034
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2503
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	0.00	0.00	ppb	217.34	64	2700	
23 Na	45		1	69.31	69.31	ppb	0.49	190016	225000	
24 Mg	45		1	7.91	7.91	ppb	1.05	5248	225000	
27 Al	45		1	7.07	7.07	ppb	1.37	2937	67500	
39 K	45		1	11.50	11.50	ppb	19.03	66223	225000	
44 Ca	45		1	192.60	192.60	ppb	2.41	5795	225000	
51 V	45		1	1.25	1.25	ppb	1.97	3834	2700	
52 Cr	45		1	0.07	0.07	ppb	6.13	869	2700	
55 Mn	45		1	0.15	0.15	ppb	8.90	755	2700	
56 Fe	45		1	6.09	6.09	ppb	0.52	30752	202500	
59 Co	45		1	-0.01	-0.01	ppb	26.45	49	2700	
60 Ni	45		1	0.01	0.01	ppb	177.97	106	2700	
65 Cu	45		1	0.25	0.25	ppb	23.16	1059	2700	
66 Zn	45		1	-8.41	-8.41	ppb	0.64	1910	2700	
75 As	115		1	0.31	0.31	ppb	8.33	134	2250	
78 Se	115		1	-0.14	-0.14	ppb	100.37	39	2700	
83 Kr	115		2	----	-----	ppb	-----	349	2700	
95 Mo	115		2	-0.01	-0.01	ppb	56.85	73	2700	
107 Ag	115		2	0.00	0.00	ppb	128.16	170	900	
111 Cd	115		2	0.00	0.00	ppb	100.48	22	2700	
121 Sb	115		2	-0.11	-0.11	ppb	1.50	317	1125	
137 Ba	159		2	0.04	0.04	ppb	58.86	888	1350	
205 Tl	165		2	-0.05	-0.05	ppb	0.78	668	900	
206 (Pb)	165		2	0.03	0.03	ppb	12.59	906	2700	
207 (Pb)	165		2	0.02	0.02	ppb	11.61	716	2700	
208 Pb	165		2	0.03	0.03	ppb	4.86	3493	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	58101	0.13	65759	88.4	70 - 150	
45 Sc	2	728029	0.76	655675	111.0	70 - 150	
115 In	1	227298	0.73	253217	89.8	70 - 150	
115 In	2	931103	0.49	856794	108.7	70 - 150	
159 Tb	1	615007	0.68	590996	104.1	70 - 150	
159 Tb	2	1440883	1.74	1335152	107.9	70 - 150	
165 Ho	1	600561	0.54	580759	103.4	70 - 150	
165 Ho	2	1424823	1.17	1322545	107.7	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\049SMPL.D\049SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\049SMPL.D\049SMPL.D#
 Date Acquired: Mar 30 2015 03:30 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: RINSE
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3101
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Mar 30 2015 11:24 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.60	0.60	ppb	6.43	2939	2700	
23 Na	45	1	252.00	252.00	ppb	0.86	404982	225000	
24 Mg	45	1	117.60	117.60	ppb	0.75	76814	225000	
27 Al	45	1	50.56	50.56	ppb	1.50	19344	67500	
39 K	45	1	111.20	111.20	ppb	0.74	119669	225000	
44 Ca	45	1	194.30	194.30	ppb	1.62	6015	225000	
51 V	45	1	1.83	1.83	ppb	0.29	5757	2700	
52 Cr	45	1	0.63	0.63	ppb	2.41	2892	2700	
55 Mn	45	1	0.68	0.68	ppb	4.90	2273	2700	
56 Fe	45	1	124.60	124.60	ppb	1.35	425624	202500	
59 Co	45	1	0.68	0.68	ppb	0.60	3608	2700	
60 Ni	45	1	0.67	0.67	ppb	2.23	996	2700	
65 Cu	45	1	0.62	0.62	ppb	5.83	1714	2700	
66 Zn	45	1	-10.72	-10.72	ppb	0.70	667	2700	
75 As	115	1	0.84	0.84	ppb	5.81	335	2250	
78 Se	115	1	0.90	0.90	ppb	18.44	84	2700	
83 Kr	115	2	----	-----	ppb	-----	357	2700	
95 Mo	115	2	1.29	1.29	ppb	2.63	5118	2700	
107 Ag	115	2	0.25	0.25	ppb	2.36	2855	900	
111 Cd	115	2	0.61	0.61	ppb	2.75	1352	2700	
121 Sb	115	2	0.44	0.44	ppb	6.10	4661	1125	
137 Ba	159	2	0.44	0.44	ppb	5.19	2231	1350	
205 Tl	165	2	0.46	0.46	ppb	3.49	14530	900	
206 (Pb)	165	2	0.54	0.54	ppb	5.26	5271	2700	
207 (Pb)	165	2	0.53	0.53	ppb	5.42	4456	2700	
208 Pb	165	2	0.52	0.52	ppb	1.90	20614	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	59896	0.47	65759	91.1	70 - 150	
45 Sc	2	748965	0.42	655675	114.2	70 - 150	
115 In	1	233685	0.93	253217	92.3	70 - 150	
115 In	2	949897	0.60	856794	110.9	70 - 150	
159 Tb	1	630246	0.26	590996	106.6	70 - 150	
159 Tb	2	1482836	0.28	1335152	111.1	70 - 150	
165 Ho	1	616254	1.44	580759	106.1	70 - 150	
165 Ho	2	1462667	0.84	1322545	110.6	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\050_CCV.D\050_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\050_CCV.D\050_CCV.D#
 Date Acquired: Mar 30 2015 03:36 pm
 Operator: GK
 Sample Name: CCV V-206947
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3103
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: 6-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	48.16 ppb	2.78	237458	50	96.3	90 - 110	
23 Na	45	1	5147.00 ppb	2.01	6792914	5000	102.9	90 - 110	
24 Mg	45	1	5218.00 ppb	1.69	3840090	5000	104.4	90 - 110	
27 Al	45	1	1547.00 ppb	1.30	656499	1500	103.1	90 - 110	
39 K	45	1	4887.00 ppb	0.75	2919861	5000	97.7	90 - 110	
44 Ca	45	1	4895.00 ppb	1.59	136863	5000	97.9	90 - 110	
51 V	45	1	50.25 ppb	1.53	176159	50	100.5	90 - 110	
52 Cr	45	1	50.75 ppb	2.53	204045	50	101.5	90 - 110	
55 Mn	45	1	50.19 ppb	1.73	159713	50	100.4	90 - 110	
56 Fe	45	1	5105.00 ppb	2.04	19194150	5000	102.1	90 - 110	
59 Co	45	1	52.17 ppb	1.92	307722	50	104.3	90 - 110	
60 Ni	45	1	53.27 ppb	2.55	80079	50	106.5	90 - 110	
65 Cu	45	1	53.57 ppb	2.71	101073	50	107.1	90 - 110	
66 Zn	45	1	45.41 ppb	3.05	36479	50	90.8	90 - 110	
75 As	115	1	50.00 ppb	1.46	20457	50	100.0	90 - 110	
78 Se	115	1	236.10 ppb	2.62	10995	250	94.4	90 - 110	
83 Kr	115	2	----- ppb -----	-----	369	50	#VALUE! #####	90 - 110	
95 Mo	115	2	48.56 ppb	0.80	194255	50	97.1	90 - 110	
107 Ag	115	2	48.53 ppb	1.22	541529	50	97.1	90 - 110	
111 Cd	115	2	48.82 ppb	1.42	110181	50	97.6	90 - 110	
121 Sb	115	2	48.48 ppb	0.81	388811	50	97.0	90 - 110	
137 Ba	159	2	49.33 ppb	0.61	169473	50	98.7	90 - 110	
205 Tl	165	2	48.70 ppb	1.83	1355390	50	97.4	90 - 110	
206 (Pb)	165	2	47.93 ppb	2.31	418557	50	95.9	90 - 110	
207 (Pb)	165	2	48.16 ppb	3.02	366900	50	96.3	90 - 110	
208 Pb	165	2	47.36 ppb	2.64	1685648	50	94.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	67734	1.84	65759	103.0	80 - 120	
45 Sc	2	773841	2.99	655675	118.0	80 - 120	
115 In	1	255661	1.05	253217	101.0	80 - 120	
115 In	2	978641	0.72	856794	114.2	80 - 120	
159 Tb	1	672368	1.07	590996	113.8	80 - 120	
159 Tb	2	1543079	1.61	1335152	115.6	80 - 120	
165 Ho	1	661896	0.80	580759	114.0	80 - 120	
165 Ho	2	1508736	1.82	1322545	114.1	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\051_CCV.D\051_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\051_CCV.D\051_CCV.D#
 Date Acquired: Mar 30 2015 03:42 pm
 Operator: GK
 Sample Name: LLCCV V-206949
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3105
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Fail
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45		2	0.48 ppb	1.47	2338	1	96.9	70 - 130	
23 Na	45		1	247.80 ppb	1.30	435559	250	99.1	70 - 130	
24 Mg	45		1	259.50 ppb	0.73	184147	250	103.8	70 - 130	
27 Al	45		1	101.40 ppb	0.97	41835	100	101.4	70 - 130	
39 K	45		1	234.80 ppb	1.01	199661	250	93.9	70 - 130	
44 Ca	45		1	210.50 ppb	3.00	6978	250	84.2	70 - 130	
51 V	45		1	0.99 ppb	1.32	3448	1	99.1	70 - 130	
52 Cr	45		1	0.91 ppb	1.40	4211	1	90.5	70 - 130	
55 Mn	45		1	2.83 ppb	2.77	9031	3	94.2	70 - 130	
56 Fe	45		1	154.80 ppb	1.12	572581	150	103.2	70 - 130	
59 Co	45		1	1.03 ppb	0.56	5928	1	102.8	70 - 130	
60 Ni	45		1	1.51 ppb	1.98	2289	2	100.5	70 - 130	
65 Cu	45		1	5.03 ppb	3.94	9808	5	100.6	70 - 130	
66 Zn	45		1	-0.15 ppb	93.43	7206	10	-1.5	70 - 130	FAIL
75 As	115		1	0.91 ppb	2.88	394	1	91.3	70 - 130	
78 Se	115		1	4.59 ppb	6.91	261	5	91.7	70 - 130	
83 Kr	115		2	----- ppb -----		350	1	#VALUE! #####		
95 Mo	115		2	0.94 ppb	4.54	3782	1	93.8	70 - 130	
107 Ag	115		2	0.48 ppb	2.13	5466	1	96.9	70 - 130	
111 Cd	115		2	0.95 ppb	1.64	2129	1	95.4	70 - 130	
121 Sb	115		2	1.27 ppb	1.49	11180	2	84.7	70 - 130	
137 Ba	159		2	2.09 ppb	1.15	7772	3	83.7	70 - 130	
205 Tl	165		2	0.84 ppb	1.70	24989	1	84.2	70 - 130	
206 (Pb)	165		2	1.36 ppb	1.26	12284	2	90.7	70 - 130	
207 (Pb)	165		2	1.40 ppb	1.88	10975	2	93.1	70 - 130	
208 Pb	165		2	1.35 ppb	1.35	49492	2	89.8	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	65200	0.71	65759	99.2	80 - 120	
45 Sc	2	739121	0.73	655675	112.7	80 - 120	
115 In	1	253581	1.01	253217	100.1	80 - 120	
115 In	2	959009	1.20	856794	111.9	80 - 120	
159 Tb	1	652340	1.12	590996	110.4	80 - 120	
159 Tb	2	1505864	0.40	1335152	112.8	80 - 120	
165 Ho	1	645765	0.85	580759	111.2	80 - 120	
165 Ho	2	1475317	0.43	1322545	111.6	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\SW33015A.b\052_CCB.D\052_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\SW33015A.b\052_CCB.D\052_CCB.D#
 Date Acquired: Mar 30 2015 03:48 pm
 Operator: GK
 Sample Name: CCB V-206944
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3102
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal Update: Mar 30 2015 11:24 am
 Sample Type: 6-CCB
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.001 ppb		132.69	49	0.50	
23 Na	45	1	7.805 ppb		13.02	137615	250.00	
24 Mg	45	1	1.451 ppb		6.27	1326	250.00	
27 Al	45	1	1.297 ppb		40.23	944	100.00	
39 K	45	1	-0.253 ppb		513.86	68219	250.00	
44 Ca	45	1	-30.950 ppb		3.19	552	250.00	
51 V	45	1	0.028 ppb		12.92	199	1.00	
52 Cr	45	1	-0.054 ppb		12.26	517	1.00	
55 Mn	45	1	-0.058 ppb		16.12	223	3.00	
56 Fe	45	1	0.543 ppb		26.74	14543	150.00	
59 Co	45	1	-0.003 ppb		77.73	74	1.00	
60 Ni	45	1	-0.038 ppb		10.18	55	1.50	
65 Cu	45	1	-0.201 ppb		5.02	380	5.00	
66 Zn	45	1	-11.360 ppb		0.41	337	10.00	
75 As	115	1	0.005 ppb		234.68	26	1.00	
78 Se	115	1	-0.129 ppb		79.10	43	5.00	
83 Kr	115	2	----- ppb		-----	346	1.00	
95 Mo	115	2	0.001 ppb		754.47	112	1.00	
107 Ag	115	2	-0.008 ppb		18.45	80	0.50	
111 Cd	115	2	0.002 ppb		82.55	22	1.00	
121 Sb	115	2	-0.130 ppb		0.72	207	1.50	
137 Ba	159	2	-0.158 ppb		3.92	262	2.50	
205 Tl	165	2	-0.049 ppb		2.00	768	1.00	
206 (Pb)	165	2	-0.021 ppb		14.18	508	1.50	
207 (Pb)	165	2	-0.023 ppb		15.40	413	1.50	
208 Pb	165	2	-0.022 ppb		5.79	1937	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	65687	0.95	65759	99.9	80 - 120	
45 Sc	2	740362	0.42	655675	112.9	80 - 120	
115 In	1	251383	0.20	253217	99.3	80 - 120	
115 In	2	974044	0.82	856794	113.7	80 - 120	
159 Tb	1	656983	0.27	590996	111.2	80 - 120	
159 Tb	2	1510307	0.61	1335152	113.1	80 - 120	
165 Ho	1	639095	0.36	580759	110.0	80 - 120	
165 Ho	2	1482232	0.61	1322545	112.1	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\SW33015A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

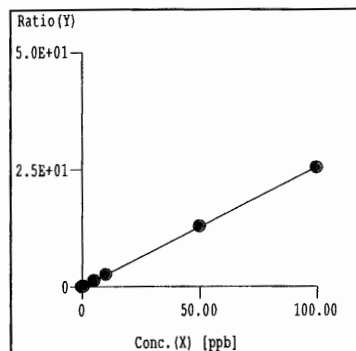
0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

=== Graph Detail ===

Step Mass Element
(2) 9 Be

ISTD
45

Unit
ppb

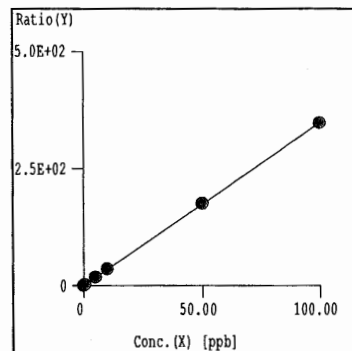


Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 2.549E-001 \cdot X + 2.983E-003$
 $X = 3.922E+000 \cdot Y - 1.170E-002$
 $DL = 7.314E-03 \text{ ppb}$
 $BEC = 1.170E-02 \text{ ppb}$

Step Mass Element
(1) 59 Co

ISTD
45

Unit
ppb

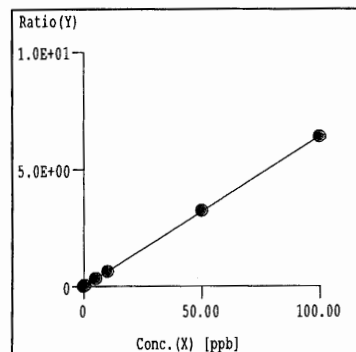


Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 3.483E+000 \cdot X + 5.499E-002$
 $X = 2.871E-001 \cdot Y - 1.579E-002$
 $DL = 2.899E-03 \text{ ppb}$
 $BEC = 1.579E-02 \text{ ppb}$

Step Mass Element
(1) 75 As

ISTD
115

Unit
ppb

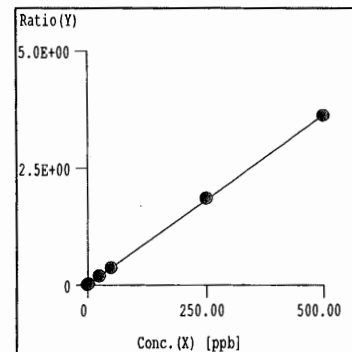


Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 6.394E-002 \cdot X + 3.861E-003$
 $X = 1.564E+001 \cdot Y - 6.038E-002$
 $DL = 2.028E-02 \text{ ppb}$
 $BEC = 6.038E-02 \text{ ppb}$

Step Mass Element
(1) 78 Se

ISTD
115

Unit
ppb

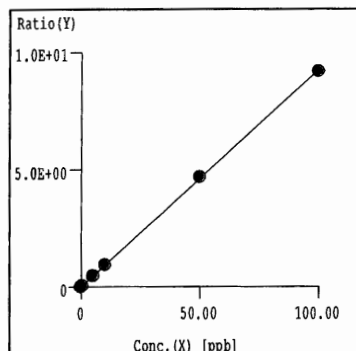


Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 7.254E-003 \cdot X + 7.830E-003$
 $X = 1.379E+002 \cdot Y - 1.079E+000$
 $DL = 2.062E-01 \text{ ppb}$
 $BEC = 1.079 \text{ ppb}$

Step Mass Element
(2) 111 Cd

ISTD
115

Unit
ppb

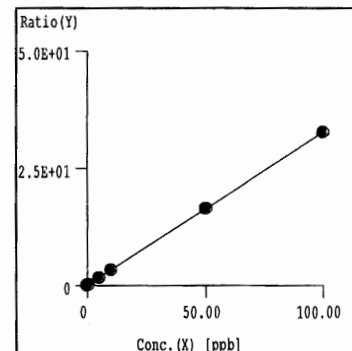


Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 9.224E-002 \cdot X + 7.618E-004$
 $X = 1.084E+001 \cdot Y - 8.258E-003$
 $DL = 5.386E-03 \text{ ppb}$
 $BEC = 8.258E-03 \text{ ppb}$

Step Mass Element
(2) 121 Sb

ISTD
115

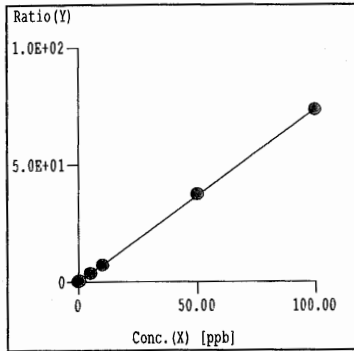
Unit
ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 3.268E-001 \cdot X + 5.094E-002$
 $X = 3.060E+000 \cdot Y - 1.559E-001$
 $DL = 1.119E-03 \text{ ppb}$
 $BEC = 1.559E-01 \text{ ppb}$

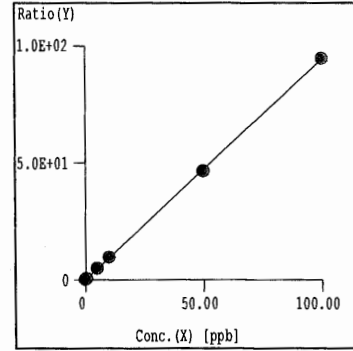
=== Graph Detail ===

Step	Mass Element	ISTD	Unit
(2)	205 Tl	165	ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 7.368E-001 \cdot X + 5.707E-002$
 $X = 1.357E+000 \cdot Y - 7.745E-002$
DL = $8.481E-03$ ppb
BEC = $7.745E-02$ ppb

Step	Mass Element	ISTD	Unit
(2)	208 Pb	165	ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 9.424E-001 \cdot X + 7.265E-002$
 $X = 1.061E+000 \cdot Y - 7.709E-002$
DL = $7.281E-03$ ppb
BEC = $7.709E-02$ ppb

Metal Data
Digestion Logbook Data

Hampton-Clarke/Veritech

ICP SAMPLE PREPARATION LOGANALYTICAL METHOD: 3010A 3005A 3050B (6020) 200.7/200.8 OTHER _____Batch No.: 17099 Analyst: ArmQC Number: 42362 Prep Date: 3/25/15Matrix: SW846-6019/6020 Reviewed By: SB

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50mL	50mL	10mL	20mL		--	
LCS	↓	↓				--	
LCSD	↓	↓				--	
1.83866-011	100mL	100mL					
MR ↓ -011	50mL	50mL					
MS ↓ -012							
MSD ↓ -013							
2.83866-001							
3. ↓ -003							
4. ↓ -005							
5. ↓ -007							
6. ↓ -009							
7. ↓ -017							
8. ↓ -019							
9. ↓ -021							
10. ↓ -023							
11. ↓ -025							
12. ↓ -027							
13. ↓ -029							
14. ↓ -031							
15. ↓ -033							(7B)
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 92.1 C (90-95° C)

	Volume mL	Lot #
LCS, LCSD	0.25	V-8934, 8935
LLCS, LLCSD		V-
MS, MSD	0.25	V-8934, 8935
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO ₃	3	V-9196
HCl		V-
H ₂ O ₂		V-

Acid	Vol mL	Lot#
1:1 HNO ₃	5	V-
1:1 HCl	5	V-20502-202629

Relinquished By Arm Date 3/25/15
Received By SB Date 3/25/15

0160

Hampton-Clarke/Veritech

ICP SAMPLE PREPARATION LOGANALYTICAL METHOD: 3010A 3005A 3050B (6020) 200.7/200.8 OTHER _____Batch No.: 17600 Analyst: AnnQC Number: 42303 Prep Date: 3/25/15Matrix: SW840-0010/0020 Reviewed By: SA

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50mL	50mL	10mL	20mL		--	
LCS	↓	↓				--	
LCSD	↓	↓				--	
1.83866-014	100mL	100mL					
MR -014	50mL	50mL					
MS -015							
MSD -016							
2.83866-002							
3. -004							
4. -006							
5. -008							
6. -010							
7. -018							
8. -020							
9. -022							
10. -024							
11. -026							
12. -028							
13. -030							
14. -032							
15. -034	↓	↓	↓	↓			(FB)
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 93.4 C (90-95° C)

	Volume mL	Lot #
LCS, LCSD	0.25mL	V-8394, 8395
LLLCS, LLLCSD		V-
MS, MSD	0.25mL	V-8394, 8395
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO ₃	3	V-9196
HCl		V-
H ₂ O ₂		V-

Acid	Vol mL	Lot#
1:1 HNO ₃		V-
1:1 HCl	5	V-202629

Relinquished By Ann Date 3/25/15Received By S Date 3/25/15

B158

Hampton-Clarke/Vertech

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B (6020) 200.7/200.8 OTHER

Batch No.: 17600

Analyst: Jm

QC Number:

Prep Date: 3/30/15

Matrix: SW846

Reviewed By: SB

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml				--	
LCS						--	
LCSD						--	
12C 83866-014	100ml	100ml					
MR 83866-014	50ml	50ml					
MS 83866-014							
MSD 83866-014							
2. -002							
3. -004							
4. -006							
5. -008							
6. -010							
7. -018							
8. -020							
9. -022							
10. -024							
11. -026							
12. -028							
13. -030							
14. -032							
15. -034							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 930 C (90-95° C)

	Volume mL	Lot #
LCS, LCSD	0.25ml	V-8934, 8935
LLCS, LLCSD		V-
MS, MSD	0.25ml	V-8934, 8935
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO ₃	3ml	V- 9196
HCl		V-
H ₂ O ₂		V-

Acid	Vol mL	Lot#
1:1 HNO ₃		V-
1:1 HCl	5ml	V-205022229

Relinquished By: Jm

Date: 3/30/15

Received By: SB

Date: 3/30/15

0185

HG SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 245.1 (470A) 7471B OTHER _____

Batch No.: 17599

Analyst: ER

QC Number: QC42362

Prep Date: 3/23/15

Matrix: Aqueous (SW846)

Review By: CJA

LAB ID#	MERCURY		COMMENTS
	INITIAL	FINAL	
Method blank	25ml	25ml	
LCS			
LCSD			
1 AC 83866-011			
MR AC 83866-011			
MS AC 83866-012			
MSD AC 83866-001			
2 AC 83866-003			
3 AC 83866-005			
4 AC 83866-007			
5 AC 83866-009			
6 AC 83866-017			
7 AC 83866-019			
8 AC 83866-021			
9 AC 83866-023			
10 AC 83866-025			
11 AC 83866-027			
12 AC 83866-029			
13 AC 83866-031			
14 AC 83866-033	✓	✓	(FB)
15			
16			
17			
18			
19			
20			

Lot Numbers	Acid	Volume (mL)	Lot #
KmnO ₄ : V- 203662	HNO ₃	0.625 ml	V- 9067
K ₂ S ₂ O ₈ : V- 198008	HCl		V-
NH ₂ OH: V- 206098	H ₂ SO ₄	1.25 ml	V- 9081
	Aqua Regia		V-

**Block Temp.: 92.1 °C
Time In Block: 11:45
Time Out of Block: 1:45

Spike Volume & Lot #

LCS V- 206587 0.15g / (25 ml)

MS V- 206587 0.250 ml

Standards/Control Batch B- 18986

**Temperature ranges:

245.1 / 7470A: 90-95C

7471B: 92-98C

Relinquished By: ER

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriproq using the standard batch number and the corresponding V #s.

HG SAMPLE PREPARATION LOG

5032012 0761
Harrington-Hill and AssociatesANALYTICAL METHOD: 245.1 7470A 7471B OTHER _____

Batch No.:

17600

Analyst:

Ann

QC Number:

42303

Prep Date:

3/25/15

Matrix:

SW846

Review By:

CJA

LAB ID#	MERCURY		COMMENTS
	INITIAL	FINAL	
Method blank	<u>25mL</u>	<u>25mL</u>	
LCS			
LCS D			
1 <u>83866-014</u>			
MR <u>-014</u>			
MS <u>-015</u>			
MSD <u>-016</u>			
2 <u>83866-002</u>			
3 <u>-004</u>			
4 <u>-006</u>			
5 <u>-008</u>			
6 <u>-010</u>			
7 <u>-018</u>			
8 <u>-020</u>			
9 <u>-022</u>			
10 <u>-024</u>			
11 <u>-026</u>			
12 <u>-028</u>			
13 <u>-030</u>			
14 <u>-032</u>			
15 <u>-034</u>			<u>FB</u>
16			
17			
18			
19			
20			

Lot Numbers	Acid	Volume (mL)	Lot #
KmnO ₄ V- <u>203602</u>	HNO ₃	<u>0.025mL</u>	V- <u>9067</u>
K ₂ S ₂ O ₈ V- <u>198008</u>	HCl		V-
NH ₄ OH V- <u>206098</u>	H ₂ SO ₄	<u>1.25mL</u>	V- <u>9081</u>
	Aqua Regia		V-

**Block Temp <u>93.4</u> °C
Time In Block: <u>11:00</u>
Time Out of Block: <u>13:00</u>

Spike Volume & Lot #

LCS V- 206812 0.15g (0.25 ml)MS V- 206812 0.250 mlStandards/Control Batch B- 206812 19001

**Temperature ranges:

245.1 / 7470A: 90-95C

7471B: 92-98C

Relinquished By: Ann

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriproq using the standard batch number and the corresponding V #s.



Last Page of Report