



Environment

Prepared for:
Superfund Standby Program
NYSDEC
Albany, NY

Prepared by:
AECOM
Chestnut Ridge, NY
60277021
April 2014

Groundwater Sampling Report
(November 2013 Sampling Event)
Liberty Industrial Finishing Site
Site #1-52-108
Work Assignment No. D007626-17

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Prepared By: Paul Kareth


Reviewed By: Robert Montione

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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 November 2013.

Seven 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.

This report focuses on the most recent (Round 7) 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. These samples reportedly contained elevated concentrations of 1,1,1-trichloroethane (1,1,1-TCA), cadmium,

chromium, and lead. 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. The results of the investigation reported concentrations of chromium in the onsite groundwater at concentrations exceeding the Class GA groundwater criterion (NYSDEC Technical and Operational Guidance Series [TOGS] 1.1.1). The Site was subsequently classified as a Class “2a” site on the Registry of Inactive Hazardous Waste Disposal Sites on December 12, 1987. Class “2a” was a temporary listing pending further investigation into the effects the site has on health and the environment. A Phase II Supplemental Site Investigation was performed in 1991. Chromium was reported in the on-site groundwater at concentrations ranging from 2,300 µg/l to 5,800 µg/L. Additionally, sediment/soil in the leaching pool contained elevated concentrations of cyanide (11,500 µg/L). 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. Wastes removed and disposed of include:

- cyanide plating waste;
- phosphates;
- copper strips;
- copper strip sludge;
- metal hydroxide sludge;
- cyanide salts;
- solutions containing chromium and cadmium;
- chromic acid;
- paint waste containing methyl ethyl ketone; and
- vapor degreaser waste containing trichloroethene.

Floors were swept and the material was drummed and disposed of as hazardous waste. Wood floors were removed from the factory building and stored onsite. Flooring was later disposed of by the USEPA as part of an Interim Remedial Action.

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 ROD specified the following remedial goals for the Site:

- Eliminate sources of contamination that exceed cleanup criteria: such as, surface soil, subsurface soil, and stormwater drywell or sanitary leaching pool sediments;
- Eliminate, to the extent practicable, ingestion of Groundwater affected by the Site that does not meet the NYSDEC Class GA Ambient Water Quality Criteria;
- Mitigate potential impacts to the environment from contaminated groundwater by natural attenuation; and,
- Eliminate the potential for direct human contact with contaminated soil onsite.

To achieve the goals of the ROD remedial measures were performed. These measures included:

- Clean-out of sediments in the stormwater and sanitary leaching galleries;
- Removal of on-site hazardous wastes;
- Delineation, excavation and disposal of on-site and off-site impacted soils;
- Cleaning and closure in place of USTs and associated piping;
- Placement of impermeable asphalt cap over USTs and associate piping;
- Demolition and removal of the building;
- Installation of perimeter security fence; and,
- Installation and periodic sampling of groundwater monitoring wells to assess groundwater quality.

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. Each tank was cleaned and sandblasted, filled to one foot below top with clean soil, and the remaining space (including fill pipes) was plugged with concrete. 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). The remedial actions performed at the site have effectively achieved the goals of the ROD with respect to mitigation of potential impacts to human health and the environment from on-site soils and sediment. These measures excavated and removed impacted soil and sediments to concentrations below applicable cleanup criteria or prevented the infiltration of precipitation through impacted media where excavation was deemed impractical.

The natural attenuation of site related dissolved phase COCs would be evaluated by the periodic sampling and analysis of eight groundwater monitoring wells (Figure 2). Two of the wells (MW-5 and MW-6) are located on site, two of the wells (MW-18 and MW-19) are located in the Brentwood Water District well field, two wells (MW-12 and MW-14) are located immediately downgradient of the COC source area plume, and two wells (MW-21 and MW-20) are located near the leading edge of the dissolved COC plume.

2.3 Deviations from the Sampling and Analysis Plan

For the Round 5, 6 and 7 sampling events, NYSDEC requested the addition of six monitoring wells to the sampling program. These wells included MW-1, MW-2, MW-3, and MW-4 which were located along the fence line in the southeast corner of the property. Monitoring wells MW-10 and MW-16 were also added. This well cluster is located in the municipal ball fields approximately 100 feet south of the former underground storage tanks. MW-1 was found to be dry during all three sampling events and a sample was not collected.

A second change to the sampling protocol for Rounds 5, 6 and 7 was the collection of both filtered and unfiltered metals samples at each location.

For the Round 6 and 7 sampling events, NYSDEC requested that all groundwater samples be collected using low-flow techniques instead of the volumetric purge technique utilized during the first five long term monitoring sampling events.

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 seventh round of groundwater sampling at the Liberty Industrial Finishing Site occurred on November 4, 5 and 6, 2013. Sampling was conducted in accordance with the Sampling and Analysis Plan (SAP) prepared by Earth Tech Northeast, Inc. (now AECOM), dated June 2007. The SAP is comprised of the Field Sampling Plan (FSP), the Quality Assurance Project Plan (QAPP) and the Safe Work Plan (SWP). All field work was performed in Level D personal protection.

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 eight wells also varies significantly from 49.3 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, MW-2 rose significantly, MW-3 decreased and MW-4 dropped significantly 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.

3.2 November 2013 Groundwater Sampling Event

Eight monitoring wells were identified for long term monitoring at the Site. The selected wells included MW-5, MW-6, MW-12, MW-14, MW-18, MW-19, MW-20, and MW-21. As part of the fifth sampling

event, NYSDEC requested the addition of six monitoring wells to the list of monitoring wells: MW-1, MW-2, MW-3, MW-4, and well pair MW-10/MW-16. MW-1 was dry at the time of sampling during rounds 5, 6, and 7. 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 and 7 sampling events, groundwater samples were collected using low-flow techniques. A peristaltic 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 Spectrum Analytical (formerly Mitkem 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 5 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 six sampling events. These metals include antimony, cadmium, chromium, copper, iron, lead, manganese, selenium, sodium and thallium.

Antimony – Class GA criterion of 3 µg/L

June 2006 – Detected in six of eight monitoring wells, two exceedances, maximum concentration of 3.7 µg/L in MW-5.

August 2007 – Detected in five of eight monitoring wells, five exceedances, maximum concentration of 11.2 µg/L in MW-12.

November 2009 – Detected in one of eight monitoring wells, MW-18, which exceeded the criterion at 9 µg/L.

March 2010 – Detected in three of eight monitoring wells, three exceedances, maximum concentration of 13.9 µg/L in MW-12.

May 2011 – Not detected in any of the 13 monitoring well samples (filtered or unfiltered samples).

August 2012 – Detected in one of 13 monitoring wells, one exceedance, 11.9 µg/L in MW-21D.

November 2013 – Detected in one of 13 monitoring wells, no exceedances (filtered or unfiltered samples).

Cadmium – Class GA criterion of 5 µg/L

June 2006 – Detected in six of eight monitoring wells, no exceedances.

August 2007 – Detected in all eight monitoring wells, three exceedances, maximum concentration of 12.6 µg/L in MW-6.

November 2008 – Detected in six of eight monitoring wells, two exceedances, maximum concentration of 59.1 µg/L in MW-14.

March 2010 – Detected in four of eight monitoring wells, two exceedances, maximum concentration of 205 µg/L in MW-12.

May 2011 – Detected in nine of 13 unfiltered samples, seven exceedances, maximum concentration of 54.8 µg/L in MW-12. Detected in nine of 13 filtered samples, four exceedances, maximum concentration of 19.8 in MW-4.

August 2012 – Detected in eight of 13 unfiltered samples, four exceedances, maximum concentration of 36.1 µg/L in MW-10. Detected in six of 13 filtered samples, three exceedances, maximum concentration of 34.9 µg/L in MW-10.

November 2013 – Detected in six of 13 unfiltered samples, three exceedances, maximum concentration of 49.0 µg/L in MW-10. Detected in five of 13 filtered samples, two exceedances, maximum concentration of 50.0 µg/L in MW-10.

Chromium – Class GA criterion of 50 µg/L

June 2006 – Detected in all eight monitoring wells, one exceedance, 95.8 µg/L in MW-14.

August 2007 – Detected in all eight monitoring wells, one exceedance, 248 µg/L in MW-14.

November 2008 – Detected in six of eight monitoring wells, one exceedance, 69.6 µg/L in MW-14.

March 2010 – Detected in all eight monitoring wells, two exceedances, maximum concentration of 251 µg/L in MW-12.

May 2011 – Detected in all 13 unfiltered samples, six exceedances, maximum concentration of 176 µg/L in MW-4. Detected in 11 of 13 filtered samples, two exceedances, maximum concentration of 142 µg/L in MW-4.

August 2012 – Detected in all 13 unfiltered samples, maximum concentration of 152 µg/L in MW-10. Detected in ten of 13 filtered samples, maximum concentration of 155 µg/L in MW-10.

November 2013 – Detected in five of 13 unfiltered samples, maximum concentration of 170 µg/L in MW-14. Detected in three of 13 filtered samples, maximum concentration of 140 µg/L in MW-10.

Copper – Class GA criterion of 200 µg/L

June 2006 – Detected in five of eight monitoring wells, no exceedances.

August 2007 – Detected in all eight monitoring wells, no exceedances.

November 2008 – Detected in four of eight monitoring wells, no exceedances.

March 2010 – Detected in six of eight monitoring wells, one exceedance, 377 µg/L in MW-12.

May 2011 – Detected in nine of 13 unfiltered samples, no exceedances. Detected in three of 13 filtered samples, no exceedances.

August 2012 – Detected in nine of 13 unfiltered samples, no exceedances. Detected in three of 13 filtered samples, no exceedances.

November 2013 – Not detected in any of the 13 samples (unfiltered or filtered).

Iron – Class GA criterion of 300 µg/L

June 2006 – Detected in all eight monitoring wells, three exceedances, maximum concentration of 1,710 µg/L in MW-20.

August 2007 – Detected in all eight monitoring wells, six exceedances, maximum concentration of 10,900 µg/L in MW-12.

November 2008 – Detected in six of eight monitoring wells, three exceedances, maximum concentration of 9,320 µg/L in MW-14.

March 2010 – Detected in all eight monitoring wells, five exceedances, maximum concentration of 38,100 µg/L in MW-12.

May 2011 – Detected in 12 of 13 unfiltered samples, six exceedances, maximum concentration of 11,300 µg/L in MW-12. Detected in six of 13 filtered samples, two exceedances, maximum concentration of 1,620 in MW-12.

August 2012 – Detected in 12 of 13 unfiltered samples, nine exceedances, maximum concentration of 2,000 µg/L in MW-4. Detected in six of 13 filtered samples. Maximum concentration of 1,180 µg/L in MW-14.

November 2013 – Detected in seven of 13 unfiltered samples, seven exceedances, maximum concentration of 6,000 µg/L in MW-14. Detected in one of 13 filtered samples, maximum concentration of 930 µg/L in MW-14.

Lead – Class GA criterion of 25 µg/L

June 2006 – Detected in four of eight monitoring wells, no exceedances.

August 2007 – Detected in all eight monitoring wells, one exceedance, 106 µg/L in MW-12.

November 2008 – Detected in four of eight monitoring wells, two exceedances, 221 µg/L in MW-14.

March 2010 – Detected in five of eight monitoring wells, two exceedances, maximum concentration of 553 µg/L in MW-12.

May 2011 – Detected in four of 13 unfiltered samples, two exceedances, maximum concentration of 230 µg/L in MW-12. Not detected in any of the 13 filtered samples.

August 2012 – Detected in two of 13 unfiltered samples, no exceedances. Detected in two of 13 filtered samples, no exceedances.

November 2013 – Detected in three of 13 unfiltered samples, one exceedance, 53 µg/L in MW-14. Detected in one of 13 filtered samples, no exceedances.

Manganese – Class GA criterion of 300 µg/L

June 2006 – Detected in all eight monitoring wells, no exceedances.

August 2007 – Detected in all eight monitoring wells, one exceedance, 547 µg/L in MW-18.

November 2008 – Detected in six of eight monitoring wells, one exceedance, 627 µg/L in MW-21.

March 2010 – Detected in all eight monitoring wells, one exceedance, 312 µg/L in MW-18.

May 2011 – Detected in ten of 13 unfiltered samples, two exceedances, maximum concentration of 597 µg/L in MW-16. Detected in six of 13 filtered samples, two exceedances, maximum concentration of 623 µg/L in MW-12.

August 2012 – Detected in ten of 13 unfiltered samples, one exceedance, 661 µg/L in MW-16. Detected in six of 13 filtered samples, two exceedances, maximum concentration of 632 µg/L in MW-16.

November 2013 – Detected in four of 13 unfiltered samples, two exceedances, maximum concentration of 1,200 µg/L in MW-18. Detected in three of 13 filtered samples, two exceedances, maximum concentration of 530 µg/L in MW-16.

Selenium – Class GA criterion of 10 µg/L

June 2006 – Detected in four of eight monitoring wells, no exceedances.

August 2007 – Detected in two of eight monitoring wells, no exceedances.

November 2008 – Not detected in any of the eight monitoring wells.

March 2010 – Detected in one of eight monitoring wells, one exceedance, 13.4 µg/L in MW-12.

May 2011 – Not detected in any of the 13 unfiltered or filtered samples.

August 2012 – Not detected in any of the 13 unfiltered or filtered samples.

November 2013 – Not detected in any of the 13 unfiltered or filtered samples.

Sodium – Class GA criterion of 20,000 µg/L

June 2006 – Detected in all eight monitoring wells, four exceedances, maximum concentration of 31,900 in MW-14.

August 2007 – Detected in all eight monitoring wells, four exceedances, maximum concentration of 31,100 µg/L in MW-20.

November 2008 – Detected in all eight monitoring wells, four exceedances, maximum concentration of 561,000 µg/L in MW-14.

March 2010 – Detected in all eight monitoring wells, two exceedances, maximum concentration of 39,600 µg/L in MW-2.

May 2011 – Detected in all 13 unfiltered samples, six exceedances, maximum concentration of 38,400 µg/L in MW-20. Detected in all 13 filtered samples, six exceedances, maximum concentration of 40,300 µg/L in MW-20.

August 2012 – detected in all 13 unfiltered samples, four exceedances, maximum concentration of 30,800 in MW-3. Detected in all 13 filtered samples, four exceedances, maximum concentration of 31,000 in MW-3.

November 2013 – detected in all 13 unfiltered samples, four exceedances, maximum concentration of 38,000 in MW-3. Detected in all 13 filtered samples, four exceedances, maximum concentration of 35,000 in MW-3.

Thallium – Class GA criterion of 0.50 µg/L

June 2006 – Not detected in any of the eight monitoring wells.

August 2007 – Detected in two of eight monitoring wells, two exceedances, maximum concentration of 3.4 µg/L in MW-14.

November 2008 – Not detected in any of the eight monitoring wells.

March 2010 – Not detected in any of the eight monitoring wells.

May 2011 – Not detected in any of the 13 unfiltered or filtered samples.

August 2012 – Not detected in any of the 13 unfiltered or filtered samples.

November 2013 – Not detected in any of the 13 unfiltered or filtered samples.

4.2 Filtered versus Unfiltered Metals Samples

Over the years, concentrations of total metals in groundwater samples at the Site tended to be highly variable between different sampling events, as did field measurements of turbidity at 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 6 (August 2012) and Round 7 (November 2013) 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 all 13 samples, ranging from 0 to 38.5 NTU (see the bottom row of Table 4). The turbidity was less than 20 NTU in ten samples and above 30 NTU in three samples. The total metals concentrations was expected to be higher in the more turbid samples with only small differences between the total metals and dissolved metals concentrations in samples with low turbidity. As all the Round 7 samples at the Site could be considered 'low turbidity' (i.e., all samples met the NYSDEC criterion of 50 NTU or less), it is somewhat difficult to evaluate differences among the samples although an apparent relationship between turbidity as measured in the field, and metals concentrations (e.g., aluminum) in the unfiltered samples.

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, potassium, and calcium) are not expected to be affected by filtering. Note also that depending on the redox conditions, magnesium may also be generally found in only the dissolved form. 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 four compounds were generally similar in the filtered and unfiltered samples indicating good reproducibility

in the sampling/analytic process, with one exception. In the MW-5 pairings the concentration of sodium in the filtered sample was 120.9 percent than the unfiltered, although the calcium ratio was only 112.5 percent.

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.

4.3 Round 7 (November 2013) 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 November 4, 5, and 6 and received in good condition by the laboratory (Hampton Clarke Veritech, Fairfield, New Jersey on November 6. Samples were analyzed for target analyte list (TAL) metals (unfiltered and filtered) as sample delivery group (SDG) AC75576. One field equipment blank was collected for both the filtered (LFB-11513F) and unfiltered (LFB-11513) samples. Samples LMW-2 (unfiltered) and LMW-2F (filtered) were designated as the QC samples (spike and duplicate analysis), for the Round 7 sampling event.

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, barium, beryllium, chromium, magnesium, potassium, and sodium, in sample AC75576-29 (LMW-2), and barium, beryllium, chromium, magnesium, and potassium, AC75576-30 (LMW-2F). All other laboratory QC criteria were met for SDG AC75576. No unusual occurrences were noted by the laboratory during the analysis of samples.

One filtered/unfiltered site-specific field duplicate groundwater sample pair (LMW-12 and 12F/LMW-512 and 512F) 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-12/LMW-512U), relative percent difference (RPD) ranged from 0.0 to 10.5 percent, with a median RPD of 3.6 percent, for 7 metals with results above the contract required detection limit. Precision was good in the filtered duplicate pair (12F/512F) for the 3 metals with results above the contract required detection limit, with RPDs ranging from 7.1 to 8.7 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). As discussed above, it appears the in the sample set of LMW-5 (U and F) the filtered sodium (which should be in the dissolved phase) exceeded the filtered by 20 %, but not the other metal detected (i.e., sodium).

5.0 Summary and Recommendations for Future Site Remediation Activities

5.1 Summary of Groundwater Sampling Data

Based on a review of the data from the seven sampling events, concentrations of antimony, cadmium, chromium, copper, iron, lead, manganese, selenium, sodium, and thallium were detected at concentrations above their Class GA criteria. Based on the November 2013 sample results, the following metals exceeded Class GA criteria in unfiltered samples: cadmium (three wells), chromium (four wells), iron (seven wells), lead (one well), manganese (two wells), and sodium (four wells). The following metals exceeded the Class GA criteria in filtered samples: cadmium (two wells), chromium (four wells), iron (one well), manganese (two wells), and sodium (four 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.

Antimony was detected in one of the Round 7 (November 2013) samples (including recently added monitoring wells MW-2, MW-3, MW-4, MW-10 and MW-16). Antimony has been detected in six wells at the Site during the previous six sampling events. Exceedances have been sporadic with no obvious trends noted in any of the wells. Antimony does not appear to be a contaminant of concern at the Site.

Figure 6 shows the cadmium concentrations in each well during the seven sampling events. Cadmium was detected in a majority of the samples collected during the seven sampling events (48 out of 71 unfiltered samples through seven rounds of sampling and in 20 of 39 filtered samples in three rounds of sampling). However, there were only three exceedances in Round 2, two exceedances in Round 3, two exceedances in Round 4, seven unfiltered exceedances in Round 5 (four filtered exceedances) three unfiltered exceedances in Round 6 (three filtered exceedances), and three unfiltered exceedances in Round 7 (two filtered exceedances). There do not appear to be any trends in cadmium concentrations. Isoconcentration maps of the cadmium plume are shown on Figure 7 (August 2012) and 7A (November 2013). The filtered cadmium concentrations from the two sampling events (shallow wells) were used to draw the isoconcentration lines. The leading edge of the cadmium plume during the November 2013 event is near the MW-12/MW-14 well cluster, a similar position to that found during the Round 6 sampling event in August 2012.

Figure 8 shows the chromium concentrations in each well during the seven sampling events. Chromium has been detected in the majority of samples analyzed from seven sampling events (61 of 71 unfiltered samples and 24 of 39 filtered samples). However there were only five exceedances (Class GA criterion of 50 µg/L) during the first four sampling rounds, four of which were in MW-14 with

concentrations ranging from 68.6 µg/L to 248 µg/L. During Rounds 5, 6 and 7, unfiltered chromium concentrations exceeded the criterion in four of the five newly added wells (MW-2, MW-3, MW-4 and MW-10) and four filtered samples from the five newly added wells (MW-2, MW-3, MW-4 and MW-10). Chromium exceedances appear to be limited to monitoring wells MW-3, MW-4, MW-10 and MW-14. As the filtered chromium concentrations at MW-12 (paired shallow well with deep well MW-14) were not detected, it appears that the dissolved chromium plume is sinking as it leaves the site. Concentrations at deep well MW-21, located downgradient of MW-14 are still significantly below the criterion. There does appear to be a general upward trend in concentration over the last seven sampling events.

Copper was detected in the majority of samples collected during the seven sampling events (40 of 71 unfiltered samples, eight of 39 filtered samples). Copper was not detected in any Round 7 sample, unfiltered or filtered. However, the only exceedance was at MW-12 during Round 4. Copper does not appear to be a contaminant of concern at the site.

Lead was detected in 30 of 71 unfiltered samples collected at the Site during the seven sampling events. During Round 5, lead was detected in four unfiltered samples and two of these exceeded the criterion; however, lead was not detected in any of the filtered samples collected during Round 5. During Round 6, lead was detected in three wells but there were no exceedances, unfiltered or filtered. During Round 7, lead was detected in three unfiltered samples with one exceedance and detected in one filtered sample (no exceedance). There have only been eight exceedances of the 25 µg/L criterion, four of which have occurred at MW-12 with concentrations ranging from 106 µg/L to 553 µg/L. Lead concentrations also exceeded the criterion at MW-14 during Rounds 3, 4 and 7 (221 µg/L, 76.5 µg/L and 53 µg/L). Lead does not appear to be a contaminant of concern at the Site.

Selenium was detected in seven of 71 unfiltered samples collected at the Site during the seven sampling events (not detected in any of the 39 Round 5, 6 and 7 filtered samples). MW-12 was the only monitoring well where selenium was detected twice (Rounds 1 and 4) and the only monitoring well where the concentration, 13.4 µg/L, exceeded the 10 µg/L criterion. As this appears to be an isolated occurrence, selenium is not considered to be a contaminant of concern at the Site.

Thallium was only detected twice during the seven sampling events. Both occurrences were above the criterion. As these appear to be isolated occurrences, thallium is not considered to be a contaminant of concern at the Site.

5.2 Recommendations for Future Work

Cadmium was detected above the Class GA criterion of 5 µg/L in three monitoring well samples during the August 2007 sampling event, two samples during the November 2008 sampling event, three samples during the March 2010 event, seven unfiltered samples during the May 2011 event (four filtered samples), three unfiltered samples during the August 2012 event (three filtered samples), and three unfiltered samples during the November 2013 event (two filtered samples). Cadmium concentrations in monitoring wells MW-4 and MW-10 have exceeded the criterion (both unfiltered and

filtered) samples) in each of the three sampling events where these wells were sampled. At monitoring well MW-12, there were four exceedances in unfiltered samples and one filtered exceedance during the seven sampling events. At monitoring well MW-14, there were five unfiltered exceedances but only one filtered exceedance during the seven sampling events. AECOM recommends continued sampling to verify the concentrations.

Chromium exceeded the Class GA criterion of 50 µg/L in monitoring well MW-10 during all three sampling events where this well was sampled (both unfiltered and filtered samples). The chromium concentration in monitoring well MW-14 exceeded the criterion in six of seven unfiltered samples but only one of three filtered samples.. Chromium concentrations in the adjacent monitoring well MW-12 (screened approximately 50 ft higher in the aquifer) were below the Class GA criterion during the first three sampling events but was anomalously high during Round 4 (251 µg/L). Chromium was not detected in either Round 5, 6 or 7 filtered samples. Chromium as also present in four of five newly added monitoring wells (MW-2, MW-3, MW-4 and MW-10). Continued sampling of these wells is recommended to determine if the contamination is migrating downgradient (MW-21) or to the deeper portions of the aquifer (MW-20).

Paired filtered/unfiltered groundwater samples for metals analysis were collected from all monitoring wells in the May 2011, August 2012 and November 2013 sampling events. Early sampling rounds indicted the presence of several metals (cadmium, chromium and lead) in monitoring wells above their respective criteria. To further evaluate these exceedances, paired filtered/unfiltered samples were collected during the last three sampling events. Cadmium appears to be present in the dissolved phase whereas chromium and lead are not. Filtering of samples can be discontinued.

The next scheduled sampling event at the Liberty Site is February 2015.

Tables

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	dry dry dry	NA NA NA	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	42.91 44.05 43.21	48.36 47.22 48.06	
MW-3 (shallow)	91.25	53.9	5/24/11 8/21/12 11/5/13	42.90 44.00 45.21	48.35 47.25 46.04	
MW-4 (shallow)	91.61	53.4	5/24/11 8/21/12 11/5/13	43.25 44.36 46.60	48.36 47.25 45.01	
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	42.24 43.11 45.40 43.37 44.92 45.99 47.19	50.99 50.12 47.83 49.86 48.31 47.24 46.04	
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	42.19 43.15 45.23 43.12 44.76 45.70 45.95	50.52 49.56 47.48 49.59 47.95 47.01 46.76	
MW-10 (shallow)	90.40	50.0	5/24/11 8/21/12 11/5/13	42.12 43.18 43.10	48.28 47.22 47.30	
MW-12 (shallow)	89.59	49.3	6/14/06 8/24/07 11/13/08 12/23/08 3/10/10 5/24/11 8/21/12 11/5/13	39.09 39.95 42.25 41.81 40.07 41.69 42.75 43.00	50.50 49.64 47.34 47.78 49.52 47.90 46.84 46.59	

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-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	
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	
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	
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	
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	

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-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	

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 NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	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
Laboratory ID	Ground	K0943-11	K0943-12	L1807-12	L1808-12	AC75576-029	AC75576-030
Sample Date	Water	5/26/11	5/26/11	8/23/12	8/23/12	11/6/13	11/6/13
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	118 B	ND	602	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	44.6 B	44.9 B	39.5 B	31.9 B	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	8.5	5.5	3.5 B	2.7 B	ND	ND
Calcium	NC	16,300	16,700	20,400	21,500	30,000	29,000
Chromium	50	51.9	48.2	26.7	12.0 B	62.0	59.0
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	24 B	ND	14.4 B	4.2 B	ND	ND
Iron	300	205	ND	853	ND	ND	ND
Lead	25	ND	ND	ND	ND	ND	ND
Magnesium	35,000	3,180	3,250	3,720	3,870	ND	ND
Manganese	300	ND	ND	17.7 B	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	5.5 B	2.7 B	4.6 B	3.3 B	ND	ND
Potassium	NC	2,720	2,610	1,710 E	1,660	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	21,300	22,400	21,400	22,900	15,000	16,000
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	1.4 B	ND	ND	ND
Zinc	2,000	29.2 B	24.8 B	51.0	26.1 B	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 NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	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
Laboratory ID	Ground	K0943-13	K0943-14	L1807-13	L1808-13	AC75576-001	AC75576-002
Sample Date	Water	5/26/11	5/26/11	8/23/12	8/23/12	11/4/13	11/4/13
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	346	ND	360	ND	470	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	19.1 B	18.1 B	28.9 B	27.9 B	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	6.6	4.6 B	3.0 B	2.8 B	4.7	3.5
Calcium	NC	16,900	16,800	28,600	29,400	29,000	27,000
Chromium	50	59.6	32.6	118	103	140	95.0
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	45.5	11.7 B	14.2 B	6.5 B	ND	ND
Iron	300	462	ND	414	45.4 B	650	ND
Lead	25	14.1	ND	ND	ND	8.5	ND
Magnesium	35,000	2710	2,760	5,100	5,180	ND	ND
Manganese	300	11.8 B	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	6.7 B	4.3 B	3.8 B	3.4 B	ND	ND
Potassium	NC	1,950	1,770	2,560 E	2,480	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	12,400	13,200	30,800	31,000	38,000	35,000
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	1.4 B	ND	1.1 B	ND	ND	ND
Zinc	2,000	54.9	40.4 B	19.6 B	19.3 B	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 NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

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

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 NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-5	MW-5	MW-5	MW-5	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	LMW-5	LMW-5F	LMW-5	LMW-5F
Laboratory ID	Ground	E0833-01A	F1192-04A	G2136-07A	J0429-01A	K0919-02	K0919-01	L1807-01	L1808-01	AC75576-009	AC75576-010
Sample Date	Water	6/12/06	8/23/07	11/14/08	3/8/10	5/23/11	5/23/11	8/20/12	8/20/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	238	157 B	ND	87.5 BE	ND	ND	245	157 B	ND	ND
Antimony	3	3.7 B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	2.2 B	ND	ND	ND	ND	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	56.9 B	60.4 B	ND	ND
Beryllium	3	ND	ND	ND	0.089 B	ND	ND	ND	ND	ND	ND
Cadmium	5	0.13 B	0.51 B	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NC	19,000	15,000	16,900	14,100	6,280	5400	17,800	18,600	16,000	18,000
Chromium	50	18.2 B	42.2	7.3 B	29.0	1.8 B	0.88 B	1.7 B	1.5 B	ND	ND
Cobalt	NC	0.67 B	1.4 B	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	23.8 B	10.9 B	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	198 B	122 B	ND	107 BN	151 BN	54.3 BN	52.4 B	ND	ND	ND
Lead	25	1.3 B	3.4 B	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	2,040 E	1,870	2,040	1,830	2,370	2,140	3,210	3,390	ND	ND
Manganese	300	15.1 B	13.7 B	6.8 B	16.5 B	10.4 B	ND	68.2	67.4	ND	ND
Mercury	0.7	ND	ND	ND	0.056 B	ND	ND	ND	ND	ND	ND
Nickel	100	3.3 B	1.1 B	ND	1.2 B	2.5 B	1.3 B	2.3 B	2.9 B	ND	ND
Potassium	NC	4,330	4,500	4,380	4,740	627 B	613 B	5,410 E	5,440	ND	ND
Selenium	10	ND	7.4 B	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	4.0 B	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	4,460	7,800	7,570	6,570	8,000	7,420	18,100	19,000	9,100	11,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.59 B	ND	ND	ND	ND	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	10.5 B	10.3 B	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 NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered	NYSDEC Class GA Ground Water Criteria	MW-6 LMW-6 E0833-02A 6/12/06 Unfiltered conc. Q	MW-6 LMW-6 F1192-09A 8/24/07 Unfiltered conc. Q	MW-6 LMW-6 G2136-06A 11/14/08 Unfiltered conc. Q	MW-6 LMW-6 J0429-03A 3/8/10 Unfiltered conc. Q	MW-6 LMW-6 K0919-04 5/23/11 Unfiltered conc. Q	MW-6 LMW-6 K0919-03 5/23/11 Filtered conc. Q	MW-6 LMW-6 L1807-03 8/20/12 Unfiltered conc. Q	MW-6 LMW-6F L1808-03 8/20/12 Filtered conc. Q	MW-6 LMW-6 AC75576-011 11/5/13 Unfiltered conc. Q	MW-6 LMW-6F AC75576-012 11/5/13 Filtered conc. Q
Aluminum	NC	ND	398	ND	50.2 BE	ND	ND	488	ND	ND	ND
Antimony	3	3.1 B	8.0 B	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	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	14.4 B	2.7 B	ND	ND
Beryllium	3	ND	ND	ND	0.062 B	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	12.6	0.55 B	0.62 B	ND	ND	ND	ND	ND	ND
Calcium	NC	9,880	10,000	8,300	6,120	19,500	20,000	7,700	7,750	5,800	6,100
Chromium	50	0.79 B	28.7	ND	1.9 B	15.7 B	14.7 B	2.1 B	ND	ND	ND
Cobalt	NC	0.31 B	2.2 B	ND	ND	ND	ND	0.86 B	ND	ND	ND
Copper	200	15.6 B	31.3	ND	5.6 B	ND	ND	4.0 B	ND	ND	ND
Iron	300	45.2 B	3,120	147 B	137 BN	ND	ND	338	39.8 B	ND	ND
Lead	25	ND	15.8	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	2,980 E	2,630	2,590	1,970	2,190	2,240	3,180	3,180	ND	ND
Manganese	300	5.9 B	60.9	40.8 B	11.4 B	ND	ND	21.8 B	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	3.6 B	12.3 B	2.2 B	1.9 B	ND	ND	2.4 B	2.0 B	ND	ND
Potassium	NC	759 B	1,390	2,060	1,180	3,500	3,530	753 B	552 B	ND	ND
Selenium	10	1.6 B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	10,100	9,950	11,600	7,660	7,760	7,890	10,000	10,300	7,600	7,700
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	2.0 B	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	24.8 B	118	21.9 B	25.4 B	16.6 B	18.8 B	12.4 B	7.9 B	ND	ND

Notes:

All values in µg/L

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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 NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

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

Notes:

All values in µg/L

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ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

E - Estimated value due to interference

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TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

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

Notes:

All values in µg/L

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E - Estimated value due to interference

N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-12	MW-12	MW-12	MW-12	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	LMW-12	LMW-12F	LMW-12	LMW-12F
Laboratory ID	Ground	E0833-03A	F1192-05A	G2415-01	J0429-04A	K0919-06	K0919-05	L1807-06	L1808-06	AC75576-023	AC75576-024
Sample Date	Water	6/14/06	8/24/07	12/23/08	3/9/10	5/24/11	5/24/11	8/21/12	8/21/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	445	9,070	2,260	33,600 E	12,000	ND	1,560	ND	810	ND
Antimony	3	1.8 B	11.2 B	ND	13.9 B	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	3.3 B	ND	14.2 B	5.1 B	ND	ND	ND	ND	ND
Barium	1,000	45.2 B	75.4 B	60.5 B	188 B	88.9 B	28.1 B	44.6 B	48.2 B	ND	51
Beryllium	3	0.38 B	0.24 B	0.19 B	2.1 B	0.79 B	ND	ND	ND	ND	ND
Cadmium	5	0.52 B	5.6	25.5	205	54.8	4.5 B	4.4 B	9.3	2.9	ND
Calcium	NC	13,100	26,900	19,700	29,900	23,300	18,700	10,900	28,900	40,000	44,000
Chromium	50	2.5 B	37.5	18.9 B	251	72.8	ND	103	ND	ND	ND
Cobalt	NC	0.63 B	5.5 B	2.6 B	12.8 B	4.1 B	ND	ND	ND	ND	ND
Copper	200	14.9 B	85.3	63.5	377	147	ND	10.6 B	ND	ND	ND
Iron	300	467	10,900	4,080	38,100 N	11,300 N	1,620 N	1,740	39.0 B	740	ND
Lead	25	7.7 B	106	83.7	553	230	ND	19.4	ND	9.9	ND
Magnesium	35,000	3,710 E	6,830	4,330	10,900	5,760	3,310	2,540	5,600	6,400	7,200
Manganese	300	77.3	96.9	82.7	253	77.6	37.3 B	211	ND	ND	ND
Mercury	0.7	ND	ND	ND	0.54	ND	ND	ND	ND	ND	ND
Nickel	100	3.4 B	12.4 B	14.9 B	57.1	18.5 B	1.9 B	6.4 B	2.0 B	ND	ND
Potassium	NC	2,280	2,700	2,540	3,810	3,670	2,870	4,350 E	2,970	ND	ND
Selenium	10	2.6 B	ND	ND	13.4 B	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	7.6 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	11,700	13,400	27,100	33,600	8,250	7,660	15,400	16,200	12,000	14,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.77 B	28.8 B	8.6 B	89.7	33 B	1.5 B	3.9 B	ND	ND	ND
Zinc	2,000	26.1 B	246	220	1,280	488	52.1	32.5 B	55.9	ND	ND

Notes:

All values in µg/L

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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 NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-14	MW-14	MW-14	MW-14	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	LMW-14	LMW-14F	LMW-14	LMW-14F
Laboratory ID	Ground	E0833-04A	F1192-06A	G2415-02	J0429-05A	K0919-08	K0919-07	L1807-07	L1808-07	AC75576-021	AC75576-022
Sample Date	Water	6/14/06	8/24/07	12/23/08	3/9/10	5/24/11	5/24/11	8/21/12	8/21/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	780	314	7,090	4,830 E	652	ND	314	954	5,300	ND
Antimony	3	1.5 B	ND	ND	ND	ND	ND	ND	ND	2.2	ND
Arsenic	25	ND	ND	5.6 B	6.0 B	5.6 B	ND	ND	ND	3.2	ND
Barium	1,000	40.5 B	31.5 B	162 B	107 B	57.1 B	50.4 B	47.2 B	43.3 B	56.0	ND
Beryllium	3	ND	ND	0.38 B	0.28 B	ND	ND	ND	ND	ND	ND
Cadmium	5	4.9 B	1.5 B	59.1	26	9.2	7.6	9.3	3.7 B	6.6	2.4
Calcium	NC	13,100	12,900	35,800	18,700	18,300	18,400	28,100	10,900	11,000	12,000
Chromium	50	95.8	248	69.6	68.6	51.3	29.6	2.4 B	88.2	170	ND
Cobalt	NC	2.0 B	1.2 B	5.1 B	2.7 B	0.72 B	ND	ND	ND	ND	ND
Copper	200	22.2 B	8.9 B	110	42.8	13.6 B	ND	5.0 B	7.2 B	ND	ND
Iron	300	728	389	9,320	14,000 N	1,780 N	1,430 N	279	1,180	6,000	930
Lead	25	2.9 B	3.4 B	221	76.5	18.8	ND	ND	13.2	53.0	3.7
Magnesium	35,000	1,610 E	3,000	6,340	2,910	3,840	3,700	5,450	2,470	ND	ND
Manganese	300	35.3 B	21.2 B	231	186	260	235	ND	211	290	300
Mercury	0.7	ND	ND	ND	0.1 B	ND	ND	ND	ND	ND	ND
Nickel	100	7.5 B	4.4 B	53.2	18.3 B	11.8 B	8.7 B	1.1 B	6.1 B	ND	ND
Potassium	NC	3,320	4,140	7,090	1,670	4,430	4,570	2,990 E	4,170	5,000	ND
Selenium	10	ND	6.7 B	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.2 B	4.3 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	31,900	28,900	561,000	25,400	20,400	20,300	15,400	15,400	10,000	12,000
Thallium	0.50	ND	3.4 B	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.58 B	0.51 B	22.5 B	12.6 B	2.4 B	ND	1.9 B	2.3 B	ND	ND
Zinc	2,000	40.1 B	27.5 B	520	279	99.1	70.1	56.3	25.5 B	94.0	ND

Notes:

All values in µg/L

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NC - No NYSDEC criterion

N - Spike recovery outside control limits

ND - Not Detected

B - Estimated value

BOLD/Italics - Exceeds criterion

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-18	MW-18	MW-18	MW-18	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	LMW-18	LMW-18F	LMW-18	LMW-18F
Laboratory ID	Ground	E0868-14A	F1192-08A	G2136-02A	J0429-06A	K0919-10	K0919-09	L1807-04	L1808-04	AC75576-013	AC75576-014
Sample Date	Water	6/22/06	8/24/07	11/13/08	3/10/10	5/24/11	5/24/11	8/21/12	8/21/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	135 B	252	196 B	716 E	193 B	ND	ND	164 B	ND	ND
Antimony	3	ND	ND	9.0 B	5.2 B	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	74.8 B	92.5 B	86.4 B	103 B	101 B	104 B	61.3 B	64.8 B	62.0	61.0
Beryllium	3	ND	ND	ND	0.12 B	ND	ND	ND	ND	ND	ND
Cadmium	5	0.33 B	1.3 B	0.92 B	0.86 B	3.0 B	2.9 B	ND	ND	ND	ND
Calcium	NC	12,800	15,500	13,500	18,900	21,100	21,900	15,800	15,700	19,000	20,000
Chromium	50	3.3 B	2.1 B	5.4 B	6.5 B	3.1 B	2.3 B	1.9 B	3.1 B	ND	ND
Cobalt	NC	0.48 B	1.3 B	ND	1.0 B	ND	ND	ND	ND	ND	ND
Copper	200	ND	8.1 B	11.0 B	9.8 B	6.9 B	ND	ND	ND	ND	ND
Iron	300	212	308	307	731 N	327 N	ND	ND	277	ND	ND
Lead	25	ND	3.0 B	2.5 B	3.9 B	ND	ND	ND	ND	ND	ND
Magnesium	35,000	5,440	5,430	4,960	4,460	4,380	4,560	3,720	3,650	ND	ND
Manganese	300	169	547	122	312	521	421	39.1 B	539	1,200	ND
Mercury	0.7	ND	ND	ND	0.057 B	ND	ND	ND	ND	ND	ND
Nickel	100	1.4 B	3.1 B	3.2 B	6.5 B	3.4 B	2.4 B	ND	1.5 B	ND	ND
Potassium	NC	10,800	7,290	10,200	13,500	11,500	12,500	9,220 E	8,720	8,200	7,800
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	4.0 B	1.6 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	30,000	26,700	29,600	30,000	28,400	30,200	26,600	26,000	25,000	26,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.66 B	ND	0.63 B	ND	ND	ND	ND	ND	ND
Zinc	2,000	25.0 B	34.8 B	86.7	57.8	37.2 B	33.8 B	16.0 B	8.0 B	ND	ND

Notes:

All values in µg/L

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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 NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-19	MW-19	MW-19	MW-19	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	LMW-19	LMW-19F	LMW-19	LMW-19F
Laboratory ID	Ground	E0868-15A	F1192-07A	G2136-01A	J0429-07A	K0919-12	K0919-11	L1807-05	L1808-05	AC75576-015	AC75576-016
Sample Date	Water	6/22/06	8/24/07	11/13/08	3/10/10	5/24/11	5/24/11	8/21/12	8/21/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	53.4 B	74.9 B	ND	69.9 B E	ND	ND	ND	ND	ND	ND
Antimony	3	ND	6.7 B	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	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	11.5 B	9.5 B	ND	ND
Beryllium	3	ND	ND	ND	0.046 B	ND	ND	ND	ND	ND	ND
Cadmium	5	1.1 B	8.0	ND	2.7 B	ND	2.4 B	ND	ND	ND	ND
Calcium	NC	9,900	13,000	9,700	11,500	11,600	11,700	10,600	10,100	11,000	11,000
Chromium	50	1 B	2.0 B	ND	1.8 B	0.94 B	ND	0.81 B	ND	ND	ND
Cobalt	NC	ND	1.2 B	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	ND	11.7 B	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	54.2 B	221	ND	234 N	40.1 B N	ND	32.8 B	ND	ND	ND
Lead	25	ND	4.1 B	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	3,180	4,600	3,970	4,350	4,460	4,480	4,130	3,920	ND	ND
Manganese	300	3.5 B	9.3 B	14.9 B	8.0 B	ND	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ND	2.9 B	ND	0.96 B	ND	ND	ND	ND	ND	ND
Potassium	NC	816 B	949 B	947 B	1,070	993 B	1,120	890 B	867 B	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.3 B	1.1 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	10,200	14,400	13,400	14,900	14,600	14,600	14,500	13,700	14,000	14,000
Thallium	0.50	ND	2.9 B	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	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	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 NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20
Sample ID	Class GA	LMW-20	LMW-20	LMW-20	LMW-20	LMW-20	LMW-20	LMW-20	LMW-20F	LMW-20	LMW-20F
Laboratory ID	Ground	E0833-05A	F1192-03A	G2136-04A	J0429-08A	K0943-05	K0943-06	L1807-09	L1808-09	AC75576-025	AC75576-026
Sample Date	Water	6/14/06	8/22/07	11/13/08	3/9/10	5/26/11	5/26/11	8/21/12	8/21/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	223	299	81.6 B	404 E	303	ND	411	ND	ND	ND
Antimony	3	1.7 B	9.5 B	ND	4.4 B	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	38.9 B	57.8 B	48.8 B	35.0 B	27.0 B	25.4 B	42.1 B	40 B	ND	ND
Beryllium	3	ND	ND	ND	0.057 B	ND	ND	ND	ND	ND	ND
Cadmium	5	1 B	0.45 B	0.74 B	ND	ND	ND	ND	ND	ND	ND
Calcium	NC	13,200	20,600	4,420	9,050	7,700	7,870	17,400	16,900	19,000	18,000
Chromium	50	4.6 B	3.1 B	2.1 B	5.1 B	5.1 B	1.1 B	2.0 B	0.91 B	ND	ND
Cobalt	NC	0.92 B	2.5 B	ND	1.1 B	1.2 B	0.93 B	ND	ND	ND	ND
Copper	200	13.6 B	8.7 B	ND	5.7 B	6.0 B	ND	ND	ND	ND	ND
Iron	300	1,710	624	164 B	1,370 N	879	71.7 B	398	ND	ND	ND
Lead	25	1.5 B	3.7 B	ND	4.9 B	ND	ND	ND	ND	ND	ND
Magnesium	35,000	6,050 E	9,820	3,400	4,400	3,790	3,870	8,990	8,870	9,000	9,200
Manganese	300	27.8 B	60.5	35.0 B	27.1 B	17.5 B	ND	23.2 B	ND	ND	ND
Mercury	0.7	ND	ND	ND	0.064 B	ND	ND	ND	ND	ND	ND
Nickel	100	4.6 B	2.4 B	1.8 B	3.5 B	1.8 B	ND	ND	1.0 B	ND	ND
Potassium	NC	2,050	2,220	8,190	1,970	2,430	2,060	1,840 E	1,710	ND	ND
Selenium	10	1.1 B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	5.2 B	0.6 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	21,800	31,100	29,700	39,600	38,400	40,300	21,700	21,400	21,000	22,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.48 B	1.6 B	ND	1.2 B	ND	ND	ND	ND	ND	ND
Zinc	2,000	48.7 B	32.8 B	28.5 B	187	52.5	29.7 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 NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21
Sample ID	Class GA	LMW-21	LMW-21	LMW-21	LMW-21	LMW-21	LMW-21	LMW-21	LMW-21	LMW-21	LMW-21F
Laboratory ID	Ground	E0833-06A	F1192-01A	G2136-05A	J0429-09A	K0943-07	K0943-08	L1807-08	L1808-08	AC75576-027	AC75576-028
Sample Date	Water	6/14/06	8/22/07	11/14/08	3/9/10	5/26/11	5/26/11	8/21/12	8/21/12	11/5/13	11/5/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	197 B	457	793 E	319	ND	746	ND	410	ND
Antimony	3	1.9 B	6.7 B	ND	ND	ND	ND	ND	11.9 B	ND	ND
Arsenic	25	2.2 B	ND	ND	ND	4.3 B	ND	ND	ND	ND	ND
Barium	1,000	79.3 B	60.9 B	58.2 B	119 B	78.8 B	76.2 B	92.6 B	85.9 B	67.0	67.0
Beryllium	3	ND	ND	ND	0.16 B	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	1.5 B	4.8 B	1.1 B	1.2 B	ND	ND	ND	ND	ND
Calcium	NC	7,520	5,190	11,900	12,600	17,000	16,900	14,300	14,200	14,000	14,000
Chromium	50	0.94 B	3.0 B	2.3 B	9.0 B	6.2 B	3.3 B	13.2 B	10.6 B	ND	ND
Cobalt	NC	0.48 B	1.5 B	ND	1.5 B	ND	ND	ND	ND	ND	ND
Copper	200	ND	13.7 B	6.6 B	8.2 B	8.5 B	ND	3.9 B	ND	ND	ND
Iron	300	31.4 B	503	198 B	1,840 N	694	32 B	1,330	ND	760	ND
Lead	25	ND	4.5 B	2.6 B	8.2 B	ND	ND	ND	ND	ND	ND
Magnesium	35,000	5,440 E	3,320	2,960	8,380	6,960	7,240	6,050	5,820	6,100	6,100
Manganese	300	26.4 B	51.8	627	57.7	36.1 B	19.7 B	96.1	56.7	100	64.0
Mercury	0.7	ND	ND	ND	0.058 B	ND	ND	ND	ND	ND	ND
Nickel	100	1.9 B	2.4 B	6.9 B	4.9 B	3.3 B	1.3 B	2.8 B	2.4 B	ND	ND
Potassium	NC	5,670	6,350	6,250	12,700	12,500	9,270	7,500 E	7,050	6,200	5,800
Selenium	10	4.1 B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	24,500	27,200	19,200	31,800	24,300	21,700	19,700	19,400	17,000	18,000
Thallium	0.50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.063 B	ND	2.1 B	1.5 B	ND	1.8 B	ND	ND	ND
Zinc	2,000	14.2 B	40.5 B	69.1	67.6	65.1	30.5 B	15.5 B	6.0 B	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 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
NOVEMBER 2013 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	AC75576-029	AC75576-030		AC75576-001	AC75576-002		AC75576-003	AC75576-004	
Sample Date	Water	11/6/13	11/6/13		11/4/13	11/4/13		11/4/13	11/4/13	
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	ND	ND	NC	470	ND	NC	310	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	4.7	3.5	74.5%	26	21	80.8%
Calcium	NC	30,000	29,000	96.7%	29,000	27,000	93.1%	33,000	30,000	90.9%
Chromium	50	62	59	95.2%	140	95	67.9%	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	ND	ND	NC	650	ND	NC	320	ND	NC
Lead	25	ND	ND	NC	8.5	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	15,000	16,000	106.7%	38,000	35,000	92.1%	21,000	21,000	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	ND	ND	NC	ND	ND	NC	160	130	81.3%
Turbidity (NTU)		11.1			31.7			9.7		

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)
NOVEMBER 2013 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	AC75576-009	AC75576-010		AC75576-011	AC75576-012		AC75576-005	AC75576-006	
Sample Date	Water	11/5/13	11/5/13		11/5/13	11/5/13		11/4/13	11/4/13	
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	ND	ND	NC	ND	ND	NC	210	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	49	50	102.0%
Calcium	NC	16,000	18000	112.5%	5,800	6,100	105.2%	28,000	28,000	100.0%
Chromium	50	ND	ND	NC	ND	ND	NC	140	140	100.0%
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	420	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	9,100	11,000	120.9%	7,600	7,700	101.3%	9,200	9,300	101.1%
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)		15.3			17.3			11.9		

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)
NOVEMBER 2013 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	AC75576-023	AC75576-024		AC75576-021	AC75576-022		AC75576-007	AC75576-008	
Sample Date	Water	11/5/13	11/5/13		11/5/13	11/5/13		11/4/13	11/4/13	
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	810	ND	NC	5,300	ND	NC	1,400	440	31.4%
Antimony	3	ND	ND	NC	2.2	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	3.2	ND	NC	ND	ND	NC
Barium	1,000	ND	51	NC	56	ND	NC	230	240	104.3%
Beryllium	3	ND	ND	NC	ND	ND	NC	1.5	1.2	80.0%
Cadmium	5	2.9	ND	NC	6.6	2.4	36.4%	4.4	3.9	88.6%
Calcium	NC	40,000	44,000	110.0%	11,000	12,000	109.1%	9,800	10,000	102.0%
Chromium	50	ND	ND	NC	170	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	740	ND	NC	6,000	930	15.5%	1,800	ND	NC
Lead	25	9.9	ND	NC	53	3.7	7.0%	ND	ND	NC
Magnesium	35,000	6,400	7,200	112.5%	ND	ND	NC	ND	ND	NC
Manganese	300	ND	ND	NC	290	300	103.4%	570	530	93.0%
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	5,000	ND	NC	5,100	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	12,000	14,000	116.7%	10,000	12,000	120.0%	11,000	11,000	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	ND	ND	NC	94	ND	NC	ND	ND	NC
Turbidity (NTU)		33.7			16.9			38.5		

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 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
NOVEMBER 2013 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	AC75576-013	AC75576-014		AC75576-015	AC75576-016	
Sample Date	Water	11/5/13	11/5/13		11/5/13	11/5/13	
Filtered/Unfiltered	Criteria	Unfiltered conc. Q	Filtered conc. Q	Dissolved	Unfiltered conc. Q	Filtered conc. Q	Dissolved
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	62	61	98.4%	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC
Calcium	NC	19,000	20,000	105.3%	11,000	11,000	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	ND	ND	NC	ND	ND	NC
Lead	25	ND	ND	NC	ND	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC
Manganese	300	1,200	ND	NC	ND	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC
Potassium	NC	8,200	7,800	95.1%	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC
Sodium	20,000	25,000	26,000	104.0%	14,000	14,000	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)		2.8			7.9		

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)
NOVEMBER 2013 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	AC75576-025	AC75576-026		AC75576-027	AC75576-028	
Sample Date	Water	11/5/13	11/5/13		11/5/13	11/5/13	
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Dissolved	Unfiltered	Filtered	Dissolved
		conc. Q	conc. Q		conc. Q	conc. Q	
Aluminum	NC	ND	ND	NC	410	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC
Barium	1,000	ND	ND	NC	67	67	100.0%
Beryllium	3	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC
Calcium	NC	19,000	18,000	94.7%	14,000	14,000	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	ND	ND	NC	760	ND	NC
Lead	25	ND	ND	NC	ND	ND	NC
Magnesium	35,000	9,000	9,200	102.2%	6,100	6,100	100.0%
Manganese	300	ND	ND	NC	100	64	64.0%
Mercury	0.7	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	6,200	5,800	93.5%
Selenium	10	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC
Sodium	20,000	21,000	22,000	104.8%	17,000	18,000	105.9%
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)		0.0			17.7		

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)
NOVEMBER 2013 (ROUND 7) SAMPLING EVENT
FIELD DUPLICATE DATA - TAL METALS IN GROUNDWATER

Sample Location	LMW-12	LMW-512	Precision
Sample ID	LMW-12	LMW-512	as
Laboratory ID	AC75576-023	AC75576-019	
Sample Date	11/5/13	11/5/13	Percent
Filtered/Unfiltered	Unfiltered	Unfiltered	Difference
Metal	conc. Q	conc. Q	(RPD)
Aluminum	810	840	3.6%
Antimony	ND	ND	NC
Arsenic	ND	ND	NC
Barium	ND	ND	NC
Beryllium	ND	ND	NC
Cadmium	2.9	3.2	9.8%
Calcium	40,000	39,000	2.5%
Chromium	ND	ND	NC
Cobalt	ND	ND	NC
Copper	ND	ND	NC
Iron	740	790	6.5%
Lead	9.9	11.0	10.5%
Magnesium	6,400	6,400	0.0%
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	12,000	12,000	0.0%
Thallium	ND	ND	NC
Vanadium	ND	ND	NC
Zinc	ND	ND	NC

LMW-12	LMW-12	Precision
LMW-12F	LMW-512F	as
AC75576-024	AC75576-020	
11/5/13	11/5/13	Percent
Filtered	Filtered	Difference
conc. Q	conc. Q	(RPD)
ND	ND	NC
ND	ND	NC
ND	ND	NC
51.0	ND	NC
ND	ND	NC
ND	ND	NC
44,000	41,000	7.1%
ND	ND	NC
7,200	6,600	8.7%
ND	ND	NC
ND	ND	NC
ND	ND	NC
ND	ND	NC
ND	ND	NC
14,000	13,000	7.4%
ND	ND	NC
ND	ND	NC
ND	ND	NC

Notes:

All values in µg/L

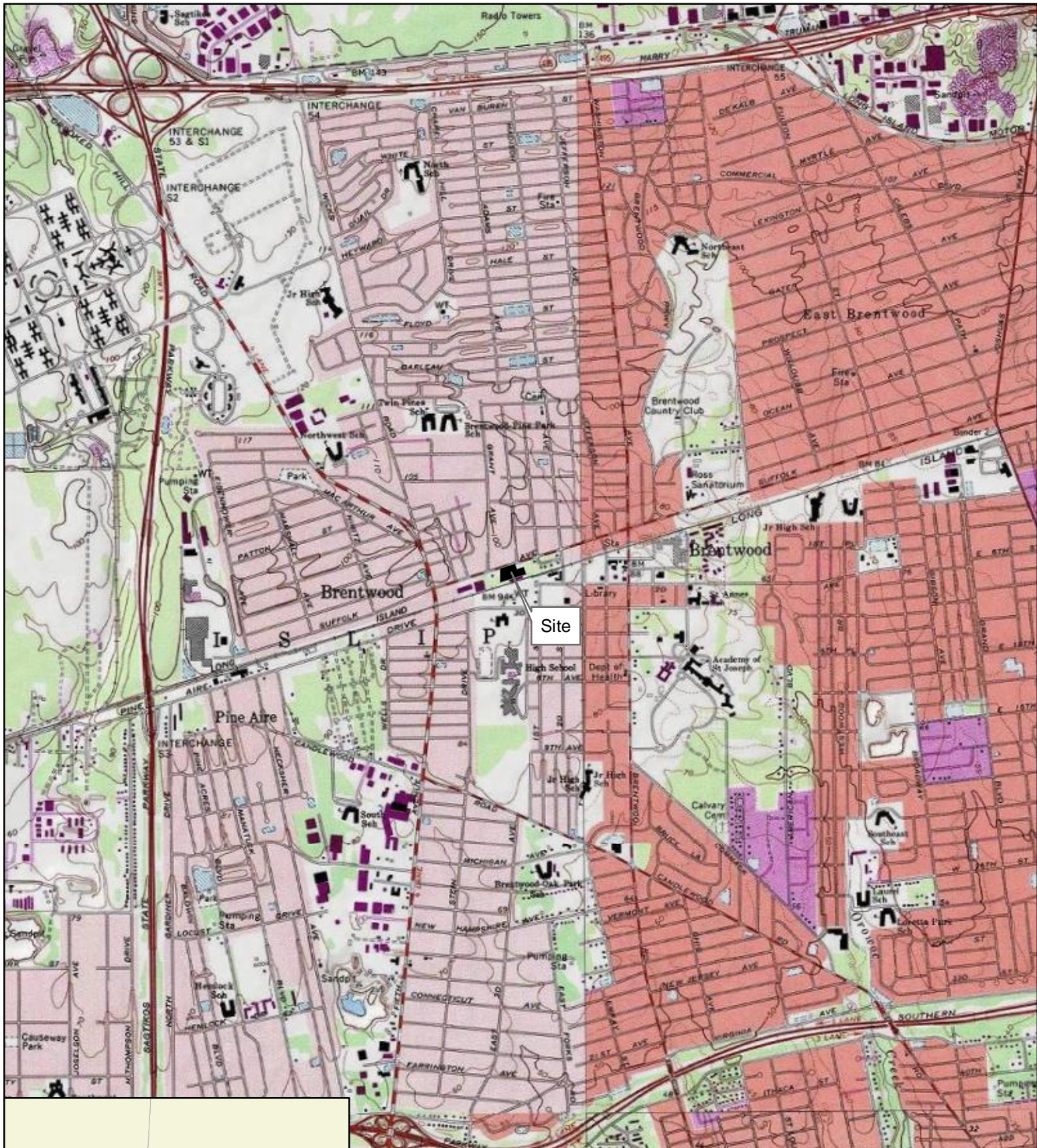
NC - Not Calculable (analyte not detected in one or both analyses)



ND - Not Detected

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

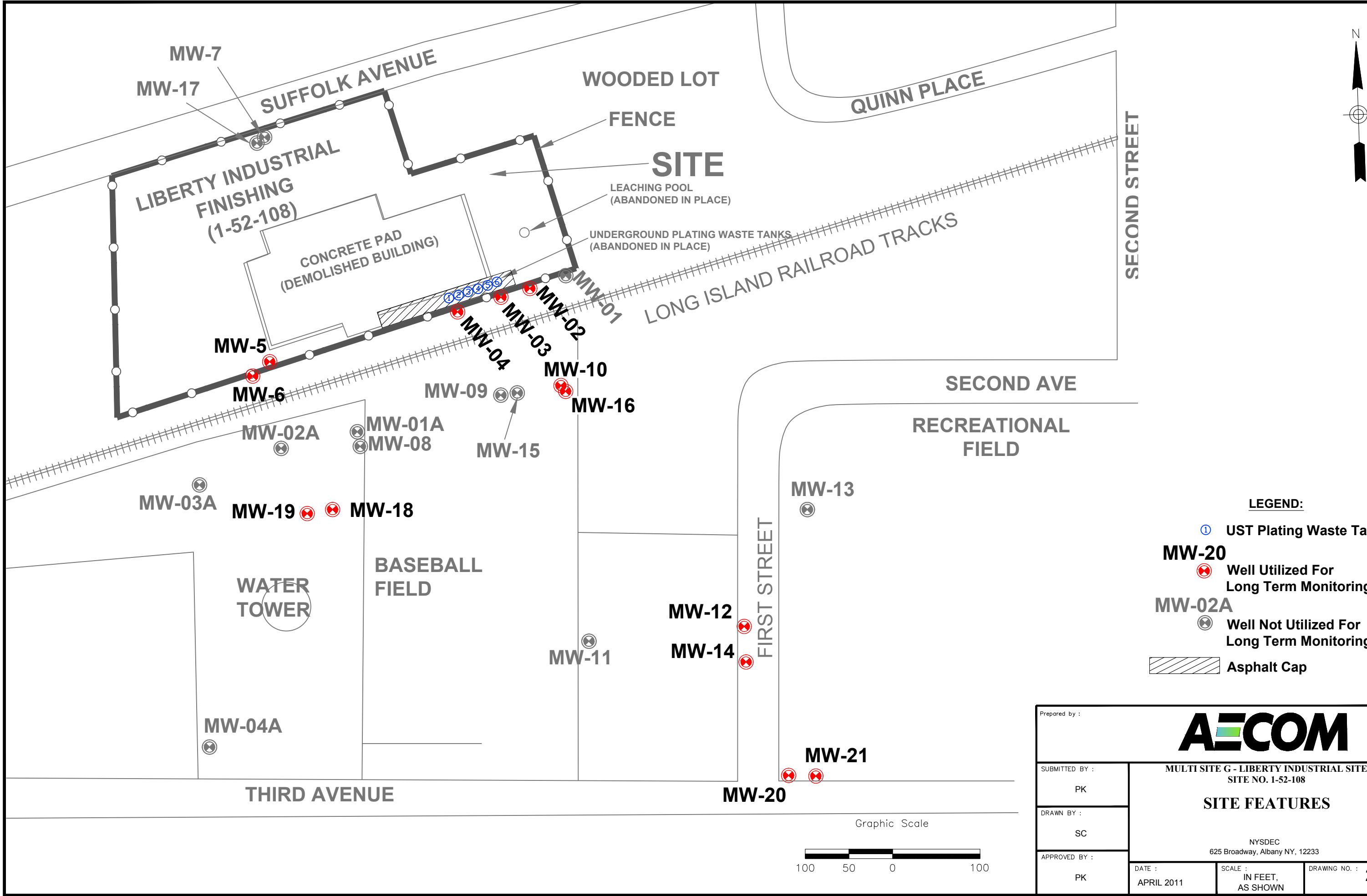
E - Estimated concentration due to interference based on serial dilution.

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



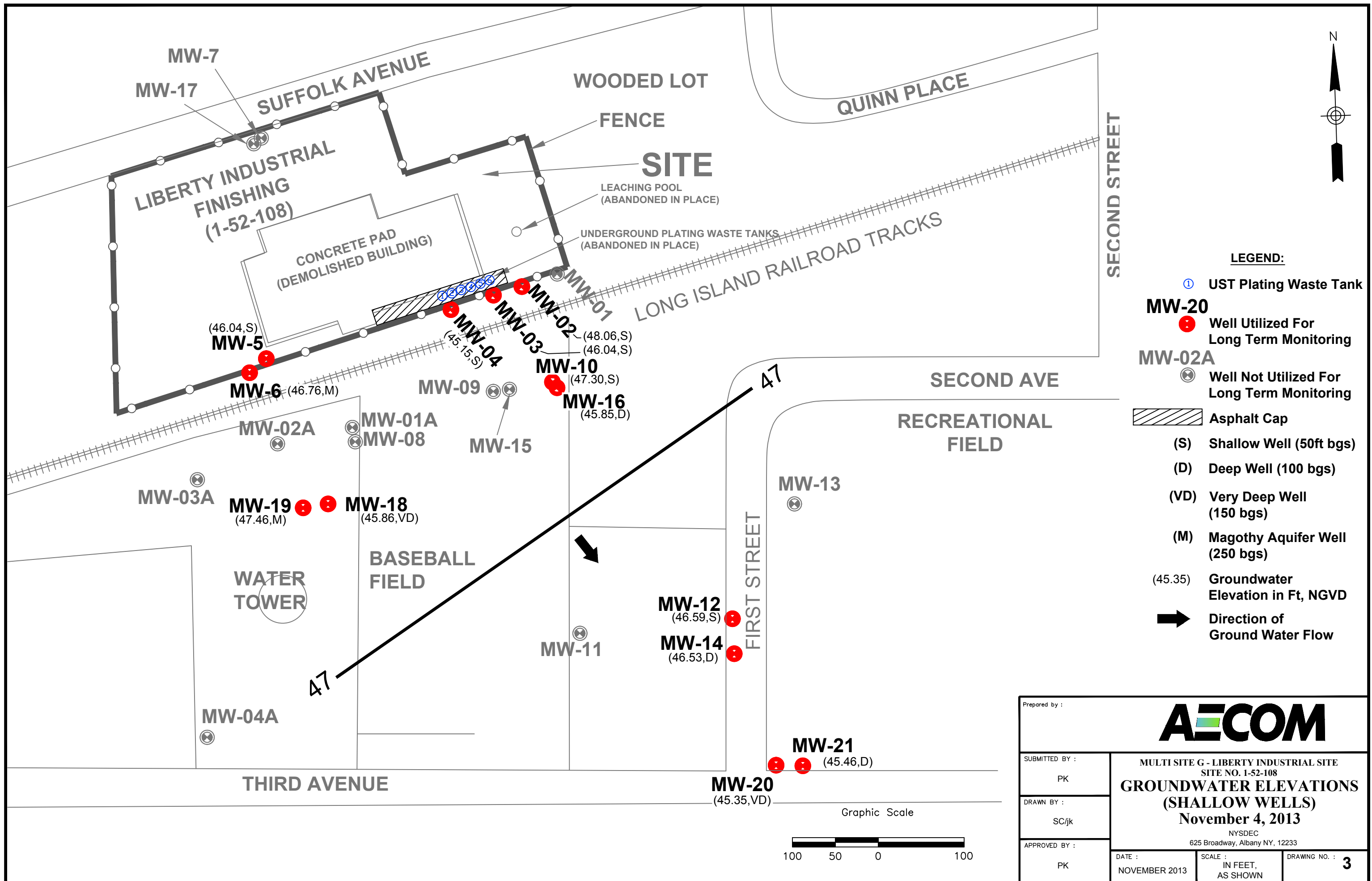
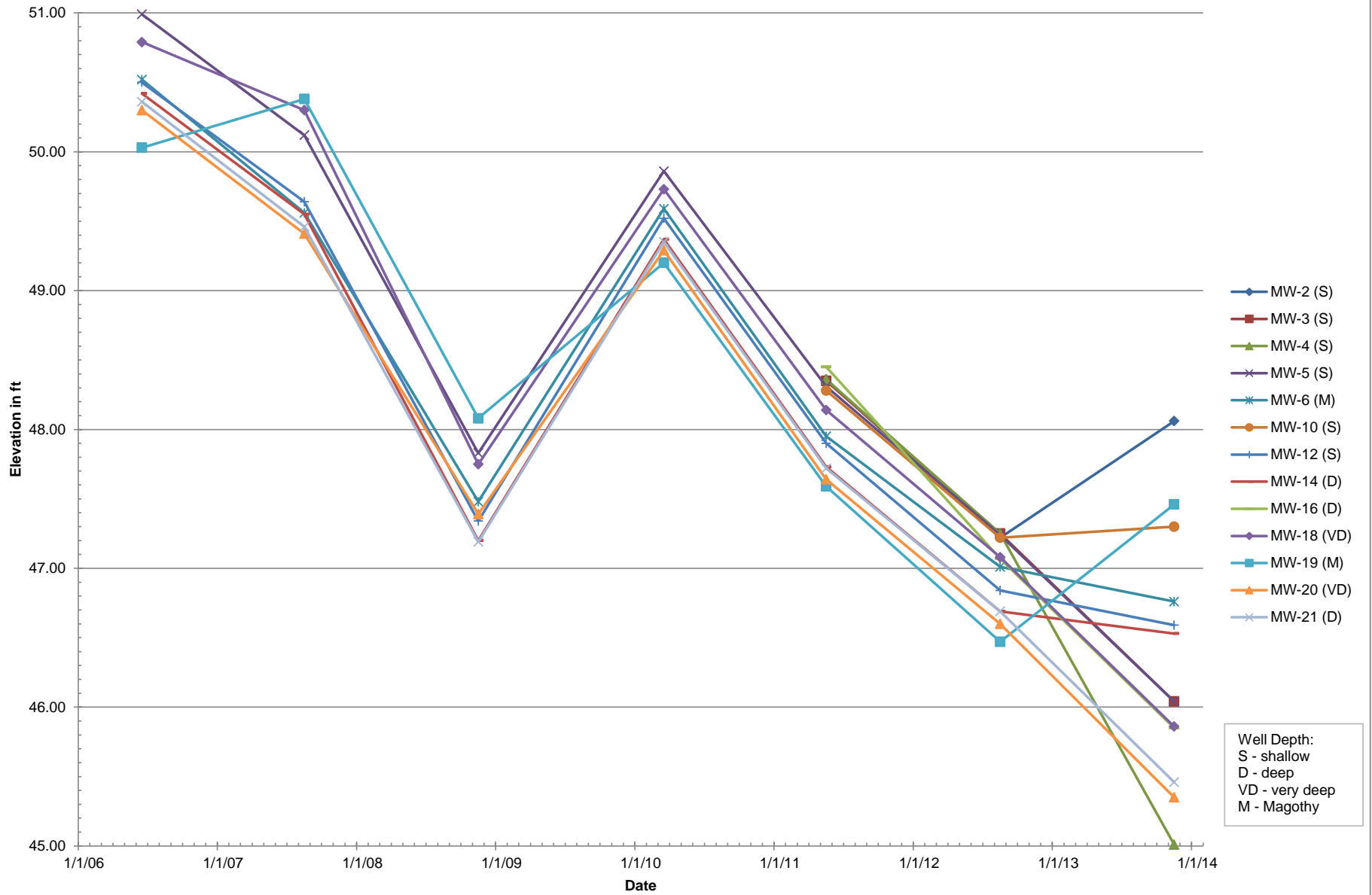


FIGURE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
GROUNDWATER HYDROGRAPH



Compound	MW-6 (M)									
	Jun-06	Aug-07	Nov-08	Mar-10	May-11	May-11	Aug-12	Aug-12	Nov-13	Nov-13
Antimony	U	U	U	U	U	F	U	F	U	F
Cadmium	3.1 B	8.0 B	ND	ND	ND	ND	ND	ND	ND	ND
Iron	45.2 B	3,120	0.55 B	0.62 B	ND	ND	ND	ND	ND	ND

Compound	MW-5 (S)									
	Jun-06	Aug-07	Nov-08	Mar-10	May-11	May-11	Aug-12	Aug-12	Nov-13	Nov-13
Antimony	U	U	U	U	U	F	U	F	U	F
Antimony	3.7 B	ND	ND	ND	ND	ND	ND	ND	ND	ND

Compound	MW-3 (S)					
	May-11	May-11	Aug-12	Aug-12	Nov-13	Nov-13
Cadmium	6.6	4.6 B	3 B	2.8 B	4.7	3.5
Chromium	59.6	32.6	118	103	140	95.0
Iron	462	ND	414	45.4 B	650	ND
Sodium	12,400	13,200	30,800	31,000	38,000	35,000

Compound	MW-4 (S)					
	May-11	May-11	Aug-12	Aug-12	Nov-13	Nov-13
Cadmium	54.2	19.8	28.2	27.3	26.0	21.0
Chromium	176	142	74.9	58.7	ND	ND
Iron	2,660	109 B	2,000	1,110	320	ND
Lead	43.2	ND	15.5	9.8 B	ND	ND
Sodium	26,100	29,100	13,400	14,400	21,000	21,000

Compound	MW-2 (S)					
	May-11	May-11	Aug-12	Aug-12	Nov-13	Nov-13
Cadmium	8.5	5.5	3.5 B	2.7 B	ND	ND
Chromium	51.9	48.2	26.7	12.0 B	62.0	59.0
Iron	205	ND	853	ND	ND	ND
Sodium	21,300	22,400	21,400	22,900	15,000	16,000

Compound	MW-10 (S)					
	May-11	May-11	Aug-12	Aug-12	Nov-13	Nov-13
Cadmium	10.3	11.3	36.1	34.9	49.0	50.0
Chromium	72.7	89.3	152	155	140	140
Iron	245	ND	391	ND	420	ND

Compound	MW-16 (D)					
	May-11	May-11	Aug-12	Aug-12	Nov-13	Nov-13
Cadmium	5.3	4.9 B	4.2 B	4.3 B	4.4	3.9
Manganese	597	623	661	632	570	530

Compound	MW-12 (S)									
	Jun-06	Aug-07	Nov-08	Mar-10	May-11	May-11	Aug-12	Aug-12	Nov-13	Nov-13
Antimony	1.8 B	11.2 B	ND	13.9 B	ND	ND	ND	ND	ND	ND
Cadmium	0.52 B	5.6	25.5	205	54.8	4.5 B	4.4 B	9.3	2.9	ND
Chromium	2.5 B	37.5	18.9 B	251	72.8	ND	103	ND	ND	ND
Copper	14.9 B	85.3	63.5	377	147	ND	10.6 B	ND	ND	ND
Iron	467	10,900	4,080	38,100 N	11,300 N	1,620 N	1,740	39.0 B	740	ND
Lead	7.7 B	106	83.7	553	230	ND	19.4	ND	9.9	ND
Selenium	2.6 B	ND	ND	13.4 B	ND	ND	ND	ND	ND	ND
Sodium	11,700	13,400	27,100	33,600	8,250	7,660	15,400	16,200	12,000	14,000

Compound	MW-14 (D)									
	Jun-06	Aug-07	Nov-08	Mar-10	May-11	May-11	Aug-12	Aug-12	Nov-13	Nov-13
Cadmium	4.9 B	1.5 B	59.1	26	9.2	7.6	9.3	3.7 B	6.6	2.4
Chromium	95.8	248	69.6	68.6	51.3	29.6	2.4 B	88.2	170	ND
Iron	728	389	9,320	14,000 N	1,780 N	1,430 N	279	1,180	6,000	930
Lead	2.9 B	3.4 B	221	76.5	18.8	ND	ND	13.2	53.0	3.7
Sodium	31,900	28,900	561,000	25,400	20,400	20,300	15,400	15,400	10,000	12,000
Thallium	ND	3.4 B	ND	ND	ND	ND	ND	ND	ND	ND

Compound	MW-21 (D)									
	Jun-06	Aug-07	Nov-08	Mar-10	May-11	May-11	Aug-12	Aug-12	Nov-13	Nov-13
Antimony	1.9 B	6.7 B	ND	ND	ND	ND	ND	ND	11.9 B	ND
Iron	31.4 B	503	198 B	1,840 N	694	32.4 B	1,330	ND	760	ND
Manganese	26.4 B	51.8	627	57.7	36.1 B	19.7 B	96.1	56.7	100	64.0
Sodium	24,500	27,200	19,200	31,800	24,300	21,700	19,700	19,400	17,000	18,000

Compound	MW-20 (VD)									
	Jun-06	Aug-07	Nov-08	Mar-10	May-11	May-11	Aug-12	Aug-12	Nov-13	Nov-13
Antimony	1.7 B	9.5 B	ND	4.4 B	ND	ND	ND	ND	ND	ND
Iron	1,710	624	164 B	1,370 N	879	71.7 B	398	ND	ND	ND
Sodium	21,800	31,100	29,700	39,600	38,400	40,300	21,700	21,400	21,000	22,000

Compound	MW-19 (M)									
	Jun-06	Aug-07	Nov-08	Mar-10	May-11	May-11	Aug-12	Aug-12	Nov-13	Nov-13
Antimony	ND	U	U	U	U	F	U	F	U	F
Cadmium	1.1 B	6.7 B	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	ND	8	ND	2.7 B	ND	2.4 B	ND	ND	ND	ND

Compound	MW-18 (VD)									
	Jun-06	Aug-07	Nov-08	Mar-10	May-11	May-11	Aug-12	Aug-12	Nov-13	Nov-13
Antimony	ND	ND	9.0 B	5.2 B	ND	ND	ND	ND	ND	ND
Iron	212	308	307	731 N	327 N	ND	ND	277	ND	ND
Manganese	169	547	122	312	521	421	39.1 B	539	1,200	ND
Sodium	30,000	26,700	29,600	30,000	28,400	30,200	26,600	26,000	25,000	26,000

Compound	NYSDEC Criteria
Antimony	3
Cadmium	5
Chromium	50
Copper	200
Iron	300
Lead	25
Manganese	300
Selenium	10
Sodium	20,000
Thallium	0.50

- LEGEND:**
- MW-20
 - Well Utilized For Long Term Monitoring
 - Well Not Utilized For Long Term Monitoring
 - (S) Shallow Well (50ft bgs)
 - (D) Deep Well (100 bgs)
 - (VD) Very Deep Well (150 bgs)
 - (M) Magothy Aquifer Well (250 bgs)

Asphalt Cap

B Estimated Concentration (Less than the Instrument Reporting Limit)

F Filtered

N Spike Recovery Outside Control Limit

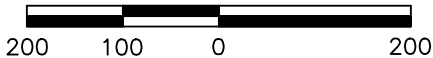
ND Not Detected

U Not Filtered

8.5 Concentration Exceeds the Class GA Criteria

All Values are in ug/L

Graphic Scale



Prepared by :

AECOM

SUBMITTED BY :

PK

DRAWN BY :

SC/jk

APPROVED BY :

PK

MULTI SITE G - LIBERTY INDUSTRIAL SITE
SITE NO. 1-52-108

SUMMARY OF TAL METALS IN GROUNDWATER NOVEMBER 2013

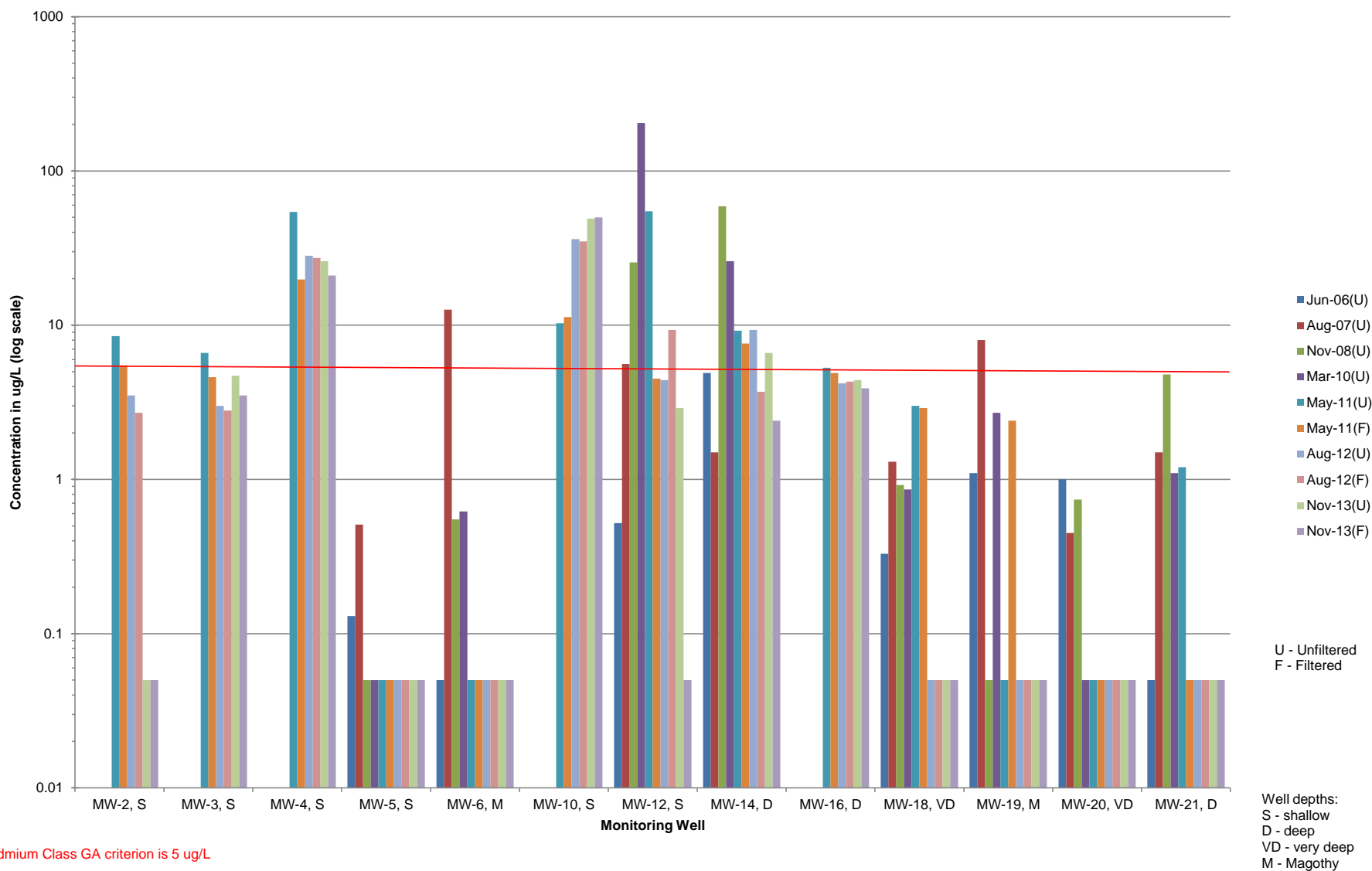
NYSDEC
625 Broadway, Albany NY, 12233

DATE :
NOVEMBER 2013

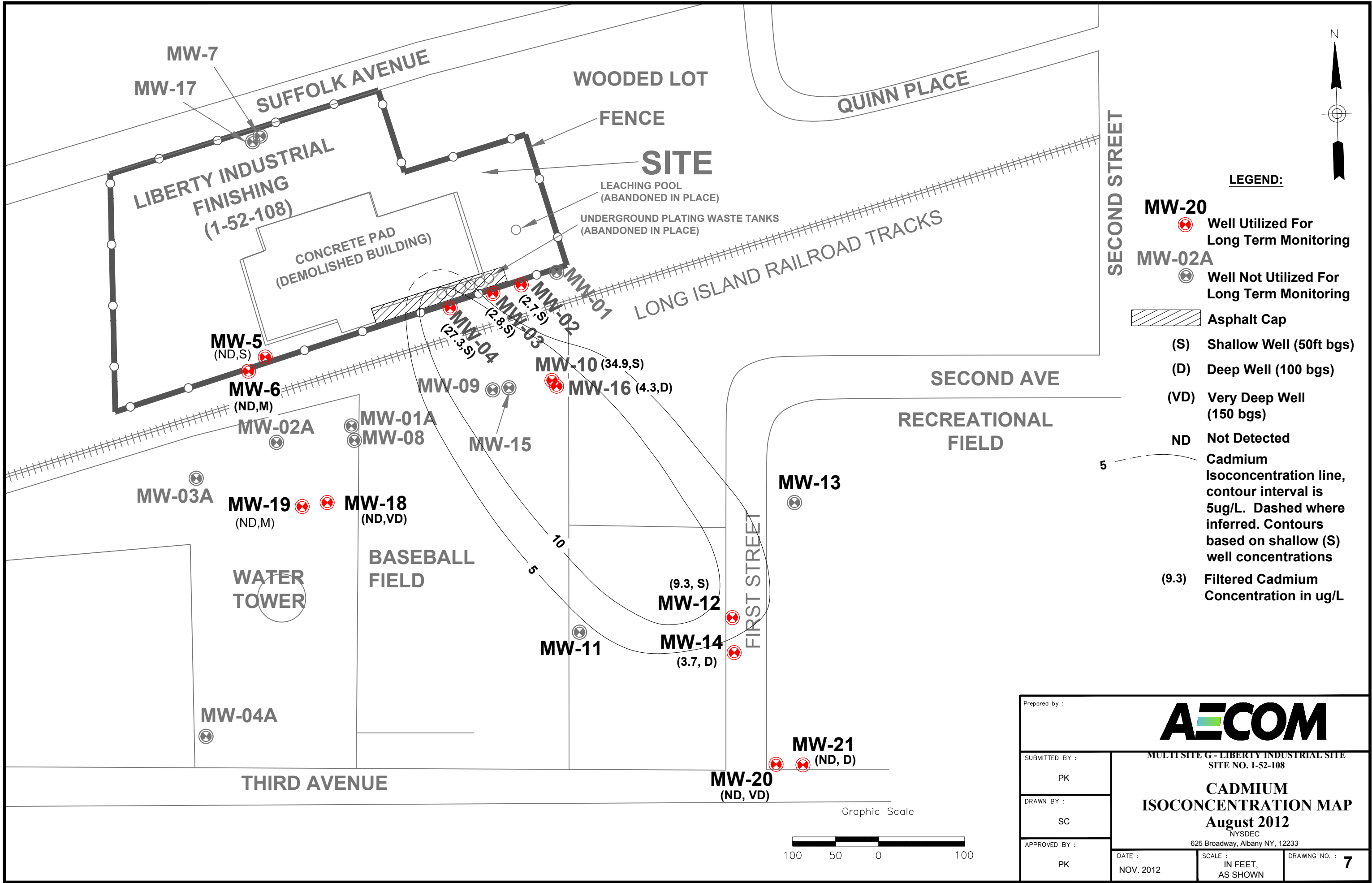
SCALE :
IN FEET,
AS SHOWN

DRAWING NO. :
5

FIGURE 6
CADMIUM CONCENTRATIONS IN SELECTED MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)



Piscataway on uspsw2vfp001\1Data_uspsw2vfp001\Environment\J
File: J:\Project\1LibertyIndustrialSite\Cadd\Drawings\liberty prr Figures_2012-11-12.dwg Layout: Cadmium Iso Fig 7 User: karchij1 Plotted: Nov 13, 2012 - 9:27am



Piscataway on uspsw2vfp001\Data_uspsw2vfp001\Environment\J
File: J:\Project\LibertyIndustrial\Cadd\Drawings\liberty prr Figures_2014-01-29.dwg Layout: Cadmium Iso Fig 7A User: karchi1 Plotted: Jan 29, 2014 - 12:58pm

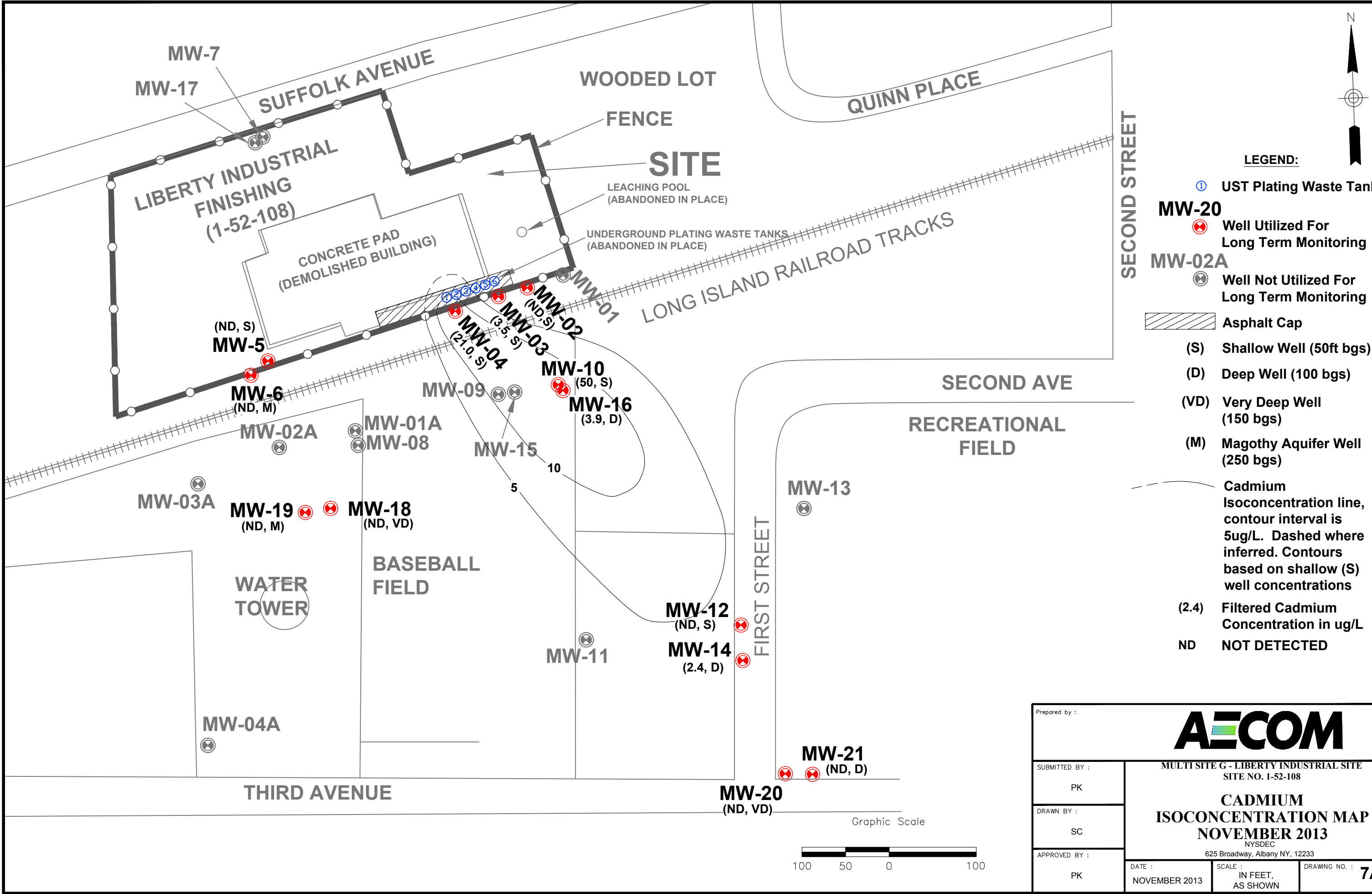
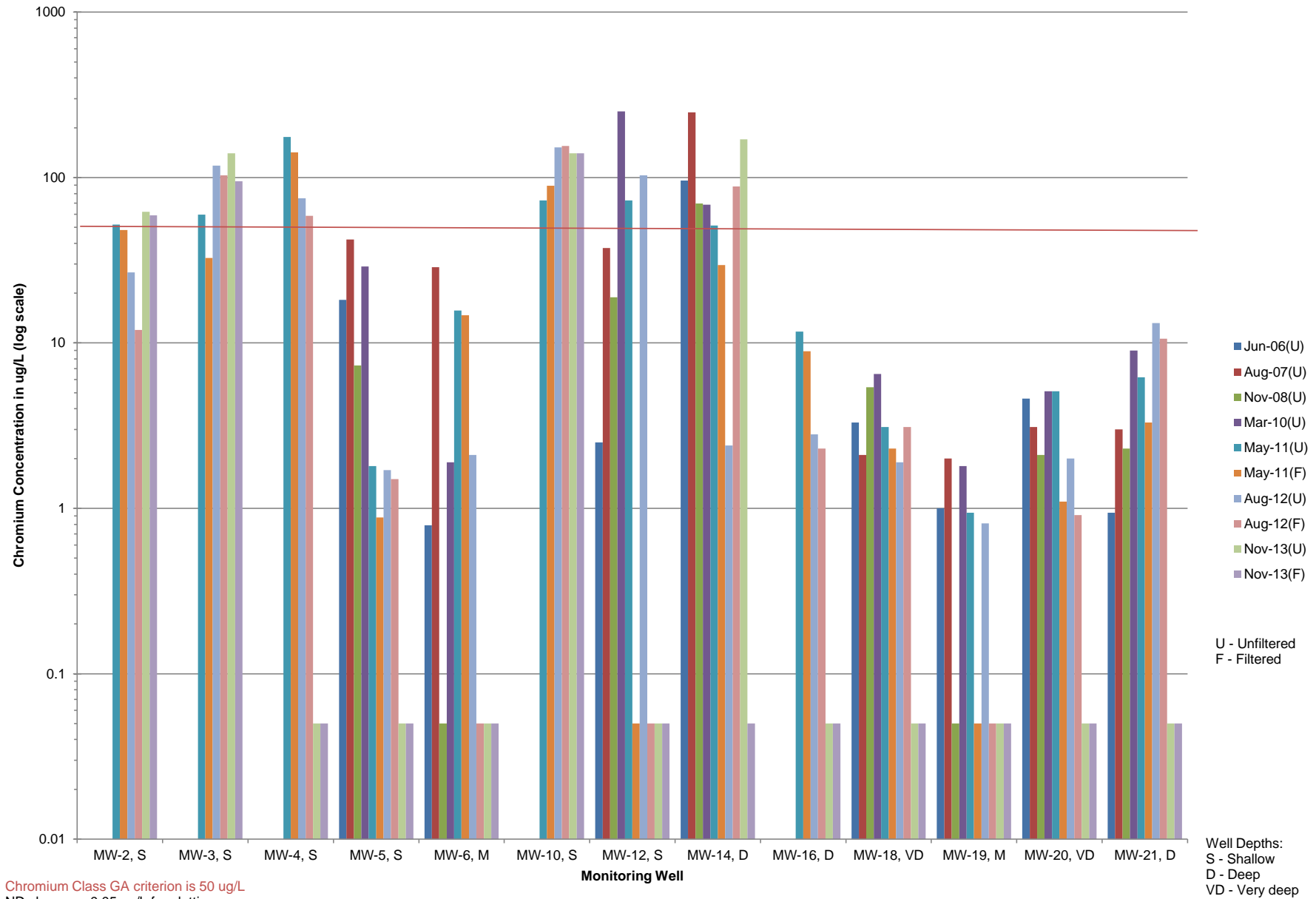
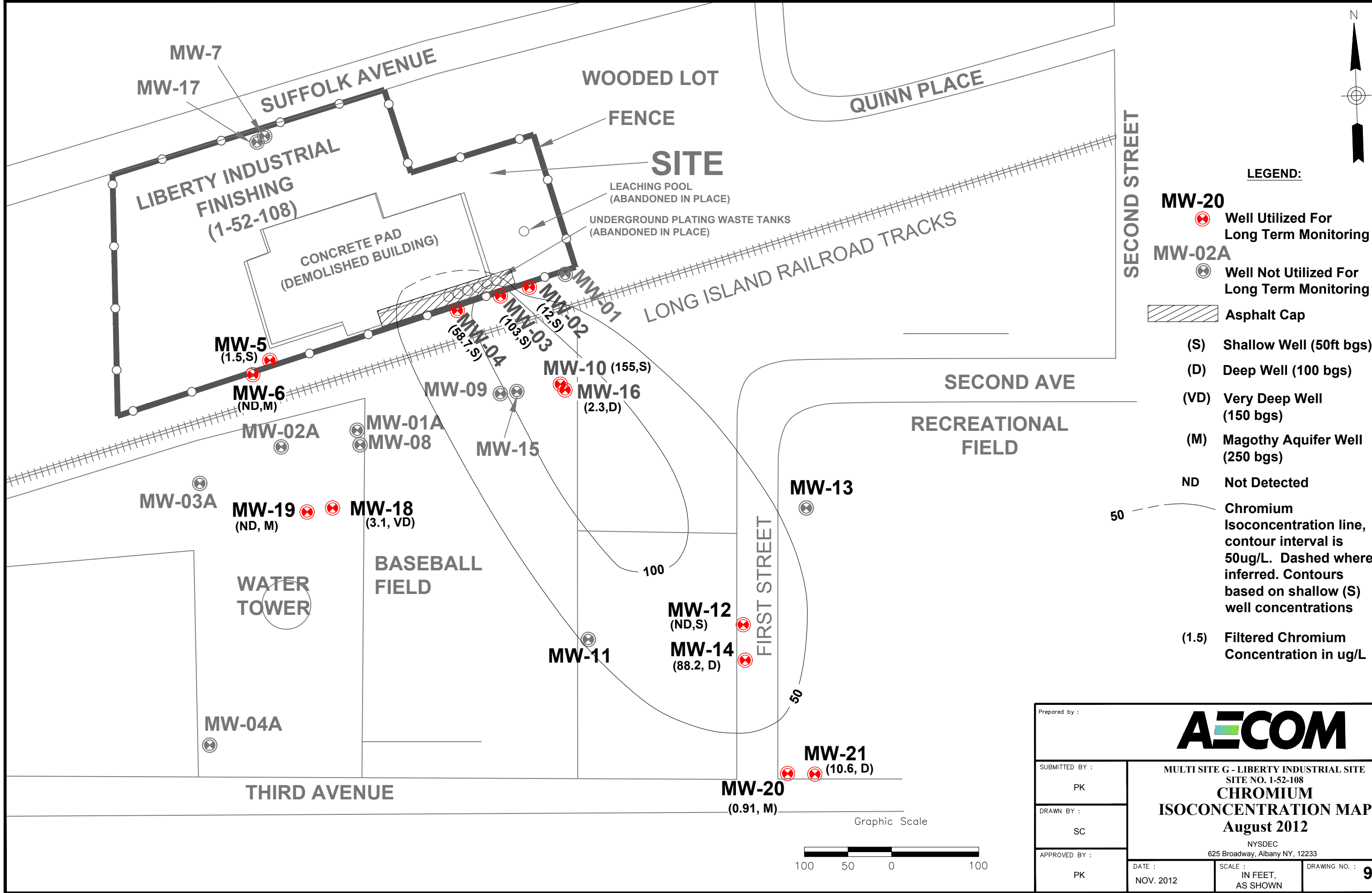


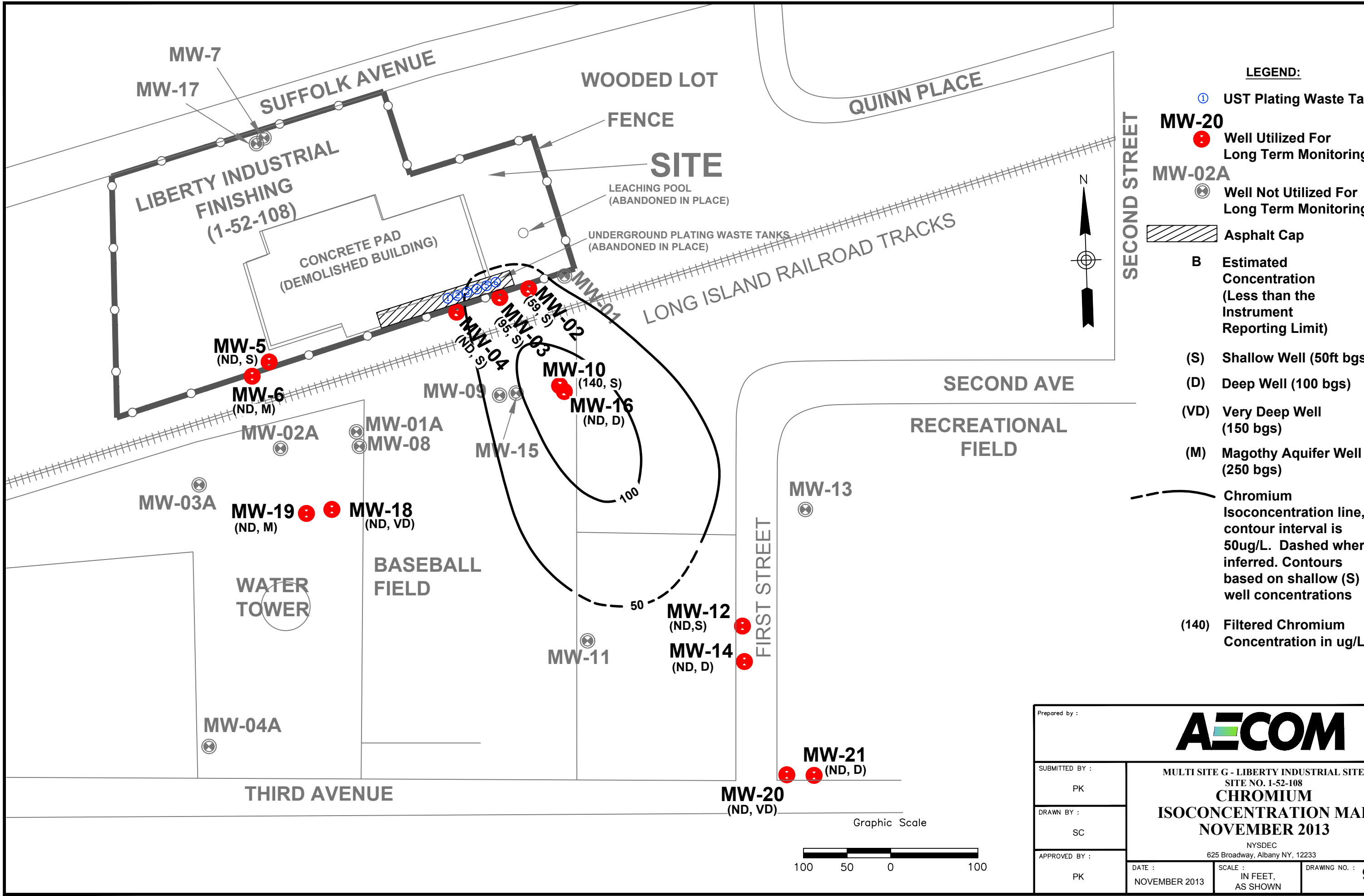
FIGURE 8
CHROMIUM CONCENTRATIONS IN SELECTED MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING (1-52-108)



Piscataway on uspsw2\fp001\Data_uspsw2\vp001\Environment\J File: J:\Project\Liberty\IndustrialSite\Cadd\Drawings\liberty prr Figures_2012-11-12.dwg Layout: Chromium Iso Fig 9 User: karchj1 Plotted: Nov 13, 2012 - 9:28am



Piscataway on uspsw2\fp001\Data_uspsw2\fp001\Environment\J
File: J:\Project\Liberty\Industrial\Cadd\Drawings\liberty prr Figures_2014-01-29.dwg Layout: Chromium Iso Fig 9A User: karchj1 Plotted: Jan 29, 2014 - 12:58pm



Prepared by :		AECOM	
SUBMITTED BY :	PK	MULTI SITE G - LIBERTY INDUSTRIAL SITE SITE NO. 1-52-108 CHROMIUM ISOCONCENTRATION MAP NOVEMBER 2013 <small>NYSDEC 625 Broadway, Albany NY, 12233</small>	
DRAWN BY :	SC		
APPROVED BY :	PK		
DATE :	NOVEMBER 2013	SCALE :	IN FEET, AS SHOWN
		DRAWING NO. :	9A

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

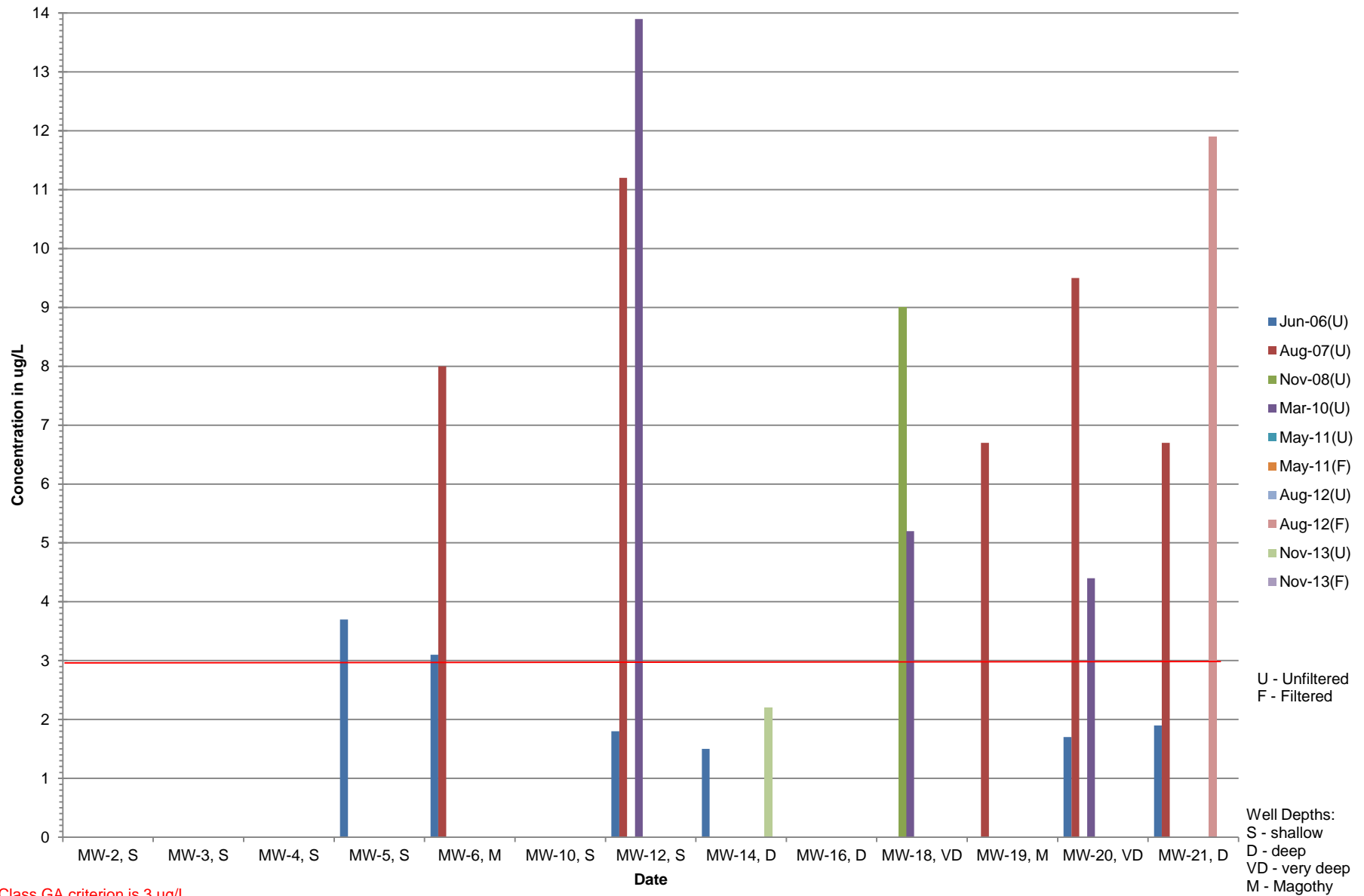


FIGURE 11
LEAD CONCENTRATIONS IN SELECTED MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)

Concentration in ug/L - Log Scale

Class GA crirerion is 25 ug/L

Well Depth:
S - shallow
D - deep
VD - very deep
M - Magothy

U - Unfiltered
F - Filtered

Legend:

- Jun-06(U)
- Aug-07(U)
- Nov-08(U)
- Mar-10(U)
- May-11(U)
- May-11(F)
- Aug-12(U)
- Aug-12(F)
- Nov-13(U)
- Nov-13(F)

Well Data:

Well	Depth	Jun-06(U)	Aug-07(U)	Nov-08(U)	Mar-10(U)	May-11(U)	May-11(F)	Aug-12(U)	Aug-12(F)	Nov-13(U)	Nov-13(F)
MW-2	S	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
MW-3	S	0.05	0.05	0.05	0.05	15	0.05	0.05	0.05	0.05	0.05
MW-4	S	0.05	0.05	0.05	0.05	45	0.05	18	10	0.05	0.05
MW-5	S	1.3	3.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
MW-6	M	0.05	18	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
MW-10	S	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
MW-12	S	7	105	80	500	250	0.05	22	13	10	0.05
MW-14	D	3.5	3.5	250	70	22	0.05	0.05	13	55	4
MW-16	D	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
MW-18	VD	0.05	3	2.5	4	0.05	0.05	0.05	0.05	0.05	0.05
MW-19	M	0.05	4.5	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
MW-20	VD	1.6	3.8	0.05	5	0.05	0.05	0.05	0.05	0.05	0.05
MW-21	D	0.05	4.5	2.8	8	0.05	0.05	0.05	0.05	0.05	0.05

Class GA crirerion is 25 ug/L

Appendix A

Monitoring Well Sampling Forms



WELL NO.

MW-2

[illegible]



WELL NO.

MW-3

[illegible]



WELL NO.

MW-4

[illegible]



WELL NO.

MW-5

[illegible]



WELL NO.

MW-6

[illegible]



WELL NO.

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]



MW-21

[illegible]

Appendix B

NYSDEC Monitoring Well Field Inspection Logs

SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/05/2013 0800

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: _____

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):

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):

43

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

NA - dry

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

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

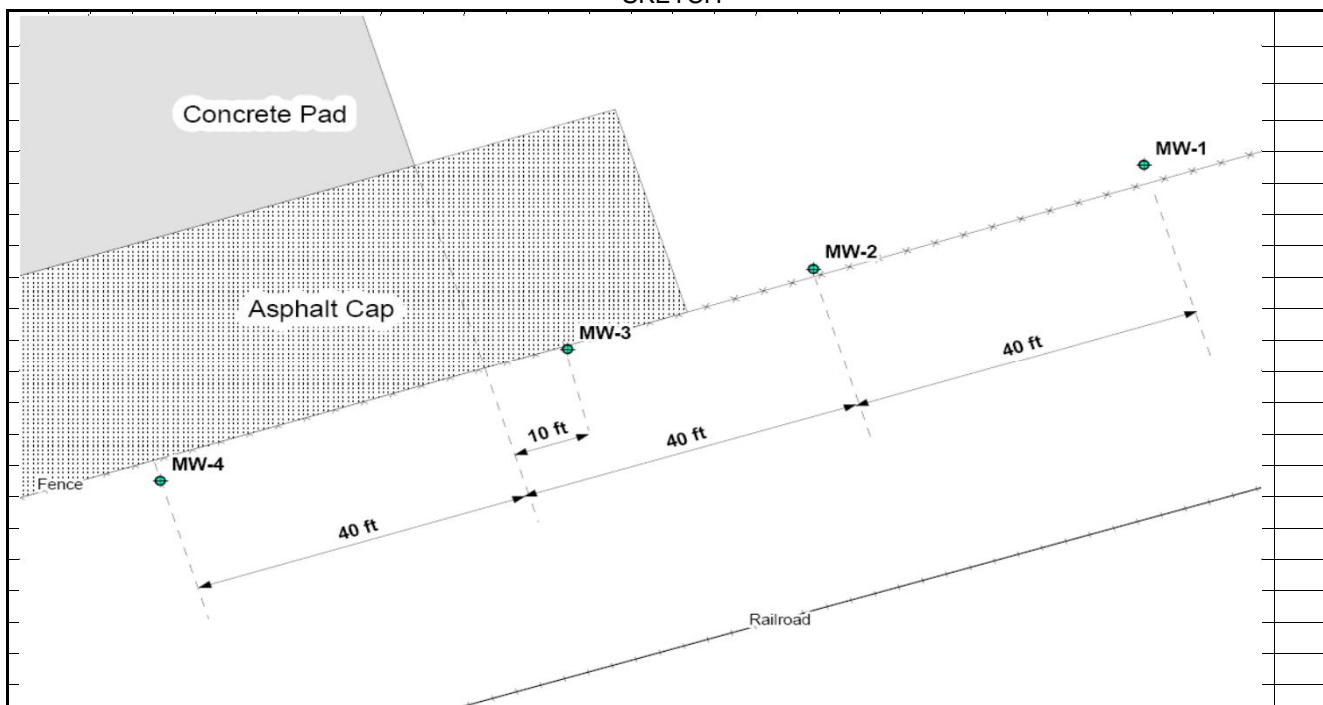
(e.g. Gas station, salt pile, etc.):

Capped area on-site. Gas station to the east of the Site.

REMARKS:

Not sampled

MONITORING WELL INSPECTION LOG
SKETCH



looking towards well from west



looking towards well from west



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/06/2013 0750

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?

YES	NO
X	
X	
X	

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):

54.2

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

43.21

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

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

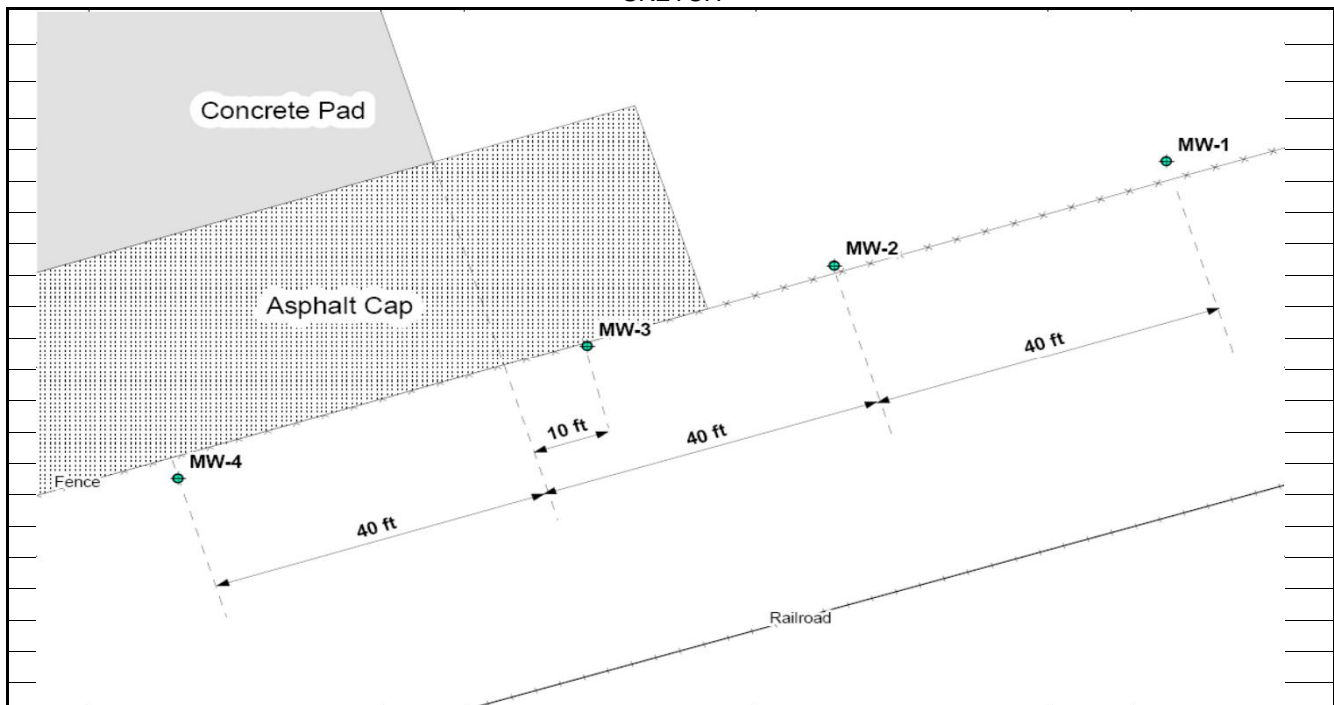
(e.g. Gas station, salt pile, etc.):

Capped area on-site. Gas station to the east of the Site.

REMARKS:

New bolts needed

MONITORING WELL INSPECTION LOG
SKETCH



looking towards well from west



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/04/2013 1025

WELL ID.: LMW-3

WELL VISIBLE? (If not, provide directions below)
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

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)

YES	NO
X	
X	
X	

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):

0.0 PIF
NA
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

54.0
45.21
4
PVC
GOOD
-
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, railroad tracks

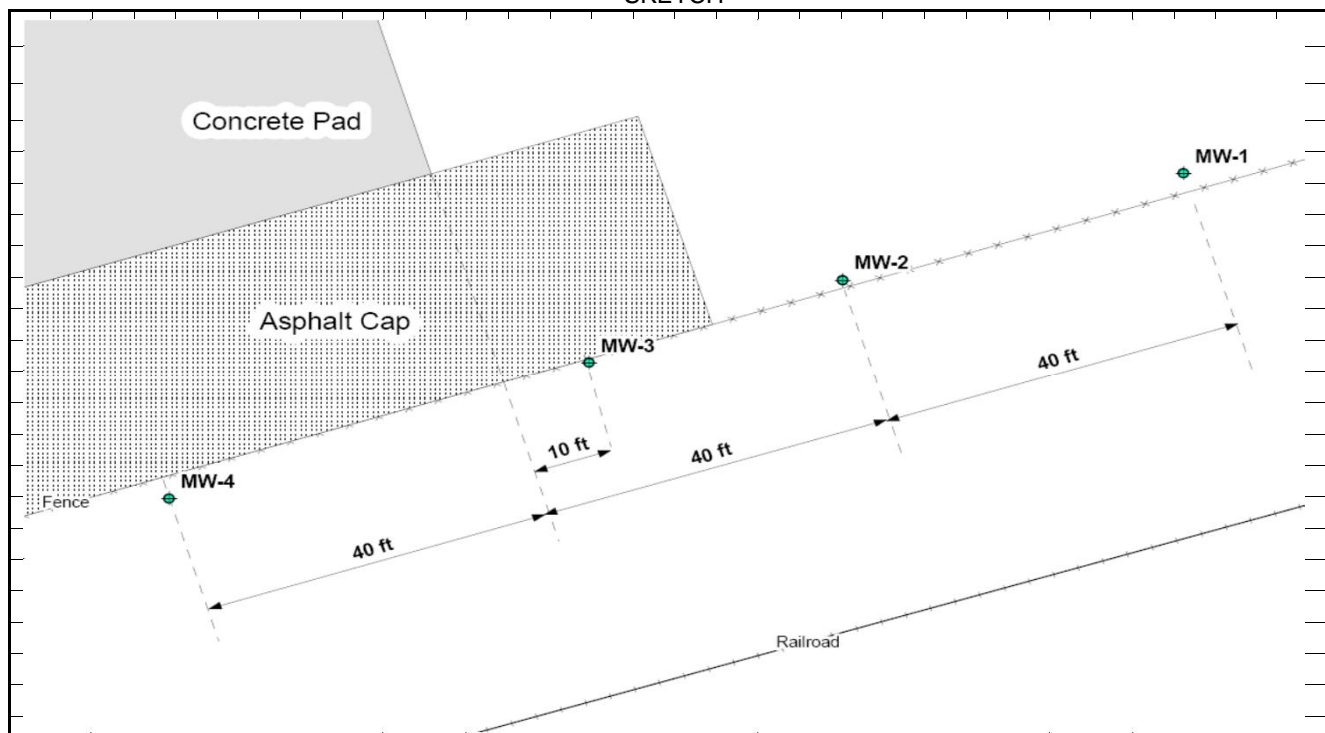
DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)
AND ASSESS THE TYPE OF RESTORATION REQUIRED.
between site and rail road fence, surrounded by overgrown vegetation

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

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

MONITORING WELL INSPECTION LOG

SKETCH



looking towards well from west



looking towards well from northeast



looking at well from outside site fence



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/04/2013 1030

WELL ID.: LMW-4

WELL VISIBLE? (If not, provide directions below)
 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

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)

YES	NO
X	
X	
X	

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):

0.0 Pid
NA
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

54.4
46.60
4
PVC
GOOD
-
CLOSE

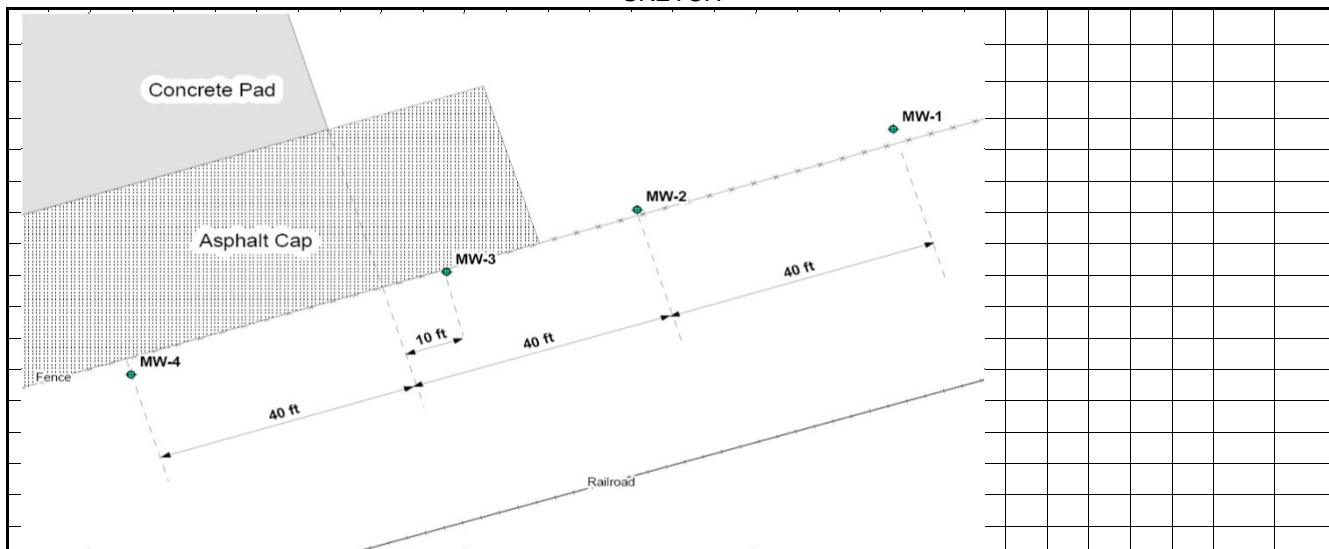
DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
overhead lines, close to fence, railroad tracks

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 fences, 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 east of the Site.

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

MONITORING WELL INSPECTION LOG
SKETCH



looking towards well from west



looking at well from outside site fence



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/05/2013 0720

WELL ID.: LMW-5

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

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

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)

Cap does not close properly. Lid is not flush with casing.

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PID

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

2 FT

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):

58

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

47.19

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

-

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.

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 between asphalted area and site fence, surrounded by overgrown vegetation

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

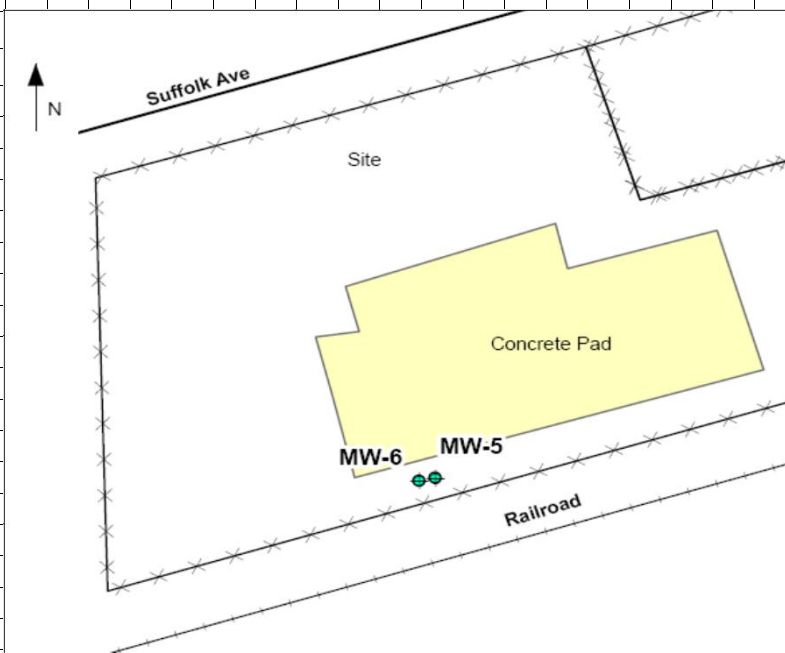
Capped area on-site. Gas station to the east of the Site.

REMARKS:

Casing lid needs repair, no lock

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/05/2013 0755

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:

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	
1	
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

265	
46.0	
4	
PVC	
Average	
-	
-	

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.

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 field 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 east of the Site.

REMARKS:

J-plug is missing, no tubing left in hole, needs a lock.

MONITORING WELL INSPECTION LOG
SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/04/2013 1330

WELL ID.: LMW-10

WELL VISIBLE? (If not, provide directions below)
 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
<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 type="checkbox"/>	<input checked="" 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)

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
 TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)
 PROTECTIVE CASING MATERIAL TYPE:
 MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

0.0 PID
 NA
 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
<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):
 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

50
 43.10
 4
 PVC
 RUSTY
 -
 -

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 sports field

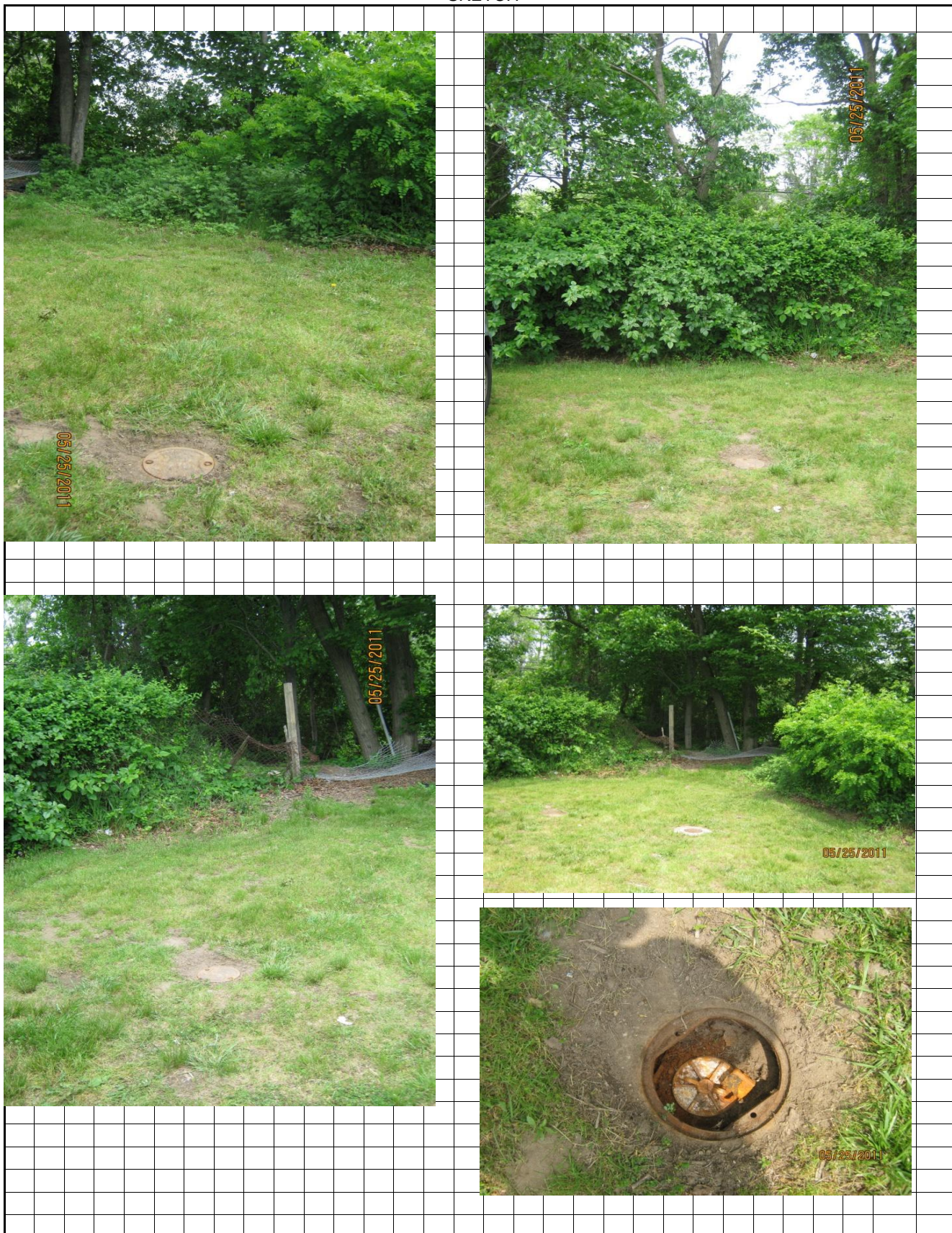
DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)
 AND ASSESS THE TYPE OF RESTORATION REQUIRED.
baseball field edge

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT
 (e.g. Gas station, salt pile, etc.):
Recharge Basin

REMARKS:
1/4" bonded poly tubing in well

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/05/2013 1240

WELL ID.: LMW-12

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

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

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):

49.20

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

43.0

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 in the ROW along First Street at the corner of parking lot

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

Recharge basin across First St

REMARKS:

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

MONITORING WELL INSPECTION LOG
SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/05/2013 1425

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

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):

100

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

43.02

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 at the corner of parking lot

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

Recharge basin across First St

REMARKS:

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

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/04/2013 1330

WELL ID.: LMW-16

WELL VISIBLE? (If not, provide directions below)
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
<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 type="checkbox"/>	<input checked="" 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)

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
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)
PROTECTIVE CASING MATERIAL TYPE:
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

0.0 Pid
NA
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
<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):
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

99.5
44.63
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 across field

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

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT
(e.g. Gas station, salt pile, etc.):
Recharge Basin

REMARKS:
bonded 1/4" poly tubing in well

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/05/2013 1040

WELL ID.: LMW-18

WELL VISIBLE? (If not, provide directions below)
 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 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 type="checkbox"/>	<input checked="" 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)

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
 TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)
 PROTECTIVE CASING MATERIAL TYPE:
 MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

0.0	PID
NA	
SS	
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):
 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

148.0	
45.69	
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.

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 fenced off grassy area behind the water tower

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

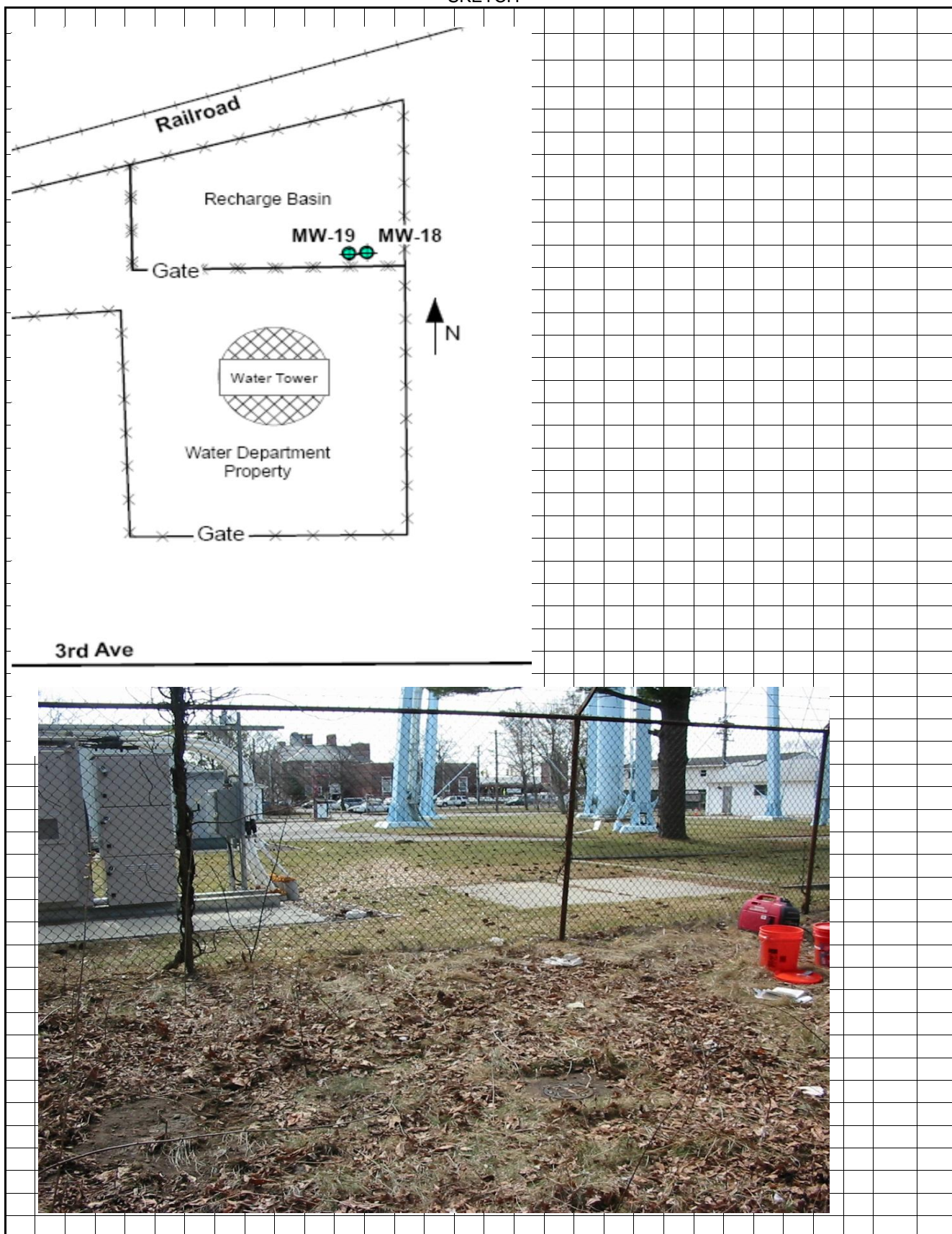
(e.g. Gas station, salt pile, etc.):

Recharge Basin

REMARKS:

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/05/2013 1040

WELL ID.: LMW-19

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

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

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

NA

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

SS

PROTECTIVE CASING MATERIAL TYPE:

8

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):

265

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

43.9

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 fenced off grassy area behind the water tower

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

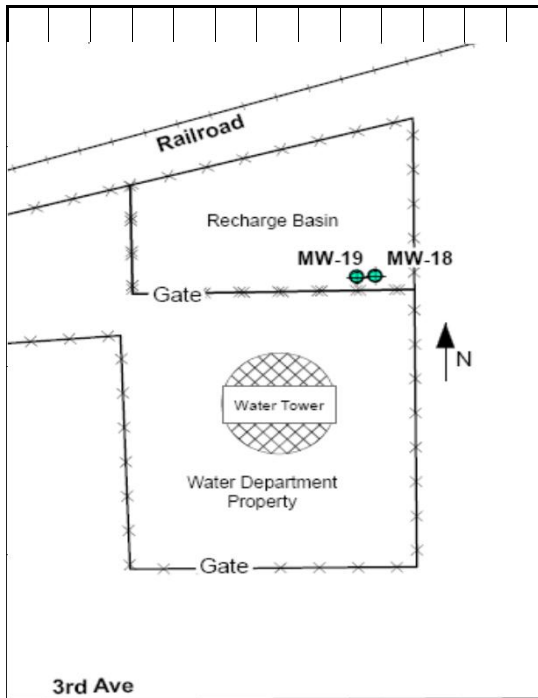
Recharge Basin

REMARKS:

No tubing in hole

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/05/2013 1400

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:

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

110
43.24
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 in between trees

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.):

Recharge Basin

REMARKS:

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

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/05/2013 1245

WELL ID.: LMW-21

WELL VISIBLE? (If not, provide directions below)

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

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
<input checked="" type="checkbox"/>	<input 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)

<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
0.0 PID	
NA	
SS	
8	

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
<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"/>

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

147.0
43.20
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 in between trees

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.):

Recharge Basin

REMARKS:

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

MONITORING WELL INSPECTION LOG

SKETCH



Appendix C

Laboratory Data Summary Packages

Project: Liberty Industrial Finish

Client PO: Not Available

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

Attn: Paul Kareth

Received Date: 11/6/2013

Report Date: 12/11/2013

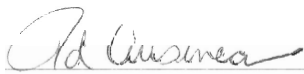
Deliverables: NYDOH-CATB

Lab ID: AC75576

Lab Project No: 3110620

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 Veritech to all parties shall not exceed Veritech's total fee for analytical services rendered.



Robin Cousineau - Quality Assurance Director

OR

Stanley Gilewicz - Laboratory Director

NJ (07071)
PA (68-00463)

NY (ELAP11408)
KY (90124)

CT (PH-0671)



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SDG Narrative

HCV Case Narrative/Conformance Summary

Client: AECOM
Project: Liberty Industrial Finish

HCV Project: 3110620

Hampton-Clarke/Veritech (HC-V) received the following samples on November 6, 2013:

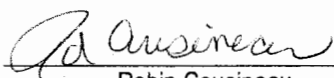
<u>Client ID</u>	<u>HCV Sample ID</u>	<u>Matrix</u>	<u>Analysis</u>
LMW-3	AC75576-001	Aqueous	Metals (6010C, 6020A/7470A)
LMW-3F	AC75576-002	Aqueous	Metals (6010C, 6020A/7470A)
LMW-4	AC75576-003	Aqueous	Metals (6010C, 6020A/7470A)
LMW-4F	AC75576-004	Aqueous	Metals (6010C, 6020A/7470A)
LMW-10	AC75576-005	Aqueous	Metals (6010C, 6020A/7470A)
LMW-10F	AC75576-006	Aqueous	Metals (6010C, 6020A/7470A)
LMW-16	AC75576-007	Aqueous	Metals (6010C, 6020A/7470A)
LMW-16F	AC75576-008	Aqueous	Metals (6010C, 6020A/7470A)
LMW-5	AC75576-009	Aqueous	Metals (6010C, 6020A/7470A)
LMW-5F	AC75576-010	Aqueous	Metals (6010C, 6020A/7470A)
LMW-6	AC75576-011	Aqueous	Metals (6010C, 6020A/7470A)
LMW-6F	AC75576-012	Aqueous	Metals (6010C, 6020A/7470A)
LMW-18	AC75576-013	Aqueous	Metals (6010C, 6020A/7470A)
LMW-18F	AC75576-014	Aqueous	Metals (6010C, 6020A/7470A)
LMW-19	AC75576-015	Aqueous	Metals (6010C, 6020A/7470A)
LMW-19F	AC75576-016	Aqueous	Metals (6010C, 6020A/7470A)
LFB-11513	AC75576-017	Aqueous	Metals (6010C, 6020A/7470A)
LFB-11513F	AC75576-018	Aqueous	Metals (6010C, 6020A/7470A)
LMW-512	AC75576-019	Aqueous	Metals (6010C, 6020A/7470A)
LMW-512F	AC75576-020	Aqueous	Metals (6010C, 6020A/7470A)
LMW-14	AC75576-021	Aqueous	Metals (6010C, 6020A/7470A)
LMW-14F	AC75576-022	Aqueous	Metals (6010C, 6020A/7470A)
LMW-12	AC75576-023	Aqueous	Metals (6010C, 6020A/7470A)
LMW-12F	AC75576-024	Aqueous	Metals (6010C, 6020A/7470A)
LMW-20	AC75576-025	Aqueous	Metals (6010C, 6020A/7470A)
LMW-20F	AC75576-026	Aqueous	Metals (6010C, 6020A/7470A)
LMW-21	AC75576-027	Aqueous	Metals (6010C, 6020A/7470A)
LMW-21F	AC75576-028	Aqueous	Metals (6010C, 6020A/7470A)
LMW-2	AC75576-029	Aqueous	Metals (6010C, 6020A/7470A)
LMW-2F	AC75576-030	Aqueous	Metals (6010C, 6020A/7470A)
LMW-2 MS	AC75576-031	Aqueous	Metals (6010C, 6020A/7470A)
LMW-2F MS	AC75576-032	Aqueous	Metals (6010C, 6020A/7470A)
LMW-2 MSD	AC75576-033	Aqueous	Metals (6010C, 6020A/7470A)
LMW-2F MSD	AC75576-034	Aqueous	Metals (6010C, 6020A/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:

The serial dilution for batches 27401 and 27402 is outside QC limits for one or more analytes, suggesting matrix interference.

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

Stanley Gilewicz
Laboratory Director

12 | 11 | 2013

Date

Reporting Limit Definitions

HCV 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

HCV Report Of Analysis

Client: AECOM

HCV Project #: 3110620

Project: Liberty Industrial Finish

Sample ID: LMW-3

Collection Date: 11/4/2013

Lab#: AC75576-001

Receipt Date: 11/6/2013

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	470
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	29000
Chromium	1	ug/l	50	140
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	650
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	38000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	4.7
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	8.5
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-3F
 Lab#: AC75576-002
 Matrix: Aqueous

Collection Date: 11/4/2013
 Receipt Date: 11/6/2013

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	27000
Chromium	1	ug/l	50	95
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	35000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	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	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-4
 Lab#: AC75576-003
 Matrix: Aqueous

Collection Date: 11/4/2013
 Receipt Date: 11/6/2013

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	310
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	33000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	320
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	21000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	160

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	26
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-4F
 Lab#: AC75576-004
 Matrix: Aqueous

Collection Date: 11/4/2013
 Receipt Date: 11/6/2013

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	30000
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	21000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	130

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	21
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#: AC75576-005
 Matrix: Aqueous

Collection Date: 11/4/2013
 Receipt Date: 11/6/2013

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	210
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	28000
Chromium	1	ug/l	50	140
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	420
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	9200
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	49
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#: AC75576-006
 Matrix: Aqueous

Collection Date: 11/4/2013
 Receipt Date: 11/6/2013

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	28000
Chromium	1	ug/l	50	140
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	9300
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	50
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#: AC75576-007
 Matrix: Aqueous

Collection Date: 11/4/2013
 Receipt Date: 11/6/2013

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	230
Calcium	1	ug/l	5000	9800
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	1800
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	570
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	5100
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	11000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	1.5
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-16F
 Lab#: AC75576-008
 Matrix: Aqueous

Collection Date: 11/4/2013
 Receipt Date: 11/6/2013

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	440
Barium	1	ug/l	50	240
Calcium	1	ug/l	5000	10000
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	530
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	11000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	1.2
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-5
 Lab#: AC75576-009
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	9100
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	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#: AC75576-010
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	11000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	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#: AC75576-011
 Matrix: Aqueous

Collection Date: 11/5/2013

Receipt Date: 11/6/2013

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	5800
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	7600
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	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#: AC75576-012
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	6100
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	7700
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	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#: AC75576-013
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	62
Calcium	1	ug/l	5000	19000
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	1200
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	8200
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	25000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	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#: AC75576-014
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	61
Calcium	1	ug/l	5000	20000
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	7800
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	2.0	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#: AC75576-015
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	11000
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	2.0	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
 Lab#: AC75576-016
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	11000
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	2.0	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-11513
 Lab#: AC75576-017
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	2.0	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-11513F
 Lab#: AC75576-018
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	2.0	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-512
 Lab#: AC75576-019
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	840
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	39000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	790
Magnesium	1	ug/l	5000	6400
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	2.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	3.2
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	11
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-512F
 Lab#: AC75576-020
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	41000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	6600
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	2.0	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-14
 Lab#: AC75576-021
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	5300
Barium	1	ug/l	50	56
Calcium	1	ug/l	5000	11000
Chromium	1	ug/l	50	170
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	6000
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	290
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	5000
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	10000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	94

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	2.2
Arsenic	1	ug/l	2.0	3.2
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	6.6
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	53
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-14F
 Lab#: AC75576-022
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	12000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	930
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	300
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	2.0	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	3.7
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-12
 Lab#: AC75576-023
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	810
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	40000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	740
Magnesium	1	ug/l	5000	6400
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	2.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	2.9
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	9.9
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: LMW-12F
 Lab#: AC75576-024
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	51
Calcium	1	ug/l	5000	44000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	7200
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	2.0	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#: AC75576-025
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	19000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	9000
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	21000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	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-20F
 Lab#: AC75576-026
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	9200
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	22000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	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-21
 Lab#: AC75576-027
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	410
Barium	1	ug/l	50	67
Calcium	1	ug/l	5000	14000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	760
Magnesium	1	ug/l	5000	6100
Manganese	1	ug/l	40	100
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	6200
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	2.0	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-21F
 Lab#: AC75576-028
 Matrix: Aqueous

Collection Date: 11/5/2013
 Receipt Date: 11/6/2013

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	67
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	6100
Manganese	1	ug/l	40	64
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	5800
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	2.0	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-2
 Lab#: AC75576-029
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/6/2013

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	30000
Chromium	1	ug/l	50	62
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	2.0	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-2F
 Lab#: AC75576-030
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/6/2013

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	29000
Chromium	1	ug/l	50	59
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	2.0	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-2 MS
 Lab#: AC75576-031
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/6/2013

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	9.4

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5100
Barium	1	ug/l	50	530
Calcium	1	ug/l	5000	80000
Chromium	1	ug/l	50	550
Copper	1	ug/l	50	500
Iron	1	ug/l	300	5000
Magnesium	1	ug/l	5000	53000
Manganese	1	ug/l	40	490
Nickel	1	ug/l	50	490
Potassium	1	ug/l	5000	50000
Silver	1	ug/l	20	94
Sodium	1	ug/l	5000	64000
Vanadium	1	ug/l	50	490
Zinc	1	ug/l	50	500

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	540
Arsenic	1	ug/l	2.0	520
Beryllium	1	ug/l	1.0	550
Cadmium	1	ug/l	2.0	530
Cobalt	1	ug/l	2.0	530
Lead	1	ug/l	3.0	540
Selenium	1	ug/l	10	500
Thallium	1	ug/l	2.0	510

Sample ID: LMW-2F MS
 Lab#: AC75576-032
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/6/2013

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	9.7

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	4800
Barium	1	ug/l	50	510
Calcium	1	ug/l	5000	78000
Chromium	1	ug/l	50	530
Copper	1	ug/l	50	480
Iron	1	ug/l	300	4700
Magnesium	1	ug/l	5000	51000
Manganese	1	ug/l	40	470
Nickel	1	ug/l	50	470
Potassium	1	ug/l	5000	53000
Silver	1	ug/l	20	91
Sodium	1	ug/l	5000	68000
Vanadium	1	ug/l	50	480
Zinc	1	ug/l	50	490

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	510
Arsenic	1	ug/l	2.0	530
Beryllium	1	ug/l	1.0	500
Cadmium	1	ug/l	2.0	490
Cobalt	1	ug/l	2.0	510
Lead	1	ug/l	3.0	500
Selenium	1	ug/l	10	480
Thallium	1	ug/l	2.0	480

Sample ID: LMW-2 MSD
 Lab#: AC75576-033
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/6/2013

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	9.1

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	4800
Barium	1	ug/l	50	510
Calcium	1	ug/l	5000	77000
Chromium	1	ug/l	50	530
Copper	1	ug/l	50	480
Iron	1	ug/l	300	4800
Magnesium	1	ug/l	5000	52000
Manganese	1	ug/l	40	480
Nickel	1	ug/l	50	480
Potassium	1	ug/l	5000	49000
Silver	1	ug/l	20	91
Sodium	1	ug/l	5000	63000
Vanadium	1	ug/l	50	480
Zinc	1	ug/l	50	490

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	470
Arsenic	1	ug/l	2.0	460
Beryllium	1	ug/l	1.0	480
Cadmium	1	ug/l	2.0	460
Cobalt	1	ug/l	2.0	460
Lead	1	ug/l	3.0	470
Selenium	1	ug/l	10	440
Thallium	1	ug/l	2.0	440

Sample ID: LMW-2F MSD
 Lab#: AC75576-034
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/6/2013

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	9.4

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	4700
Barium	1	ug/l	50	510
Calcium	1	ug/l	5000	77000
Chromium	1	ug/l	50	520
Copper	1	ug/l	50	480
Iron	1	ug/l	300	4700
Magnesium	1	ug/l	5000	51000
Manganese	1	ug/l	40	470
Nickel	1	ug/l	50	470
Potassium	1	ug/l	5000	53000
Silver	1	ug/l	20	91
Sodium	1	ug/l	5000	67000
Vanadium	1	ug/l	50	470
Zinc	1	ug/l	50	480

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	530
Arsenic	1	ug/l	2.0	550
Beryllium	1	ug/l	1.0	520
Cadmium	1	ug/l	2.0	520
Cobalt	1	ug/l	2.0	530
Lead	1	ug/l	3.0	510
Selenium	1	ug/l	10	540
Thallium	1	ug/l	2.0	490

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75576-001
 Client Id: LMW-3
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/6/2013

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	470	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-70-2	Calcium	5000	29000	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-47-3	Chromium	50	140	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7439-89-6	Iron	300	650	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	18	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	11	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-23-5	Sodium	5000	38000	1	50	50	11/16/13	27401	W15686E2	11	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	33	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: AC75576-001
 Client Id: LMW-3
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/6/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	4.7	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7439-92-1	Lead	3.0	8.5	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	29	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: AC75576-003
 Client Id: LMW-4
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	310	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-70-2	Calcium	5000	33000	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7439-89-6	Iron	300	320	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	19	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	12	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-23-5	Sodium	5000	21000	1	50	50	11/16/13	27401	W15686E2	12	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-66-6	Zinc	50	160	1	50	50	11/16/13	27401	W15686C2	34	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: AC75576-003
 Client Id: LMW-4
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	26	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-005
 Client Id: LMW-10
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	210	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-70-2	Calcium	5000	28000	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-47-3	Chromium	50	140	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7439-89-6	Iron	300	420	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	20	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	13	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-23-5	Sodium	5000	9200	1	50	50	11/16/13	27401	W15686E2	13	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	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: AC75576-005
 Client Id: LMW-10
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	49	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-007
 Client Id: LMW-16
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-39-3	Barium	50	230	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-70-2	Calcium	5000	9800	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7439-89-6	Iron	300	1800	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7439-96-5	Manganese	40	570	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	23	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-09-7	Potassium	5000	5100	1	50	50	11/16/13	27401	W15686E2	14	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/16/13	27401	W15686E2	14	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	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: AC75576-007
 Client Id: LMW-16
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	1.5	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	4.4	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-009
 Client Id: LMW-5
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	24	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	15	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-23-5	Sodium	5000	9100	1	50	50	11/16/13	27401	W15686E2	15	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	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: AC75576-009
 Client Id: LMW-5
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	33	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	33	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	33	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	33	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	33	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	33	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	33	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-011
 Client Id: LMW-6
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-70-2	Calcium	5000	5800	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	25	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	16	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-23-5	Sodium	5000	7600	1	50	50	11/16/13	27401	W15686E2	16	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	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: AC75576-011
 Client Id: LMW-6
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-013
 Client Id: LMW-18
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-39-3	Barium	50	62	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-70-2	Calcium	5000	19000	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7439-96-5	Manganese	40	1200	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	26	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-09-7	Potassium	5000	8200	1	50	50	11/16/13	27401	W15686E2	17	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-23-5	Sodium	5000	25000	1	50	50	11/16/13	27401	W15686E2	17	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	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: AC75576-013
 Client Id: LMW-18
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-015
 Client Id: LMW-19
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	27	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	21	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	11/16/13	27401	W15686E2	21	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	43	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: AC75576-015
 Client Id: LMW-19
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-017
 Client Id: LFB-11513
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	28	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	22	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	11/16/13	27401	W15686E2	22	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	44	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: AC75576-017
 Client Id: LFB-11513
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	37	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	37	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	37	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	37	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	37	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	37	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	37	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-019
 Client Id: LMW-512
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	840	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-70-2	Calcium	5000	39000	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7439-89-6	Iron	300	790	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7439-95-4	Magnesium	5000	6400	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	29	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	23	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-23-5	Sodium	5000	12000	1	50	50	11/16/13	27401	W15686E2	23	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	45	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: AC75576-019
 Client Id: LMW-512
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.2	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7439-92-1	Lead	3.0	11	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-021
 Client Id: LMW-14
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	5300	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-39-3	Barium	50	56	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-47-3	Chromium	50	170	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7439-89-6	Iron	300	6000	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7439-96-5	Manganese	40	290	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	30	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-09-7	Potassium	5000	5000	1	50	50	11/16/13	27401	W15686E2	24	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-23-5	Sodium	5000	10000	1	50	50	11/16/13	27401	W15686E2	24	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-66-6	Zinc	50	94	1	50	50	11/16/13	27401	W15686C2	46	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: AC75576-021
 Client Id: LMW-14
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	2.2	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	3.2	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	6.6	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7439-92-1	Lead	3.0	53	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-023
 Client Id: LMW-12
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	810	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-70-2	Calcium	5000	40000	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7439-89-6	Iron	300	740	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7439-95-4	Magnesium	5000	6400	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	31	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	25	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-23-5	Sodium	5000	12000	1	50	50	11/16/13	27401	W15686E2	25	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	47	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: AC75576-023
 Client Id: LMW-12
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	2.9	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7439-92-1	Lead	3.0	9.9	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-025
 Client Id: LMW-20
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-70-2	Calcium	5000	19000	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7439-95-4	Magnesium	5000	9000	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	32	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	26	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-23-5	Sodium	5000	21000	1	50	50	11/16/13	27401	W15686E2	26	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	48	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: AC75576-025
 Client Id: LMW-20
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-027
 Client Id: LMW-21
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	410	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-39-3	Barium	50	67	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7439-89-6	Iron	300	760	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7439-95-4	Magnesium	5000	6100	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7439-96-5	Manganese	40	100	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	35	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-09-7	Potassium	5000	6200	1	50	50	11/16/13	27401	W15686E2	27	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-23-5	Sodium	5000	17000	1	50	50	11/16/13	27401	W15686E2	27	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	49	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: AC75576-027
 Client Id: LMW-21
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-029
 Client Id: LMW-2
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-70-2	Calcium	5000	30000	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-47-3	Chromium	50	62	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	14	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686D2	14	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-23-5	Sodium	5000	15000	1	50	50	11/16/13	27401	W15686D2	14	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/15/13	27401	W15686B2	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: AC75576-029
 Client Id: LMW-2
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	11/19/13	27401	S111913B	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: AC75576-031
 Client Id: LMW-2 MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	5100	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-39-3	Barium	50	530	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-70-2	Calcium	5000	80000	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-47-3	Chromium	50	550	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-50-8	Copper	50	500	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7439-89-6	Iron	300	5000	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7439-95-4	Magnesium	5000	53000	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7439-96-5	Manganese	40	490	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7439-97-6	Mercury	0.70	9.4	1	25	25	11/14/13	27401	H15686SW	16	CV	HGCV1A
7440-02-0	Nickel	50	490	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-09-7	Potassium	5000	50000	1	50	50	11/16/13	27401	W15686D2	16	P	PEICPRAD2A
7440-22-4	Silver	20	94	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-23-5	Sodium	5000	64000	1	50	50	11/16/13	27401	W15686D2	16	P	PEICPRAD2A
7440-62-2	Vanadium	50	490	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-66-6	Zinc	50	500	1	50	50	11/15/13	27401	W15686B2	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: AC75576-031
 Client Id: LMW-2 MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	540	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	520	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	550	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	530	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	530	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7439-92-1	Lead	3.0	540	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7782-49-2	Selenium	10	500	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	510	1	50	100	11/19/13	27401	S111913B	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: AC75576-033
 Client Id: LMW-2 MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	4800	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-39-3	Barium	50	510	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-70-2	Calcium	5000	77000	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-47-3	Chromium	50	530	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-50-8	Copper	50	480	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7439-89-6	Iron	300	4800	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7439-95-4	Magnesium	5000	52000	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7439-96-5	Manganese	40	480	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7439-97-6	Mercury	0.70	9.1	1	25	25	11/14/13	27401	H15686SW	17	CV	HGCV1A
7440-02-0	Nickel	50	480	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-09-7	Potassium	5000	49000	1	50	50	11/16/13	27401	W15686D2	17	P	PEICPRAD2A
7440-22-4	Silver	20	91	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-23-5	Sodium	5000	63000	1	50	50	11/16/13	27401	W15686D2	17	P	PEICPRAD2A
7440-62-2	Vanadium	50	480	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-66-6	Zinc	50	490	1	50	50	11/15/13	27401	W15686B2	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: AC75576-033
 Client Id: LMW-2 MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	470	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	460	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	480	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	460	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	460	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7439-92-1	Lead	3.0	470	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7782-49-2	Selenium	10	440	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	440	1	50	100	11/19/13	27401	S111913B	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: AC75576-002
 Client Id: LMW-3F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-70-2	Calcium	5000	27000	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-47-3	Chromium	50	95	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	18	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	28	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-23-5	Sodium	5000	35000	1	50	50	11/18/13	27402	W15687C2	28	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-002
 Client Id: LMW-3F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27402	S111913C	29	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27402	S111913C	29	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27402	S111913C	29	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.5	1	50	100	11/19/13	27402	S111913C	29	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27402	S111913C	29	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27402	S111913C	29	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	29	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27402	S111913C	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: AC75576-004
 Client Id: LMW-4F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-70-2	Calcium	5000	30000	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	19	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	29	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-23-5	Sodium	5000	21000	1	50	50	11/18/13	27402	W15687C2	29	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-66-6	Zinc	50	130	1	50	50	11/16/13	27402	W15687B2	13	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: AC75576-004
 Client Id: LMW-4F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27402	S111913C	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27402	S111913C	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27402	S111913C	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	21	1	50	100	11/19/13	27402	S111913C	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27402	S111913C	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27402	S111913C	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27402	S111913C	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: AC75576-006
 Client Id: LMW-10F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-70-2	Calcium	5000	28000	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-47-3	Chromium	50	140	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	22	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	30	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-23-5	Sodium	5000	9300	1	50	50	11/18/13	27402	W15687C2	30	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-006
 Client Id: LMW-10F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27402	S111913C	31	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27402	S111913C	31	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27402	S111913C	31	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	50	1	50	100	11/19/13	27402	S111913C	31	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27402	S111913C	31	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27402	S111913C	31	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	31	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27402	S111913C	31	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: AC75576-008
 Client Id: LMW-16F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	440	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-39-3	Barium	50	240	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-70-2	Calcium	5000	10000	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7439-96-5	Manganese	40	530	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	23	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	31	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/18/13	27402	W15687C2	31	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	15	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: AC75576-008
 Client Id: LMW-16F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27402	S111913C	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27402	S111913C	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	1.2	1	50	100	11/19/13	27402	S111913C	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.9	1	50	100	11/19/13	27402	S111913C	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27402	S111913C	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27402	S111913C	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27402	S111913C	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: AC75576-010
 Client Id: LMW-5F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-70-2	Calcium	5000	18000	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	24	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	32	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/18/13	27402	W15687C2	32	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	16	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: AC75576-010
 Client Id: LMW-5F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27402	S111913C	33	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27402	S111913C	33	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27402	S111913C	33	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27402	S111913C	33	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27402	S111913C	33	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27402	S111913C	33	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	33	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27402	S111913C	33	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: AC75576-012
 Client Id: LMW-6F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-70-2	Calcium	5000	6100	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	25	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	33	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-23-5	Sodium	5000	7700	1	50	50	11/18/13	27402	W15687C2	33	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-012
 Client Id: LMW-6F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27402	S111913C	34	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27402	S111913C	34	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27402	S111913C	34	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27402	S111913C	34	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27402	S111913C	34	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27402	S111913C	34	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	34	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27402	S111913C	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: AC75576-014
 Client Id: LMW-18F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-39-3	Barium	50	61	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-70-2	Calcium	5000	20000	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	26	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-09-7	Potassium	5000	7800	1	50	50	11/18/13	27402	W15687C2	34	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-23-5	Sodium	5000	26000	1	50	50	11/18/13	27402	W15687C2	34	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	18	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: AC75576-014
 Client Id: LMW-18F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	35	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	35	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	35	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	35	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	35	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	35	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	35	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	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: AC75576-016
 Client Id: LMW-19F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	27	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	38	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	11/18/13	27402	W15687C2	38	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	22	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: AC75576-016
 Client Id: LMW-19F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	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: AC75576-018
 Client Id: LFB-11513F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	28	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	39	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	11/18/13	27402	W15687C2	39	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	23	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: AC75576-018
 Client Id: LFB-11513F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	37		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	37		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	37		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	37		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	37		MSMS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	37		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	37		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	37		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: AC75576-020
 Client Id: LMW-512F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-70-2	Calcium	5000	41000	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7439-95-4	Magnesium	5000	6600	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	29	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	40	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	11/18/13	27402	W15687C2	40	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-020
 Client Id: LMW-512F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	42	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	42	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	42	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	42	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	42	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	42	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	42	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	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: AC75576-022
 Client Id: LMW-14F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7439-89-6	Iron	300	930	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7439-96-5	Manganese	40	300	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	30	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	41	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-23-5	Sodium	5000	12000	1	50	50	11/18/13	27402	W15687C2	41	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-022
 Client Id: LMW-14F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	43	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	43	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	43	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	2.4	1	50	100	11/20/13	27402	S111913C	43	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	43	MS	MS2_7500SWA
7439-92-1	Lead	3.0	3.7	1	50	100	11/20/13	27402	S111913C	43	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	43	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	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: AC75576-024
 Client Id: LMW-12F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-39-3	Barium	50	51	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-70-2	Calcium	5000	44000	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7439-95-4	Magnesium	5000	7200	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	33	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	42	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	11/18/13	27402	W15687C2	42	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	26	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: AC75576-024
 Client Id: LMW-12F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	44	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	44	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	44	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	44	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	44	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	44	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	44	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	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: AC75576-026
 Client Id: LMW-20F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-70-2	Calcium	5000	18000	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7439-95-4	Magnesium	5000	9200	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	34	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	43	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-23-5	Sodium	5000	22000	1	50	50	11/18/13	27402	W15687C2	43	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-026
 Client Id: LMW-20F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	45	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	45	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	45	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	45	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	45	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	45	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	45	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	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: AC75576-028
 Client Id: LMW-21F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-39-3	Barium	50	67	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7439-95-4	Magnesium	5000	6100	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7439-96-5	Manganese	40	64	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	35	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-09-7	Potassium	5000	5800	1	50	50	11/18/13	27402	W15687C2	44	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-23-5	Sodium	5000	18000	1	50	50	11/18/13	27402	W15687C2	44	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-028
 Client Id: LMW-21F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	46	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	46	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	46	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	46	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	46	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	46	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	46	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	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: AC75576-030
 Client Id: LMW-2F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-70-2	Calcium	5000	29000	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-47-3	Chromium	50	59	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	14	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	100	100	11/18/13	27402	W15687C2	14	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-23-5	Sodium	5000	16000	1	100	100	11/18/13	27402	W15687C2	14	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	11/14/13	27402	W15687A2	15	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: AC75576-030
 Client Id: LMW-2F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	100	200	11/19/13	27402	S111913C	19	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	11/19/13	27402	S111913C	19	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	11/19/13	27402	S111913C	19	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	11/19/13	27402	S111913C	19	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	11/19/13	27402	S111913C	19	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	11/19/13	27402	S111913C	19	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	11/20/13	27402	S112013A	19	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	11/19/13	27402	S111913C	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: AC75576-032
 Client Id: LMW-2F MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	4800	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-39-3	Barium	50	510	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-70-2	Calcium	5000	78000	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-47-3	Chromium	50	530	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-50-8	Copper	50	480	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7439-89-6	Iron	300	4700	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7439-95-4	Magnesium	5000	51000	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7439-96-5	Manganese	40	470	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7439-97-6	Mercury	0.70	9.7	1	25	25	11/14/13	27402	H15687SW	16	CV	HGCV2A
7440-02-0	Nickel	50	470	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-09-7	Potassium	5000	53000	1	50	50	11/18/13	27402	W15687C2	16	P	PEICPRAD2A
7440-22-4	Silver	20	91	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-23-5	Sodium	5000	68000	1	50	50	11/18/13	27402	W15687C2	16	P	PEICPRAD2A
7440-62-2	Vanadium	50	480	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-66-6	Zinc	50	490	1	50	50	11/14/13	27402	W15687A2	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: AC75576-032
 Client Id: LMW-2F MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	510	1	50	100	11/19/13	27402	S111913C	22	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	530	1	50	100	11/19/13	27402	S111913C	22	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	500	1	50	100	11/19/13	27402	S111913C	22	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	490	1	50	100	11/19/13	27402	S111913C	22	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	510	1	50	100	11/19/13	27402	S111913C	22	MS	MS2_7500SWA
7439-92-1	Lead	3.0	500	1	50	100	11/19/13	27402	S111913C	22	MS	MS2_7500SWA
7782-49-2	Selenium	10	480	1	50	100	11/20/13	27402	S112013A	22	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	480	1	50	100	11/19/13	27402	S111913C	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: AC75576-034
 Client Id: LMW-2F MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	4700	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-39-3	Barium	50	510	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-70-2	Calcium	5000	77000	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-47-3	Chromium	50	520	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-50-8	Copper	50	480	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7439-89-6	Iron	300	4700	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7439-95-4	Magnesium	5000	51000	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7439-96-5	Manganese	40	470	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7439-97-6	Mercury	0.70	9.4	1	25	25	11/14/13	27402	H15687SW	17	CV	HGCV2A
7440-02-0	Nickel	50	470	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-09-7	Potassium	5000	53000	1	50	50	11/18/13	27402	W15687C2	17	P	PEICPRAD2A
7440-22-4	Silver	20	91	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-23-5	Sodium	5000	67000	1	50	50	11/18/13	27402	W15687C2	17	P	PEICPRAD2A
7440-62-2	Vanadium	50	470	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-66-6	Zinc	50	480	1	50	50	11/14/13	27402	W15687A2	18	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: AC75576-034
 Client Id: LMW-2F MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	530	1	50	100	11/19/13	27402	S111913C	23	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	550	1	50	100	11/19/13	27402	S111913C	23	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	520	1	50	100	11/19/13	27402	S111913C	23	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	520	1	50	100	11/19/13	27402	S111913C	23	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	530	1	50	100	11/19/13	27402	S111913C	23	MSMS2_7500SWA	
7439-92-1	Lead	3.0	510	1	50	100	11/19/13	27402	S111913C	23	MSMS2_7500SWA	
7782-49-2	Selenium	10	540	1	50	100	11/20/13	27402	S112013A	23	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	490	1	50	100	11/19/13	27402	S111913C	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

Chain of Custody Forms

Customer Information

1a) Customer: AECOM
Address: 1000 Red Schoenhaus Rd
Chestnut Ridge, NY 10977
1b) Email/Cell/Fax/Ph: Raul Kerseth, rkerseth@aecocom.com
1c) Send Invoice to: Raul Kerseth
1d) Send Report to: _____

Project Information

2a) Project: Liberty Industrial Finishing
2b) Project Mgr: Raul Kerseth
2c) Project Location (City/State): Brentwood, NY
2d) Quote/PO # (if Applicable): _____

Reporting Requirements (Please Circle)

Turnaround: 24 Hours (100%)
48 Hours (75%)
72 Hours (50%)
4 Days (35%, TYP)
1 Week (25%, EPH)
10 Days (10%)
2 Weeks
Other: _____

Report Type: Data Summary
Waste
Red - NJ / NY / PA
CLP
Full / Category B
Category A
Other: _____

Electronic Deliv.: HazMat/CSV
EQUIS 4-File / EZ / NYS
EQUIS EPA Region 2 or 5
Excel - NJ Regulatory
Excel - NY Regulatory
Excel - PA Regulatory
PDF
Other: _____

Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY		Check If Contingent ==>				7) Analysis Request										<=== Check If Continge it																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Batch #	Matrix Codes DW - Drinking Water GW - Ground Water WW - Waste Water OT - Other (please specify under item 9, Comments)	S - Soil SL - Sludge OL - Oil	A - Air	Sample Type	Composite (C)	Grab (G)	TAL Metals										# of Bottles																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
							8) # of Bottles	None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9)Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Ac71576	4)Customer Sample ID	5) Matrix	6)Sample Date Time																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

10) Relinquished by: _____ Accepted by: _____ Date: 11/6 Time: 11:40

Additional Notes: _____

Comments, Notes, Special Requirements, HAZARDS
Note: Check if low-level groundwater methods required to meet current standards in NJ or PA:
BN or BNA (8270C SIM)
VOC (8260B SIM or 8011)
Metals (ICP-MS 200.8 or 6020)
Metals-Soil (ICP-MS 6020 for Be & Ag)
Note: Check if applicable:
Project-Specific Reporting Limits
High Contaminant Concentrations
NJ LSRP Project
11) Sampler (print name): _____ Date: 2.8.3.0
Please note NUMBERED items. If not completed, our analytical work may be delayed.
A fee of \$5/sample will be assessed for storage should sample not be activated to any analysis.

Cooler Temperature: 2.8.3.0

173 Route 40 West and 2 Madison Road, Tinton, 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

HAMPTON CLARK VERTECH
LABORATORIES
A Women-Owned, Disadvantaged, Small Business Enterprise

RECORD

2100 2
3) Reporting Requirements (Please Circle)

NEIACNJ #07071 | PA #68-00463 | NY #1408 | CT #PH-0671 | KY #90124

1a) Customer: Accon
Address: 100 Red Schoolhouse Rd
Chestnut Ridge NY
1b) Email/Cell/Fax/Ph: Paul Kaseth @ accon.com
1c) Send Invoice to: Paul Kaseth
1d) Send Report to: "

2a) Project: Liberty
2b) Project Mgr: Paul Kaseth
2c) Project Location (City/State): Brentwood NY
2d) Quote/PO # (if Applicable):

Turnaround
24 Hours (100%)
48 Hours (75%)
72 Hours (50%)
4 Days (35%) - TPH
1 Week (25%) - EPH
10 Days (10%)
2 Weeks
Other: 2 Weeks

Report Type
Data Summary
Waste
Red - NJ / NY / PA
CLP
Full / Category B
Category A
Other:

Electronic Deliv.
HazSite/CSV
EQUIS 4-File / EZ / NYS
EQUIS EPA Region 2 or 5
Excel - NJ Regulatory
Excel - NY Regulatory
Excel - PA Regulatory
PDF
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				
Batch #	Matrix Codes	Sample Type	Composite (C)	Grab (G)	None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:
ACSS76	DW - Drinking Water GW - Ground Water WW - Waste Water OT - Other (please specify under item 9, Comments)	S - Soil SL - Sludge OL - Oil	A - Air									
Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	Time								
-01	LMW-6	GW	11-5-13	80	X							
-02	LMW-6F	GW	11-5-13	6015	X							
-03	LMW-18	GW	11-5-13	1130	X							
-04	LMW-18F	GW	11-5-13	1135	X							
-05	LMW-19	GW	11-5-13	1140	X							
-06	LMW-19F	GW	11-5-13	1145	X							
-07	LFB-1153	GW	11-5-13	1350	X							
-08	LFB-1153F	GW	11-5-13	1355	X							
-09	LMW-512	GW	11-5-13	1200	X							
-020	LMW-512F	GW	11-5-13	1205	X							

10) Relinquished by: _____ Accepted by: _____ Date: 11/6 Time: 1140

Additional Notes: _____

11) Sampler (print name): _____ Date: 2/8/50

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of \$3/sample will be assessed for storage should sample not be activated in any analysis.

Project-Specific Reporting Limits
High Contaminant Concentrations
NULSRP Project

Comments, Notes, Special Requirements, HAZARDS
Note: Check if low-level groundwater methods required to meet current standards in NJ or PA:
BN or BNA (8270C SIM)
VOC (8260B SIM or 8011)
Metals (ICP-MS 200.8 or 6020)
Metals-Soil (ICP-MS 6020 for Be & Ag)
Note: Check if applicable:
Project-Specific Reporting Limits
High Contaminant Concentrations
NULSRP Project

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 Galtier Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

HC-V
LABORATORIES

CHAIN OF CUSTODY
RECORD

A Women-Owned, Disadvantaged, Small Business Enterprise

NEIAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124

3) Reporting Requirements (Please Circle)

1a) Customer: Acrom
Address: 1000 Red Schoolhouse Rd
Chestnut Ridge, NY 10977
1b) Email/Cell/Fax/Ph: Raul, Karath @ acrom.com
1c) Send Invoice to: Raul Karath
1d) Send Report to: "

2a) Project: Liberty
2b) Project Mgr: Raul Karath
2c) Project Location (City/State): Greenvood, NY
2d) Quote/PO # (If Applicable):

Turnaround
24 Hours (100%)
48 Hours (75%)
72 Hours (50%)
4 Days (35%; TPH)
1 Week (25%; EPH)
10 Days (10%)
2 Weeks
Other: _____

Report Type
Data Summary
Waste
Red - NJ / NY / PA
CLP
Full / Category B
Category A
Other: _____

Electronic Deliv.
HazSite/CSV
EQUIS 4-File / EZ / NYS
EQUIS EPA Region 2 or 5
Excel - NJ Regulatory
Excel - NY Regulatory
Excel - PA Regulatory
PDF
Other: _____

Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY

Check if Contingent ==>
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)

Sample Type
Composite (C)
Grab (G)

7) Analysis Request

Check if Contingent
of Bottles
None
MeOH
En Core
NaOH
HCl
H2SO4
HNO3
Other: _____

9) Comments

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	Time	Composite (C)	Grab (G)	7) Analysis Request	8) # of Bottles	9) Comments
-021	LMW-14	GW	11-5-13	1610		X		1	
-022	LMW-14F	GW	11-5-13	1615		X		1	
-023	LMW-12	GW	11-5-13	1410		X		1	
-024	LMW-12F	GW	11-5-13	1415		X		1	
-025	LMW-20	GW	11-5-13	1500		X		1	
-026	LMW-20F	GW	11-5-13	1505		X		1	
-027	LMW-21	GW	11-5-13	1345		X		1	
-028	LMW-21F	GW	11-5-13	1350		X		1	
-029	LMW-2	GW	11-6-13	0845		X		1	
-030	LMW-2F	GW	11-6-13	0850		X		1	

10) Relinquished by: _____ Accepted by: _____ Date: 11/6 Time: 1100

Additional Notes
Note: Check if low-level groundwater methods required to meet current standards in NJ or PA:
BN or BNA (8270C SIM)
VOC (8260B SIM or 8011)
Metals (ICP-MS 200.8 or 6020)
Metals-Soil (ICP-MS 6020 for Be & Ag)
Note: Check if applicable:
Project-Specific Reporting Limits
High Contaminant Concentrations
NJ LSRP Project
Cooler Temperature
Date: 11-8-13

11) Sampler (print name): _____ Date: 11-8-13
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 analyzed or analyzed.

CONDITION UPON RECEIPT

Batch Number AC75576

Entered By: maxwell

Date Entered 11/6/2013 2:29:00 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 NO Are the COC seals intact?
- 4 Yes Please specify the Temperature inside the container (in degC)
2.8,3.0
- 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 NO Is there enough sample sent for the analyses listed on the COC? If no, specify:
SAMPLE ID LFB-11513 PRESERVED AT LAB
- 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 AC75576

Entered By: maxwell

Date Entered 11/6/2013 2:29:00 PM

Lab#:	Container Siz	Container Typ	Paramete	Preservative	PH
AC75576-001	1L	P	METALS	HNO3	1
AC75576-002	1L	P	METALS	HNO3	1
AC75576-003	1L	P	METALS	HNO3	1
AC75576-004	1L	P	METALS	HNO3	1
AC75576-005	1L	P	METALS	HNO3	1
AC75576-006	1L	P	METALS	HNO3	1
AC75576-007	1L	P	METALS	HNO3	1
AC75576-008	1L	P	METALS	HNO3	1
AC75576-009	1L	P	METALS	HNO3	1
AC75576-010	1L	P	METALS	HNO3	1
AC75576-011	1L	P	METALS	HNO3	1
AC75576-012	1L	P	METALS	HNO3	1
AC75576-013	1L	P	METALS	HNO3	1
AC75576-014	1L	P	METALS	HNO3	1
AC75576-015	1L	P	METALS	HNO3	1
AC75576-016	1L	P	METALS	HNO3	1
AC75576-017	1L	P	METALS	HNO3	1
AC75576-018	1L	P	METALS	HNO3	1
AC75576-019	1L	P	METALS	HNO3	1
AC75576-020	1L	P	METALS	HNO3	1
AC75576-021	1L	P	METALS	HNO3	1
AC75576-022	1L	P	METALS	HNO3	1
AC75576-023	1L	P	METALS	HNO3	1
AC75576-024	1L	P	METALS	HNO3	1
AC75576-025	1L	P	METALS	HNO3	1
AC75576-026	1L	P	METALS	HNO3	1
AC75576-027	1L	P	METALS	HNO3	1
AC75576-028	1L	P	METALS	HNO3	1
AC75576-029	1L	P	METALS	HNO3	1
AC75576-030	1L	P	METALS	HNO3	1
AC75576-031	1L	P	METALS	HNO3	1
AC75576-032	1L	P	METALS	HNO3	1

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

3110620 0117

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AC75576-031	11/06/13 14:10	MAXW	0	M	Received
AC75576-031	11/06/13 14:28	MAXW	0	M	Login
AC75576-031	11/06/13 15:03	R12	2	A	NONE
AC75576-031	11/13/13 14:07	JU	2	A	TDWI-HG
AC75576-031	11/14/13 14:07	R12	2	M	NONE
AC75576-032	11/06/13 14:10	MAXW	0	M	Received
AC75576-032	11/06/13 14:28	MAXW	0	M	Login
AC75576-032	11/06/13 15:03	R12	1	A	NONE
AC75576-032	11/13/13 13:22	JU	1	A	TDWI-HG
AC75576-032	11/13/13 13:59	R12	1	A	NONE
AC75576-033	11/06/13 14:10	VINCE	0	M	Received
AC75576-033	11/06/13 17:06	VINCE	0	M	Login
AC75576-033	11/13/13 14:07	JU	1	A	TDWI-HG
AC75576-033	11/14/13 14:07	R12	1	M	NONE
AC75576-034	11/06/13 14:10	VINCE	0	M	Received
AC75576-034	11/06/13 17:06	VINCE	0	M	Login
AC75576-034	11/13/13 13:22	JU	1	A	TDWI-HG
AC75576-034	11/13/13 13:59	R12	1	A	NONE

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
-------	-----------	-------------------	-----------	---------	----------

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: AC75576-001
 Client Id: LMW-3
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/6/2013

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	470	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-70-2	Calcium	5000	29000	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-47-3	Chromium	50	140	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7439-89-6	Iron	300	650	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	18	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	11	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-23-5	Sodium	5000	38000	1	50	50	11/16/13	27401	W15686E2	11	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	33	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	33	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: AC75576-001
 Client Id: LMW-3
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/6/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	4.7	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7439-92-1	Lead	3.0	8.5	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	29	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	29	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: AC75576-002
 Client Id: LMW-3F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-70-2	Calcium	5000	27000	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-47-3	Chromium	50	95	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	18	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	28	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-23-5	Sodium	5000	35000	1	50	50	11/18/13	27402	W15687C2	28	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	12	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-002
 Client Id: LMW-3F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27402	S111913C	29	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27402	S111913C	29	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27402	S111913C	29	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.5	1	50	100	11/19/13	27402	S111913C	29	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27402	S111913C	29	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27402	S111913C	29	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	29	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27402	S111913C	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: AC75576-003
 Client Id: LMW-4
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	310	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-70-2	Calcium	5000	33000	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7439-89-6	Iron	300	320	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	19	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	12	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-23-5	Sodium	5000	21000	1	50	50	11/16/13	27401	W15686E2	12	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	34	P	PEICP2A
7440-66-6	Zinc	50	160	1	50	50	11/16/13	27401	W15686C2	34	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: AC75576-003
 Client Id: LMW-4
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	26	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-004
 Client Id: LMW-4F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-70-2	Calcium	5000	30000	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	19	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	29	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-23-5	Sodium	5000	21000	1	50	50	11/18/13	27402	W15687C2	29	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	13	P	PEICP2A
7440-66-6	Zinc	50	130	1	50	50	11/16/13	27402	W15687B2	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: AC75576-004
 Client Id: LMW-4F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27402	S111913C	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27402	S111913C	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27402	S111913C	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	21	1	50	100	11/19/13	27402	S111913C	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27402	S111913C	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27402	S111913C	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27402	S111913C	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: AC75576-005
 Client Id: LMW-10
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	210	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-70-2	Calcium	5000	28000	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-47-3	Chromium	50	140	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7439-89-6	Iron	300	420	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	20	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	13	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-23-5	Sodium	5000	9200	1	50	50	11/16/13	27401	W15686E2	13	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	35	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	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: AC75576-005
 Client Id: LMW-10
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	49	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	31	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-006
 Client Id: LMW-10F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-70-2	Calcium	5000	28000	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-47-3	Chromium	50	140	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	22	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	30	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-23-5	Sodium	5000	9300	1	50	50	11/18/13	27402	W15687C2	30	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	14	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	14	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: AC75576-006
 Client Id: LMW-10F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27402	S111913C	31		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27402	S111913C	31		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27402	S111913C	31		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	50	1	50	100	11/19/13	27402	S111913C	31		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27402	S111913C	31		MSMS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27402	S111913C	31		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	31		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27402	S111913C	31		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: AC75576-007
 Client Id: LMW-16
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-39-3	Barium	50	230	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-70-2	Calcium	5000	9800	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7439-89-6	Iron	300	1800	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7439-96-5	Manganese	40	570	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	23	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-09-7	Potassium	5000	5100	1	50	50	11/16/13	27401	W15686E2	14	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/16/13	27401	W15686E2	14	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	36	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	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: AC75576-007
 Client Id: LMW-16
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	1.5	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	4.4	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-008
 Client Id: LMW-16F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	440	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-39-3	Barium	50	240	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-70-2	Calcium	5000	10000	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7439-96-5	Manganese	40	530	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	23	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	31	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/18/13	27402	W15687C2	31	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-008
 Client Id: LMW-16F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27402	S111913C	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27402	S111913C	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	1.2	1	50	100	11/19/13	27402	S111913C	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.9	1	50	100	11/19/13	27402	S111913C	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27402	S111913C	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27402	S111913C	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27402	S111913C	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: AC75576-009
 Client Id: LMW-5
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	24	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	15	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-23-5	Sodium	5000	9100	1	50	50	11/16/13	27401	W15686E2	15	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	37	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	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: AC75576-009
 Client Id: LMW-5
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	33		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	33		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	33		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	33		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	33		MSMS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	33		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	33		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	33		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: AC75576-010
 Client Id: LMW-5F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-70-2	Calcium	5000	18000	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	24	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	32	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/18/13	27402	W15687C2	32	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	16	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	16	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: AC75576-010
 Client Id: LMW-5F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27402	S111913C	33	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27402	S111913C	33	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27402	S111913C	33	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27402	S111913C	33	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27402	S111913C	33	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27402	S111913C	33	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	33	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27402	S111913C	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: AC75576-011
 Client Id: LMW-6
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-70-2	Calcium	5000	5800	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	25	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	16	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-23-5	Sodium	5000	7600	1	50	50	11/16/13	27401	W15686E2	16	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	38	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	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: AC75576-011
 Client Id: LMW-6
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	34	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-012
 Client Id: LMW-6F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-70-2	Calcium	5000	6100	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	25	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	33	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-23-5	Sodium	5000	7700	1	50	50	11/18/13	27402	W15687C2	33	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	17	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	17	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: AC75576-012
 Client Id: LMW-6F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27402	S111913C	34	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27402	S111913C	34	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27402	S111913C	34	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27402	S111913C	34	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27402	S111913C	34	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27402	S111913C	34	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	34	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27402	S111913C	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: AC75576-013
 Client Id: LMW-18
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-39-3	Barium	50	62	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-70-2	Calcium	5000	19000	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7439-96-5	Manganese	40	1200	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	26	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-09-7	Potassium	5000	8200	1	50	50	11/16/13	27401	W15686E2	17	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-23-5	Sodium	5000	25000	1	50	50	11/16/13	27401	W15686E2	17	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	39	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	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: AC75576-013
 Client Id: LMW-18
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	35	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-014
 Client Id: LMW-18F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-39-3	Barium	50	61	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-70-2	Calcium	5000	20000	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	26	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-09-7	Potassium	5000	7800	1	50	50	11/18/13	27402	W15687C2	34	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-23-5	Sodium	5000	26000	1	50	50	11/18/13	27402	W15687C2	34	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	18	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-014
 Client Id: LMW-18F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	35	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	35	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	35	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	35	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	35	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	35	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	35	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	35	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: AC75576-015
 Client Id: LMW-19
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	27	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	21	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	11/16/13	27401	W15686E2	21	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	43	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	43	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: AC75576-015
 Client Id: LMW-19
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-016
 Client Id: LMW-19F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	27	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	38	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	11/18/13	27402	W15687C2	38	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	22	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-016
 Client Id: LMW-19F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	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: AC75576-017
 Client Id: LFB-11513
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	28	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	22	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	11/16/13	27401	W15686E2	22	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	44	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	44	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: AC75576-017
 Client Id: LFB-11513
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	37		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	37		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	37		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	37		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	37		MSMS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	37		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	37		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	37		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: AC75576-018
 Client Id: LFB-11513F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	28	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	39	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	11/18/13	27402	W15687C2	39	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	23	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	23	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: AC75576-018
 Client Id: LFB-11513F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	37	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	37	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	37	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	37	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	37	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	37	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	37	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	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: AC75576-019
 Client Id: LMW-512
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	840	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-70-2	Calcium	5000	39000	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7439-89-6	Iron	300	790	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7439-95-4	Magnesium	5000	6400	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	29	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	23	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-23-5	Sodium	5000	12000	1	50	50	11/16/13	27401	W15686E2	23	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	45	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	45	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: AC75576-019
 Client Id: LMW-512
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.2	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7439-92-1	Lead	3.0	11	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	42	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-020
 Client Id: LMW-512F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-70-2	Calcium	5000	41000	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7439-95-4	Magnesium	5000	6600	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	29	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	40	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	11/18/13	27402	W15687C2	40	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	24	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-020
 Client Id: LMW-512F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	42	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	42	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	42	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	42	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	42	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	42	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	42	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	42	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: AC75576-021
 Client Id: LMW-14
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	5300	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-39-3	Barium	50	56	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-47-3	Chromium	50	170	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7439-89-6	Iron	300	6000	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7439-96-5	Manganese	40	290	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	30	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-09-7	Potassium	5000	5000	1	50	50	11/16/13	27401	W15686E2	24	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-23-5	Sodium	5000	10000	1	50	50	11/16/13	27401	W15686E2	24	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	46	P	PEICP2A
7440-66-6	Zinc	50	94	1	50	50	11/16/13	27401	W15686C2	46	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: AC75576-021
 Client Id: LMW-14
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	2.2	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	3.2	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	6.6	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7439-92-1	Lead	3.0	53	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	43	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-022
 Client Id: LMW-14F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7439-89-6	Iron	300	930	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7439-96-5	Manganese	40	300	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	30	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	41	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-23-5	Sodium	5000	12000	1	50	50	11/18/13	27402	W15687C2	41	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	25	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-022
 Client Id: LMW-14F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	43	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	43	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	43	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	2.4	1	50	100	11/20/13	27402	S111913C	43	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	43	MS	MS2_7500SWA
7439-92-1	Lead	3.0	3.7	1	50	100	11/20/13	27402	S111913C	43	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	43	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	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: AC75576-023
 Client Id: LMW-12
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	810	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-70-2	Calcium	5000	40000	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7439-89-6	Iron	300	740	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7439-95-4	Magnesium	5000	6400	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	31	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	25	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-23-5	Sodium	5000	12000	1	50	50	11/16/13	27401	W15686E2	25	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	47	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	47	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: AC75576-023
 Client Id: LMW-12
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	2.9	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7439-92-1	Lead	3.0	9.9	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	44	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-024
 Client Id: LMW-12F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-39-3	Barium	50	51	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-70-2	Calcium	5000	44000	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7439-95-4	Magnesium	5000	7200	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	33	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	42	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-23-5	Sodium	5000	14000	1	50	50	11/18/13	27402	W15687C2	42	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	26	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	26	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: AC75576-024
 Client Id: LMW-12F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	44	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	44	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	44	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	44	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	44	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	44	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	44	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	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: AC75576-025
 Client Id: LMW-20
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-70-2	Calcium	5000	19000	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7439-95-4	Magnesium	5000	9000	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	32	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686E2	26	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-23-5	Sodium	5000	21000	1	50	50	11/16/13	27401	W15686E2	26	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	48	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	48	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: AC75576-025
 Client Id: LMW-20
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	45	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-026
 Client Id: LMW-20F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-70-2	Calcium	5000	18000	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7439-95-4	Magnesium	5000	9200	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	34	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402	W15687C2	43	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-23-5	Sodium	5000	22000	1	50	50	11/18/13	27402	W15687C2	43	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	27	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	27	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: AC75576-026
 Client Id: LMW-20F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	45	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	45	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	45	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	45	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	45	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	45	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	45	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	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: AC75576-027
 Client Id: LMW-21
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	410	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-39-3	Barium	50	67	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7439-89-6	Iron	300	760	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7439-95-4	Magnesium	5000	6100	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7439-96-5	Manganese	40	100	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	35	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-09-7	Potassium	5000	6200	1	50	50	11/16/13	27401	W15686E2	27	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-23-5	Sodium	5000	17000	1	50	50	11/16/13	27401	W15686E2	27	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27401	W15686C2	49	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27401	W15686C2	49	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: AC75576-027
 Client Id: LMW-21
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	46	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	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: AC75576-028
 Client Id: LMW-21F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-39-3	Barium	50	67	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7439-95-4	Magnesium	5000	6100	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7439-96-5	Manganese	40	64	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	35	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-09-7	Potassium	5000	5800	1	50	50	11/18/13	27402	W15687C2	44	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-23-5	Sodium	5000	18000	1	50	50	11/18/13	27402	W15687C2	44	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/16/13	27402	W15687B2	28	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/16/13	27402	W15687B2	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: AC75576-028
 Client Id: LMW-21F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	50	100	11/20/13	27402	S111913C	46	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	11/20/13	27402	S111913C	46	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	11/20/13	27402	S111913C	46	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	11/20/13	27402	S111913C	46	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	11/20/13	27402	S111913C	46	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	11/20/13	27402	S111913C	46	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	46	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	11/20/13	27402	S111913C	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: AC75576-029
 Client Id: LMW-2
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-70-2	Calcium	5000	30000	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-47-3	Chromium	50	62	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	14	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	W15686D2	14	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-23-5	Sodium	5000	15000	1	50	50	11/16/13	27401	W15686D2	14	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	11/15/13	27401	W15686B2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/15/13	27401	W15686B2	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: AC75576-029
 Client Id: LMW-2
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	11/19/13	27401	S111913B	19	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	11/19/13	27401	S111913B	19	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: AC75576-030
 Client Id: LMW-2F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-70-2	Calcium	5000	29000	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-47-3	Chromium	50	59	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402	H15687SW	14	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	100	100	11/18/13	27402	W15687C2	14	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-23-5	Sodium	5000	16000	1	100	100	11/18/13	27402	W15687C2	14	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	100	100	11/14/13	27402	W15687A2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	11/14/13	27402	W15687A2	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: AC75576-030
 Client Id: LMW-2F
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	ND	1	100	200	11/19/13	27402	S111913C	19		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	11/19/13	27402	S111913C	19		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	11/19/13	27402	S111913C	19		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	11/19/13	27402	S111913C	19		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	11/19/13	27402	S111913C	19		MSMS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	11/19/13	27402	S111913C	19		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	11/20/13	27402	S112013A	19		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	11/19/13	27402	S111913C	19		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: AC75576-031
 Client Id: LMW-2 MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	5100	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-39-3	Barium	50	530	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-70-2	Calcium	5000	80000	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-47-3	Chromium	50	550	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-50-8	Copper	50	500	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7439-89-6	Iron	300	5000	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7439-95-4	Magnesium	5000	53000	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7439-96-5	Manganese	40	490	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7439-97-6	Mercury	0.70	9.4	1	25	25	11/14/13	27401	H15686SW	16	CV	HGCV1A
7440-02-0	Nickel	50	490	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-09-7	Potassium	5000	50000	1	50	50	11/16/13	27401	W15686D2	16	P	PEICPRAD2A
7440-22-4	Silver	20	94	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-23-5	Sodium	5000	64000	1	50	50	11/16/13	27401	W15686D2	16	P	PEICPRAD2A
7440-62-2	Vanadium	50	490	1	50	50	11/15/13	27401	W15686B2	17	P	PEICP2A
7440-66-6	Zinc	50	500	1	50	50	11/15/13	27401	W15686B2	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: AC75576-031
 Client Id: LMW-2 MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	540	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	520	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	550	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	530	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	530	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7439-92-1	Lead	3.0	540	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7782-49-2	Selenium	10	500	1	50	100	11/19/13	27401	S111913B	22	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	510	1	50	100	11/19/13	27401	S111913B	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: AC75576-032
 Client Id: LMW-2F MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	4800	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-39-3	Barium	50	510	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-70-2	Calcium	5000	78000	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-47-3	Chromium	50	530	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-50-8	Copper	50	480	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7439-89-6	Iron	300	4700	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7439-95-4	Magnesium	5000	51000	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7439-96-5	Manganese	40	470	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7439-97-6	Mercury	0.70	9.7	1	25	25	11/14/13	27402	H15687SW	16	CV	HGCV2A
7440-02-0	Nickel	50	470	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-09-7	Potassium	5000	53000	1	50	50	11/18/13	27402	W15687C2	16	P	PEICPRAD2A
7440-22-4	Silver	20	91	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-23-5	Sodium	5000	68000	1	50	50	11/18/13	27402	W15687C2	16	P	PEICPRAD2A
7440-62-2	Vanadium	50	480	1	50	50	11/14/13	27402	W15687A2	17	P	PEICP2A
7440-66-6	Zinc	50	490	1	50	50	11/14/13	27402	W15687A2	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: AC75576-032
 Client Id: LMW-2F MS
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	510	1	50	100	11/19/13	27402	S111913C	22	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	530	1	50	100	11/19/13	27402	S111913C	22	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	500	1	50	100	11/19/13	27402	S111913C	22	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	490	1	50	100	11/19/13	27402	S111913C	22	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	510	1	50	100	11/19/13	27402	S111913C	22	MS	MS2_7500SWA
7439-92-1	Lead	3.0	500	1	50	100	11/19/13	27402	S111913C	22	MS	MS2_7500SWA
7782-49-2	Selenium	10	480	1	50	100	11/20/13	27402	S112013A	22	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	480	1	50	100	11/19/13	27402	S111913C	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: AC75576-033
 Client Id: LMW-2 MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	4800	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-39-3	Barium	50	510	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-70-2	Calcium	5000	77000	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-47-3	Chromium	50	530	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-50-8	Copper	50	480	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7439-89-6	Iron	300	4800	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7439-95-4	Magnesium	5000	52000	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7439-96-5	Manganese	40	480	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7439-97-6	Mercury	0.70	9.1	1	25	25	11/14/13	27401	H15686SW	17	CV	HGCV1A
7440-02-0	Nickel	50	480	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-09-7	Potassium	5000	49000	1	50	50	11/16/13	27401	W15686D2	17	P	PEICPRAD2A
7440-22-4	Silver	20	91	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-23-5	Sodium	5000	63000	1	50	50	11/16/13	27401	W15686D2	17	P	PEICPRAD2A
7440-62-2	Vanadium	50	480	1	50	50	11/15/13	27401	W15686B2	18	P	PEICP2A
7440-66-6	Zinc	50	490	1	50	50	11/15/13	27401	W15686B2	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: AC75576-033
 Client Id: LMW-2 MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	470	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	460	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	480	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	460	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	460	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7439-92-1	Lead	3.0	470	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7782-49-2	Selenium	10	440	1	50	100	11/19/13	27401	S111913B	23	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	440	1	50	100	11/19/13	27401	S111913B	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: AC75576-034
 Client Id: LMW-2F MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	4700	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-39-3	Barium	50	510	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-70-2	Calcium	5000	77000	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-47-3	Chromium	50	520	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-50-8	Copper	50	480	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7439-89-6	Iron	300	4700	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7439-95-4	Magnesium	5000	51000	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7439-96-5	Manganese	40	470	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7439-97-6	Mercury	0.70	9.4	1	25	25	11/14/13	27402	H15687SW	17	CV	HGCV2A
7440-02-0	Nickel	50	470	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-09-7	Potassium	5000	53000	1	50	50	11/18/13	27402	W15687C2	17	P	PEICPRAD2A
7440-22-4	Silver	20	91	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-23-5	Sodium	5000	67000	1	50	50	11/18/13	27402	W15687C2	17	P	PEICPRAD2A
7440-62-2	Vanadium	50	470	1	50	50	11/14/13	27402	W15687A2	18	P	PEICP2A
7440-66-6	Zinc	50	480	1	50	50	11/14/13	27402	W15687A2	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: AC75576-034
 Client Id: LMW-2F MSD
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/7/2013

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	2.0	530	1	50	100	11/19/13	27402	S111913C	23	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	550	1	50	100	11/19/13	27402	S111913C	23	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	520	1	50	100	11/19/13	27402	S111913C	23	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	520	1	50	100	11/19/13	27402	S111913C	23	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	530	1	50	100	11/19/13	27402	S111913C	23	MS	MS2_7500SWA
7439-92-1	Lead	3.0	510	1	50	100	11/19/13	27402	S111913C	23	MS	MS2_7500SWA
7782-49-2	Selenium	10	540	1	50	100	11/20/13	27402	S112013A	23	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	490	1	50	100	11/19/13	27402	S111913C	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

Metal Data
QC Data

FORM 2 (ICV/CCV Summary)

Date Analyzed: 11/14/13
 Data File: SW15687A2
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-173510-7	Rec	CCV V-173510-20	Rec	CCV V-173510-29	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	10/5	4.96009	99	4.90432	98	4.91280	98								
Arsenic	1/5	0.48528	97	0.48025	96	0.48765	98								
Barium	1/5	0.49315	99	0.49056	98	0.49181	98								
Cadmium	1/5	0.48952	98	0.48526	97	0.48439	97								
Calcium	100/50	49.82090	100	49.37710	99	49.22290	98								
Chromium	1/5	0.49777	100	0.49044	98	0.48142	96								
Copper	1/5	0.48915	98	0.48771	98	0.49293	99								
Iron	10/5	4.97700	100	4.86432	97	4.82384	96								
Lead	1/5	0.49352	99	0.48533	97	0.48867	98								
Magnesium	100/50	50.02110	100	49.33060	99	48.99220	98								
Manganese	1/5	0.48877	98	0.48284	97	0.48094	96								
Molybdenum	1/5	0.49233	98	0.48486	97	0.48875	98								
Nickel	1/5	0.49348	99	0.48749	97	0.47973	96								
Selenium	1/5	0.49172	98	0.48879	98	0.50972	102								
Silver	0.2/0.1	0.09815	98	0.09673	97	0.09579	96								
Vanadium	1/5	0.49025	98	0.48478	97	0.48237	96								
Zinc	1/5	0.48885	98	0.48301	97	0.47836	96								

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: 11/14/13
 Data File: SW15687A2
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV V- 176606 [aq]-8	Rec	LLCCV V-176606 [aq]-21	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	0.2/0.2	0.186969	93	0.182804	91									
Arsenic	0.02/0.02	0.0204822	102	0.0208836	104									
Barium	0.05/0.05	0.0502231	100	0.0504196	101									
Cadmium	0.012/0.012	0.0128815	107	0.0129961	108									
Calcium	5.0/5	5.09994	102	5.05024	101									
Chromium	0.05/0.05	0.0491076	98	0.0491535	98									
Copper	0.05/0.05	0.0506912	101	0.0513911	103									
Iron	0.3/0.3	0.292073	97	0.292507	98									
Lead	0.012/0.012	0.0124320	104	0.0130925	109									
Magnesium	5.0/5	5.19412	104	5.12260	102									
Manganese	0.04/0.04	0.0387334	97	0.0383534	96									
Molybdenum	0.02/0.02	0.0233004	117	0.0235841	118									
Nickel	0.05/0.05	0.0490770	98	0.0494691	99									
Selenium	0.04/0.04	0.0433567	108	0.0389431	97									
Silver	0.02/0.02	0.0195478	98	0.0186233	93									
Vanadium	0.05/0.05	0.0491038	98	0.0478583	96									
Zinc	0.05/0.05	0.0473723	95	0.0473998	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: 11/15/13
 Data File: SW15686B2
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CC V Amt	ICV V- 173510- 7	Rec	CCV V- 173510- 20	Rec	CCV V- 173510- 29	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	10/5	4.96793	99	4.96134	99	4.93919	99								
Arsenic	1/5	0.49593	99	0.48641	97	0.47898	96								
Barium	1/5	0.49616	99	0.49664	99	0.49588	99								
Cadmium	1/5	0.50013	100	0.49733	99	0.49312	99								
Calcium	100/50	50.30650	101	50.00730	100	49.81860	100								
Chromium	1/5	0.50378	101	0.49927	100	0.49360	99								
Copper	1/5	0.48828	98	0.49172	98	0.49318	99								
Iron	10/5	4.98504	100	4.94546	99	4.91355	98								
Lead	1/5	0.50187	100	0.49710	99	0.49454	99								
Magnesium	100/50	50.56050	101	50.08410	100	49.80400	100								
Manganese	1/5	0.49039	98	0.48934	98	0.48640	97								
Molybdenum	1/5	0.50108	100	0.49667	99	0.49339	99								
Nickel	1/5	0.50002	100	0.49511	99	0.49278	99								
Silver	0.2/0.1	0.09922	99	0.09806	98	0.09722	97								
Vanadium	1/5	0.49129	98	0.48959	98	0.48665	97								
Zinc	1/5	0.49596	99	0.49182	98	0.48786	98								

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: 11/15/13
 Data File: SW15686B2
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV V- 176606 [aq]-8	Rec	LLCCV V-176606 [aq]-21	Rec	LLCCV V- 176606 [aq]-30	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	0.2/0.2	0.191151	96	0.198028	99	0.196180	98							
Arsenic	0.02/0.02	0.0217364	109	0.0201044	101	0.0221319	111							
Barium	0.05/0.05	0.0510561	102	0.0514103	103	0.0509133	102							
Cadmium	0.012/0.012	0.0129717	108	0.0131963	110	0.0127588	106							
Calcium	5.0/5	5.07716	102	5.07195	101	5.07659	102							
Chromium	0.05/0.05	0.0513679	103	0.0512423	102	0.0507369	101							
Copper	0.05/0.05	0.0497230	99	0.0522738	105	0.0526545	105							
Iron	0.3/0.3	0.308040	103	0.306842	102	0.305769	102							
Lead	0.012/0.012	0.0131074	109	0.0110839	92	0.0118051	98							
Magnesium	5.0/5	5.20057	104	5.16903	103	5.16307	103							
Manganese	0.04/0.04	0.0403580	101	0.0402099	101	0.0399707	100							
Molybdenum	0.02/0.02	0.0215381	108	0.0219069	110	0.0223664	112							
Nickel	0.05/0.05	0.0504455	101	0.0514462	103	0.0502803	101							
Silver	0.02/0.02	0.0198972	99	0.0197747	99	0.0195041	98							
Vanadium	0.05/0.05	0.0514325	103	0.0513241	103	0.0503573	101							
Zinc	0.05/0.05	0.0463821	93	0.0471534	94	0.0464839	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: 11/16/13
 Data File: SW15687B2
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHGLABS

Analyte	ICV/CCV V Amt	ICV V- 173510- 7	Rec	CCV V- 173510- 19	Rec	CCV V- 173510- 31	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	10/5	4.81770	96	4.79265	96	4.80314	96								
Barium	1/5	0.48360	97	0.48018	96	0.47815	96								
Calcium	100/50	48.96990	98	48.59670	97	48.66920	97								
Chromium	1/5	0.48827	98	0.48217	96	0.47957	96								
Copper	1/5	0.47524	95	0.47396	95	0.47203	94								
Iron	10/5	4.86320	97	4.83179	97	4.81699	96								
Magnesium	100/50	49.57690	99	49.05870	98	49.04050	98								
Manganese	1/5	0.47603	95	0.47287	95	0.47039	94								
Nickel	1/5	0.48511	97	0.47851	96	0.47614	95								
Silver	0.2/0.1	0.09605	96	0.09457	95	0.09416	94								
Vanadium	1/5	0.47684	95	0.47377	95	0.47056	94								
Zinc	1/5	0.47506	95	0.47160	94	0.46846	94								

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: 11/16/13
 Data File: SW15687B2
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHGLABS

Analyte	LLICV/ LLCCV Amt	LLICV V- 176606 [aq]-8	Rec	LLCCV V-176606 [aq]-20	Rec	LLCCV V- 176606 [aq]-32	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	0.2/0.2	0.199661	100	0.194240	97	0.204666	102						
Barium	0.05/0.05	0.0511869	102	0.0516965	103	0.0515521	103						
Calcium	5.0/5	5.25339	105	5.18007	104	5.17073	103						
Chromium	0.05/0.05	0.0518597	104	0.0516805	103	0.0516807	103						
Copper	0.05/0.05	0.0544049	109	0.0553052	111	0.0509824	102						
Iron	0.3/0.3	0.313901	105	0.307946	103	0.312990	104						
Magnesium	5.0/5	5.34170	107	5.23207	105	5.22523	105						
Manganese	0.04/0.04	0.0413388	103	0.0409076	102	0.0407792	102						
Nickel	0.05/0.05	0.0526975	105	0.0511229	102	0.0503203	101						
Silver	0.02/0.02	0.0204315	102	0.0196242	98	0.0193093	97						
Vanadium	0.05/0.05	0.0520220	104	0.0510893	102	0.0508868	102						
Zinc	0.05/0.05	0.0505786	101	0.0491802	98	0.0487146	97						

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: 11/16/13
 Data File: SW15686C2
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CCV Amt	ICV V-173510-7	Rec	CCV V-173510-20	Rec	CCV V-173510-30	Rec	CCV V-173510-40	Rec	CCV V-173510-52	Rec	Rec	Rec	Rec	Rec
Aluminum	10/5	4.82855	97	4.85480	97	4.87675	98	4.85745	97	4.87095	97				
Barium	1/5	0.48157	96	0.48510	97	0.48499	97	0.48365	97	0.48373	97				
Calcium	100/50	48.69630	97	49.03390	98	48.92040	98	48.67570	97	48.55390	97				
Chromium	1/5	0.48296	97	0.48794	98	0.48965	98	0.48553	97	0.48892	98				
Copper	1/5	0.48002	96	0.47927	96	0.47797	96	0.47754	96	0.48021	96				
Iron	10/5	4.80391	96	4.85251	97	4.89082	98	4.86612	97	4.85537	97				
Magnesium	100/50	48.76120	98	49.30430	99	49.21980	98	48.82860	98	48.59790	97				
Manganese	1/5	0.47275	95	0.47594	95	0.47645	95	0.47522	95	0.47525	95				
Nickel	1/5	0.47714	95	0.48108	96	0.48364	97	0.48016	96	0.48088	96				
Selenium	1/5	0.46522	93	0.47852	96	0.47471	95	0.46326	93	0.45606	91				
Silver	0.2/0.1	0.09490	95	0.09590	96	0.09571	96	0.09604	96	0.09602	96				
Vanadium	1/5	0.47400	95	0.47679	95	0.47656	95	0.47683	95	0.47664	95				
Zinc	1/5	0.47149	94	0.47353	95	0.47299	95	0.47513	95	0.46996	94				

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: 11/16/13
 Data File: SW15686C2
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV V- 176606 [aq]-8	Rec	LLCCV V-176606 [aq]-21	Rec	LLCCV V- 176606 [aq]-31	Rec	LLCCV V- 176606 [aq]-41	Rec	LLCCV V- 176606 [aq]-53	Rec	Rec	Rec	Rec	Rec
Aluminum	0.2/0.2	0.190767	95	0.186791	93	0.198218	99	0.186417	93	0.198717	99				
Barium	0.05/0.05	0.0508689	102	0.0505745	101	0.0501394	100	0.0500105	100	0.0505720	101				
Calcium	5.0/5	5.06466	101	5.08117	102	5.13229	103	5.04699	101	5.08694	102				
Chromium	0.05/0.05	0.0497011	99	0.0500649	100	0.0503205	101	0.0499909	100	0.0502931	101				
Copper	0.05/0.05	0.0526653	105	0.0506052	101	0.0517361	103	0.0501268	100	0.0519599	104				
Iron	0.3/0.3	0.293897	98	0.296481	99	0.306055	102	0.295941	99	0.302428	101				
Magnesium	5.0/5	5.06955	101	5.10202	102	5.17874	104	5.06393	101	5.10332	102				
Manganese	0.04/0.04	0.0396743	99	0.0396985	99	0.0398806	100	0.0394278	99	0.0396802	99				
Nickel	0.05/0.05	0.0504974	101	0.0496884	99	0.0510857	102	0.0486224	97	0.0502849	101				
Selenium	0.04/0.04	0.0321950	80	0.0293904	73	0.0452147	113	0.0313876	78	0.0321641	80				
Silver	0.02/0.02	0.0197835	99	0.0199672	100	0.0205355	103	0.0197782	99	0.0202572	101				
Vanadium	0.05/0.05	0.0501152	100	0.0493909	99	0.0494728	99	0.0492298	98	0.0500507	100				
Zinc	0.05/0.05	0.0495613	99	0.0493659	99	0.0506509	101	0.0481283	96	0.0495840	99				

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: 11/16/13
 Data File: SW15686D2
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CC V Amt	ICV V- 173510- 6	Rec	CCV V- 173510- 19	Rec	CCV V- 173510- 25	Rec	CCV V- 173510- 35	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	100/50	46.72660	93	46.30290	93	46.84940	94	45.82510	92					
Sodium	100/50	47.95950	96	48.00790	96	48.62540	97	47.25840	95					

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: 11/16/13
 Data File: SW15686D2
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV V- 176606 [aq]-7	Rec	LLCCV V- 176606 [aq]-20	Rec	LLCCV V- 176606 [aq]-26	Rec	LLCCV V- 176606 [aq]-36	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	5.0/5	5.39808	108	5.33025	107	5.30805	106	5.19319	104					
Sodium	5.0/5	5.10009	102	5.24366	105	5.23610	105	5.09389	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: 11/16/13
 Data File: SW15686E2
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CC V Amt	ICV V- 173510- 6	Rec	CCV V- 173510- 18	Rec	CCV V- 173510- 30	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	100/50	47.05510	94	47.42920	95	47.09900	94								
Sodium	100/50	47.81260	96	47.85490	96	47.89350	96								

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: 11/16/13
 Data File: SW15686E2
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV V- 176606 [aq]-7	Rec	LLCCV V- 176606 [aq]-19	Rec	LLCCV V- 176606 [aq]-31	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	5.0/5	5.39899	108	5.54055	111	5.42463	108							
Sodium	5.0/5	5.10922	102	5.16988	103	5.13430	103							

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: 11/18/13
 Data File: SW15687C2
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CC V Amt	ICV V- 173510- 6	Rec	CCV V- 173510- 19	Rec	CCV V- 173510- 25	Rec	CCV V- 173510- 35	Rec	CCV V- 173510- 47	Rec	Rec	Rec	Rec	Rec
Potassium	100/50	48.78450	98	47.77560	96	47.80900	96	48.60560	97	47.69650	95				
Sodium	100/50	47.46380	95	46.71460	93	46.94710	94	47.99830	96	47.66070	95				

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: 11/18/13
 Data File: SW15687C2
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV V- 176606 [aq]-7	Rec	LLCCV V- 176606 [aq]-20	Rec	LLCCV V- 176606 [aq]-26	Rec	LLCCV V- 176606 [aq]-36	Rec	LLCCV V- 176606 [aq]-48	Rec	Rec	Rec	Rec	Rec
Potassium	5.0/5	4.93803	99	4.95029	99	4.92398	98	4.86741	97	4.87059	97				
Sodium	5.0/5	4.82383	96	4.82604	97	4.83782	97	4.81980	96	4.79594	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: 11/19/13
 Data File: S111913C
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CC V Amt	ICV V- 176967- 8	Rec	CCV V- 176971- 13	Rec	CCV V- 176971- 26	Rec	CCV V- 176971- 39	Rec	CCV V- 176971- 48	Rec	Rec	Rec	Rec	Rec
Antimony	50/30	45.17000	90	49.55000	99	49.72000	99	49.18000	98	48.56000	97				
Arsenic	50/30	46.44000	93	53.04000	106	54.23000	108	52.35000	105	51.52000	103				
Beryllium	50/30	47.93000	96	47.21000	94	48.85000	98	49.60000	99	48.93000	98				
Cadmium	50/30	48.31000	97	50.10000	100	50.11000	100	49.69000	99	49.69000	99				
Cobalt	50/30	48.52000	97	52.13000	104	53.38000	107	53.74000	107	54.41000	109				
Lead	50/30	50.13000	100	50.99000	102	50.86000	102	50.59000	101	50.85000	102				
Thallium	50/30	48.43000	97	51.04000	102	51.38000	103	51.35000	103	51.92000	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 2 (LLICV/LLCCV Summary)

Date Analyzed: 11/19/13
 Data File: S111913C
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV V- 176972- 9	Rec	LLCCV V- 176972- 14	Rec	LLCCV V- 176972- 27	Rec	LLCCV V- 176972- 40	Rec	LLCCV V- 176972- 49	Rec	Rec	Rec	Rec	Rec
Antimony	1/1	1.097	110	9.658E-01	97	1.010	101	9.650E-01	96	9.445E-01	94				
Arsenic	1/1	1.085	108	1.036	104	1.070	107	1.029	103	9.920E-01	99				
Beryllium	0.5/0.5	5.062E-01	101	4.876E-01	98	5.388E-01	108	4.868E-01	97	4.982E-01	100				
Cadmium	1/1	9.899E-01	99	9.839E-01	98	9.981E-01	100	9.862E-01	99	9.633E-01	96				
Cobalt	1/1	1.018	102	1.035	104	1.071	107	1.082	108	1.052	105				
Lead	1.5/1.5	1.408	94	1.397	93	1.474	98	1.425	95	1.371	91				
Thallium	1/1	9.677E-01	97	9.397E-01	94	1.043	104	9.851E-01	99	9.326E-01	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: 11/19/13
 Data File: S111913B
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CC V Amt	ICV V- 176967- 8	Rec	CCV V- 176971- 13	Rec	CCV V- 176971- 26	Rec	CCV V- 176971- 39	Rec	CCV V- 176971- 49	Rec	Rec	Rec	Rec	Rec
Antimony	50/30	46.62000	93	49.85000	100	48.75000	98	48.48000	97	48.00000	96				
Arsenic	50/30	48.93000	98	50.22000	100	48.21000	96	47.33000	95	48.39000	97				
Beryllium	50/30	48.33000	97	48.59000	97	49.70000	99	50.34000	101	49.38000	99				
Cadmium	50/30	50.03000	100	51.14000	102	49.89000	100	49.76000	100	49.15000	98				
Cobalt	50/30	46.81000	94	49.76000	100	50.85000	102	50.55000	101	50.75000	102				
Lead	50/30	49.57000	99	50.48000	101	50.69000	101	50.01000	100	49.93000	100				
Selenium	50/30	49.33000	99	249.20000	100	235.90000	94	234.70000	94	229.90000	92				
Thallium	50/30	48.36000	97	49.62000	99	51.77000	104	51.66000	103	50.37000	101				

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: 11/19/13
 Data File: S111913B
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV V- 176972- 9	Rec	LLCCV V- 176972- 14	Rec	LLCCV V- 176972- 27	Rec	LLCCV V- 176972- 40	Rec	LLCCV V- 176972- 50	Rec	Rec	Rec	Rec
Antimony	1/1	1.123	112	9.689E-01	97	9.946E-01	99	9.281E-01	93	9.286E-01	93			
Arsenic	1/1	1.032	103	1.026	103	9.652E-01	97	9.145E-01	91	9.542E-01	95			
Beryllium	0.5/0.5	5.022E-01	100	4.617E-01	92	5.311E-01	106	4.892E-01	98	4.894E-01	98			
Cadmium	1/1	1.025	102	9.961E-01	100	1.001	100	9.398E-01	94	9.726E-01	97			
Cobalt	1/1	1.005	100	9.996E-01	100	1.025	102	9.839E-01	98	1.010	101			
Lead	1.5/1.5	1.333	89	1.249	83	1.323	88	1.191	79	1.228	82			
Selenium	5/5	4.799	96	4.673	93	3.913	78	3.879	78	4.343	87			
Thallium	1/1	9.563E-01	96	9.475E-01	95	1.018	102	9.377E-01	94	9.347E-01	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: 11/20/13
 Data File: S112013A
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	ICV/CC V Amt	ICV V- 176967- 8	Rec	CCV V- 176971- 13	Rec	CCV V- 176971- 26	Rec	CCV V- 176971- 39	Rec	CCV V- 176971- 48	Rec	Rec	Rec	Rec	Rec
Selenium	50/30	50.77000	102	251.70000	101	242.00000	97	235.80000	94	226.70000	91				

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: 11/20/13
 Data File: S112013A
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VHG LABS

Analyte	LLICV/ LLCCV Amt	LLICV V- 176972- 9 Rec	LLCCV V- 176972- 14 Rec	LLCCV V- 176972- 27 Rec	LLCCV V- 176972- 40 Rec	LLCCV V- 176972- 49 Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Selenium	5/5	4.628	93	4.421	88	4.763	95	4.096	82	3.913	78			

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: 11/14/13
 Data File: H15686SW
 Prep Batch: 27401
 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: 3110620

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		CCV-38									
	ICV/CC	V Amt	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Mercury	20/10	18.87677	94	9.32357	93	9.79373	98	9.58158	96							

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: 11/14/13
 Data File: H15687SW
 Prep Batch: 27402
 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: 3110620

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-39									
	ICV/CC V Amt	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Mercury	20/10	19.22000	96	9.83900	98	9.75200	98	10.07000	101							

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 3

(ICB/CCB/MB Summary)

Date Analyzed: 11/14/13

Data File: SW15687A2

Prep Batch: 27402

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: 3110620

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666- 9	CCB-22	MB 27402 (1)- 12
Aluminum	.2 U	.2 U	.2 U
Arsenic	.02 U	.02 U	.02 U
Barium	.05 U	.05 U	.05 U
Cadmium	.012 U	.012 U	.012 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
Lead	.012 U	.012 U	.012 U
Magnesium	5 U	5 U	5 U
Manganese	.04 U	.04 U	.04 U
Molybdenum	.02 U	.02 U	.02 U
Nickel	.05 U	.05 U	.05 U
Selenium	.04 U	.04 U	.04 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: 11/15/13

Data File: SW15686B2

Prep Batch: 27401

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: 3110620

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666-9	CCB-22	CCB-31	MB 27401 (1)-12				
Aluminum	.2 U	.2 U	.2 U	.2 U				
Arsenic	.02 U	.02 U	.02 U	.02 U				
Barium	.05 U	.05 U	.05 U	.05 U				
Cadmium	.012 U	.012 U	.012 U	.012 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				
Lead	.012 U	.012 U	.012 U	.012 U				
Magnesium	5 U	5 U	5 U	5 U				
Manganese	.04 U	.04 U	.04 U	.04 U				
Molybdenum	.02 U	.02 U	.02 U	.02 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: 11/16/13

Data File: SW15687B2

Prep Batch: 27402

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: 3110620

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666- 9	CCB-21	CCB-33					
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: 11/16/13

Data File: SW15686C2

Prep Batch: 27401

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: 3110620

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666-9	CCB-22	CCB-32	CCB-42	CCB-54	MB 27401 (1)-12		
Aluminum	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U		
Barium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Calcium	5 U	5 U	5 U	5 U	5 U	5 U		
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Iron	.3 U	.3 U	.3 U	.3 U	.3 U	.3 U		
Magnesium	5 U	5 U	5 U	5 U	5 U	5 U		
Manganese	.04 U	.04 U	.04 U	.04 U	.04 U	.04 U		
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Selenium	.04 U	.04 U	.04 U	.04 U	.04 U	.04 U		
Silver	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U		
Vanadium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U		
Zinc	.05 U	.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: 11/16/13

Data File: SW15686D2

Prep Batch: 27401

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: 3110620

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666- 8	CCB-21	CCB-27	CCB-37	MB 27401 (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: 11/16/13

Data File: SW15686E2

Prep Batch: 27401

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: 3110620

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666- 8	CCB-20	CCB-32					
Potassium	5 U	5 U	5 U					
Sodium	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: 11/18/13

Data File: SW15687C2

Prep Batch: 27402

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: 3110620

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666- 8	CCB-21	CCB-27	CCB-37	CCB-49	MB 27402 (1)- 11		
Potassium	5 U	5 U	5 U	5 U	5 U	5 U		
Sodium	5 U	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: 11/19/13

Data File: S111913C

Prep Batch: 27402

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: 3110620

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-176968- 10	CCB V-176968- 15	CCB V-176968- 28	CCB V-176968- 41	CCB V-176968- 50	MB 27402-16
Antimony	1 U	1 U	1 U	1 U	1 U	2 U
Arsenic	1 U	1 U	1 U	1 U	1 U	2 U
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	3 U
Thallium	1 U	1 U	1 U	1 U	1 U	2 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: 11/19/13

Data File: S111913B

Prep Batch: 27401

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: 3110620

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-176968- 10	CCB V-176968- 15	CCB V-176968- 28	CCB V-176968- 41	CCB V-176968- 51	MB 27401-16
Antimony	1 U	1 U	1 U	1 U	1 U	2 U
Arsenic	1 U	1 U	1 U	1 U	1 U	2 U
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	3 U
Selenium	5 U	5 U	5 U	5 U	5 U	10 U
Thallium	1 U	1 U	1 U	1 U	1 U	2 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: 11/20/13

Data File: S112013A

Prep Batch: 27402

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: 3110620

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-176968- 10	CCB V-176968- 15	CCB V-176968- 28	CCB V-176968- 41	CCB V-176968- 50	MB 27402-16		
Selenium	5 U	5 U	5 U	5 U	5 U	10 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: 11/14/13

Data File: H15686SW

Prep Batch: 27401

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: 3110620

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-39	MB 27401 (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: 11/14/13

Data File: H15687SW

Prep Batch: 27402

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: 3110620

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB-10	CCB-21	CCB-32	CCB-40	MB 27402 (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 4

(ICSA/ICSAB Summary)

Date Analyzed: 11/14/13
 Data File: SW15687A2
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VH G LABS

Analyte	Spk Amt	ICSA V- 173614-10	Rec	ICSAB V- 173231-11	Rec	ICSA V- 173614-27	Rec	ICSAB V- 173231-28	Rec	Rec	Rec	Rec
Aluminum	500	469.826	94	469.57300	94	469.877	94	468.77000	94			
Arsenic	1	U		1.00983	101	U		1.00189	100			
Barium	.5	U		0.49373	99	U		0.49014	98			
Cadmium	1	U		1.00484	100	U		0.99745	100			
Calcium	500	462.054	92	462.21500	92	459.524	92	458.14000	92			
Chromium	.5	U		0.47477	95	U		0.47151	94			
Copper	.5	U		0.51422	103	U		0.51682	103			
Iron	200	181.29	91	181.23500	91	178.04	89	178.61300	89			
Lead	1	U		0.95623	96	U		0.95088	95			
Magnesium	500	487.582	98	485.67100	97	477.808	96	479.81400	96			
Manganese	.5	U		0.46883	94	U		0.46546	93			
Nickel	1	U		0.92367	92	U		0.91509	92			
Selenium	1	U		1.00366	100	U		1.00663	101			
Silver	1	U		1.01959	102	U		1.01716	102			
Vanadium	.5	U		0.48621	97	U		0.48316	97			
Zinc	1	U		0.92796	93	U		0.91954	92			

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: 11/15/13
 Data File: SW15686B2
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VHGB LABS

Analyte	Spk Amt	ICSA V- 173614-10	Rec	ICSAB V- 173231-11	Rec	ICSA V- 173614-27	Rec	ICSAB V- 173231-28	Rec	Rec	Rec	Rec
Aluminum	500	463.123	93	474.89000	95	466.079	93	465.97400	93			
Arsenic	1	U		1.00863	101	U		1.00032	100			
Barium	.5	U		0.49526	99	U		0.49380	99			
Cadmium	1	U		1.01265	101	U		1.00733	101			
Calcium	500	455.809	91	467.27100	93	459.897	92	459.33200	92			
Chromium	.5	U		0.48142	96	U		0.48199	96			
Copper	.5	U		0.51217	102	U		0.51242	102			
Iron	200	180.565	90	182.14300	91	182.094	91	183.00800	92			
Lead	1	U		0.95995	96	U		0.95362	95			
Magnesium	500	484.988	97	488.77300	98	482.48	96	481.29600	96			
Manganese	.5	U		0.46937	94	U		0.46911	94			
Nickel	1	U		0.93725	94	U		0.94212	94			
Silver	1	U		1.03192	103	U		1.03097	103			
Vanadium	.5	U		0.48730	97	U		0.48693	97			
Zinc	1	U		0.93435	93	U		0.93482	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

FORM 4 (ICSA/ICSAB Summary)

Date Analyzed: 11/16/13
 Data File: SW15687B2
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 173614-10		ICSAB V- 173231-11		ICSA V- 173614-29		ICSAB V- 173231-30		Rec	Rec	Rec	Rec
			Rec		Rec		Rec		Rec				
Aluminum	500	464.343	93	468.14700	94	467.19	93	468.02800	94				
Barium	.5	U		0.50168	100	U		0.50197	100				
Calcium	500	457.876	92	460.11600	92	460.468	92	462.16300	92				
Chromium	.5	U		0.49161	98	U		0.49427	99				
Copper	.5	U		0.52373	105	U		0.51708	103				
Iron	200	183.31	92	184.32400	92	183.967	92	184.73600	92				
Magnesium	500	483.027	97	483.80700	97	484.983	97	488.04600	98				
Manganese	.5	U		0.47951	96	U		0.47797	96				
Nickel	1	U		0.95290	95	U		0.95468	95				
Silver	1	U		1.05184	105	U		1.04623	105				
Vanadium	.5	U		0.49784	100	U		0.49597	99				
Zinc	1	U		0.94299	94	U		0.94670	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: 11/16/13
 Data File: SW15686C2
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VHGB LABS

Analyte	Spk Amt	ICSA V-173614-10	Rec	ICSAB V-173231-11	Rec	ICSA V-173614-28	Rec	ICSAB V-173231-29	Rec	ICSA V-173614-50	Rec	ICSAB V-173231-51	Rec	Rec	Rec
Aluminum	500	467.715	94	472.42300	94	469.616	94	467.53800	94	470.82	94	467.77100	94		
Barium	.5	U		0.50163	100	U		0.50423	101	U		0.49505	99		
Calcium	500	459.746	92	462.01700	92	463.844	93	458.87000	92	460.647	92	456.67400	91		
Chromium	.5	U		0.48719	97	U		0.49776	100	U		0.48755	98		
Copper	.5	U		0.52566	105	U		0.51835	104	U		0.52200	104		
Iron	200	184.463	92	183.05400	92	185.933	93	185.04200	93	184.349	92	182.41500	91		
Magnesium	500	482.614	97	482.66800	97	488.754	98	481.31100	96	480.447	96	475.17400	95		
Manganese	.5	U		0.47659	95	U		0.47765	96	U		0.47435	95		
Nickel	1	U		0.94024	94	U		0.95778	96	U		0.93565	94		
Selenium	1	U		0.98150	98	U		0.96042	96	U		0.93126	93		
Silver	1	U		1.05259	105	U		1.05681	106	U		1.05019	105		
Vanadium	.5	U		0.49517	99	U		0.49760	100	U		0.49408	99		
Zinc	1	U		0.92865	93	U		0.94401	94	U		0.91213	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: 11/16/13
 Data File: SW15686D2
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VH G LABS

Analyte	Spk Amt	ICSA V- 173614-9		ICSAB V- 173231-10		ICSA V- 173614-23		ICSAB V- 173231-24		Rec	Rec	Rec	Rec
Aluminum	500	469.321	94	472.03400	94	476.307	95	469.93400	94				
Calcium	500	455.711	91	458.09500	92	465.707	93	457.54400	92				
Iron	200	185.675	93	185.53900	93	185.897	93	185.96700	93				
Magnesium	500	473.643	95	476.30400	95	487.168	97	476.33100	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: 11/16/13
 Data File: SW15686E2
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VHGB LABS

Analyte	Spk Amt	ICSA V- 173614-9 Rec	ICSAB V- 173231-10 Rec	ICSA V- 173614-28 Rec	ICSAB V- 173231-29 Rec	Rec	Rec	Rec	Rec
Aluminum	500	475.98 95	476.74100 95	472.256 94	471.85200 94				
Calcium	500	464.684 93	465.27200 93	461.634 92	460.21700 92				
Iron	200	187.194 94	187.19100 94	186.524 93	187.61600 94				
Magnesium	500	491.075 98	492.13000 98	488.814 98	486.60700 97				

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: 11/18/13
 Data File: SW15687C2
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 173614-9		ICSAB V- 173231-10		ICSA V- 173614-23		ICSAB V- 173231-24		ICSA V- 173614-45		ICSAB V- 173231-46		Rec	Rec
			Rec		Rec		Rec		Rec		Rec		Rec		
Aluminum	500	489.956	98	485.78500	97	492.771	99	490.69400	98	496.812	99	491.67300	98		
Calcium	500	480.794	96	476.18400	95	481.769	96	479.63000	96	482.779	97	476.43300	95		
Iron	200	186.922	93	185.49700	93	188.621	94	188.24200	94	189.434	95	187.07300	94		
Magnesium	500	499.939	100	495.30400	99	500.752	100	499.10300	100	501.241	100	494.25800	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: 11/19/13
 Data File: S111913B
 Prep Batch: 27401
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 176969-11	Rec	ICSA V- 176970-12	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	46040	92	46350.00000	93					
Arsenic	100	U		100.90000	101					
Cadmium	100	1.136b		95.76000	96					
Calcium	150000	141800	95	41800.00000	95					
Cobalt	200	1.75b		187.00000	94					
Iron	125000	116800	93	16800.00000	93					
Magnesium	50000	47740	95	47210.00000	94					
Selenium	100	U		94.85000	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: 11/19/13
 Data File: S111913C
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VH G LABS

Analyte	Spk Amt	ICSA V- 176969-11	Rec	ICSA V- 176970-12	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	49350	99	49350.00000	99					
Arsenic	100	U		108.90000	109					
Cadmium	100	1.12b		97.32000	97					
Calcium	150000	151500	101	49000.00000	99					
Cobalt	200	1.854b		196.00000	98					
Iron	125000	122700	98	20300.00000	96					
Magnesium	50000	49950	100	49790.00000	100					

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: 11/20/13
 Data File: S112013A
 Prep Batch: 27402
 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: 3110620

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICSA/ICSAB: SOURCE: VHG LABS

Analyte	Spk Amt	ICSA V- 176969-11		ICSAB V- 176970-12		Rec		Rec		Rec		Rec		Rec		Rec	
			Rec		Rec												
Aluminum	50000	47450	95	47830.00000	96												
Calcium	150000	144800	97	46400.00000	98												
Iron	125000	115500	92	17700.00000	94												
Magnesium	50000	47790	96	48590.00000	97												
Selenium	100	U		98.32000	98												

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: 27401

3110620 0233

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 27401						
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27401	1	SW15686	13	4.7964	5.00	96		80	120
Antimony	27401	1	SW15686	13	0.4786	0.500	96		80	120
Arsenic	27401	1	SW15686	13	0.4714	0.500	94		80	120
Barium	27401	1	SW15686	13	0.4845	0.500	97		80	120
Beryllium	27401	1	SW15686	13	0.4822	0.500	96		80	120
Cadmium	27401	1	SW15686	13	0.4800	0.500	96		80	120
Calcium	27401	1	SW15686	13	48.9444	50.00	98		80	120
Chromium	27401	1	SW15686	13	0.4803	0.500	96		80	120
Cobalt	27401	1	SW15686	13	0.4867	0.500	97		80	120
Copper	27401	1	SW15686	13	0.4843	0.500	97		80	120
Iron	27401	1	SW15686	13	4.7833	5.00	96		80	120
Lead	27401	1	SW15686	13	0.4897	0.500	98		80	120
Magnesium	27401	1	SW15686	13	48.2419	50.00	96		80	120
Manganese	27401	1	SW15686	13	0.4756	0.500	95		80	120
Mercury	27401	1	H15686S	12	9.3282	10	93		80	120
Nickel	27401	1	SW15686	13	0.4798	0.500	96		80	120
Potassium	27401	1	SW15686	12	47.4190	50	95		80	120
Selenium	27401	1	SW15686	13	0.4858	0.500	97		80	120
Silver	27401	1	SW15686	13	0.0909	0.100	91		80	120
Sodium	27401	1	SW15686	12	48.4762	50	97		80	120
Thallium	27401	1	SW15686	13	0.5038	0.500	101		80	120
Vanadium	27401	1	SW15686	13	0.4815	0.500	96		80	120
Zinc	27401	1	SW15686	13	0.4824	0.500	96		80	120

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 27401						
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27401	1	SW15686	14	4.8013	5.00	96		80	120
Antimony	27401	1	SW15686	14	0.4788	0.500	96		80	120
Arsenic	27401	1	SW15686	14	0.4765	0.500	95		80	120
Barium	27401	1	SW15686	14	0.4843	0.500	97		80	120
Beryllium	27401	1	SW15686	14	0.4797	0.500	96		80	120
Cadmium	27401	1	SW15686	14	0.4813	0.500	96		80	120
Calcium	27401	1	SW15686	14	48.7309	50.00	97		80	120
Chromium	27401	1	SW15686	14	0.4761	0.500	95		80	120
Cobalt	27401	1	SW15686	14	0.4883	0.500	98		80	120
Copper	27401	1	SW15686	14	0.4806	0.500	96		80	120
Iron	27401	1	SW15686	14	4.7344	5.00	95		80	120
Lead	27401	1	SW15686	14	0.4921	0.500	98		80	120
Magnesium	27401	1	SW15686	14	48.0236	50.00	96		80	120
Manganese	27401	1	SW15686	14	0.4735	0.500	95		80	120
Mercury	27401	1	H15686S	13	9.5462	10	95		80	120
Nickel	27401	1	SW15686	14	0.4764	0.500	95		80	120
Potassium	27401	1	SW15686	13	47.0749	50	94		80	120
Selenium	27401	1	SW15686	14	0.4698	0.500	94		80	120
Silver	27401	1	SW15686	14	0.0905	0.100	91		80	120
Sodium	27401	1	SW15686	13	48.4657	50	97		80	120
Thallium	27401	1	SW15686	14	0.5072	0.500	101		80	120
Vanadium	27401	1	SW15686	14	0.4802	0.500	96		80	120
Zinc	27401	1	SW15686	14	0.4855	0.500	97		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: 27401

3110620 0234

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MS		Matrix: AQUEOUS			SampleID: AC75576-031								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27401	1	SW15686	17	SW15686	15	5.0596	0.2U	5.0	101		75	125
Antimony	27401	1	SW15686	17	SW15686	15	0.4881	0.02U	.5	98		75	125
Arsenic	27401	1	SW15686	17	SW15686	15	0.4883	0.02U	.5	98		75	125
Barium	27401	1	SW15686	17	SW15686	15	0.5283	0.05U	.5	106		75	125
Beryllium	27401	1	SW15686	17	SW15686	15	0.4892	0.012U	.5	98		75	125
Cadmium	27401	1	SW15686	17	SW15686	15	0.4906	0.012U	.5	98		75	125
Calcium	27401	1	SW15686	17	SW15686	15	79.6582	29.7962	50.0	100		75	125
Chromium	27401	1	SW15686	17	SW15686	15	0.5494	0.0617	.5	98		75	125
Cobalt	27401	1	SW15686	17	SW15686	15	0.4959	0.02U	.5	99		75	125
Copper	27401	1	SW15686	17	SW15686	15	0.4956	0.05U	.5	99		75	125
Iron	27401	1	SW15686	17	SW15686	15	5.0116	0.3U	5.0	100		75	125
Lead	27401	1	SW15686	17	SW15686	15	0.5004	0.012U	.5	100		75	125
Magnesium	27401	1	SW15686	17	SW15686	15	52.9292	5U	50	106		75	125
Manganese	27401	1	SW15686	17	SW15686	15	0.4921	0.04U	.5	98		75	125
Mercury	27401	1	H15686S	16	H15686S	14	9.3538	.70U	10	94		75	125
Nickel	27401	1	SW15686	17	SW15686	15	0.4913	0.05U	.5	98		75	125
Potassium	27401	1	SW15686	16	SW15686	14	49.7449	5U	50.00	99		75	125
Selenium	27401	1	SW15686	17	SW15686	15	0.4887	0.04U	.5	98		75	125
Silver	27401	1	SW15686	17	SW15686	15	0.0937	0.02U	.1	94		75	125
Sodium	27401	1	SW15686	16	SW15686	14	64.3030	15.3415	50.00	98		75	125
Thallium	27401	1	SW15686	17	SW15686	15	0.5101	0.02U	.5	102		75	125
Vanadium	27401	1	SW15686	17	SW15686	15	0.4939	0.05U	.5	99		75	125
Zinc	27401	1	SW15686	17	SW15686	15	0.5004	0.05U	.5	100		75	125

TxtQcType: MSD		Matrix: AQUEOUS		SampleID: AC75576-033									
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27401	1	SW15686	18	SW15686	15	4.8309	0.2U	5.0	97		75	125
Antimony	27401	1	SW15686	18	SW15686	15	0.4785	0.02U	.5	96		75	125
Arsenic	27401	1	SW15686	18	SW15686	15	0.4756	0.02U	.5	95		75	125
Barium	27401	1	SW15686	18	SW15686	15	0.5116	0.05U	.5	102		75	125
Beryllium	27401	1	SW15686	18	SW15686	15	0.4789	0.012U	.5	96		75	125
Cadmium	27401	1	SW15686	18	SW15686	15	0.4794	0.012U	.5	96		75	125
Calcium	27401	1	SW15686	18	SW15686	15	77.4710	29.7962	50.0	95		75	125
Chromium	27401	1	SW15686	18	SW15686	15	0.5341	0.0617	.5	94		75	125
Cobalt	27401	1	SW15686	18	SW15686	15	0.4824	0.02U	.5	96		75	125
Copper	27401	1	SW15686	18	SW15686	15	0.4822	0.05U	.5	96		75	125
Iron	27401	1	SW15686	18	SW15686	15	4.8487	0.3U	5.0	97		75	125
Lead	27401	1	SW15686	18	SW15686	15	0.4896	0.012U	.5	98		75	125
Magnesium	27401	1	SW15686	18	SW15686	15	51.6709	5U	50	103		75	125
Manganese	27401	1	SW15686	18	SW15686	15	0.4763	0.04U	.5	95		75	125
Mercury	27401	1	H15686S	17	H15686S	14	9.1434	.70U	10	91		75	125
Nickel	27401	1	SW15686	18	SW15686	15	0.4788	0.05U	.5	96		75	125
Potassium	27401	1	SW15686	17	SW15686	14	49.2551	5U	50.0	99		75	125
Selenium	27401	1	SW15686	18	SW15686	15	0.4750	0.04U	.5	95		75	125
Silver	27401	1	SW15686	18	SW15686	15	0.0907	0.02U	.1	91		75	125
Sodium	27401	1	SW15686	17	SW15686	14	63.2819	15.3415	50	96		75	125
Thallium	27401	1	SW15686	18	SW15686	15	0.4967	0.02U	.5	99		75	125
Vanadium	27401	1	SW15686	18	SW15686	15	0.4764	0.05U	.5	95		75	125
Zinc	27401	1	SW15686	18	SW15686	15	0.4887	0.05U	.5	98		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: 27401

3110620 0235

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS		Matrix: AQUEOUS		SampleID: LCSW 27401							
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim	
Antimony	27401	1	S111913B	17	256.0000	250	102	80	120		
Arsenic	27401	1	S111913B	17	248.0000	250	99	80	120		
Beryllium	27401	1	S111913B	17	254.9000	250	102	80	120		
Cadmium	27401	1	S111913B	17	250.5000	250	100	80	120		
Cobalt	27401	1	S111913B	17	243.7000	250	97	80	120		
Lead	27401	1	S111913B	17	242.4000	250	97	80	120		
Selenium	27401	1	S111913B	17	239.6000	250	96	80	120		
Thallium	27401	1	S111913B	17	234.5000	250	94	80	120		

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 27401							
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim	
Antimony	27401	1	S111913B	18	245.8000	250	98	80	120		
Arsenic	27401	1	S111913B	18	242.5000	250	97	80	120		
Beryllium	27401	1	S111913B	18	248.9000	250	100	80	120		
Cadmium	27401	1	S111913B	18	244.9000	250	98	80	120		
Cobalt	27401	1	S111913B	18	239.6000	250	96	80	120		
Lead	27401	1	S111913B	18	241.9000	250	97	80	120		
Selenium	27401	1	S111913B	18	236.3000	250	95	80	120		
Thallium	27401	1	S111913B	18	231.7000	250	93	80	120		

TxtQcType: MS		Matrix: AQUEOUS		SampleID: AC75576-031									
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	27401	1	S111913B	22	S111913B	19	267.7000	1U	250	107	75	125	
Arsenic	27401	1	S111913B	22	S111913B	19	260.9000	1U	250	104	75	125	
Beryllium	27401	1	S111913B	22	S111913B	19	275.4000	0.5U	250	110	75	125	
Cadmium	27401	1	S111913B	22	S111913B	19	264.8000	1U	250	106	75	125	
Cobalt	27401	1	S111913B	22	S111913B	19	263.3000	1U	250	105	75	125	
Lead	27401	1	S111913B	22	S111913B	19	267.8000	1.5U	250	107	75	125	
Selenium	27401	1	S111913B	22	S111913B	19	251.1000	5U	250	100	75	125	
Thallium	27401	1	S111913B	22	S111913B	19	253.6000	1U	250	101	75	125	

TxtQcType: MSD		Matrix: AQUEOUS		SampleID: AC75576-033									
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	27401	1	S111913B	23	S111913B	19	236.9000	1U	250	95	75	125	
Arsenic	27401	1	S111913B	23	S111913B	19	229.7000	1U	250	92	75	125	
Beryllium	27401	1	S111913B	23	S111913B	19	240.8000	0.5U	250	96	75	125	
Cadmium	27401	1	S111913B	23	S111913B	19	231.3000	1U	250	93	75	125	
Cobalt	27401	1	S111913B	23	S111913B	19	228.2000	1U	250	91	75	125	
Lead	27401	1	S111913B	23	S111913B	19	235.5000	1.5U	250	94	75	125	
Selenium	27401	1	S111913B	23	S111913B	19	221.0000	5U	250	88	75	125	
Thallium	27401	1	S111913B	23	S111913B	19	220.4000	1U	250	88	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: 27401

3110620 0236

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: AQUEOUS		SampleID: AC75576-029								
Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	SW15686	19	SW15686	15	5.1062	0.2U	5.000	102		80	120
Antimony	1	SW15686	19	SW15686	15	0.4717	0.02U	.5000	94		80	120
Arsenic	1	SW15686	19	SW15686	15	0.4958	0.02U	.5000	99		80	120
Barium	1	SW15686	19	SW15686	15	0.5348	0.05U	.5	107		80	120
Beryllium	1	SW15686	19	SW15686	15	0.5006	0.012U	.5000	100		80	120
Cadmium	1	SW15686	19	SW15686	15	0.5061	0.012U	.5000	101		80	120
Calcium	1	SW15686	19	SW15686	15	80.6175	29.7962	50.0	102		80	120
Chromium	1	SW15686	19	SW15686	15	0.5643	0.0617	.5000	101		80	120
Cobalt	1	SW15686	19	SW15686	15	0.5020	0.02U	.5000	100		80	120
Copper	1	SW15686	19	SW15686	15	0.5024	0.05U	0.5	100		80	120
Iron	1	SW15686	19	SW15686	15	5.0966	0.3U	5.000	102		80	120
Lead	1	SW15686	19	SW15686	15	0.5051	0.012U	.500	101		80	120
Magnesium	1	SW15686	19	SW15686	15	55.3540	5U	50.0	111		80	120
Manganese	1	SW15686	19	SW15686	15	0.4994	0.04U	.5000	100		80	120
Nickel	1	SW15686	19	SW15686	15	0.5027	0.05U	.5000	101		80	120
Potassium	1	SW15686	18	SW15686	14	51.0260	5U	50.00	102		80	120
Selenium	1	SW15686	19	SW15686	15	0.4950	0.04U	.5000	99		80	120
Silver	1	SW15686	19	SW15686	15	0.0870	0.02U	0.100	87		80	120
Sodium	1	SW15686	18	SW15686	14	65.4946	15.3415	50.00	100		80	120
Thallium	1	SW15686	19	SW15686	15	0.5163	0.02U	.5000	103		80	120
Vanadium	1	SW15686	19	SW15686	15	0.4973	0.05U	.5000	99		80	120
Zinc	1	SW15686	19	SW15686	15	0.5088	0.05U	0.500	102		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: 27401

3110620 0237

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS			Matrix: AQUEOUS			SampleID: AC75576-029						
Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	S111913B	24	S111913B	19	48.9500	1U	50	98		80	120
Arsenic	1	S111913B	24	S111913B	19	49.2500	1U	50	98		80	120
Beryllium	1	S111913B	24	S111913B	19	50.5900	0.5U	50	101		80	120
Cadmium	1	S111913B	24	S111913B	19	50.0800	1U	50	100		80	120
Cobalt	1	S111913B	24	S111913B	19	51.1200	1U	50	102		80	120
Lead	1	S111913B	24	S111913B	19	47.9600	1.5U	50	96		80	120
Selenium	1	S111913B	24	S111913B	19	232.6000	5U	250	93		80	120
Thallium	1	S111913B	24	S111913B	19	50.3200	1U	50	101		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: 27402

3110620 0238

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 27402						
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27402	1	SW15687	13	4.7501	5.00	95		80	120
Antimony	27402	1	SW15687	13	0.4692	0.500	94		80	120
Arsenic	27402	1	SW15687	13	0.4721	0.500	94		80	120
Barium	27402	1	SW15687	13	0.4789	0.500	96		80	120
Beryllium	27402	1	SW15687	13	0.4727	0.500	95		80	120
Cadmium	27402	1	SW15687	13	0.4683	0.500	94		80	120
Calcium	27402	1	SW15687	13	47.9572	50.00	96		80	120
Chromium	27402	1	SW15687	13	0.4678	0.500	94		80	120
Cobalt	27402	1	SW15687	13	0.4760	0.500	95		80	120
Copper	27402	1	SW15687	13	0.4777	0.500	96		80	120
Iron	27402	1	SW15687	13	4.6888	5.00	94		80	120
Lead	27402	1	SW15687	13	0.4821	0.500	96		80	120
Magnesium	27402	1	SW15687	13	47.2673	50.00	95		80	120
Manganese	27402	1	SW15687	13	0.4677	0.500	94		80	120
Mercury	27402	1	H15687S	12	9.7920	10	98		80	120
Nickel	27402	1	SW15687	13	0.4683	0.500	94		80	120
Potassium	27402	1	SW15687	12	50.4593	50	101		80	120
Selenium	27402	1	SW15687	13	0.4900	0.500	98		80	120
Silver	27402	1	SW15687	13	0.0901	0.100	90		80	120
Sodium	27402	1	SW15687	12	50.7393	50	101		80	120
Thallium	27402	1	SW15687	13	0.4957	0.500	99		80	120
Vanadium	27402	1	SW15687	13	0.4731	0.500	95		80	120
Zinc	27402	1	SW15687	13	0.4751	0.500	95		80	120

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 27402						
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27402	1	SW15687	14	4.7272	5.00	95		80	120
Antimony	27402	1	SW15687	14	0.4692	0.500	94		80	120
Arsenic	27402	1	SW15687	14	0.4658	0.500	93		80	120
Barium	27402	1	SW15687	14	0.4771	0.500	95		80	120
Beryllium	27402	1	SW15687	14	0.4710	0.500	94		80	120
Cadmium	27402	1	SW15687	14	0.4685	0.500	94		80	120
Calcium	27402	1	SW15687	14	47.7876	50.00	96		80	120
Chromium	27402	1	SW15687	14	0.4672	0.500	93		80	120
Cobalt	27402	1	SW15687	14	0.4746	0.500	95		80	120
Copper	27402	1	SW15687	14	0.4748	0.500	95		80	120
Iron	27402	1	SW15687	14	4.6731	5.00	93		80	120
Lead	27402	1	SW15687	14	0.4760	0.500	95		80	120
Magnesium	27402	1	SW15687	14	47.1520	50.00	94		80	120
Manganese	27402	1	SW15687	14	0.4663	0.500	93		80	120
Mercury	27402	1	H15687S	13	9.6820	10	97		80	120
Nickel	27402	1	SW15687	14	0.4669	0.500	93		80	120
Potassium	27402	1	SW15687	13	51.5673	50	103		80	120
Selenium	27402	1	SW15687	14	0.4820	0.500	96		80	120
Silver	27402	1	SW15687	14	0.0899	0.100	90		80	120
Sodium	27402	1	SW15687	13	50.4456	50	101		80	120
Thallium	27402	1	SW15687	14	0.4942	0.500	99		80	120
Vanadium	27402	1	SW15687	14	0.4728	0.500	95		80	120
Zinc	27402	1	SW15687	14	0.4757	0.500	95		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: 27402

3110620 0239

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MS		Matrix: AQUEOUS			SampleID: AC75576-032								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27402	1	SW15687	17	SW15687	15	4.7827	0.2U	5.0	96		75	125
Antimony	27402	1	SW15687	17	SW15687	15	0.4759	0.02U	.5	95		75	125
Arsenic	27402	1	SW15687	17	SW15687	15	0.4725	0.02U	.5	95		75	125
Barium	27402	1	SW15687	17	SW15687	15	0.5125	0.05U	.5	103		75	125
Beryllium	27402	1	SW15687	17	SW15687	15	0.4730	0.012U	.5	95		75	125
Cadmium	27402	1	SW15687	17	SW15687	15	0.4735	0.012U	.5	95		75	125
Calcium	27402	1	SW15687	17	SW15687	15	77.6895	29.3312	50.0	97		75	125
Chromium	27402	1	SW15687	17	SW15687	15	0.5261	0.0587	.5	93		75	125
Cobalt	27402	1	SW15687	17	SW15687	15	0.4776	0.02U	.5	96		75	125
Copper	27402	1	SW15687	17	SW15687	15	0.4807	0.05U	.5	96		75	125
Iron	27402	1	SW15687	17	SW15687	15	4.7291	0.3U	5.0	95		75	125
Lead	27402	1	SW15687	17	SW15687	15	0.4792	0.012U	.5	96		75	125
Magnesium	27402	1	SW15687	17	SW15687	15	51.1376	5U	50	102		75	125
Manganese	27402	1	SW15687	17	SW15687	15	0.4715	0.04U	.5	94		75	125
Mercury	27402	1	H15687S	16	H15687S	14	9.7240	.70U	10	97		75	125
Nickel	27402	1	SW15687	17	SW15687	15	0.4705	0.05U	.5	94		75	125
Potassium	27402	1	SW15687	16	SW15687	14	53.4769	5U	50.00	107		75	125
Selenium	27402	1	SW15687	17	SW15687	15	0.4953	0.04U	.5	99		75	125
Silver	27402	1	SW15687	17	SW15687	15	0.0913	0.02U	.1	91		75	125
Sodium	27402	1	SW15687	16	SW15687	14	68.1247	15.7578	50.00	105		75	125
Thallium	27402	1	SW15687	17	SW15687	15	0.4928	0.02U	.5	99		75	125
Vanadium	27402	1	SW15687	17	SW15687	15	0.4773	0.05U	.5	95		75	125
Zinc	27402	1	SW15687	17	SW15687	15	0.4871	0.05U	.5	97		75	125

TxtQcType: MSD		Matrix: AQUEOUS			SampleID: AC75576-034								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27402	1	SW15687	18	SW15687	15	4.7267	0.2U	5.0	95		75	125
Antimony	27402	1	SW15687	18	SW15687	15	0.4676	0.02U	.5	94		75	125
Arsenic	27402	1	SW15687	18	SW15687	15	0.4717	0.02U	.5	94		75	125
Barium	27402	1	SW15687	18	SW15687	15	0.5089	0.05U	.5	102		75	125
Beryllium	27402	1	SW15687	18	SW15687	15	0.4692	0.012U	.5	94		75	125
Cadmium	27402	1	SW15687	18	SW15687	15	0.4696	0.012U	.5	94		75	125
Calcium	27402	1	SW15687	18	SW15687	15	76.6324	29.3312	50.0	95		75	125
Chromium	27402	1	SW15687	18	SW15687	15	0.5211	0.0587	.5	92		75	125
Cobalt	27402	1	SW15687	18	SW15687	15	0.4734	0.02U	.5	95		75	125
Copper	27402	1	SW15687	18	SW15687	15	0.4790	0.05U	.5	96		75	125
Iron	27402	1	SW15687	18	SW15687	15	4.6608	0.3U	5.0	93		75	125
Lead	27402	1	SW15687	18	SW15687	15	0.4742	0.012U	.5	95		75	125
Magnesium	27402	1	SW15687	18	SW15687	15	50.7020	5U	50	101		75	125
Manganese	27402	1	SW15687	18	SW15687	15	0.4674	0.04U	.5	93		75	125
Mercury	27402	1	H15687S	17	H15687S	14	9.4080	.70U	10	94		75	125
Nickel	27402	1	SW15687	18	SW15687	15	0.4663	0.05U	.5	93		75	125
Potassium	27402	1	SW15687	17	SW15687	14	52.5403	5U	50.0	105		75	125
Selenium	27402	1	SW15687	18	SW15687	15	0.4897	0.04U	.5	98		75	125
Silver	27402	1	SW15687	18	SW15687	15	0.0906	0.02U	.1	91		75	125
Sodium	27402	1	SW15687	17	SW15687	14	66.6683	15.7578	50	102		75	125
Thallium	27402	1	SW15687	18	SW15687	15	0.4880	0.02U	.5	98		75	125
Vanadium	27402	1	SW15687	18	SW15687	15	0.4741	0.05U	.5	95		75	125
Zinc	27402	1	SW15687	18	SW15687	15	0.4792	0.05U	.5	96		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: 27402

3110620 0240

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: AQUEOUS		SampleID: AC75576-030								
Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	SW15687	19	SW15687	15	4.9961	0.2U	5.000	100		80	120
Antimony	1	SW15687	19	SW15687	15	0.4617	0.02U	.5000	92		80	120
Arsenic	1	SW15687	19	SW15687	15	0.4870	0.02U	.5000	97		80	120
Barium	1	SW15687	19	SW15687	15	0.5278	0.05U	.5	106		80	120
Beryllium	1	SW15687	19	SW15687	15	0.4869	0.012U	.5000	97		80	120
Cadmium	1	SW15687	19	SW15687	15	0.4948	0.012U	.5000	99		80	120
Calcium	1	SW15687	19	SW15687	15	78.3255	29.3312	50.0	98		80	120
Chromium	1	SW15687	19	SW15687	15	0.5461	0.0587	.5000	97		80	120
Cobalt	1	SW15687	19	SW15687	15	0.4884	0.02U	.5000	98		80	120
Copper	1	SW15687	19	SW15687	15	0.4977	0.05U	0.5	100		80	120
Iron	1	SW15687	19	SW15687	15	4.9500	0.3U	5.000	99		80	120
Lead	1	SW15687	19	SW15687	15	0.4905	0.012U	.500	98		80	120
Magnesium	1	SW15687	19	SW15687	15	53.7349	5U	50.0	107		80	120
Manganese	1	SW15687	19	SW15687	15	0.4885	0.04U	.5000	98		80	120
Nickel	1	SW15687	19	SW15687	15	0.4868	0.05U	.5000	97		80	120
Potassium	1	SW15687	18	SW15687	14	55.1341	5U	50.00	110		80	120
Selenium	1	SW15687	19	SW15687	15	0.5024	0.04U	.5000	100		80	120
Silver	1	SW15687	19	SW15687	15	0.0849	0.02U	0.100	85		80	120
Sodium	1	SW15687	18	SW15687	14	68.9943	15.7578	50.00	106		80	120
Thallium	1	SW15687	19	SW15687	15	0.5067	0.02U	.5000	101		80	120
Vanadium	1	SW15687	19	SW15687	15	0.4886	0.05U	.5000	98		80	120
Zinc	1	SW15687	19	SW15687	15	0.4962	0.05U	0.500	99		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: 27402

3110620 0241

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: AQUEOUS SampleID: LCSW 27402											
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim	
Antimony	27402	1	S111913C	17	255.3000	250	102	80	120		
Arsenic	27402	1	S111913C	17	256.9000	250	103	80	120		
Beryllium	27402	1	S111913C	17	254.5000	250	102	80	120		
Cadmium	27402	1	S111913C	17	251.9000	250	101	80	120		
Cobalt	27402	1	S111913C	17	248.7000	250	99	80	120		
Lead	27402	1	S111913C	17	248.7000	250	99	80	120		
Thallium	27402	1	S111913C	17	237.9000	250	95	80	120		

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 27402											
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim	
Antimony	27402	1	S111913C	18	274.7000	250	110	80	120		
Arsenic	27402	1	S111913C	18	287.8000	250	115	80	120		
Beryllium	27402	1	S111913C	18	269.7000	250	108	80	120		
Cadmium	27402	1	S111913C	18	271.9000	250	109	80	120		
Cobalt	27402	1	S111913C	18	278.1000	250	111	80	120		
Lead	27402	1	S111913C	18	264.0000	250	106	80	120		
Thallium	27402	1	S111913C	18	251.5000	250	101	80	120		

TxtQcType: MS			Matrix: AQUEOUS		SampleID: AC75576-032								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	27402	1	S111913C	22	S111913C	19	253.3000	1U	250	101	75	125	
Arsenic	27402	1	S111913C	22	S111913C	19	264.0000	1U	250	106	75	125	
Beryllium	27402	1	S111913C	22	S111913C	19	247.7000	0.5U	250	99	75	125	
Cadmium	27402	1	S111913C	22	S111913C	19	247.1000	1U	250	99	75	125	
Cobalt	27402	1	S111913C	22	S111913C	19	257.2000	1U	250	103	75	125	
Lead	27402	1	S111913C	22	S111913C	19	248.4000	1.5U	250	99	75	125	
Selenium	27402	1	S112013A	22	S112013A	19	242.5000	5U	250	97	75	125	
Thallium	27402	1	S111913C	22	S111913C	19	237.7000	1U	250	95	75	125	

TxtQcType: MSD													
Matrix: AQUEOUS													
SampleID: AC75576-034													
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	27402	1	S111913C	23	S111913C	19	265.5000	1U	250	106	75	125	
Arsenic	27402	1	S111913C	23	S111913C	19	273.2000	1U	250	109	75	125	
Beryllium	27402	1	S111913C	23	S111913C	19	260.7000	0.5U	250	104	75	125	
Cadmium	27402	1	S111913C	23	S111913C	19	257.6000	1U	250	103	75	125	
Cobalt	27402	1	S111913C	23	S111913C	19	263.4000	1U	250	105	75	125	
Lead	27402	1	S111913C	23	S111913C	19	255.9000	1.5U	250	102	75	125	
Selenium	27402	1	S112013A	23	S112013A	19	268.6000	5U	250	107	75	125	
Thallium	27402	1	S111913C	23	S111913C	19	243.3000	1U	250	97	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: 27402

3110620 0242

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS

Matrix: AQUEOUS

SampleID: AC75576-030

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	S111913C	24	S111913C	19	49.8500	1U	50	100		80	120
Arsenic	1	S111913C	24	S111913C	19	52.8700	1U	50	106		80	120
Beryllium	1	S111913C	24	S111913C	19	49.8700	0.5U	50	100		80	120
Cadmium	1	S111913C	24	S111913C	19	50.3600	1U	50	101		80	120
Cobalt	1	S111913C	24	S111913C	19	51.8500	1U	50	104		80	120
Lead	1	S111913C	24	S111913C	19	47.9200	1.5U	50	96		80	120
Selenium	1	S112013A	24	S112013A	19	249.2000	5U	250	100		80	120
Thallium	1	S111913C	24	S111913C	19	49.7600	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
RPD/%Difference Data
 PREP BATCH: 27401

3110620 0243

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 27401					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	27401	SW15686	14	SW15686	13	4.8013	4.7964	.1	20
Antimony	27401	SW15686	14	SW15686	13	0.4788	0.4786	.054	20
Arsenic	27401	SW15686	14	SW15686	13	0.4765	0.4714	1.1	20
Barium	27401	SW15686	14	SW15686	13	0.4843	0.4845	.057	20
Beryllium	27401	SW15686	14	SW15686	13	0.4797	0.4822	.52	20
Cadmium	27401	SW15686	14	SW15686	13	0.4813	0.4800	.26	20
Calcium	27401	SW15686	14	SW15686	13	48.7309	48.9444	.44	20
Chromium	27401	SW15686	14	SW15686	13	0.4761	0.4803	.88	20
Cobalt	27401	SW15686	14	SW15686	13	0.4883	0.4867	.32	20
Copper	27401	SW15686	14	SW15686	13	0.4806	0.4843	.78	20
Iron	27401	SW15686	14	SW15686	13	4.7344	4.7833	1	20
Lead	27401	SW15686	14	SW15686	13	0.4921	0.4897	.48	20
Magnesium	27401	SW15686	14	SW15686	13	48.0236	48.2419	.45	20
Manganese	27401	SW15686	14	SW15686	13	0.4735	0.4756	.44	20
Mercury	27401	H15686S	13	H15686S	12	9.5462	9.3282	2.3	20
Nickel	27401	SW15686	14	SW15686	13	0.4764	0.4798	.71	20
Potassium	27401	SW15686	13	SW15686	12	47.0749	47.4190	.73	20
Selenium	27401	SW15686	14	SW15686	13	0.4698	0.4858	3.3	20
Silver	27401	SW15686	14	SW15686	13	0.0905	0.0909	.39	20
Sodium	27401	SW15686	13	SW15686	12	48.4657	48.4762	.022	20
Thallium	27401	SW15686	14	SW15686	13	0.5072	0.5038	.67	20
Vanadium	27401	SW15686	14	SW15686	13	0.4802	0.4815	.26	20
Zinc	27401	SW15686	14	SW15686	13	0.4855	0.4824	.64	20

TxtQcType: MR		Matrix: AQUEOUS		SampleID: AC75576-029					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	27401	SW15686	16	SW15686	15	0.2U	0.2U	---	20
Antimony	27401	SW15686	16	SW15686	15	0.02U	0.02U	---	20
Arsenic	27401	SW15686	16	SW15686	15	0.02U	0.02U	---	20
Barium	27401	SW15686	16	SW15686	15	0.05U	0.05U	---	20
Beryllium	27401	SW15686	16	SW15686	15	0.012U	0.012U	---	20
Cadmium	27401	SW15686	16	SW15686	15	0.012U	0.012U	---	20
Calcium	27401	SW15686	16	SW15686	15	30.5024	29.7962	2.3	20
Chromium	27401	SW15686	16	SW15686	15	0.0635	0.0617	2.8	20
Cobalt	27401	SW15686	16	SW15686	15	0.02U	0.02U	---	20
Copper	27401	SW15686	16	SW15686	15	0.05U	0.05U	---	20
Iron	27401	SW15686	16	SW15686	15	0.3U	0.3U	---	20
Lead	27401	SW15686	16	SW15686	15	0.012U	0.012U	---	20
Magnesium	27401	SW15686	16	SW15686	15	5U	5U	---	20
Manganese	27401	SW15686	16	SW15686	15	0.04U	0.04U	---	20
Mercury	27401	H15686S	15	H15686S	14	.70U	.70U	---	20
Nickel	27401	SW15686	16	SW15686	15	0.05U	0.05U	---	20
Potassium	27401	SW15686	15	SW15686	14	5U	5U	---	20
Selenium	27401	SW15686	16	SW15686	15	0.04U	0.04U	---	20
Silver	27401	SW15686	16	SW15686	15	0.02U	0.02U	---	20
Sodium	27401	SW15686	15	SW15686	14	15.4105	15.3415	0.45	20
Thallium	27401	SW15686	16	SW15686	15	0.02U	0.02U	---	20
Vanadium	27401	SW15686	16	SW15686	15	0.05U	0.05U	---	20
Zinc	27401	SW15686	16	SW15686	15	0.05U	0.05U	---	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: 27401

3110620 0244

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: AC75576-033					
Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	27401	SW15686	18	SW15686	17	4.8309	5.0596	4.6	20
Antimony	27401	SW15686	18	SW15686	17	0.4785	0.4881	2	20
Arsenic	27401	SW15686	18	SW15686	17	0.4756	0.4883	2.6	20
Barium	27401	SW15686	18	SW15686	17	0.5116	0.5283	3.2	20
Beryllium	27401	SW15686	18	SW15686	17	0.4789	0.4892	2.1	20
Cadmium	27401	SW15686	18	SW15686	17	0.4794	0.4906	2.3	20
Calcium	27401	SW15686	18	SW15686	17	77.4710	79.6582	2.8	20
Chromium	27401	SW15686	18	SW15686	17	0.5341	0.5494	2.8	20
Cobalt	27401	SW15686	18	SW15686	17	0.4824	0.4959	2.8	20
Copper	27401	SW15686	18	SW15686	17	0.4822	0.4956	2.8	20
Iron	27401	SW15686	18	SW15686	17	4.8487	5.0116	3.3	20
Lead	27401	SW15686	18	SW15686	17	0.4896	0.5004	2.2	20
Magnesium	27401	SW15686	18	SW15686	17	51.6709	52.9292	2.4	20
Manganese	27401	SW15686	18	SW15686	17	0.4763	0.4921	3.3	20
Mercury	27401	H15686S	17	H15686S	16	9.1434	9.3538	2.3	20
Nickel	27401	SW15686	18	SW15686	17	0.4788	0.4913	2.6	20
Potassium	27401	SW15686	17	SW15686	16	49.2551	49.7449	.99	20
Selenium	27401	SW15686	18	SW15686	17	0.4750	0.4887	2.8	20
Silver	27401	SW15686	18	SW15686	17	0.0907	0.0937	3.3	20
Sodium	27401	SW15686	17	SW15686	16	63.2819	64.3030	1.6	20
Thallium	27401	SW15686	18	SW15686	17	0.4967	0.5101	2.7	20
Vanadium	27401	SW15686	18	SW15686	17	0.4764	0.4939	3.6	20
Zinc	27401	SW15686	18	SW15686	17	0.4887	0.5004	2.4	20

TxtQcType: SD		Matrix: AQUEOUS		SampleID: AC75576-029						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq# DF	Result 1	Result 2	%Diff		Limit
Aluminum	27401	SW15686	23	SW15686	15 5	0.0193	0.1236	22	c	10
Antimony	27401	SW15686	23	SW15686	15 5	0.0002	0.0021	---		10
Arsenic	27401	SW15686	23	SW15686	15 5	0.0021	0.0028	---		10
Barium	27401	SW15686	23	SW15686	15 5	0.0081	0.0318	28	a	10
Beryllium	27401	SW15686	23	SW15686	15 5	0.0013	0.0012	437	a	10
Cadmium	27401	SW15686	23	SW15686	15 5	0.0018	0.0027	235	c	10
Calcium	27401	SW15686	23	SW15686	15 5	6.2026	29.7962	4.1		10
Chromium	27401	SW15686	23	SW15686	15 5	0.0142	0.0617	15	a	10
Cobalt	27401	SW15686	23	SW15686	15 5	0.0016	0.0018	361	c	10
Copper	27401	SW15686	23	SW15686	15 5	0.0046	0.0070	232	c	10
Iron	27401	SW15686	23	SW15686	15 5	0.0271	0.0926	---		10
Lead	27401	SW15686	23	SW15686	15 5	0.0003	0.0016	---		10
Magnesium	27401	SW15686	23	SW15686	15 5	0.9873	4.1424	19	a	10
Manganese	27401	SW15686	23	SW15686	15 5	0.0026	0.0056	129	c	10
Nickel	27401	SW15686	23	SW15686	15 5	0.0012	0.0028	117	c	10
Potassium	27401	SW15686	22	SW15686	14 5	1.2835	3.1973	101	a	10
Selenium	27401	SW15686	23	SW15686	15 5	0.0017	0.0073	---		10
Silver	27401	SW15686	23	SW15686	15 5	0.0000	0.0005	---		10
Sodium	27401	SW15686	22	SW15686	14 5	3.4687	15.3415	13	a	10
Thallium	27401	SW15686	23	SW15686	15 5	0.0029	0.0008	---		10
Vanadium	27401	SW15686	23	SW15686	15 5	0.0020	0.0029	238	c	10
Zinc	27401	SW15686	23	SW15686	15 5	0.0011	0.0108	50	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: 27401

3110620 0245

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 27401					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	27401	S111913B	18	S111913B	17	245.8000	256.0000	4.1	20
Arsenic	27401	S111913B	18	S111913B	17	242.5000	248.0000	2.2	20
Beryllium	27401	S111913B	18	S111913B	17	248.9000	254.9000	2.4	20
Cadmium	27401	S111913B	18	S111913B	17	244.9000	250.5000	2.3	20
Cobalt	27401	S111913B	18	S111913B	17	239.6000	243.7000	1.7	20
Lead	27401	S111913B	18	S111913B	17	241.9000	242.4000	.21	20
Selenium	27401	S111913B	18	S111913B	17	236.3000	239.6000	1.4	20
Thallium	27401	S111913B	18	S111913B	17	231.7000	234.5000	1.2	20

TxtQcType: MR		Matrix: AQUEOUS		SampleID: AC75576-029					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	27401	S111913B	20	S111913B	19	1U	1U	---	20
Arsenic	27401	S111913B	20	S111913B	19	1U	1U	---	20
Beryllium	27401	S111913B	20	S111913B	19	0.5U	0.5U	---	20
Cadmium	27401	S111913B	20	S111913B	19	1U	1U	---	20
Cobalt	27401	S111913B	20	S111913B	19	1U	1U	---	20
Lead	27401	S111913B	20	S111913B	19	1.5U	1.5U	---	20
Selenium	27401	S111913B	20	S111913B	19	5U	5U	---	20
Thallium	27401	S111913B	20	S111913B	19	1U	1U	---	20

TxtQcType: MSD		Matrix: AQUEOUS		SampleID: AC75576-033					
Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	27401	S111913B	23	S111913B	22	236.9000	267.7000	12	20
Arsenic	27401	S111913B	23	S111913B	22	229.7000	260.9000	13	20
Beryllium	27401	S111913B	23	S111913B	22	240.8000	275.4000	13	20
Cadmium	27401	S111913B	23	S111913B	22	231.3000	264.8000	14	20
Cobalt	27401	S111913B	23	S111913B	22	228.2000	263.3000	14	20
Lead	27401	S111913B	23	S111913B	22	235.5000	267.8000	13	20
Selenium	27401	S111913B	23	S111913B	22	221.0000	251.1000	13	20
Thallium	27401	S111913B	23	S111913B	22	220.4000	253.6000	14	20

TxtQcType: SD		Matrix: AQUEOUS		SampleID: AC75576-029						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Antimony	27401	S111913B	21	S111913B	19	5	0.0827	0.2265	82	c 10
Arsenic	27401	S111913B	21	S111913B	19	5	0.1233	0.3113	98	c 10
Beryllium	27401	S111913B	21	S111913B	19	5	0.0557	0.1056	164	c 10
Cadmium	27401	S111913B	21	S111913B	19	5	0.1804	0.7580	19	a 10
Cobalt	27401	S111913B	21	S111913B	19	5	0.0822	0.1772	132	c 10
Lead	27401	S111913B	21	S111913B	19	5	0.3567	0.7976	124	a 10
Selenium	27401	S111913B	21	S111913B	19	5	-0.4524	-0.0847	---	10
Thallium	27401	S111913B	21	S111913B	19	5	0.0898	0.3215	40	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: 27402

3110620 0246

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 27402					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	27402	SW15687	14	SW15687	13	4.7272	4.7501	.48	20
Antimony	27402	SW15687	14	SW15687	13	0.4692	0.4692	.01	20
Arsenic	27402	SW15687	14	SW15687	13	0.4658	0.4721	1.3	20
Barium	27402	SW15687	14	SW15687	13	0.4771	0.4789	.37	20
Beryllium	27402	SW15687	14	SW15687	13	0.4710	0.4727	.36	20
Cadmium	27402	SW15687	14	SW15687	13	0.4685	0.4683	.043	20
Calcium	27402	SW15687	14	SW15687	13	47.7876	47.9572	.35	20
Chromium	27402	SW15687	14	SW15687	13	0.4672	0.4678	.14	20
Cobalt	27402	SW15687	14	SW15687	13	0.4746	0.4760	.3	20
Copper	27402	SW15687	14	SW15687	13	0.4748	0.4777	.61	20
Iron	27402	SW15687	14	SW15687	13	4.6731	4.6888	.34	20
Lead	27402	SW15687	14	SW15687	13	0.4760	0.4821	1.3	20
Magnesium	27402	SW15687	14	SW15687	13	47.1520	47.2673	.24	20
Manganese	27402	SW15687	14	SW15687	13	0.4663	0.4677	.29	20
Mercury	27402	H15687S	13	H15687S	12	9.6820	9.7920	1.1	20
Nickel	27402	SW15687	14	SW15687	13	0.4669	0.4683	.31	20
Potassium	27402	SW15687	13	SW15687	12	51.5673	50.4593	2.2	20
Selenium	27402	SW15687	14	SW15687	13	0.4820	0.4900	1.6	20
Silver	27402	SW15687	14	SW15687	13	0.0899	0.0901	.28	20
Sodium	27402	SW15687	13	SW15687	12	50.4456	50.7393	.58	20
Thallium	27402	SW15687	14	SW15687	13	0.4942	0.4957	.3	20
Vanadium	27402	SW15687	14	SW15687	13	0.4728	0.4731	.066	20
Zinc	27402	SW15687	14	SW15687	13	0.4757	0.4751	.13	20

TxtQcType: MR		Matrix: AQUEOUS		SampleID: AC75576-030					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	27402	SW15687	16	SW15687	15	0.2U	0.2U	---	20
Antimony	27402	SW15687	16	SW15687	15	0.02U	0.02U	---	20
Arsenic	27402	SW15687	16	SW15687	15	0.02U	0.02U	---	20
Barium	27402	SW15687	16	SW15687	15	0.05U	0.05U	---	20
Beryllium	27402	SW15687	16	SW15687	15	0.012U	0.012U	---	20
Cadmium	27402	SW15687	16	SW15687	15	0.012U	0.012U	---	20
Calcium	27402	SW15687	16	SW15687	15	28.5078	29.3312	2.8	20
Chromium	27402	SW15687	16	SW15687	15	0.0576	0.0587	1.9	20
Cobalt	27402	SW15687	16	SW15687	15	0.02U	0.02U	---	20
Copper	27402	SW15687	16	SW15687	15	0.05U	0.05U	---	20
Iron	27402	SW15687	16	SW15687	15	0.3U	0.3U	---	20
Lead	27402	SW15687	16	SW15687	15	0.012U	0.012U	---	20
Magnesium	27402	SW15687	16	SW15687	15	5U	5U	---	20
Manganese	27402	SW15687	16	SW15687	15	0.04U	0.04U	---	20
Mercury	27402	H15687S	15	H15687S	14	.70U	.70U	---	20
Nickel	27402	SW15687	16	SW15687	15	0.05U	0.05U	---	20
Potassium	27402	SW15687	15	SW15687	14	5U	5U	---	20
Selenium	27402	SW15687	16	SW15687	15	0.04U	0.04U	---	20
Silver	27402	SW15687	16	SW15687	15	0.02U	0.02U	---	20
Sodium	27402	SW15687	15	SW15687	14	15.6551	15.7578	0.65	20
Thallium	27402	SW15687	16	SW15687	15	0.02U	0.02U	---	20
Vanadium	27402	SW15687	16	SW15687	15	0.05U	0.05U	---	20
Zinc	27402	SW15687	16	SW15687	15	0.05U	0.05U	---	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: 27402

3110620 0247

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: AC75576-034					
Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	27402	SW15687	18	SW15687	17	4.7267	4.7827	1.2	20
Antimony	27402	SW15687	18	SW15687	17	0.4676	0.4759	1.8	20
Arsenic	27402	SW15687	18	SW15687	17	0.4717	0.4725	.17	20
Barium	27402	SW15687	18	SW15687	17	0.5089	0.5125	.7	20
Beryllium	27402	SW15687	18	SW15687	17	0.4692	0.4730	.8	20
Cadmium	27402	SW15687	18	SW15687	17	0.4696	0.4735	.83	20
Calcium	27402	SW15687	18	SW15687	17	76.6324	77.6895	1.4	20
Chromium	27402	SW15687	18	SW15687	17	0.5211	0.5261	.97	20
Cobalt	27402	SW15687	18	SW15687	17	0.4734	0.4776	.88	20
Copper	27402	SW15687	18	SW15687	17	0.4790	0.4807	.37	20
Iron	27402	SW15687	18	SW15687	17	4.6608	4.7291	1.5	20
Lead	27402	SW15687	18	SW15687	17	0.4742	0.4792	1	20
Magnesium	27402	SW15687	18	SW15687	17	50.7020	51.1376	.86	20
Manganese	27402	SW15687	18	SW15687	17	0.4674	0.4715	.87	20
Mercury	27402	H15687S	17	H15687S	16	9.4080	9.7240	3.3	20
Nickel	27402	SW15687	18	SW15687	17	0.4663	0.4705	.9	20
Potassium	27402	SW15687	17	SW15687	16	52.5403	53.4769	1.8	20
Selenium	27402	SW15687	18	SW15687	17	0.4897	0.4953	1.1	20
Silver	27402	SW15687	18	SW15687	17	0.0906	0.0913	.79	20
Sodium	27402	SW15687	17	SW15687	16	66.6683	68.1247	2.2	20
Thallium	27402	SW15687	18	SW15687	17	0.4880	0.4928	.97	20
Vanadium	27402	SW15687	18	SW15687	17	0.4741	0.4773	.67	20
Zinc	27402	SW15687	18	SW15687	17	0.4792	0.4871	1.6	20

TxtQcType: SD		Matrix: AQUEOUS		SampleID: AC75576-030					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq# DF	Result 1	Result 2	%Diff	Limit
Aluminum	27402	SW15687	23	SW15687	15 5	0.0019	0.0364	---	10
Antimony	27402	SW15687	23	SW15687	15 5	0.0019	0.0027	---	10
Arsenic	27402	SW15687	23	SW15687	15 5	0.0031	0.0006	---	10
Barium	27402	SW15687	23	SW15687	15 5	0.0084	0.0319	32 a	10
Beryllium	27402	SW15687	23	SW15687	15 5	0.0026	0.0026	406 a	10 (reported from ICP MS 6020)
Cadmium	27402	SW15687	23	SW15687	15 5	0.0012	0.0022	179 c	10
Calcium	27402	SW15687	23	SW15687	15 5	6.3340	29.3312	8	10
Chromium	27402	SW15687	23	SW15687	15 5	0.0135	0.0587	15 a	10
Cobalt	27402	SW15687	23	SW15687	15 5	0.0011	0.0012	350 c	10
Copper	27402	SW15687	23	SW15687	15 5	0.0040	0.0084	135 c	10
Iron	27402	SW15687	23	SW15687	15 5	0.0089	0.0166	---	10
Lead	27402	SW15687	23	SW15687	15 5	0.0025	0.0029	337 c	10
Magnesium	27402	SW15687	23	SW15687	15 5	1.0910	4.1670	31 a	10
Manganese	27402	SW15687	23	SW15687	15 5	0.0013	0.0019	239 c	10
Nickel	27402	SW15687	23	SW15687	15 5	0.0007	0.0018	---	10
Potassium	27402	SW15687	22	SW15687	14 5	0.8160	2.8584	43 a	10
Selenium	27402	SW15687	23	SW15687	15 5	0.0038	0.0045	---	10
Silver	27402	SW15687	23	SW15687	15 5	-0.0001	0.0000	---	10
Sodium	27402	SW15687	22	SW15687	14 5	3.3980	15.7578	7.8	10
Thallium	27402	SW15687	23	SW15687	15 5	0.0035	0.0022	---	10
Vanadium	27402	SW15687	23	SW15687	15 5	-0.0001	0.0013	---	10
Zinc	27402	SW15687	23	SW15687	15 5	0.0030	0.0100	49 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: 27402

3110620 0248

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 27402					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	27402	S111913C	18	S111913C	17	274.7000	255.3000	7.3	20
Arsenic	27402	S111913C	18	S111913C	17	287.8000	256.9000	11	20
Beryllium	27402	S111913C	18	S111913C	17	269.7000	254.5000	5.8	20
Cadmium	27402	S111913C	18	S111913C	17	271.9000	251.9000	7.6	20
Cobalt	27402	S111913C	18	S111913C	17	278.1000	248.7000	11	20
Lead	27402	S111913C	18	S111913C	17	264.0000	248.7000	6	20
Thallium	27402	S111913C	18	S111913C	17	251.5000	237.9000	5.6	20

TxtQcType: MR		Matrix: AQUEOUS		SampleID: AC75576-030					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	27402	S111913C	20	S111913C	19	1U	1U	---	20
Arsenic	27402	S111913C	20	S111913C	19	1U	1U	---	20
Beryllium	27402	S111913C	20	S111913C	19	0.5U	0.5U	---	20
Cadmium	27402	S111913C	20	S111913C	19	1U	1U	---	20
Cobalt	27402	S111913C	20	S111913C	19	1U	1U	---	20
Lead	27402	S111913C	20	S111913C	19	1.5U	1.5U	---	20
Selenium	27402	S112013A	20	S112013A	19	5U	5U	---	20
Thallium	27402	S111913C	20	S111913C	19	1U	1U	---	20

TxtQcType: MSD		Matrix: AQUEOUS		SampleID: AC75576-034					
Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	27402	S111913C	23	S111913C	22	265.5000	253.3000	4.7	20
Arsenic	27402	S111913C	23	S111913C	22	273.2000	264.0000	3.4	20
Beryllium	27402	S111913C	23	S111913C	22	260.7000	247.7000	5.1	20
Cadmium	27402	S111913C	23	S111913C	22	257.6000	247.1000	4.2	20
Cobalt	27402	S111913C	23	S111913C	22	263.4000	257.2000	2.4	20
Lead	27402	S111913C	23	S111913C	22	255.9000	248.4000	3	20
Selenium	27402	S112013A	23	S112013A	22	268.6000	242.5000	10	20
Thallium	27402	S111913C	23	S111913C	22	243.3000	237.7000	2.3	20

TxtQcType: SD		Matrix: AQUEOUS		SampleID: AC75576-030						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Antimony	27402	S111913C	21	S111913C	19	5	0.0716	0.2053	74 c	10
Arsenic	27402	S111913C	21	S111913C	19	5	0.1148	0.3235	77 c	10
Beryllium	27402	S111913C	21	S111913C	19	5	0.0453	0.0789	187 c	10
Cadmium	27402	S111913C	21	S111913C	19	5	0.1742	0.6854	27 a	10
Cobalt	27402	S111913C	21	S111913C	19	5	0.0749	0.1522	146 c	10
Lead	27402	S111913C	21	S111913C	19	5	0.2091	0.2082	402 c	10
Selenium	27402	S112013A	21	S112013A	19	5	-0.5497	0.0590	---	10
Thallium	27402	S111913C	21	S111913C	19	5	0.0800	0.3793	5.5	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

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	900
Cr	45
Co	45
Cu	18
Fe	450
Pb	45
Mg	900
Mn	45
Mo	45
Ni	45
Se	45
Ag	9
Tl	45
Sn	45
Ti	45
V	45
Zn	45

LINEAR RANGES
PE ICP 2
Radial

<u>ELEMENT</u>	<u>LINEAR RANGE</u>
	(PPM)
Al	900
Ca	900
Fe	360
Mg	900
K	540
Na	900
Mn	45
Ti	45

LINEAR RANGES**ICP-MS2****MS_7500**

<u>ELEMENT</u>	<u>LINEAR RANGE</u> (ppb)
Al	67500
Sb	1125
As	2250
Ba	1350
Be	2700
Ca	225000
Cd	2700
Cr	2700
Co	2700
Cu	2700
Fe	202500
Pb	2700
Mg	225000
Mn	2700
Mo	2700
Na	225000
Ni	2700
K	225000
Se	2700
Ag	900
Tl	900
V	2700
Zn	2700

**INTERELEMENT CORRECTION SUMMARY
PEICP2**

3110620 0253

	Interfering Elements							
	Al	Ca	Fe	Mg	Mn	Mo	Ti	Zn
Interfered Elements								
Al	N/A	0	0	0	0	16.5	0	0
Sb	-0.0458	0	-0.129	0.00581	0	-0.658	0	0
As	0.0151	0.0152	0.0959	-0.012	0	0.235	-0.879	0
Ba	0	0	0.0379	0	0	0	0	0
Be	0	0	0	0	0	0	0.36	0
Cd	0.00402	0.0042	0.0097	0	0	0.114	0	0
Ca	0.211	N/A	1.27	0	5.17	6.83	0	0
Cr	0	0	0	0	-0.366	-5.16	0	0
Co	0	0	0	0	0	-3.76	2.05	0
Cu	0.0121	0.0137	0	0	0	-0.501	0.423	0
Fe	0	0	N/A	0	0	0	0	0
Pb	-0.218	-0.000637	0.0962	0.00544	0	-0.952	0.128	0
Mg	0	0	0.699	N/A	-5.78	-11.4	0	0
Mn	0	0	0	0.0371	N/A	-0.305	0	0
Mo	0.018	0.0349	0	0	0	N/A	0.307	0
Ni	0	0	0	0	0	-1.16	0	0
Se	-0.0942	0.0262	-0.217	-0.0214	0.501	-0.267	-0.438	0
Ag	0	0	-0.0869	0	0	0	0	0
Tl	0.0191	-0.00526	-0.0251	0.0107	1.11	-4.71	-7.19	0
Sn	0	0.0374	0	-0.0105	0	0	-0.502	0
Ti	0	0	0	0	0	0	N/A	0
V	0	0	0.0373	0.0416	-0.287	-1.22	0	0
Zn	0.017	0	0.0392	0	0	0.267	0	N/A

Metal Data
Raw Data

Form1

Inorganic Analysis Data Sheet

Sample ID: MB 27401 (1)
 Client Id: MB 27401 (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	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-36-0	Antimony	20	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-38-2	Arsenic	20	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-41-7	Beryllium	12	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-43-9	Cadmium	12	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-48-4	Cobalt	20	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7439-92-1	Lead	12	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27401	H15686SW	11	CV	HGCV1A
7439-98-7	Molybdenum	20	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-02-0	Nickel	50	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/16/13	27401	SW15686D2	11	P	PEICPRAD2A
7782-49-2	Selenium	40	ND	1	50	50	11/16/13	27401	SW15686C2	12	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	11/16/13	27401	SW15686D2	11	P	PEICPRAD2A
7440-28-0	Thallium	20	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-31-5	Tin	50	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-32-6	Titanium	50	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-62-2	Vanadium	50	ND	1	50	50	11/15/13	27401	SW15686B2	12	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/15/13	27401	SW15686B2	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 27402 (1)
 Client Id: MB 27402 (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	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-36-0	Antimony	20	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-38-2	Arsenic	20	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-41-7	Beryllium	12	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-43-9	Cadmium	12	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-48-4	Cobalt	20	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7439-92-1	Lead	12	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/14/13	27402 H15687SW		11	CV	HGCV2A
7439-98-7	Molybdenum	20	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-02-0	Nickel	50	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/18/13	27402SW15687C2		11	P	PEICPRAD2A
7782-49-2	Selenium	40	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	11/18/13	27402SW15687C2		11	P	PEICPRAD2A
7440-28-0	Thallium	20	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-31-5	Tin	50	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-32-6	Titanium	50	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-62-2	Vanadium	50	ND	1	50	50	11/14/13	27402SW15687A2		12	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/14/13	27402SW15687A2		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 27401
 Client Id: MB 27401
 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	2.0	ND	1	50	100	11/19/13	27401	S111913B	16	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27401	S111913B	16	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27401	S111913B	16	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27401	S111913B	16	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27401	S111913B	16	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27401	S111913B	16	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/19/13	27401	S111913B	16	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27401	S111913B	16	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: MB 27402
 Client Id: MB 27402
 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	2.0	ND	1	50	100	11/19/13	27402	S111913C	16	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/19/13	27402	S111913C	16	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/19/13	27402	S111913C	16	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/19/13	27402	S111913C	16	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/19/13	27402	S111913C	16	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/19/13	27402	S111913C	16	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/20/13	27402	S112013A	16	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/19/13	27402	S111913C	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

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-172861



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS 1 INTERMEDIATE		BatchNumber:	ApproveDate: 09/18/13	
Prep Date: 9/17/2013		Concentration: various mg/l	Checked: Yes	
Expiration Date: 12/16/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8015	DIWater		NEAT neat	
8066	Nitric Acid	5 ml	neat neat	
7655	ARSENIC	.5 ml	1000 ug/ml	5 mg/l
7638	BERYLLIUM	.3 ml	1000 ug/ml	3 mg/l
7639	CADMIUM	.3 ml	1000 ug/ml	3 mg/l
7650	LEAD	.4 ml	1000 ug/ml	4 mg/l
7652	THALLIUM	.5 ml	1000 ug/ml	5 mg/l

Veritech Lot Number: V-173067



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS1 Lowest std		BatchNumber:	ApproveDate: 09/25/13	
Prep Date: 9/19/2013		Concentration: various mg/l	Checked: Yes	
Expiration Date: 12/16/2013		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
	DI Water			
8066	Nitric Acid	50 ml	neat neat	
8122	hydrochloric acid	50 ml	neat neat	
V-172861	ICS 1 INTERMEDIATE	1 ml	various mg/l	

Veritech Lot Number: V-173231



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICSAB		BatchNumber:	ApproveDate: 09/25/13	
Prep Date: 9/24/2013		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 12/23/2013		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
	DI Water			
8123	nitric acid	50 ml	neat neat	
8122	hydrochloric acid	50 ml	neat neat	
8013	ICSA	50 ml	NEAT neat	
7545	ISAB	10 ml	NEAT neat	

Veritech Lot Number: V-173273



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS2- Low Std		BatchNumber:	ApproveDate: 09/25/13	
Prep Date: 9/24/2013		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 12/23/2013		Final Volume: 500 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
	DI Water			
8123	nitric acid	50 ml	neat neat	
8122	hydrochloric acid	50 ml	neat neat	
7784	ics-a	.05 ml	NEAT ug/ml	
7785	ics-b	.05 ml	10000 ug/ml	
7786	ics-c	.05 ml	100 ug/ml	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-173274



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS3 - Middle Std		BatchNumber:	ApproveDate: 09/25/13	
Prep Date: 9/24/2013		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 12/23/2013		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8123	DI Water			
	nitric acid	50 ml	neat neat	
8122	hydrochloric acid	50 ml	neat neat	
7784	ics-a	5 ml	NEAT ug/ml	
7785	ics-b	5 ml	10000 ug/ml	
7786	ics-c	5 ml	100 ug/ml	

Veritech Lot Number: V-173510



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: CCV		BatchNumber:	ApproveDate: 10/04/13	
Prep Date: 9/27/2013		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 12/26/2013		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8123	DI Water			
	nitric acid	50 ml	neat neat	
8122	hydrochloric acid	50 ml	neat neat	
8113	ICV 1	10 ml	NEAT neat	
8114	ICV 2	10 ml	50 ug/ml	

Veritech Lot Number: V-173614



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICSA		BatchNumber:	ApproveDate: 10/04/13	
Prep Date: 9/30/2013		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 12/29/2013		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8123	DI Water			
	nitric acid	50 ml	neat neat	
8122	hydrochloric acid	50 ml	neat neat	
8013	ICSA	50 ml	NEAT neat	

Veritech Lot Number: V-174144



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS4 - High std		BatchNumber:	ApproveDate: 10/16/13	
Prep Date: 10/5/2013		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 1/4/2014		Final Volume: 500 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8123	DI Water			
	nitric acid	25 ml	neat neat	
8122	hydrochloric acid	25 ml	neat neat	
7784	ics-a	5 ml	NEAT ug/ml	
7785	ics-b	5 ml	10000 ug/ml	
7786	ics-c	5 ml	100 ug/ml	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-174666



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICB/CCB		BatchNumber:	ApproveDate: 10/16/13	
Prep Date: 10/11/2013		Concentration: 0 mg/l	Checked: Yes	
Expiration Date: 1/10/2014		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8078	Nitric Acid	50 ml	neat neat	
8122	hydrochloric acid	50 ml	neat neat	

Veritech Lot Number: V-176606



Prepared By: Berls, Sean R.		Department: WetChem	ApprovedBy: shiamala	
Description: LLICV-SW846H2O		BatchNumber:	ApproveDate: 11/15/13	
Prep Date: 11/12/2013		Concentration: VARIOUS pp	Checked: Yes	
Expiration Date: 2/11/2014		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8122	hydrochloric acid	5 ml	neat neat	
8123	nitric acid	5 ml	neat neat	
8135	SW846 LL ICV/CCV	1 ml	NEAT neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7545



Description
ISAB

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
VHGLABS	ZHAMPTON#2	22010	12/27/12	12/26/13	Kalin, Gabrielle	1	500m	NEAT	NEAT

Veritech Control/Receipt Number: 7638



Description
BERYLLIUM

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	S4400-100051	BE13002	01/31/13	01/30/14	Kalin, Gabrielle	1	100m	1000	ug/mL

Veritech Control/Receipt Number: 7639



Description
CADMIUM

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	S4400-100081	CD2501	01/31/13	01/30/14	Kalin, Gabrielle	1	100m	1000	ug/mL

Veritech Control/Receipt Number: 7650



Description
LEAD

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	S4400-1000281	PB3301	01/31/13	01/30/14	Kalin, Gabrielle	1	100m	1000	ug/mL

Veritech Control/Receipt Number: 7652



Description
THALLIUM

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	S4400-1000581	TL7201	01/31/13	01/30/14	Kalin, Gabrielle	1	100m	1000	ug/mL

Veritech Control/Receipt Number: 7655



Description
ARSENIC

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	S4400-100031	AS6002	01/31/13	01/30/14	Kalin, Gabrielle	1	100m	1000	ug/mL

Veritech Control/Receipt Number: 7784



Description
ics-a

ApprovedBy: shiamala
 ApproveDate: 05/17/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	4400-070604JC01	13B081	03/18/13	03/17/14	Kalin, Gabrielle	1	500m	NEAT	ug/mL

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7785



Description
ics-b

ApprovedBy: shiamala
 ApproveDate: 05/17/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	4400-070604JC01	13C056	03/18/13	03/17/14	Kalin, Gabrielle	1	500m	10000	ug/mL

Veritech Control/Receipt Number: 7786



Description
ics-c

ApprovedBy: shiamala
 ApproveDate: 05/17/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	4400-070604JC01	13B081	03/18/13	03/17/14	Kalin, Gabrielle	1	500m	100	ug/mL

Veritech Control/Receipt Number: 8013



Description
ICSA

ApprovedBy: shiamala
 ApproveDate: 08/05/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
VHGLABS	ZHAMPTON#1	33061	07/18/13	07/31/14	Kalin, Gabrielle	4	500m	NEAT	NEAT

Veritech Control/Receipt Number: 8015



Description
DIWater

ApprovedBy: shiamala
 ApproveDate: 09/09/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemens	1	1	07/22/13	02/22/14	Ugljesa, Julijana	1		NEAT	NEAT

Veritech Control/Receipt Number: 8066



Description
Nitric Acid

ApprovedBy: jean
 ApproveDate: 08/16/13
 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	25627	08/13/13	11/07/17	Lopez, Jose	1	2.5L	neat	neat

Veritech Control/Receipt Number: 8078



Description
Nitric Acid

ApprovedBy: aurora
 ApproveDate: 08/22/13
 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	08/20/13	06/23/18	Lopez, Jose	11	2.5L	neat	neat

Veritech Control/Receipt Number: 8113



Description
ICV 1

ApprovedBy: gabrielle
 ApproveDate: 10/06/13
 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	S130829017	09/09/13	09/30/14	Kalin, Gabrielle	2	500m	NEAT	NEAT

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8114



Description
ICV 2

ApprovedBy: gabrielle
 ApproveDate: 10/06/13
 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	S130829018	09/09/13	09/30/14	Kalin, Gabrielle	2	500m	50	ug/mL

Veritech Control/Receipt Number: 8122



Description
hydrochloric acid

ApprovedBy: gabrielle
 ApproveDate: 09/24/13
 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	44272	09/10/13	03/17/18	Lopez, Jose	12	2.5L	neat	neat

Veritech Control/Receipt Number: 8123



Description
nitric acid

ApprovedBy: gabrielle
 ApproveDate: 10/06/13
 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	09/10/13	06/23/18	Lopez, Jose	16	2.5L	neat	neat

Veritech Control/Receipt Number: 8135



Description
SW846 LL ICV/CCV

ApprovedBy: gabrielle
 ApproveDate: 10/06/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	4400-130805NC01	13I091	09/16/13	09/04/14	Kalin, Gabrielle	2	250m	NEAT	NEAT

Veritech Control/Receipt Number: 8193



Description
DI H2O

ApprovedBy: gabrielle
 ApproveDate: 10/22/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemanns	1	1	10/11/13	07/18/14	Berls, Sean R.	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7685



Description
ICV 1

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-7	18-143CR	02/12/13	02/11/14	Kalin, Gabrielle	4	500m	NEAT	NEAT

Veritech Control/Receipt Number: 7686



Description
ICV 2

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	XHCV-8	18-142CR	02/12/13	02/11/14	Kalin, Gabrielle	4	500m	50	mg/L

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-166179



Prepared By: Adewusi, Anu	Department: Metals	ApprovedBy: shiamala
Description: 1:1 HCl	BatchNumber:	ApproveDate: 06/03/13
Prep Date: 5/30/2013	Concentration: Reagent	Checked: Yes
Expiration Date: 11/22/2013	Final Volume: 2000 ml	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7834	DI H2O	1000 ml		
7840	Hydrochloric Acid	1000 ml	neat neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7834



Description
DI H2O

ApprovedBy: gabrielle
 ApproveDate: 10/04/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemanns	1	1	04/08/13	01/13/14	Berls, Sean R.	1			

Veritech Control/Receipt Number: 7840



Description
Hydrochloric Acid

ApprovedBy: aurora
 ApproveDate: 05/06/13
 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	27002	04/09/13	11/18/17	Lopez, Jose	14	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-166616



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: 5% Potassium Persulfate		BatchNumber:	ApproveDate: 06/10/13	
Prep Date: 6/6/2013		Concentration: reagent	Checked: Yes	
Expiration Date: 12/5/2013		Final Volume: 10 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7834	DI H2O			
7678	POTASSIUM PERSULFATE	500 g	NEAT neat	

Veritech Lot Number: V-172727



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Hydroxylamine Hydrochloride		BatchNumber:	ApproveDate: 09/17/13	
Prep Date: 9/16/2013		Concentration: reagent	Checked: Yes	
Expiration Date: 2/21/2014		Final Volume: 10 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8015	DIWater		NEAT neat	
8074	Sodium chloride	1200 g	neat neat	
8022	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-173671



Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: shiamala	
Description: 6020 CALIBRATION STOCK		BatchNumber:	ApproveDate: 10/04/13	
Prep Date: 10/1/2013		Concentration: VARIOUS pp	Checked: Yes	
Expiration Date: 12/31/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8015	DIWater		NEAT neat	
8078	Nitric Acid	2 ml	neat neat	
7629	ALUMINUM	.725 ml	10000 mg/l	72.5
7625	SELENIUM	1 ml	1000 mg/l	10
7632	CALCIUM	2.5 ml	10000 mg/l	250
7620	IRON	2.5 ml	10000 mg/l	250
7617	MAGNESIUM	2.5 ml	10000 mg/l	250
7626	POTASSIUM	2.5 ml	10000 mg/l	250
7624	SODIUM	2.5 ml	10000 mg/l	250
7680	MULTI-ELEMENT CALIBRATION STOCK STD.	12.5 ml	20 mg/l	2.5

Veritech Lot Number: V-173707



Prepared By: Balashanthan, Shiamala		Department: Metals	ApprovedBy: shiamala	
Description: 5% Potassium Permanganate		BatchNumber:	ApproveDate: 10/04/13	
Prep Date: 10/1/2013		Concentration: reagent	Checked: Yes	
Expiration Date: 2/22/2014		Final Volume: 20 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8015	DIWater		NEAT neat	
7993	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-176627



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Hg Intermediate Standard		BatchNumber: B-16542	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: .25 ppm	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 500 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7618	MERCURY	.125 ml	1000 mg/l	
8123	nitric acid	12.5 ml	neat neat	
8193	DI H2O			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-166616

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: 5% Potassium Persulfate		BatchNumber:	ApproveDate: 06/10/13	
Prep Date: 6/6/2013		Concentration: reagent	Checked: Yes	
Expiration Date: 12/5/2013		Final Volume: 10 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7834	DI H2O			
7678	POTASSIUM PERSULFATE	500 g	NEAT neat	

Veritech Lot Number: V-172727

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Hydroxylamine Hydrochloride		BatchNumber:	ApproveDate: 09/17/13	
Prep Date: 9/16/2013		Concentration: reagent	Checked: Yes	
Expiration Date: 2/21/2014		Final Volume: 10 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8015	DI Water		NEAT neat	
8074	Sodium chloride	1200 g	neat neat	
8022	HYDROXYLAMINE HYDROCHLORIDE	1200 g	NEAT neat	

Veritech Lot Number: V-173707

Prepared By: Balashanthan, Shiamala		Department: Metals	ApprovedBy: shiamala	
Description: 5% Potassium Permanganate		BatchNumber:	ApproveDate: 10/04/13	
Prep Date: 10/1/2013		Concentration: reagent	Checked: Yes	
Expiration Date: 2/22/2014		Final Volume: 20 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8015	DI Water		NEAT neat	
7993	POTASSIUM PERMANGANATE	1000 g	NEAT neat	

Veritech Lot Number: V-176627

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Hg Intermediate Standard		BatchNumber: B-16542	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: .25 ppm	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 500 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7618	MERCURY	.125 ml	1000 mg/l	
8123	nitric acid	12.5 ml	neat neat	
8193	DI H2O			

Veritech Lot Number: V-176628

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Hg intermediate Control		BatchNumber: B-16542	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 1.0 ppm	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7664	MERCURY	.1 ml	1000 ug/ml	
8123	nitric acid	2.5 ml	neat neat	
8193	DI H2O			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-176628



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Hg intermediate Control		BatchNumber: B-16542	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 1.0 ppm	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7664	MERCURY	.1 ml	1000 ug/ml	
8123	nitric acid	2.5 ml	neat neat	
8193	DI H2O			

Veritech Lot Number: V-176632



Prepared By: Cousineau, Paul		Department: WetChem	ApprovedBy: shiamala	
Description: 3% HCL		BatchNumber:	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 3 %	Checked: Yes	
Expiration Date: 2/13/2014		Final Volume: 20 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8122	hydrochloric acid	600 ml	neat neat	3 %
8193	DI H2O			

Veritech Lot Number: V-176703



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ ICV 20 ppb		BatchNumber: B-16548	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 20 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176628	Hg intermediate Control	.5 ml	1.0 ppm	
8193	DI H2O			

Veritech Lot Number: V-176704



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ CCV 10 ppb		BatchNumber: B-16548	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 10 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176628	Hg intermediate Control	.25 ml	1.0 ppm	
8193	DI H2O			

Veritech Lot Number: V-176705



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard blk		BatchNumber: B-16548	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			

Veritech Lot Number: V-176706



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard .2 ppb		BatchNumber: B-16548	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: .2 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	.02 ml	.25 ppm	
8193	DI H2O			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-176632

Prepared By: Cousineau, Paul		Department: WetChem	ApprovedBy: shiamala	
Description: 3% HCL		BatchNumber:	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 3 %	Checked: Yes	
Expiration Date: 2/13/2014		Final Volume: 20 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8122	hydrochloric acid	600 ml	neat neat	3 %
8193	DI H2O			

Veritech Lot Number: V-176693

Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ ICV 20 ppb		BatchNumber: B-16547	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 20 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176628	Hg intermediate Control	.5 ml	1.0 ppm	
8193	DI H2O			

Veritech Lot Number: V-176694

Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ CCV 10 ppb		BatchNumber: B-16547	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 10 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176628	Hg intermediate Control	.25 ml	1.0 ppm	
8193	DI H2O			

Veritech Lot Number: V-176695

Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard blk		BatchNumber: B-16547	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			

Veritech Lot Number: V-176696

Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard .2 ppb		BatchNumber: B-16547	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: .2 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	.02 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-176697

Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard .5 ppb		BatchNumber: B-16547	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: .5 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	.05 ml	.25 ppm	
8193	DI H2O			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-176698

Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 1 ppb		BatchNumber: B-16547	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 1 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	.1 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-176699

Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 2 ppb		BatchNumber: B-16547	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 2 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	.2 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-176700

Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 5 ppb		BatchNumber: B-16547	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 5 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	.5 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-176701

Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 10 ppb		BatchNumber: B-16547	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 10 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	1 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-176702

Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 25 ppb		BatchNumber: B-16547	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 25 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	2.5 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-176740

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: SnCl2		BatchNumber:	ApproveDate: 11/15/13	
Prep Date: 11/14/2013		Concentration: reagent I	Checked: Yes	
Expiration Date: 11/14/2013		Final Volume: 2 l		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7994	STANNOUS CHLORIDE	26.4 g	NEAT neat	
V-176632	3% HCL	2000 ml	3 %	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-176707



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard .5 ppb		BatchNumber: B-16548	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: .5 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	.05 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-176708



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 1 ppb		BatchNumber: B-16548	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 1 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	.1 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-176709



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 2 ppb		BatchNumber: B-16548	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 2 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	.2 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-176710



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 5 ppb		BatchNumber: B-16548	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 5 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	.5 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-176711



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 10 ppb		BatchNumber: B-16548	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 10 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	1 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-176712



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 25 ppb		BatchNumber: B-16548	ApproveDate: 11/15/13	
Prep Date: 11/13/2013		Concentration: 25 ppb	Checked: Yes	
Expiration Date: 11/13/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176627	Hg Intermediate Standard	2.5 ml	.25 ppm	
8193	DI H2O			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-176740



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: SnCl ₂		BatchNumber:	ApproveDate: 11/15/13	
Prep Date: 11/14/2013		Concentration: reagent I	Checked: Yes	
Expiration Date: 11/14/2013		Final Volume: 2 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176632	3% HCL	2000 ml	3 %	
7994	STANNOUS CHLORIDE	26.4 g	NEAT neat	

Veritech Lot Number: V-176961



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Cal Blk		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H ₂ O			
8123	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-176962



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Cal Std-1		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H ₂ O			
8123	nitric acid	2.5 ml	neat neat	
V-173671	6020 CALIBRATION STOCK	.02 ml	VARIOUS pp	

Veritech Lot Number: V-176963



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Cal Std-2		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8123	nitric acid	2.5 ml	neat neat	
8193	DI H ₂ O			
V-173671	6020 CALIBRATION STOCK	.2 ml	VARIOUS pp	

Veritech Lot Number: V-176964



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Cal Std-3		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H ₂ O			
8123	nitric acid	2.5 ml	neat neat	
V-173671	6020 CALIBRATION STOCK	.4 ml	VARIOUS pp	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-176965



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Cal Std-4		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	2.5 ml	neat neat	
V-173671	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-176966



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Cal Std-5		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8123	nitric acid	2.5 ml	neat neat	
8193	DI H2O			
V-173671	6020 CALIBRATION STOCK	4 ml	VARIOUS pp	

Veritech Lot Number: V-176967



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: ICV		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8123	nitric acid	2.5 ml	neat neat	
8193	DI H2O			
7787	ICV 1 (6020)	.5 ml	NEAT ug/ml	
7642	IRON	.45 ml	1000 ug/ml	
7643	ALUMINUM	.45 ml	1000 ug/ml	
7788	ICV 2 (6020)	.5 ml	10 ug/ml	

Veritech Lot Number: V-176968



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: ICB/CCB		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-176969



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: ICSA		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 50 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	1.25 ml	neat neat	
8021	INTERFERENTS A	2.5 ml	NEAT mg/l	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-176970



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: ICSAB		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 50 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	1.25 ml	neat neat	2.5 %
8021	INTERFERENTS A	2.5	NEAT mg/l	
7470	Analytes B	.5	NEAT neat	

Veritech Lot Number: V-176971



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: CCV		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	2.5 ml	neat neat	
V-173671	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-176972



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: LL-ICV/CCV AQ.		BatchNumber:	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	2.5 ml	neat neat	
8055	6020 AQUEOUS LL CCV/ICV STOCK	.5 ml	NEAT neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7470



Description
Analytes B

ApprovedBy: pcousineau
ApproveDate: 11/11/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-B1	CL43-148AS	11/13/12	11/30/13	Kalin, Gabrielle	1	125m	NEAT	NEAT

Veritech Control/Receipt Number: 7617



Description
MAGNESIUM

ApprovedBy: shiamala
ApproveDate: 02/13/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLMG2-3X/3Y	AD14-75MG	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	10000	mg/L

Veritech Control/Receipt Number: 7618



Description
MERCURY

ApprovedBy: shiamala
ApproveDate: 02/13/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLHG4-2Y	18-66HGY	01/31/13	01/30/14	Kalin, Gabrielle	2	125m	1000	mg/L

Veritech Control/Receipt Number: 7620



Description
IRON

ApprovedBy: shiamala
ApproveDate: 02/13/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLFE2-3Y	AH14-157FEY	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	10000	mg/L

Veritech Control/Receipt Number: 7624



Description
SODIUM

ApprovedBy: shiamala
ApproveDate: 02/13/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLNA2-3Y	AG14-125NAY	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	10000	mg/L

Veritech Control/Receipt Number: 7625



Description
SELENIUM

ApprovedBy: shiamala
ApproveDate: 02/13/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSE2-2Y	17-184SEY	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	1000	mg/L

Veritech Control/Receipt Number: 7626



Description
POTASSIUM

ApprovedBy: shiamala
ApproveDate: 02/13/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLK2-3X/3Y	AH14-93K	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	10000	mg/L

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7618



Description
MERCURY

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLHG4-2Y	18-66HGY	01/31/13	01/30/14	Kalin, Gabrielle	2	125m	1000	mg/L

Veritech Control/Receipt Number: 7664



Description
MERCURY

ApprovedBy: shiamala
 ApproveDate: 07/11/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	4400-1000331	HG6401	01/31/13	01/30/14	Kalin, Gabrielle	1	250m	1000	ug/mL

Veritech Control/Receipt Number: 7678



Description
POTASSIUM PERSULFATE

ApprovedBy: shiamala
 ApproveDate: 12/03/13
 Checked: Yes

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: 7834



Description
DI H2O

ApprovedBy: gabrielle
 ApproveDate: 10/04/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemanns	1	1	04/08/13	01/13/14	Berls, Sean R.	1			

Veritech Control/Receipt Number: 7993



Description
POTASSIUM PERMANGANATE

ApprovedBy: gabrielle
 ApproveDate: 10/06/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	T10208	B033-01	07/09/13	07/08/23	Kalin, Gabrielle	1	2.5kg	NEAT	NEAT

Veritech Control/Receipt Number: 7994



Description
STANNOUS CHLORIDE

ApprovedBy: gabrielle
 ApproveDate: 10/06/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	P33805	B249-13	07/09/13	07/08/23	Kalin, Gabrielle	1	3kg	NEAT	NEAT

Veritech Control/Receipt Number: 8015



Description
DIWater

ApprovedBy: shiamala
 ApproveDate: 09/09/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemens	1	1	07/22/13	02/22/14	Ugljesa, Julijana	1		NEAT	NEAT

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7629



Description
ALUMINUM

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLAL2-3Y	AD14-146ALY	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	10000	mg/L

Veritech Control/Receipt Number: 7632



Description
CALCIUM

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLCA2-3X/3Y/3T	AJ14-71CA	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	10000	mg/L

Veritech Control/Receipt Number: 7642



Description
IRON

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	S4400-1000261	FE3201	01/31/13	01/30/14	Kalin, Gabrielle	2	100m	1000	ug/mL

Veritech Control/Receipt Number: 7643



Description
ALUMINUM

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	S4400-100011	AL1901	01/31/13	01/30/14	Kalin, Gabrielle	2	100m	1000	ug/mL

Veritech Control/Receipt Number: 7664



Description
MERCURY

ApprovedBy: shiamala
 ApproveDate: 07/11/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	4400-1000331	HG6401	01/31/13	01/30/14	Kalin, Gabrielle	1	250m	1000	ug/mL

Veritech Control/Receipt Number: 7678



Description
POTASSIUM PERSULFATE

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CCI	LC4445NG	200712215	02/11/13	02/10/14	Kalin, Gabrielle	1	2.5kg	NEAT	NEAT

Veritech Control/Receipt Number: 7680



Description
MULTI-ELEMENT CALIBRATION STOCK STD.

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-CAL-1	CL5-195YPY	02/07/13	02/06/14	Kalin, Gabrielle	1	125m	20	mg/L

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7787



Description

ICV 1 (6020)

ApprovedBy: gabrielle

ApproveDate: 10/04/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	4400-120215NL01	13B168	03/18/13	02/21/14	Kalin, Gabrielle	1	100m	NEAT	ug/mL

Veritech Control/Receipt Number: 7788



Description

ICV 2 (6020)

ApprovedBy: gabrielle

ApproveDate: 10/04/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	4400-120206NL04	13B080	03/18/13	03/17/14	Kalin, Gabrielle	1	100m	10	ug/mL

Veritech Control/Receipt Number: 7834



Description

DI H2O

ApprovedBy: gabrielle

ApproveDate: 10/04/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemanns	1	1	04/08/13	01/13/14	Berls, Sean R.	1			

Veritech Control/Receipt Number: 7993



Description

POTASSIUM PERMANGANATE

ApprovedBy: gabrielle

ApproveDate: 10/06/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	T10208	B033-01	07/09/13	07/08/23	Kalin, Gabrielle	1	2.5kg	NEAT	NEAT

Veritech Control/Receipt Number: 7994



Description

STANNOUS CHLORIDE

ApprovedBy: gabrielle

ApproveDate: 10/06/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
LabChem	P33805	B249-13	07/09/13	07/08/23	Kalin, Gabrielle	1	3kg	NEAT	NEAT

Veritech Control/Receipt Number: 8015



Description

DIWater

ApprovedBy: shiamala

ApproveDate: 09/09/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemens	1	1	07/22/13	02/22/14	Ugljesa, Julijana	1		NEAT	NEAT

Veritech Control/Receipt Number: 8021



Description

INTERFERENTS A

ApprovedBy: shiamala

ApproveDate: 08/07/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-A1	CL5-69YPY	07/25/13	07/30/14	Kalin, Gabrielle	3	125m	NEAT	mg/L

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8022



Description
HYDROXYLAMINE HYDROCHLORIDE

ApprovedBy: gabrielle
ApproveDate: 10/06/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CCI	LC-2752725	2013040338	07/25/13	07/24/15	Kalin, Gabrielle	1	2.5kg	NEAT	NEAT

Veritech Control/Receipt Number: 8055



Description
6020 AQUEOUS LL CCV/ICV STOCK

ApprovedBy: gabrielle
ApproveDate: 10/06/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	ZHCV-14-100	3-217NY	08/13/13	02/28/14	Kalin, Gabrielle	1	100m	NEAT	NEAT

Veritech Control/Receipt Number: 8074



Description
Sodium chloride

ApprovedBy: jean
ApproveDate: 08/16/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	SX0420-5	VG11D	08/14/13	08/13/17	Lopez, Jose	1	12gk	neat	neat

Veritech Control/Receipt Number: 8078



Description
Nitric Acid

ApprovedBy: aurora
ApproveDate: 08/22/13
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	08/20/13	06/23/18	Lopez, Jose	11	2.5L	neat	neat

Veritech Control/Receipt Number: 8122



Description
hydrochloric acid

ApprovedBy: gabrielle
ApproveDate: 09/24/13
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	44272	09/10/13	03/17/18	Lopez, Jose	12	2.5L	neat	neat

Veritech Control/Receipt Number: 8123



Description
nitric acid

ApprovedBy: gabrielle
ApproveDate: 10/06/13
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	09/10/13	06/23/18	Lopez, Jose	16	2.5L	neat	neat

Veritech Control/Receipt Number: 8193



Description
DI H2O

ApprovedBy: gabrielle
ApproveDate: 10/22/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemanns	1	1	10/11/13	07/18/14	Berls, Sean R.	1			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8123



Description
nitric acid

ApprovedBy: gabrielle
 ApproveDate: 10/06/13
 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	09/10/13	06/23/18	Lopez, Jose	16	2.5L	neat	neat

Veritech Control/Receipt Number: 8131



Description
sulfuric acid

ApprovedBy: aurora
 ApproveDate: 09/26/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
fisher	A510-P212	3113040	09/13/13	05/08/16	Lopez, Jose	4	2.5L	neat	neat

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-173671

Prepared By: Kalin, Gabrielle		Department: Metals	ApprovedBy: shiamala	
Description: 6020 CALIBRATION STOCK		BatchNumber:	ApproveDate: 10/04/13	
Prep Date: 10/1/2013		Concentration: VARIOUS pp	Checked: Yes	
Expiration Date: 12/31/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8015	DIWater		NEAT neat	
8078	Nitric Acid	2 ml	neat neat	
7629	ALUMINUM	.725 ml	10000 mg/l	72.5
7625	SELENIUM	1 ml	1000 mg/l	10
7632	CALCIUM	2.5 ml	10000 mg/l	250
7620	IRON	2.5 ml	10000 mg/l	250
7617	MAGNESIUM	2.5 ml	10000 mg/l	250
7626	POTASSIUM	2.5 ml	10000 mg/l	250
7624	SODIUM	2.5 ml	10000 mg/l	250
7680	MULTI-ELEMENT CALIBRATION STOCK STD.	12.5 ml	20 mg/l	2.5

Veritech Lot Number: V-176961

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Cal Blk		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-176962

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Cal Std-1		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	2.5 ml	neat neat	
V-173671	6020 CALIBRATION STOCK	.02 ml	VARIOUS pp	

Veritech Lot Number: V-176963

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Cal Std-2		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8123	nitric acid	2.5 ml	neat neat	
8193	DI H2O			
V-173671	6020 CALIBRATION STOCK	.2 ml	VARIOUS pp	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-176964

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Cal Std-3		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
V-173671	6020 CALIBRATION STOCK	.4 ml	VARIOUS pp	
8123	nitric acid	2.5 ml	neat neat	

Veritech Lot Number: V-176965

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Cal Std-4		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	2.5 ml	neat neat	
V-173671	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-176966

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Cal Std-5		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8123	nitric acid	2.5 ml	neat neat	
8193	DI H2O			
V-173671	6020 CALIBRATION STOCK	4 ml	VARIOUS pp	

Veritech Lot Number: V-176967

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: ICV		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8123	nitric acid	2.5 ml	neat neat	
8193	DI H2O			
7642	IRON	.45 ml	1000 ug/ml	
7787	ICV 1 (6020)	.5 ml	NEAT ug/ml	
7643	ALUMINUM	.45 ml	1000 ug/ml	
7788	ICV 2 (6020)	.5 ml	10 ug/ml	

Veritech Lot Number: V-176968

Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: ICB/CCB		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	2.5 ml	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-176969



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: ICSA		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 50 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	1.25 ml	neat neat	
8021	INTERFERENTS A	2.5 ml	NEAT mg/l	

Veritech Lot Number: V-176970



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: ICSAB		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 50 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	1.25 ml	neat neat	2.5 %
8021	INTERFERENTS A	2.5	NEAT mg/l	
7470	Analytes B	.5	NEAT neat	

Veritech Lot Number: V-176971



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: CCV		BatchNumber: B-16565	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	2.5 ml	neat neat	
V-173671	6020 CALIBRATION STOCK	2 ml	VARIOUS pp	

Veritech Lot Number: V-176972



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: LL-ICV/CCV AQ.		BatchNumber:	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: various ppb	Checked: Yes	
Expiration Date: 11/26/2013		Final Volume: 100 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	2.5 ml	neat neat	
8055	6020 AQUEOUS LL CCV/ICV STOCK	.5 ml	NEAT neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7470



Description
Analytes B

ApprovedBy: pcousineau
 ApproveDate: 11/11/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-B1	CL43-148AS	11/13/12	11/30/13	Kalin, Gabrielle	1	125m	NEAT	NEAT

Veritech Control/Receipt Number: 7617



Description
MAGNESIUM

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLMG2-3X/3Y	AD14-75MG	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	10000	mg/L

Veritech Control/Receipt Number: 7620



Description
IRON

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLFE2-3Y	AH14-157FEY	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	10000	mg/L

Veritech Control/Receipt Number: 7624



Description
SODIUM

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLNA2-3Y	AG14-125NAY	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	10000	mg/L

Veritech Control/Receipt Number: 7625



Description
SELENIUM

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLSE2-2Y	17-184SEY	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	1000	mg/L

Veritech Control/Receipt Number: 7626



Description
POTASSIUM

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLK2-3X/3Y	AH14-93K	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	10000	mg/L

Veritech Control/Receipt Number: 7629



Description
ALUMINUM

ApprovedBy: shiamala
 ApproveDate: 02/13/13
 Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLAL2-3Y	AD14-146ALY	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	10000	mg/L

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7632



Description

CALCIUM

ApprovedBy: shiamala

ApproveDate: 02/13/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	PLCA2-3X/3Y/3T	AJ14-71CA	01/31/13	01/30/14	Kalin, Gabrielle	1	125m	10000	mg/L

Veritech Control/Receipt Number: 7642



Description

IRON

ApprovedBy: shiamala

ApproveDate: 02/13/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	S4400-1000261	FE3201	01/31/13	01/30/14	Kalin, Gabrielle	2	100m	1000	ug/mL

Veritech Control/Receipt Number: 7643



Description

ALUMINUM

ApprovedBy: shiamala

ApproveDate: 02/13/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	S4400-100011	AL1901	01/31/13	01/30/14	Kalin, Gabrielle	2	100m	1000	ug/mL

Veritech Control/Receipt Number: 7680



Description

MULTI-ELEMENT CALIBRATION STOCK STD.

ApprovedBy: shiamala

ApproveDate: 02/13/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-CAL-1	CL5-195YPY	02/07/13	02/06/14	Kalin, Gabrielle	1	125m	20	mg/L

Veritech Control/Receipt Number: 7787



Description

ICV 1 (6020)

ApprovedBy: gabrielle

ApproveDate: 10/04/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	4400-120215NL01	13B168	03/18/13	02/21/14	Kalin, Gabrielle	1	100m	NEAT	ug/mL

Veritech Control/Receipt Number: 7788



Description

ICV 2 (6020)

ApprovedBy: gabrielle

ApproveDate: 10/04/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CPI	4400-120206NL04	13B080	03/18/13	03/17/14	Kalin, Gabrielle	1	100m	10	ug/mL

Veritech Control/Receipt Number: 8015



Description

DIWater

ApprovedBy: shiamala

ApproveDate: 09/09/13

Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemens	1	1	07/22/13	02/22/14	Ugljesa, Julijana	1		NEAT	NEAT

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8021



Description
INTERFERENTS A

ApprovedBy: shiamala
ApproveDate: 08/07/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	CL-INT-A1	CL5-69YPY	07/25/13	07/30/14	Kalin, Gabrielle	3	125m	NEAT	mg/L

Veritech Control/Receipt Number: 8055



Description
6020 AQUEOUS LL CCV/ICV STOCK

ApprovedBy: gabrielle
ApproveDate: 10/06/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
SPEX	ZHCV-14-100	3-217NY	08/13/13	02/28/14	Kalin, Gabrielle	1	100m	NEAT	NEAT

Veritech Control/Receipt Number: 8078



Description
Nitric Acid

ApprovedBy: aurora
ApproveDate: 08/22/13
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	08/20/13	06/23/18	Lopez, Jose	11	2.5L	neat	neat

Veritech Control/Receipt Number: 8123



Description
nitric acid

ApprovedBy: gabrielle
ApproveDate: 10/06/13
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	09/10/13	06/23/18	Lopez, Jose	16	2.5L	neat	neat

Veritech Control/Receipt Number: 8193



Description
DI H2O

ApprovedBy: gabrielle
ApproveDate: 10/22/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemanns	1	1	10/11/13	07/18/14	Berls, Sean R.	1			

ICPMS Internal Standard Summary Report

3110620 0289

TuneID: 1

Batch/FileID: S111913B Sample ID: CalBlk V-176961 Sample Date 11/19/13 Sample Time: 15:51

IS ID:	Area	Area Limit
Ho-1	1192048	834433.6 - 1788072
In-1	593101.4	415170.98 - 889652.1
Sc-1	103581.5	72507.05 - 155372.25
Tb-1	1237356	866149.2 - 1856034

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-176961	2	1192048	593101.4	103581.5	1237356				
SMP	Rinse	1	1133193	539808.9	96345.52	1159964				
CAL	CalStd1 V-17696	3	1173446	578127.3	101090.5	1205932				
CAL	CalStd2 V-17696	4	1250961	611284.1	104909.6	1259355				
CAL	CalStd3 V-17696	5	1233917	609919.2	106930.1	1276554				
CAL	CalStd4 V-17696	6	1217991	598011.2	103355.3	1245122				
CAL	CalStd5 V-17696	7	1200439	588695.1	103359.5	1240713				
ICV	ICV V-176967	8	1234041	599826.5	104408.4	1263975				
LLICV	LLICV V-176972	9	1203224	596766.3	103400.8	1249115				
ICB	ICB V-176968	10	1227452	602123.1	104090.4	1262276				
ICSA	ICSA V-176969	11	1232466	565314.7	103275.8	1266699				
ICSAB	ICSAB V-176970	12	1192259	553953.8	100286.1	1236953				
CCV	CCV V-176971	13	1257390	604474.1	104275.7	1281014				
LLCCV	LLCCV V-176972	14	1240231	606735.2	106604.6	1277198				
CCB	CCB V-176968	15	1248628	613116.7	106428.6	1284415				
MB	MB 27401	16	1148646	550297.1	95786.54	1179505				
LCS	LCSW 27401	17	1186127	554990.3	96378.52	1207602				
MR	LCSW MR 27401	18	1249143	569013.4	100143.1	1274812				
SMP	AC75576-029	19	1170605	535380.7	89850.34	1185939				
MR	AC75576-029	20	1165551	538716.7	89363.35	1196064				
SD	AC75576-029	21	1263736	597967.1	99394.66	1309205				
MS	AC75576-031	22	1187497	520192.9	89139.80	1203429				
MSD	AC75576-033	23	1227836	537414.6	92131.68	1245866				
PS	AC75576-029	24	1226837	543665.4	91201.37	1241835				
SMP	RINSE	25	1430373	651322.9	107672.4	1454399				
CCV	CCV V-176971	26	1374242	630330.8	104948.7	1404570				
LLCCV	LLCCV V-176972	27	1371223	640732.9	106100.1	1409422				
CCB	CCB V-176968	28	1346433	630344.6	103845.2	1374201				
SMP	AC75576-001	29	1286276	576251.1	95092.01	1312909				
SMP	AC75576-003	30	1314716	587285.6	95747.53	1359826				
SMP	AC75576-005	31	1245166	552380.0	89855.09	1267531				
SMP	AC75576-007	32	1248714	551815.3	89270.71	1265747				
SMP	AC75576-009	33	1257834	557211.5	89562.98	1283269				
SMP	AC75576-011	34	1306477	583144.9	94932.28	1348076				
SMP	AC75576-013	35	1339364	591071.2	95937.09	1367887				
SMP	AC75576-015	36	1344461	593646.9	96583.40	1364269				
SMP	AC75576-017	37	1241988	543651.5	89332.30	1260140				
SMP	RINSE	38	1336893	604808.4	98873.23	1361008				
CCV	CCV V-176971	39	1335393	588037.6	97482.43	1346654				
LLCCV	LLCCV V-176972	40	1385047	625679.1	103301.1	1409746				
CCB	CCB V-176968	41	1380455	625250.3	102865.4	1403878				
SMP	AC75576-019	42	1329491	591294.3	97452.55	1359186				
SMP	AC75576-021	43	1292000	562576.3	92411.68	1291214				
SMP	AC75576-023	44	1307681	564534.4	92617.56	1331211				
SMP	AC75576-025	45	1268576	558529.2	89611.16	1285076				
SMP	AC75576-027	46	1316095	570081.3	92205.16	1337097				
SMP	AC75677-004	47	1231191	488078.0	81826.10	1248023				
SMP	RINSE	48	1459121	658940.9	109157.6	1490616				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110620 0290

TuneID: 1

CCV	CCV V-176971	49	1407288	640659.1	106625.0	1439293
LLCCV	LLCCV V-176972	50	1328202	606316.6	99838.88	1367801
CCB	CCB V-176968	51	1334899	597292.6	99272.95	1360697

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110620 0291

TuneID: 2

Batch/FileID: S111913B Sample ID: CalBlk V-176961 Sample Date 11/19/13 Sample Time: 15:51

IS ID: Area	Area Limit
Ho-2 2108329	1475830.3 - 3162493.5
In-2 1675692	1172984.4 - 2513538
Sc-2 1500578	1050404.6 - 2250867
Tb-2 2165061	1515542.7 - 3247591.5

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-176961	2	2108329	1675692	1500578	2165061				
SMP	Rinse	1	2086411	1681789	1450255	2138875				
CAL	CalStd1 V-17696	3	2087372	1676032	1449292	2159967				
CAL	CalStd2 V-17696	4	2178046	1734689	1526820	2265261				
CAL	CalStd3 V-17696	5	2086988	1689431	1457979	2151091				
CAL	CalStd4 V-17696	6	2089095	1674797	1456744	2148659				
CAL	CalStd5 V-17696	7	2081382	1662640	1463176	2144010				
ICV	ICV V-176967	8	2088467	1683308	1492507	2164634				
LLICV	LLICV V-176972	9	2122570	1714753	1485116	2190631				
ICB	ICB V-176968	10	2149927	1715192	1479686	2192693				
ICSA	ICSA V-176969	11	2127423	1608617	1466257	2190803				
ICSAB	ICSAB V-176970	12	2014776	1565562	1423828	2089392				
CCV	CCV V-176971	13	2129568	1697457	1501529	2209260				
LLCCV	LLCCV V-176972	14	2159731	1733505	1527190	2234923				
CCB	CCB V-176968	15	2130679	1710391	1506300	2198907				
MB	MB 27401	16	1978921	1561030	1391309	2031664				
LCS	LCSW 27401	17	2055168	1591763	1442822	2133384				
MR	LCSW MR 27401	18	1956027	1506674	1372779	2001995				
SMP	AC75576-029	19	1892887	1509224	1334320	1956882				
MR	AC75576-029	20	1926809	1527219	1342910	1986506				
SD	AC75576-029	21	2118112	1674595	1457492	2195174				
MS	AC75576-031	22	1926598	1465955	1331103	1973893				
MSD	AC75576-033	23	1960112	1490929	1365262	2009247				
PS	AC75576-029	24	2051437	1548874	1388770	2076772				
SMP	RINSE	25	2389593	1861694	1620926	2451557				
CCV	CCV V-176971	26	2337202	1795483	1559384	2371129				
LLCCV	LLCCV V-176972	27	2318154	1818322	1559114	2379462				
CCB	CCB V-176968	28	2309766	1815500	1535135	2374379				
SMP	AC75576-001	29	2110935	1625550	1439582	2192409				
SMP	AC75576-003	30	2126568	1651459	1448933	2190600				
SMP	AC75576-005	31	2018976	1561130	1351898	2056639				
SMP	AC75576-007	32	2039891	1545975	1375324	2083002				
SMP	AC75576-009	33	2045628	1596005	1399478	2124828				
SMP	AC75576-011	34	2164740	1659294	1451155	2230681				
SMP	AC75576-013	35	2185725	1671317	1465616	2216514				
SMP	AC75576-015	36	2114242	1658937	1462966	2158431				
SMP	AC75576-017	37	2024520	1574819	1386772	2085955				
SMP	RINSE	38	2247716	1753151	1502663	2322577				
CCV	CCV V-176971	39	2191220	1686343	1464527	2260595				
LLCCV	LLCCV V-176972	40	2347724	1850973	1592706	2399648				
CCB	CCB V-176968	41	2326307	1806500	1528465	2397398				
SMP	AC75576-019	42	2200052	1713068	1464766	2227515				
SMP	AC75576-021	43	2099568	1590426	1430386	2152892				
SMP	AC75576-023	44	2115973	1637281	1427445	2186548				
SMP	AC75576-025	45	2010424	1571403	1380395	2075232				
SMP	AC75576-027	46	2159432	1663446	1433325	2177596				
SMP	AC75677-004	47	2087189	1597077	1513507	2133217				
SMP	RINSE	48	2386619	1894898	1638353	2446667				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110620 0292

TuneID:2

CCV	CCV V-176971	49	2204514	1726245	1532249	2283801
LLCCV	LLCCV V-176972	50	2193592	1749114	1500223	2262809
CCB	CCB V-176968	51	2206568	1745609	1474714	2282558

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110620 0293

TuneID: 1

Batch/FileID: S111913C Sample ID: CalBlk V-176961 Sample Date 11/19/13 Sample Time: 20:52

IS ID:	Area	Area Limit
Ho-1	1347066	942946.2 - 2020599
In-1	607558.1	425290.67 - 911337.15
Sc-1	100960.5	70672.35 - 151440.75
Tb-1	1380036	966025.2 - 2070054

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-176961	2	1347066	607558.1	100960.5	1380036				
SMP	Rinse	1	1305641	568127.9	96964.41	1339185				
CAL	CalStd1 V-17696	3	1413514	648753.4	108622.4	1446056				
CAL	CalStd2 V-17696	4	1398733	645110.8	107533.8	1437279				
CAL	CalStd3 V-17696	5	1408228	645390.4	107420.3	1442625				
CAL	CalStd4 V-17696	6	1402319	634460.2	104790.1	1422700				
CAL	CalStd5 V-17696	7	1461259	666840.4	110977.4	1503289				
ICV	ICV V-176967	8	1386257	635972.3	104568.3	1437037				
LLICV	LLICV V-176972	9	1421812	651263.9	107204.9	1442152				
ICB	ICB V-176968	10	1408123	645739.5	107542.4	1458309				
ICSA	ICSA V-176969	11	1229160	530337.2	91617.65	1267392				
ICSAB	ICSAB V-176970	12	1319023	576026.6	100425.6	1338616				
CCV	CCV V-176971	13	1426662	651535.5	108623.0	1439671				
LLCCV	LLCCV V-176972	14	1434348	662615.4	109915.1	1480684				
CCB	CCB V-176968	15	1412441	642921.6	106990.1	1440068				
MB	MB 27402	16	1360062	609906.3	100293.8	1396823				
LCS	LCSW 27402	17	1313906	567415.6	94980.59	1352538				
MR	LCSW MR 27402	18	1255042	537353.6	90429.13	1284695				
SMP	AC75576-030	19	1364530	600500.9	96889.54	1375267				
MR	AC75576-030	20	1257369	552155.4	89157.19	1284505				
SD	AC75576-030	21	1441713	642798.5	102903.4	1456557				
MS	AC75576-032	22	1307013	561464.8	93237.53	1341747				
MSD	AC75576-034	23	1321472	561699.4	92842.54	1349971				
PS	AC75576-030	24	1307963	571930.6	93348.76	1346531				
SMP	RINSE	25	1442510	640784.6	103285.4	1459675				
CCV	CCV V-176971	26	1344960	607582.2	100243.6	1380405				
LLCCV	LLCCV V-176972	27	1414203	631465.3	102588.2	1447032				
CCB	CCB V-176968	28	1344988	602906.9	96746.04	1366409				
SMP	AC75576-002	29	1362164	593617.8	95188.06	1384611				
SMP	AC75576-004	30	1347728	583922.6	93466.09	1368994				
SMP	AC75576-006	31	1257828	547208.8	87794.20	1279760				
SMP	AC75576-008	32	1267688	539573.6	85661.98	1272093				
SMP	AC75576-010	33	1251615	541534.3	85414.61	1266379				
SMP	AC75576-012	34	1270639	553245.9	86442.73	1291169				
SMP	AC75576-014	35	1294394	566156.7	89670.71	1320298				
SMP	AC75576-016	36	1339770	581770.1	92050.09	1371179				
SMP	AC75576-018	37	1335753	578613.1	92191.29	1358985				
SMP	RINSE	38	1384455	606522.0	97919.47	1429160				
CCV	CCV V-176971	39	1329367	581610.0	93563.13	1371528				
LLCCV	LLCCV V-176972	40	1315166	584165.2	93445.20	1335753				
CCB	CCB V-176968	41	1378667	623392.9	99127.53	1419849				
SMP	AC75576-020	42	1340488	585421.2	92065.73	1357083				
SMP	AC75576-022	43	1331005	577536.8	91059.84	1351197				
SMP	AC75576-024	44	1321689	575615.0	91363.37	1345289				
SMP	AC75576-026	45	1300003	562272.4	89559.00	1330886				
SMP	AC75576-028	46	1318941	565059.2	89007.75	1332432				
SMP	RINSE	47	1080549	460575.3	71899.29	1130296				
CCV	CCV V-176971	48	1317781	579132.3	91624.27	1335655				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110620 0294

TuneID: 1

LLCCV	LLCCV V-176972	49	1317485	586329.6	92719.73	1343701
CCB	CCB V-176968	50	1266086	566408.4	89540.50	1290945

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110620 0295

TuneID:2

Batch/FileID: S111913C Sample ID: CalBlk V-176961 Sample Date 11/19/13 Sample Time: 20:52

IS ID:	Area	Area Limit
Ho-2	2253341	1577338.7 - 3380011.5
In-2	1778001	1244600.7 - 2667001.5
Sc-2	1543978	1080784.6 - 2315967
Tb-2	2348266	1643786.2 - 3522399

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-176961	2	2253341	1778001	1543978	2348266				
SMP	Rinse	1	2325788	1818734	1565573	2364351				
CAL	CalStd1 V-17696	3	2344689	1863667	1589475	2407533				
CAL	CalStd2 V-17696	4	2361681	1870294	1605413	2433843				
CAL	CalStd3 V-17696	5	2349570	1845327	1612691	2468563				
CAL	CalStd4 V-17696	6	2342810	1818433	1583626	2420634				
CAL	CalStd5 V-17696	7	2321867	1801443	1569143	2403476				
ICV	ICV V-176967	8	2345562	1858013	1601497	2406033				
LLICV	LLICV V-176972	9	2379742	1873274	1611927	2442480				
ICB	ICB V-176968	10	2319094	1846227	1567140	2389061				
ICSA	ICSA V-176969	11	2097676	1586120	1428807	2161998				
ICSAB	ICSAB V-176970	12	2191278	1682515	1538234	2243674				
CCV	CCV V-176971	13	2339513	1866794	1656421	2418568				
LLCCV	LLCCV V-176972	14	2426640	1907190	1639686	2467837				
CCB	CCB V-176968	15	2419485	1924515	1628966	2496987				
MB	MB 27402	16	1905984	1505895	1305344	1944745				
LCS	LCSW 27402	17	2050326	1543913	1383972	2113459				
MR	LCSW MR 27402	18	2176531	1650358	1505466	2257988				
SMP	AC75576-030	19	2215553	1724266	1525816	2293623				
MR	AC75576-030	20	2242172	1748664	1511631	2318351				
SD	AC75576-030	21	2353837	1839478	1570512	2418202				
MS	AC75576-032	22	2132069	1623691	1462540	2207061				
MSD	AC75576-034	23	2128634	1607894	1454102	2188494				
PS	AC75576-030	24	2145784	1639282	1453066	2205792				
SMP	RINSE	25	2389757	1876866	1623904	2464756				
CCV	CCV V-176971	26	2317928	1795846	1563932	2369170				
LLCCV	LLCCV V-176972	27	2310148	1819276	1542677	2380289				
CCB	CCB V-176968	28	2370809	1844885	1603358	2420478				
SMP	AC75576-002	29	2193478	1697951	1479514	2252586				
SMP	AC75576-004	30	2193018	1706330	1472020	2241222				
SMP	AC75576-006	31	2102707	1621415	1419390	2151376				
SMP	AC75576-008	32	2085780	1590703	1409457	2159981				
SMP	AC75576-010	33	2033404	1574128	1371676	2091826				
SMP	AC75576-012	34	2133806	1683105	1434853	2218746				
SMP	AC75576-014	35	2139523	1664660	1444317	2207710				
SMP	AC75576-016	36	2149839	1672042	1440207	2215891				
SMP	AC75576-018	37	2062341	1584609	1358043	2109393				
SMP	RINSE	38	2285586	1770418	1523696	2368410				
CCV	CCV V-176971	39	2185349	1722104	1475126	2240837				
LLCCV	LLCCV V-176972	40	2222932	1738047	1472002	2282656				
CCB	CCB V-176968	41	2331147	1828025	1556328	2415279				
SMP	AC75576-020	42	2178280	1691150	1479584	2234738				
SMP	AC75576-022	43	2180358	1677214	1485258	2213713				
SMP	AC75576-024	44	2128007	1655345	1442138	2180896				
SMP	AC75576-026	45	2067513	1615208	1425646	2135881				
SMP	AC75576-028	46	2058796	1607139	1395773	2111132				
SMP	RINSE	47	1924020	1452730	1253669	1996528				
CCV	CCV V-176971	48	2185954	1702886	1459946	2247705				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110620 0296

TuneID: 2

LLCCV	LLCCV V-176972	49	2195522	1695601	1435611	2246408
CCB	CCB V-176968	50	2164134	1683678	1442245	2229396

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: S112013A Sample ID: CalBlk V-176961 Sample Date 11/20/13 Sample Time: 11:51

IS ID:	Area	Area Limit
Ho-1	1159933	811953.1 - 1739899.5
In-1	580519.4	406363.58 - 870779.1
Sc-1	101495.6	71046.92 - 152243.4
Tb-1	1221266	854886.2 - 1831899

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-176961	2	1159933	580519.4	101495.6	1221266				
SMP	Rinse	1	1106386	566613.8	104819.7	1155661				
CAL	CalStd1 V-17696	3	1165015	567030.1	97207.30	1221605				
CAL	CalStd2 V-17696	4	1198272	582394.6	97645.53	1241956				
CAL	CalStd3 V-17696	5	1306601	618526.6	104284.3	1328156				
CAL	CalStd4 V-17696	6	1312605	621094.4	104495.9	1338476				
CAL	CalStd5 V-17696	7	1285895	608119.2	103226.7	1330986				
ICV	ICV V-176967	8	1333666	613507.3	103425.5	1369489				
LLICV	LLICV V-176972	9	1345339	634382.1	105601.8	1380072				
ICB	ICB V-176968	10	1371133	635508.3	105610.4	1388784				
ICSA	ICSA V-176969	11	1247834	552606.3	97293.91	1279458				
ICSAB	ICSAB V-176970	12	1266309	556849.0	98131.62	1290571				
CCV	CCV V-176971	13	1366178	636778.8	106769.7	1413729				
LLCCV	LLCCV V-176972	14	1396357	652092.0	108827.6	1447592				
CCB	CCB V-176968	15	1362775	628548.3	104992.5	1387587				
MB	MB 27402	16	1289251	581480.9	97042.45	1327517				
LCS	LCSW 27402	17	1327636	577087.9	97419.53	1334922				
MR	LCSW MR 27402	18	1309487	561641.4	94983.03	1333036				
SMP	AC75576-030	19	1327376	592034.0	96018.50	1364170				
MR	AC75576-030	20	1316178	577723.1	93863.90	1337586				
SD	AC75576-030	21	1390550	621730.1	98708.73	1413203				
MS	AC75576-032	22	1276155	550625.3	91411.57	1334559				
MSD	AC75576-034	23	1264670	534203.3	87648.35	1285876				
PS	AC75576-030	24	1275368	548528.8	88721.09	1291037				
SMP	RINSE	25	1422880	629230.0	100728.9	1450242				
CCV	CCV V-176971	26	1349450	605771.4	97546.34	1393032				
LLCCV	LLCCV V-176972	27	1343108	594859.0	96816.04	1370969				
CCB	CCB V-176968	28	1354323	604971.3	97308.91	1373260				
SMP	AC75576-002	29	1403055	604864.6	96760.91	1447049				
SMP	AC75576-004	30	1323362	564599.7	88863.59	1340187				
SMP	AC75576-006	31	1322438	569627.0	90220.26	1348767				
SMP	AC75576-008	32	1335193	568545.0	88798.70	1356396				
SMP	AC75576-010	33	1290554	546367.0	85387.80	1294167				
SMP	AC75576-012	34	1246833	535574.7	82634.88	1271449				
SMP	AC75576-014	35	1245468	518901.9	81105.90	1258218				
SMP	AC75576-016	36	1326528	562533.9	87763.00	1358989				
SMP	AC75576-018	37	1327372	570131.1	89421.66	1357992				
SMP	RINSE	38	1423564	629197.7	98533.60	1453113				
CCV	CCV V-176971	39	1411572	610853.4	96950.35	1428823				
LLCCV	LLCCV V-176972	40	1366068	603190.1	94375.56	1413636				
CCB	CCB V-176968	41	1411824	623806.7	97744.31	1437829				
SMP	AC75576-020	42	1353326	578189.2	89888.84	1380242				
SMP	AC75576-022	43	1349552	576761.8	89170.62	1392874				
SMP	AC75576-024	44	1344085	566130.6	88418.77	1367272				
SMP	AC75576-026	45	1348064	568887.0	87975.20	1365052				
SMP	AC75576-028	46	1366098	575565.7	88082.70	1376023				
SMP	RINSE	47	1451572	628022.9	96513.73	1482951				
CCV	CCV V-176971	48	1411621	599604.4	93096.19	1434514				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110620 0298

TuneID: 1

LLCCV	LLCCV V-176972	49	1389019	603835.8	93431.78	1417916
CCB	CCB V-176968	50	1384253	598509.6	93197.65	1404418

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110620 0299

TuneID: 2

Batch/FileID: S112013A Sample ID: CalBlk V-176961 Sample Date 11/20/13 Sample Time: 11:51

IS ID:	Area	Area Limit
Ho-2	2164693	1515285.1 - 3247039.5
In-2	1694704	1186292.8 - 2542056
Sc-2	1448455	1013918.5 - 2172682.5
Tb-2	2236647	1565652.9 - 3354970.5

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-176961	2	2164693	1694704	1448455	2236647				
SMP	Rinse	1	2324200	1798423	1546238	2375392				
CAL	CalStd1 V-17696	3	2122097	1687295	1439493	2199803				
CAL	CalStd2 V-17696	4	2171521	1716095	1460386	2241943				
CAL	CalStd3 V-17696	5	2263476	1773707	1532066	2342573				
CAL	CalStd4 V-17696	6	2233306	1746855	1504756	2296508				
CAL	CalStd5 V-17696	7	2244432	1748590	1522837	2307149				
ICV	ICV V-176967	8	2266216	1778979	1532430	2352646				
LLICV	LLICV V-176972	9	2321842	1833931	1577034	2379878				
ICB	ICB V-176968	10	2273868	1799141	1545262	2334198				
ICSA	ICSA V-176969	11	2098581	1614693	1459485	2170409				
ICSAB	ICSAB V-176970	12	2126854	1616312	1485355	2204843				
CCV	CCV V-176971	13	2320564	1839781	1588648	2384514				
LLCCV	LLCCV V-176972	14	2225284	1781093	1546790	2312434				
CCB	CCB V-176968	15	2259705	1781780	1545188	2357598				
MB	MB 27402	16	2103022	1631829	1452907	2189334				
LCS	LCSW 27402	17	2076921	1590290	1429866	2130357				
MR	LCSW MR 27402	18	2082178	1596007	1429195	2133030				
SMP	AC75576-030	19	2154160	1660155	1467602	2206282				
MR	AC75576-030	20	2118336	1669282	1462817	2195581				
SD	AC75576-030	21	2250791	1764074	1520049	2344859				
MS	AC75576-032	22	2098311	1565182	1412846	2143202				
MSD	AC75576-034	23	2066076	1567195	1409174	2141529				
PS	AC75576-030	24	2139865	1634251	1460251	2200163				
SMP	RINSE	25	2322989	1820050	1566410	2390340				
CCV	CCV V-176971	26	2225228	1770863	1502710	2311298				
LLCCV	LLCCV V-176972	27	2274656	1765841	1510770	2338963				
CCB	CCB V-176968	28	2239098	1778923	1508704	2291395				
SMP	AC75576-002	29	2106048	1658363	1435150	2181489				
SMP	AC75576-004	30	2101776	1613383	1413620	2169393				
SMP	AC75576-006	31	2102852	1617397	1414008	2150176				
SMP	AC75576-008	32	2068613	1596530	1403545	2143486				
SMP	AC75576-010	33	2002069	1534753	1337956	2089531				
SMP	AC75576-012	34	1952520	1514391	1297207	2010329				
SMP	AC75576-014	35	1984652	1517590	1323253	2034701				
SMP	AC75576-016	36	2108839	1627330	1409798	2176859				
SMP	AC75576-018	37	2136119	1643403	1425725	2195639				
SMP	RINSE	38	2357399	1834323	1555285	2447347				
CCV	CCV V-176971	39	2258392	1764183	1508646	2315743				
LLCCV	LLCCV V-176972	40	2325744	1825440	1529523	2392169				
CCB	CCB V-176968	41	2148025	1682750	1417326	2230976				
SMP	AC75576-020	42	2517630	1906229	1672361	2587454				
SMP	AC75576-022	43	2178090	1674029	1451742	2244644				
SMP	AC75576-024	44	2149783	1651937	1444383	2198619				
SMP	AC75576-026	45	2202327	1687166	1446641	2255654				
SMP	AC75576-028	46	2181698	1687890	1444038	2230110				
SMP	RINSE	47	2415181	1861950	1558321	2467434				
CCV	CCV V-176971	48	2314134	1777285	1525328	2381239				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110620 0300

TuneID: 2

LLCCV	LLCCV V-176972	49	2343070	1836856	1532512	2378274
CCB	CCB V-176968	50	2332687	1823710	1515631	2395215

* Indicates Internal Standard Area outside of limits

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\SW15686B2.txt

Analysis Date: 11/15/13

Instrument: PEICP2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-174666	1	CAL	15:01	1							V-174666(ICB/CCB)
Calib 1 V-173067	1	CAL	15:04	2							V-173067(ICS1 - Lowest std)
Calib 2 V-173273	1	CAL	15:08	3							V-173273(ICS2 - Low Std)
Calib 3 V-173274	1	CAL	15:12	4							V-173274(ICS3 - Middle Std)
Calib 4 V-174144	1	CAL	15:15	5							V-174144(ICS4 - High std)
ICS3 V-173274	1	ICS	15:20	6							V-173274(ICS3 - Middle Std)
ICV V-173510	1	ICV	15:24	7							V-173510(CCV)
LLICV V-176606 [aq]	1	LLICV	15:28	8		AQUEO	AQUEO	SW846	27401		V-176606 [aq](LLICV-SW846H2O)
ICB V-174666	1	ICB	15:32	9							V-174666(ICB/CCB)
ICSA V-173614	1	ICSA	15:35	10							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	15:41	11							V-173231(ICSAB)
MB 27401 (1)	1	MB	15:46	12		AQUEO	AQUEO	SW846	27401		0
LCSW 27401	1	LCS	15:49	13		AQUEO	AQUEO	SW846	27401		0
LCSW MR 27401	1	LCS	15:53	14		AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	SMP	15:57	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	MR	16:01	16	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-031	1	MS	16:05	17	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-033	1	MSD	16:08	18	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	PS	16:12	19	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
CCV V-173510	1	CCV	16:16	20							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	16:20	21		AQUEO	AQUEO	SW846	27401		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	16:24	22							0
AC75576-029	5	SD	16:27	23	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75676-001	1	SMP	16:31	24	MET-9-SOIL	AQUEO	AQUEO	SW846	27401		0
AC75677-004	1	SMP	16:35	25	MET-RCRA-S	AQUEO	AQUEO	SW846	27401		0
AC75677-004	2	NA	16:39	26	MET-RCRA-S	AQUEO	AQUEO	SW846	27401		0
ICSA V-173614	1	ICSA	16:43	27							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	16:48	28							V-173231(ICSAB)
CCV V-173510	1	CCV	16:54	29							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	16:57	30		AQUEO	AQUEO	SW846	27401	Se failed	V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	17:01	31							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

sean

192.168.1.78 11/15/2013 5:37:59 PM

OK except Se

2 11/19/13

Run Log

Data File: W:\METALS\FRM\ICPDATA\New\PEICP2A\SW15686C2.txt

Analysis Date: 11/16/13

Instrument: PEICP2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-174666	1	CAL	11:50	1							V-174666(ICB/CCB)
Calib 1 V-173067	1	CAL	11:54	2							V-173067(ICS1 - Lowest std)
Calib 2 V-173273	1	CAL	11:57	3							V-173273(ICS2 - Low Std)
Calib 3 V-173274	1	CAL	12:01	4							V-173274(ICS3 - Middle Std)
Calib 4 V-174144	1	CAL	12:05	5							V-174144(ICS4 - High std)
ICS3 V-173274	1	ICS	12:10	6							V-173274(ICS3 - Middle Std)
ICV V-173510	1	ICV	12:13	7							V-173510(CCV)
LLICV V-176606 [aq]	1	LLICV	12:17	8		AQUEO	AQUEO	SW846	27401		V-176606 [aq](LLICV-SW846H2O)
ICB V-174666	1	ICB	12:21	9							V-174666(ICB/CCB)
ICSA V-173614	1	ICSA	12:24	10							V-173614(ICS4)
ICSAB V-173231	1	ICSAB	12:30	11							V-173231(ICSAB)
MB 27401 (1)	1	MB	12:35	12		AQUEO	AQUEO	SW846	27401		0
LCSW 27401	1	LCS	12:38	13		AQUEO	AQUEO	SW846	27401		0
LCSW MR 27401	1	LCS	12:42	14		AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	SMP	12:46	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	MR	12:50	16	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-031	1	MS	12:53	17	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-033	1	MSD	12:57	18	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	PS	13:01	19	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
CCV V-173510	1	CCV	13:05	20							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	13:09	21		AQUEO	AQUEO	SW846	27401		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	13:13	22							0
AC75576-029	5	SD	13:16	23	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75676-001	1	SMP	13:20	24	MET-9-SOIL	AQUEO	AQUEO	SW846	27401		0
AC75677-004	1	NA	13:24	25	MET-RCRA-S	AQUEO	AQUEO	SW846	27401	Se hit likely false positive (antifreeze)	0
AC75677-004	2	NA	13:28	26	MET-RCRA-S	AQUEO	AQUEO	SW846	27401	Se hit likely false positive (antifreeze)	0
AC75677-004	4	NA	13:32	27	MET-RCRA-S	AQUEO	AQUEO	SW846	27401	Se hit likely false positive (antifreeze)	0
ICSA V-173614	1	ICSA	13:36	28							V-173614(ICS4)
ICSAB V-173231	1	ICSAB	13:41	29							V-173231(ICSAB)
CCV V-173510	1	CCV	13:46	30							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	13:50	31		AQUEO	AQUEO	SW846	27401		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	13:53	32							0
AC75576-001	1	SMP	13:57	33	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-003	1	SMP	14:01	34	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-005	1	SMP	14:04	35	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-007	1	SMP	14:08	36	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-009	1	SMP	14:12	37	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-011	1	SMP	14:16	38	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-013	1	SMP	14:19	39	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
CCV V-173510	1	CCV	14:23	40							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	14:27	41		AQUEO	AQUEO	SW846	27401		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	14:30	42							0
AC75576-015	1	SMP	14:34	43	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-017	1	SMP	14:38	44	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-019	1	SMP	14:41	45	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-021	1	SMP	14:45	46	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-023	1	SMP	14:49	47	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-025	1	SMP	14:53	48	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-027	1	SMP	14:56	49	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
ICSA V-173614	1	ICSA	15:00	50							V-173614(ICS4)
ICSAB V-173231	1	ICSAB	15:05	51							V-173231(ICSAB)
CCV V-173510	1	CCV	15:10	52							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	15:14	53		AQUEO	AQUEO	SW846	27401		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	15:18	54							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

sean
192.168.1.78 11/18/2013 11:34:16 AMOK
first half for Se only

8 11/19/13

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD2A\SW15686D2.txt

Analysis Date: 11/16/13

Instrument: PEICPRAD2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-174666	1	CAL	17:36	1							V-174666(ICB/CCB)
Calib 1 V-173273	1	CAL	17:39	2							V-173273(ICS2- Low Std)
Calib 2 V-173274	1	CAL	17:43	3							V-173274(ICS3 - Middle Std)
Calib 3 V-174144	1	CAL	17:45	4							V-174144(ICS4 - High std)
ICS3 V-173274	1	ICS	17:48	5							V-173274(ICS3 - Middle Std)
ICV V-173510	1	ICV	17:51	6							V-173510(CCV)
LLICV V-176606 [aq]	1	LLICV	17:53	7		AQUEO	AQUEO	SW846	27401		V-176606 [aq](LLICV-SW846H2O)
ICB V-174666	1	ICB	17:57	8							V-174666(ICB/CCB)
ICSA V-173614	1	ICSA	18:00	9							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	18:04	10							V-173231(ICSAB)
MB 27401 (1)	1	MB	18:07	11		AQUEO	AQUEO	SW846	27401		0
LCSW 27401	1	LCS	18:10	12		AQUEO	AQUEO	SW846	27401		0
LCSW MR 27401	1	LCS	18:13	13		AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	SMP	18:16	14	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	MR	18:19	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-031	1	MS	18:22	16	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-033	1	MSD	18:25	17	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	PS	18:28	18	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
CCV V-173510	1	CCV	18:30	19							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	18:33	20		AQUEO	AQUEO	SW846	27401		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	18:36	21							0
AC75576-029	5	SD	18:39	22	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
ICSA V-173614	1	ICSA	18:42	23							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	18:46	24							V-173231(ICSAB)
CCV V-173510	1	CCV	18:50	25							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	18:52	26		AQUEO	AQUEO	SW846	27401		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	18:56	27							0
AC75576-001	1	NA	18:59	28	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-003	1	NA	19:02	29	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-005	1	NA	19:05	30	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-007	1	NA	19:08	31	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-009	1	NA	19:11	32	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-011	1	NA	19:14	33	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-013	1	NA	19:17	34	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
CCV V-173510	1	CCV	19:20	35						failed (empty)	V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	19:23	36		AQUEO	AQUEO	SW846	27401	failed (empty)	V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	19:26	37							0

Comments/Reviewed by:

Standard/Batch/SnCl2 Lot #:

Sean
192.168.1.78 11/18/2013 2:27:34 PM

first half OK, second half not used

0 11/19/13

Run Log

Data File: W\METALS\FRM\ICPDATA\New\PEICPRAD2A\SW15686E2.txt

Analysis Date: 11/16/13

Instrument: PEICPRAD2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-174666	1	CAL	19:38	1							V-174666(ICB/CCB)
Calib 1 V-173273	1	CAL	19:41	2							V-173273(ICS2- Low Std)
Calib 2 V-173274	1	CAL	19:45	3							V-173274(ICS3 - Middle Std)
Calib 3 V-174144	1	CAL	19:47	4							V-174144(ICS4 - High std)
ICS3 V-173274	1	ICS	19:50	5							V-173274(ICS3 - Middle Std)
ICV V-173510	1	ICV	19:53	6							V-173510(CCV)
LLICV V-176606 [aq]	1	LLICV	19:55	7		AQUEO	AQUEO	SW846	27401		V-176606 [aq](LLICV-SW846H2O)
ICB V-174666	1	ICB	19:59	8							V-174666(ICB/CCB)
ICSA V-173614	1	ICSA	20:02	9							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	20:05	10							V-173231(ICSAB)
AC75576-001	1	SMP	20:09	11	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-003	1	SMP	20:12	12	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-005	1	SMP	20:16	13	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-007	1	SMP	20:19	14	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-009	1	SMP	20:21	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-011	1	SMP	20:25	16	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-013	1	SMP	20:28	17	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
CCV V-173510	1	CCV	20:31	18							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	20:34	19		AQUEO	AQUEO	SW846	27401		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	20:37	20							0
AC75576-015	1	SMP	20:40	21	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-017	1	SMP	20:43	22	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-019	1	SMP	20:46	23	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-021	1	SMP	20:49	24	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-023	1	SMP	20:52	25	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-025	1	SMP	20:55	26	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
AC75576-027	1	SMP	20:58	27	MET-TAL6010W	AQUEO	AQUEO	SW846	27401		0
ICSA V-173614	1	ICSA	21:01	28							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	21:05	29							V-173231(ICSAB)
CCV V-173510	1	CCV	21:08	30							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	21:11	31		AQUEO	AQUEO	SW846	27401		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	21:14	32							0
RINSE	1	NA	21:17	33		AQUEO	AQUEO	SW846	27401		0

Comments/Reviewedby:

Standard/Batch/Std Lot #:

Sean
192.168.1.78 11/18/2013 2:22:57 PM

OK

2 11/19/13

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGC1A\H15686SW.txt

Analysis Date: 11/14/13

Instrument: HGC1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Std:
Calibration Blank	1	CAL	12:30	1							0
2 PPB	1	CAL	12:31	2							0
5 PPB	1	CAL	12:33	3							0
1 PPB	1	CAL	12:34	4							0
2 PPB	1	CAL	12:35	5							0
5 PPB	1	CAL	12:37	6							0
10 PPB	1	CAL	12:38	7							0
25 PPB	1	CAL	12:40	8							0
ICV (2)	1	ICV	12:41	9							0
ICB	1	ICB	12:42	10							0
MB 27401 (1)	1	MB	12:44	11		AQUEO	AQUEO	SW846	27401		0
LCSW 27401	1	LCS	12:45	12		AQUEO	AQUEO	SW846	27401		0
LCSW MR 27401	1	LCS	12:46	13		AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	SMP	12:48	14	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	MR	12:49	15	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-031	1	MS	12:50	16	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-033	1	MSD	12:52	17	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-001	1	SMP	12:53	18	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-003	1	SMP	12:55	19	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-005	1	SMP	12:56	20	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
CCV	1	CCV	12:57	21							0
CCB	1	CCB	12:59	22							0
AC75576-007	1	SMP	13:00	23	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-009	1	SMP	13:01	24	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-011	1	SMP	13:03	25	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-013	1	SMP	13:04	26	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-015	1	SMP	13:05	27	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-017	1	SMP	13:07	28	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-019	1	SMP	13:08	29	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-021	1	SMP	13:10	30	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-023	1	SMP	13:11	31	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75576-025	1	SMP	13:12	32	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
CCV	1	CCV	13:14	33							0
CCB	1	CCB	13:15	34							0
AC75576-027	1	SMP	13:16	35	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75676-001	1	SMP	13:18	36	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
AC75677-004	1	SMP	13:19	37	HG-W-7470	AQUEO	AQUEO	SW846	27401		0
CCV	1	CCV	13:21	38							0
CCB	1	CCB	13:22	39							0

Comments/Reviewedby:

pcousineau
192.168.1.89 11/14/2013 1:45:27 PM

ok

Standard/Batch/SnCl2 Lot #:

V-176740

2 11/14/13

Run Log

3110620_0306

Data File: W:\METALS.FRM\ICPDATA\New\MS2_7500SWA\S111913B.b\S111913B.TXT

Analysis Date: 11/19/13

Instrument: MS2_7500SWA

Sample Id	Qc DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Rinse	1	NA	15:45	1	MET-1-6020	AQUEO	AQUEO	SW846	27401		0
CalBlk V-176961	1	ISBLK	15:51	2		AQUEO	AQUEO				V-176961(Cal Blk)
CalStd1 V-176962	1	CAL	15:57	3							V-176962(Cal Std-1)
CalStd2 V-176963	1	CAL	16:03	4							V-176963(Cal Std-2)
CalStd3 V-176964	1	CAL	16:09	5							V-176964(Cal Std-3)
CalStd4 V-176965	1	CAL	16:14	6							V-176965(Cal Std-4)
CalStd5 V-176966	1	CAL	16:20	7							V-176966(Cal Std-5)
ICV V-176967	1	ICV	16:26	8							V-176967(ICV)
LLICV V-176972	1	LLICV	16:32	9	MET-1-6020	AQUEO	AQUEO	SW846	27401		V-176972(LL-ICV/CCV AQ.)
ICB V-176968	1	ICB	16:38	10							V-176968(ICB/CCB)
ICSA V-176969	1	ICSA	16:44	11							V-176969(ICSA)
ICSAB V-176970	1	ICSAB	16:49	12							V-176970(ICSAB)
CCV V-176971	1	CCV	16:55	13							V-176971(CCV)
LLCCV V-176972	1	LLCCV	17:01	14	MET-1-6020	AQUEO	AQUEO	SW846	27401		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	17:07	15							V-176968(ICB/CCB)
MB 27401	1	MB	17:13	16		AQUEO	AQUEO	SW846	27401		0
LCSW 27401	1	LCS	17:19	17		AQUEO	AQUEO	SW846	27401		0
LCSW MR 27401	1	LCS	17:24	18		AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	SMP	17:30	19	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	MR	17:36	20	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-029	5	SD	17:42	21	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-031	1	MS	17:48	22	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-033	1	MSD	17:53	23	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-029	1	PS	17:59	24	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
RINSE	1	NA	18:05	25	MET-1-6020	AQUEO	AQUEO	SW846	27401		0
CCV V-176971	1	CCV	18:11	26							V-176971(CCV)
LLCCV V-176972	1	LLCCV	18:17	27	MET-1-6020	AQUEO	AQUEO	SW846	27401		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	18:23	28							V-176968(ICB/CCB)
AC75576-001	1	SMP	18:29	29	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-003	1	SMP	18:35	30	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-005	1	SMP	18:40	31	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-007	1	SMP	18:46	32	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-009	1	SMP	18:52	33	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-011	1	SMP	18:58	34	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-013	1	SMP	19:04	35	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-015	1	SMP	19:10	36	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-017	1	SMP	19:16	37	MET-TAL6020W	AQUEO	AQUEO	SW846	27401	FB.	0
RINSE	1	NA	19:22	38	MET-1-6020	AQUEO	AQUEO	SW846	27401		0
CCV V-176971	1	CCV	19:28	39							V-176971(CCV)
LLCCV V-176972	1	LLCCV	19:34	40	MET-1-6020	AQUEO	AQUEO	SW846	27401		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	19:40	41							V-176968(ICB/CCB)
AC75576-019	1	SMP	19:45	42	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-021	1	SMP	19:51	43	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-023	1	SMP	19:57	44	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-025	1	SMP	20:03	45	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75576-027	1	SMP	20:09	46	MET-TAL6020W	AQUEO	AQUEO	SW846	27401		0
AC75677-004	1	SMP	20:15	47	MET-1-6020	AQUEO	AQUEO	SW846	27401		0
RINSE	1	NA	20:21	48	MET-1-6020	AQUEO	AQUEO	SW846	27401		0
CCV V-176971	1	CCV	20:27	49							V-176971(CCV)
LLCCV V-176972	1	LLCCV	20:33	50	MET-1-6020	AQUEO	AQUEO	SW846	27401		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	20:39	51							V-176968(ICB/CCB)

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

gabrielle
192.168.1.39 11/20/2013 11:54:50 AM

RUN OK.

11/20/13

Run Log

Data File: W:\METALS\FRM\ICPDATA\New\PEICP2A\SW15687A2.txt

Analysis Date: 11/14/13

Instrument: PEICP2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-174666	1	CAL	21:33	1							V-174666(ICB/CCB)
Calib 1 V-173067	1	CAL	21:37	2							V-173067(ICS1 - Lowest std)
Calib 2 V-173273	1	CAL	21:41	3							V-173273(ICS2- Low Std)
Calib 3 V-173274	1	CAL	21:44	4							V-173274(ICS3 - Middle Std)
Calib 4 V-174144	1	CAL	21:48	5							V-174144(ICS4 - High std)
ICS3 V-173274	1	ICS	21:53	6							V-173274(ICS3 - Middle Std)
ICV V-173510	1	ICV	21:57	7							V-173510(CCV)
LLICV V-176606 [aq]	1	LLICV	22:01	8		AQUEO	AQUEO	SW846	27402		V-176606 [aq](LLICV-SW846H2O)
ICB V-174666	1	ICB	22:04	9							V-174666(ICB/CCB)
ICSA V-173614	1	ICSA	22:08	10							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	22:13	11							V-173231(ICSAB)
MB 27402 (I)	1	MB	22:18	12		AQUEO	AQUEO	SW846	27402		0
LCSW 27402	1	LCS	22:22	13		AQUEO	AQUEO	SW846	27402		0
LCSW MR 27402	1	LCS	22:26	14		AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	SMP	22:30	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	MR	22:33	16	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-032	1	MS	22:37	17	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-034	1	MSD	22:41	18	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	PS	22:45	19	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
CCV V-173510	1	CCV	22:49	20							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	22:52	21		AQUEO	AQUEO	SW846	27402		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	22:56	22							0
AC75576-030	5	SD	23:00	23	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75670-001	1	SMP	23:03	24	MET-9-SOIL	AQUEO	AQUEO	SW846	27402		0
AC75670-002	1	SMP	23:07	25	MET-9-SOIL	AQUEO	AQUEO	SW846	27402		0
AC75670-003	1	SMP	23:11	26	MET-9-SOIL	AQUEO	AQUEO	SW846	27402		0
CSA V-173614	1	ICSA	23:15	27							V-173614(ICSA)
CSAB V-173231	1	ICSAB	23:20	28							V-173231(ICSAB)
CCV V-173510	1	CCV	23:25	29							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	23:29	30		AQUEO	AQUEO	SW846	27402		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	23:33	31							0
AC75576-002	1	NA	23:36	32	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-004	1	NA	23:40	33	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-006	1	NA	23:44	34	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-008	1	NA	23:48	35	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-010	1	NA	23:51	36	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-012	1	NA	23:55	37	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-014	1	NA	23:58	38	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
CCV V-173510	1	CCV	00:02	39							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	00:06	40		AQUEO	AQUEO	SW846	27402		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	00:10	41						missed cup	0
AC75576-016	1	NA	00:13	42	MET-TAL6010W	AQUEO	AQUEO	SW846	27402	missed cup	0
AC75576-018	1	NA	00:17	43	MET-TAL6010W	AQUEO	AQUEO	SW846	27402	missed cup	0
AC75576-020	1	NA	00:21	44	MET-TAL6010W	AQUEO	AQUEO	SW846	27402	missed cup	0
AC75576-022	1	NA	00:24	45	MET-TAL6010W	AQUEO	AQUEO	SW846	27402	missed cup	0
AC75576-024	1	NA	00:28	46	MET-TAL6010W	AQUEO	AQUEO	SW846	27402	missed cup	0
AC75576-026	1	NA	00:32	47	MET-TAL6010W	AQUEO	AQUEO	SW846	27402	missed cup	0
AC75576-028	1	NA	00:36	48	MET-TAL6010W	AQUEO	AQUEO	SW846	27402	missed cup	0
CSA V-173614	1	ICSA	00:40	49						missed cup	V-173614(ICSA)
CSAB V-173231	1	ICSAB	00:43	50						missed cup	V-173231(ICSAB)
CCV V-173510	1	CCV	00:47	51						missed cup	V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	00:51	52		AQUEO	AQUEO	SW846	27402		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	00:55	53							0
RINSE	1	NA	00:58	54		AQUEO	AQUEO	SW846	27402		0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

sean
192.168.1.78 11/15/2013 10:50:53 AM

first half OK, second half not used

82 11/19/13

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\SW15687B2.txt

Analysis Date: 11/16/13

Instrument: PEICP2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-174666	1	CAL	15:24	1							V-174666(ICB/CCB)
Calib 1 V-173067	1	CAL	15:27	2							V-173067(ICS1 - Lowest std)
Calib 2 V-173273	1	CAL	15:31	3							V-173273(ICS2 - Low Std)
Calib 3 V-173274	1	CAL	15:35	4							V-173274(ICS3 - Middle Std)
Calib 4 V-174144	1	CAL	15:38	5							V-174144(ICS4 - High std)
ICS3 V-173274	1	ICS	15:43	6							V-173274(ICS3 - Middle Std)
ICV V-173510	1	ICV	15:47	7							V-173510(CCV)
LLICV V-176606 [aq]	1	LLICV	15:51	8		AQUEO	AQUEO	SW846	27402		V-176606 [aq](LLICV-SW846H2O)
ICB V-174666	1	ICB	15:55	9							V-174666(ICB/CCB)
ICSA V-173614	1	ICSA	15:58	10							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	16:04	11							V-173231(ICSAB)
AC75576-002	1	SMP	16:09	12	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-004	1	SMP	16:13	13	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-006	1	SMP	16:17	14	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-008	1	SMP	16:20	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-010	1	SMP	16:24	16	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-012	1	SMP	16:28	17	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-014	1	SMP	16:31	18	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
CCV V-173510	1	CCV	16:35	19							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	16:39	20		AQUEO	AQUEO	SW846	27402		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	16:43	21							0
AC75576-016	1	SMP	16:46	22	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-018	1	SMP	16:50	23	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-020	1	SMP	16:53	24	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-022	1	SMP	16:57	25	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-024	1	SMP	17:01	26	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-026	1	SMP	17:05	27	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-028	1	SMP	17:08	28	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
ICSA V-173614	1	ICSA	17:12	29							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	17:18	30							V-173231(ICSAB)
CCV V-173510	1	CCV	17:23	31							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	17:27	32		AQUEO	AQUEO	SW846	27402		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	17:30	33							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

sean
192.168.1.78 11/18/2013 2:14:06 PM

OK

8 ——— 11/19/13

Run Log

Data File: W:\METALS\FRM\ICPDATA\New\PEICPRAD2A\SW15687C2.txt

Analysis Date: 11/18/13

Instrument: PEICPRAD2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calib Blk 1 V-174666	1	CAL	19:17	1							V-174666(ICB/CCB)
Calib 1 V-173273	1	CAL	19:20	2							V-173273(ICS2- Low Std)
Calib 2 V-173274	1	CAL	19:23	3							V-173274(ICS3 - Middle Std)
Calib 3 V-174144	1	CAL	19:26	4							V-174144(ICS4 - High std)
ICS3 V-173274	1	ICS	19:28	5							V-173274(ICS3 - Middle Std)
ICV V-173510	1	ICV	19:31	6							V-173510(CCV)
LLICV V-176606 [aq]	1	LLICV	19:34	7		AQUEO	AQUEO	SW846	27402		V-176606 [aq](LLICV-SW846H2O)
ICB V-174666	1	ICB	19:37	8							V-174666(ICB/CCB)
ICSA V-173614	1	ICSA	19:40	9							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	19:44	10							V-173231(ICSAB)
MB 27402 (1)	1	MB	19:47	11		AQUEO	AQUEO	SW846	27402		0
LCSW 27402	1	LCS	19:51	12		AQUEO	AQUEO	SW846	27402		0
LCSW MR 27402	1	LCS	19:53	13		AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	SMP	19:56	14	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	MR	19:59	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-032	1	MS	20:02	16	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-034	1	MSD	20:05	17	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	PS	20:08	18	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
CCV V-173510	1	CCV	20:11	19							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	20:13	20		AQUEO	AQUEO	SW846	27402		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	20:16	21							0
AC75576-030	5	SD	20:20	22	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
ICSA V-173614	1	ICSA	20:23	23							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	20:27	24							V-173231(ICSAB)
CCV V-173510	1	CCV	20:30	25							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	20:33	26		AQUEO	AQUEO	SW846	27402		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	20:36	27							0
AC75576-002	1	SMP	20:39	28	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-004	1	SMP	20:43	29	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-006	1	SMP	20:46	30	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-008	1	SMP	20:49	31	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-010	1	SMP	20:52	32	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-012	1	SMP	20:55	33	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-014	1	SMP	20:59	34	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
CCV V-173510	1	CCV	21:02	35							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	21:04	36		AQUEO	AQUEO	SW846	27402		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	21:08	37							0
AC75576-016	1	SMP	21:11	38	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-018	1	SMP	21:14	39	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-020	1	SMP	21:17	40	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-022	1	SMP	21:21	41	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-024	1	SMP	21:24	42	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-026	1	SMP	21:27	43	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
AC75576-028	1	SMP	21:30	44	MET-TAL6010W	AQUEO	AQUEO	SW846	27402		0
CSA V-173614	1	ICSA	21:33	45							V-173614(ICSA)
CSAB V-173231	1	ICSAB	21:37	46							V-173231(ICSAB)
CCV V-173510	1	CCV	21:41	47							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	21:43	48		AQUEO	AQUEO	SW846	27402		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	21:46	49							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

sean
192.168.1.78 11/19/2013 9:47:54 AM

OK

2 ——— 11/19/13

Run Log

Data File: W:\METALS\FRM\ICPDATA\New\HGCV2A\H15687SW.txt

Analysis Date: 11/14/13

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	12:16	1							0
.2 PPB	1	CAL	12:18	2							0
.5 PPB	1	CAL	12:19	3							0
1 PPB	1	CAL	12:21	4							0
2 PPB	1	CAL	12:22	5							0
5 PPB	1	CAL	12:24	6							0
10 PPB	1	CAL	12:25	7							0
25 PPB	1	CAL	12:27	8							0
ICV (2)	1	ICV	12:28	9							0
ICB	1	ICB	12:30	10							0
MB 27402 (1)	1	MB	12:31	11	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
LCSW 27402	1	LCS	12:33	12	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
LCSW MR 27402	1	LCS	12:34	13	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	SMP	12:36	14	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	MR	12:37	15	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-032	1	MS	12:39	16	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-034	1	MSD	12:40	17	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-002	1	SMP	12:42	18	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-004	1	SMP	12:43	19	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
CCV	1	CCV	12:45	20							0
CCB	1	CCB	12:46	21							0
AC75576-006	1	SMP	12:48	22	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-008	1	SMP	12:49	23	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-010	1	SMP	12:51	24	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-012	1	SMP	12:52	25	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-014	1	SMP	12:54	26	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-016	1	SMP	12:55	27	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-018	1	SMP	12:57	28	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-020	1	SMP	12:58	29	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-022	1	SMP	13:00	30	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
CCV	1	CCV	13:01	31							0
CCB	1	CCB	13:03	32							0
AC75576-024	1	SMP	13:04	33	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-026	1	SMP	13:06	34	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75576-028	1	SMP	13:07	35	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75670-001	1	SMP	13:09	36	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75670-002	1	SMP	13:10	37	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
AC75670-003	1	SMP	13:11	38	HG-W-7470	AQUEO	AQUEO	SW846	27402		0
CCV	1	CCV	13:13	39							0
CCB	1	CCB	13:15	40							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

pcousineau
192.168.1.89 11/14/2013 2:07:19 PM

V-176740

ok

81 11/14/13

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS2_7500SWA\S111913C.b\S111913C.TXT

Analysis Date: 11/19/13

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	20:47	1	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
CalBlk V-176961	1	ISBLK	20:52	2		AQUEO	AQUEO				V-176961(Cal Blk)
CalStd1 V-176962	1	CAL	20:57	3							V-176962(Cal Std-1)
CalStd2 V-176963	1	CAL	21:02	4							V-176963(Cal Std-2)
CalStd3 V-176964	1	CAL	21:08	5							V-176964(Cal Std-3)
CalStd4 V-176965	1	CAL	21:14	6							V-176965(Cal Std-4)
CalStd5 V-176966	1	CAL	21:20	7							V-176966(Cal Std-5)
ICV V-176967	1	ICV	21:26	8							V-176967(ICV)
LLICV V-176972	1	LLICV	21:32	9	MET-TAL6020W	AQUEO	AQUEO	SW846	27402	Se failed.	V-176972(LL-ICV/CCV AQ.)
ICB V-176968	1	ICB	21:38	10							V-176968(ICB/CCB)
ICSA V-176969	1	ICSA	21:43	11							V-176969(ICSA)
ICSAB V-176970	1	ICSAB	21:49	12							V-176970(ICSAB)
CCV V-176971	1	CCV	21:55	13							V-176971(CCV)
LLCCV V-176972	1	LLCCV	22:01	14	MET-TAL6020W	AQUEO	AQUEO	SW846	27402	Se failed.	V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	22:07	15							V-176968(ICB/CCB)
MB 27402	1	MB	22:13	16		AQUEO	AQUEO	SW846	27402		0
LCSW 27402	1	LCS	22:18	17		AQUEO	AQUEO	SW846	27402		0
LCSW MR 27402	1	LCS	22:24	18		AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	SMP	22:30	19	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	MR	22:36	20	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-030	5	SD	22:42	21	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-032	1	MS	22:48	22	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-034	1	MSD	22:53	23	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	PS	22:59	24	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
RINSE	1	NA	23:05	25	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
CCV V-176971	1	CCV	23:11	26							V-176971(CCV)
LLCCV V-176972	1	LLCCV	23:17	27	MET-TAL6020W	AQUEO	AQUEO	SW846	27402	Se failed.	V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	23:23	28							V-176968(ICB/CCB)
AC75576-002	1	SMP	23:29	29	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-004	1	SMP	23:35	30	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-006	1	SMP	23:41	31	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-008	1	SMP	23:46	32	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-010	1	SMP	23:52	33	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-012	1	SMP	23:58	34	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-014	1	SMP	00:04	35	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-016	1	SMP	00:10	36	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-018	1	SMP	00:16	37	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
RINSE	1	NA	00:22	38	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
CCV V-176971	1	CCV	00:28	39							V-176971(CCV)
LLCCV V-176972	1	LLCCV	00:34	40	MET-TAL6020W	AQUEO	AQUEO	SW846	27402	Se failed.	V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	00:40	41							V-176968(ICB/CCB)
AC75576-020	1	SMP	00:46	42	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-022	1	SMP	00:52	43	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-024	1	SMP	00:58	44	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-026	1	SMP	01:04	45	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-028	1	SMP	01:10	46	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
RINSE	1	NA	01:16	47	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
CCV V-176971	1	CCV	01:21	48							V-176971(CCV)
LLCCV V-176972	1	LLCCV	01:27	49	MET-TAL6020W	AQUEO	AQUEO	SW846	27402	Se failed.	V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	01:33	50							V-176968(ICB/CCB)

Comments/Reviewedby:

Standard/Batch/SnCI2 Lot #:

gabrielle
192.168.1.39 11/20/2013 1:59:12 PMRUN OK.
ALL REPORTED EXCEPT SE.

u/21/13

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS2_7500SWA\SI112013A.b\SI112013A.TXT

Analysis Date: 11/20/13

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	11:46	1	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
CalBlk V-176961	1	ISBLK	11:51	2		AQUEO	AQUEO				V-176961(Cal Blk)
CalStd1 V-176962	1	CAL	11:56	3							V-176962(Cal Std-1)
CalStd2 V-176963	1	CAL	12:02	4							V-176963(Cal Std-2)
CalStd3 V-176964	1	CAL	12:07	5							V-176964(Cal Std-3)
CalStd4 V-176965	1	CAL	12:13	6							V-176965(Cal Std-4)
CalStd5 V-176966	1	CAL	12:19	7							V-176966(Cal Std-5)
ICV V-176967	1	ICV	12:25	8							V-176967(ICV)
LLICV V-176972	1	LLICV	12:31	9	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		V-176972(LL-ICV/CCV AQ.)
ICB V-176968	1	ICB	12:37	10							V-176968(ICB/CCB)
ICSA V-176969	1	ICSA	12:42	11							V-176969(ICSA)
ICSAB V-176970	1	ICSAB	12:48	12							V-176970(ICSAB)
CCV V-176971	1	CCV	12:54	13							V-176971(CCV)
LLCCV V-176972	1	LLCCV	13:00	14	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	13:06	15							V-176968(ICB/CCB)
MB 27402	1	MB	13:12	16		AQUEO	AQUEO	SW846	27402		0
LCSW 27402	1	LCS	13:17	17		AQUEO	AQUEO	SW846	27402		0
LCSW MR 27402	1	LCS	13:23	18		AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	SMP	13:29	19	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	MR	13:35	20	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-030	5	SD	13:41	21	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-032	1	MS	13:46	22	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-034	1	MSD	13:52	23	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-030	1	PS	13:58	24	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
RINSE	1	NA	14:04	25	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
CCV V-176971	1	CCV	14:10	26							V-176971(CCV)
LLCCV V-176972	1	LLCCV	14:16	27	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	14:22	28							V-176968(ICB/CCB)
AC75576-002	1	SMP	14:28	29	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-004	1	SMP	14:33	30	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-006	1	SMP	14:39	31	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-008	1	SMP	14:45	32	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-010	1	SMP	14:51	33	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-012	1	SMP	14:57	34	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-014	1	SMP	15:03	35	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-016	1	SMP	15:09	36	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-018	1	SMP	15:15	37	MET-TAL6020W	AQUEO	AQUEO	SW846	27402	FB.	0
RINSE	1	NA	15:21	38	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
CCV V-176971	1	CCV	15:27	39							V-176971(CCV)
LLCCV V-176972	1	LLCCV	15:33	40	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	15:39	41							V-176968(ICB/CCB)
AC75576-020	1	SMP	15:45	42	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-022	1	SMP	15:50	43	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-024	1	SMP	15:56	44	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-026	1	SMP	16:02	45	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
AC75576-028	1	SMP	16:08	46	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
RINSE	1	NA	16:14	47	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		0
CCV V-176971	1	CCV	16:20	48							V-176971(CCV)
LLCCV V-176972	1	LLCCV	16:26	49	MET-TAL6020W	AQUEO	AQUEO	SW846	27402		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	16:32	50							V-176968(ICB/CCB)

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

gabrielle
192.168.1.39 11/20/2013 2:31:10 PMRUN OK FOR DOC
gabrielle
192.168.1.39 11/21/2013 11:09:53 AM

ONLY Se REPORTED FOR QC BATCH 27402

File SW15686B2

Batch 15686 SW15686 3110620 0313

Method: PE2 4300DV AXIAL

Page 1

Date: 11/15/2013 3:03:34 PM

Analyst JBL 11/15/13

=====
Analysis Begun

Start Time: 11/15/2013 3:01:15 PM

Plasma On Time: 11/15/2013 9:43:08 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\11.14.13.sif

Batch ID: PEICP 2

Results Data Set: SW15686B2

Results Library: C:\pe\administrator\Results\Results.mdb

=====
Method Loaded

Method Name: PE2 4300DV AXIAL

Method Last Saved: 11/15/2013 11:35:27 AM

IEC File: IECax092613.iec

MSF File:

Method Description: 200.7/6010B/6010C

=====
Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blk 1 V-174666

Date Collected: 11/15/2013 3:01:16 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: Calib Blk 1 V-174666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1053502.7	1350.47	0.13%	100	%
Y 371.029	372313.5	1701.38	0.46%	100	%
Ag 328.068†	3003.7	46.15	1.54%	[0.00]	mg/L
Al 308.215†	10063.6	0.52	0.01%	[0.00]	mg/L
As 188.979†	-1.8	5.31	292.69%	[0.00]	mg/L
Ba 233.527†	-2185.1	37.23	1.70%	[0.00]	mg/L
Be 313.107†	-5165.0	1.69	0.03%	[0.00]	mg/L
Ca 315.887†	-8664.2	20.56	0.24%	[0.00]	mg/L
Cd 228.802†	943.6	10.91	1.16%	[0.00]	mg/L
Co 228.616†	107.0	4.10	3.84%	[0.00]	mg/L
Cr 267.716†	157.7	4.41	2.80%	[0.00]	mg/L
Cu 327.393†	-6386.7	47.27	0.74%	[0.00]	mg/L
Fe 273.955†	131.5	0.08	0.06%	[0.00]	mg/L
K 404.721†	-14517.2	209.69	1.44%	[0.00]	mg/L
Mg 279.077†	-4367.6	5.22	0.12%	[0.00]	mg/L
Mn 257.610†	702.2	6.56	0.93%	[0.00]	mg/L
Mo 202.031†	70.2	1.49	2.12%	[0.00]	mg/L
Na 330.237†	89.4	43.47	48.64%	[0.00]	mg/L
Ni 231.604†	814.1	1.81	0.22%	[0.00]	mg/L
Pb 220.353†	-245.0	4.96	2.02%	[0.00]	mg/L
Sb 206.836†	-37.8	4.57	12.08%	[0.00]	mg/L
Se 196.026†	-54.5	5.56	10.20%	[0.00]	mg/L
Sn 189.927†	-18.6	1.58	8.54%	[0.00]	mg/L
Ti 334.940†	-4635.9	68.31	1.47%	[0.00]	mg/L
Tl 190.801†	-23.6	3.56	15.06%	[0.00]	mg/L
V 290.880†	4850.8	90.17	1.86%	[0.00]	mg/L
Zn 206.200†	63.5	10.92	17.19%	[0.00]	mg/L

15686
27401all elements reported
except Se, Na, K

75576-w1-027 not reported

Sequence No.: 2
Sample ID: Calib 1 V-173067
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 11/15/2013 3:04:50 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib 1 V-173067

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Sc 361.383	1064848.6	10537.19	0.99%	101 %
Y 371.029	372253.0	3806.49	1.02%	100.0 %
As 188.979†	4.4	1.32	30.36%	[0.005] mg/L
Be 313.107†	8546.7	124.81	1.46%	[0.003] mg/L
Cd 228.802†	158.5	2.56	1.62%	[0.003] mg/L
Pb 220.353†	61.8	8.17	13.21%	[0.004] mg/L
Tl 190.801†	8.1	1.73	21.46%	[0.005] mg/L

Sequence No.: 3
 Sample ID: Calib 2 V-173273
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 9
 Date Collected: 11/15/2013 3:08:24 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: Calib 2 V-173273

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1057001.1	3855.64	0.36%	100 %
Y 371.029	367884.5	1910.21	0.52%	98.8 %
Ag 328.068†	348.5	8.95	2.57%	[0.002] mg/L
Al 308.215†	3073.4	13.39	0.44%	[0.10] mg/L
As 188.979†	10.7	5.21	48.94%	[0.010] mg/L
Ba 233.527†	1165.0	6.08	0.52%	[0.010] mg/L
Be 313.107†	26270.3	11.37	0.04%	[0.010] mg/L
Ca 315.887†	106502.8	305.36	0.29%	[1.0] mg/L
Cd 228.802†	541.1	3.94	0.73%	[0.010] mg/L
Co 228.616†	430.1	12.26	2.85%	[0.010] mg/L
Cr 267.716†	766.0	26.82	3.50%	[0.010] mg/L
Cu 327.393†	1521.3	277.41	18.24%	[0.010] mg/L
Fe 273.955†	2224.5	37.61	1.69%	[0.10] mg/L
K 404.721†	609.3	130.52	21.42%	[1.0] mg/L
Mg 279.077†	17799.7	37.73	0.21%	[1.0] mg/L
Mn 257.610†	7666.7	43.55	0.57%	[0.010] mg/L
Mo 202.031†	202.7	14.29	7.05%	[0.010] mg/L
Na 330.237†	974.1	9.03	0.93%	[1.0] mg/L
Ni 231.604†	611.6	15.98	2.61%	[0.010] mg/L
Pb 220.353†	138.4	9.58	6.92%	[0.010] mg/L
Sb 206.836†	25.0	2.56	10.28%	[0.010] mg/L
Se 196.026†	12.8	4.30	33.62%	[0.010] mg/L
Sn 189.927†	45.6	0.68	1.50%	[0.010] mg/L
Ti 334.940†	6126.6	34.38	0.56%	[0.010] mg/L
Tl 190.801†	17.2	5.32	30.99%	[0.010] mg/L
V 290.880†	1310.3	39.65	3.03%	[0.010] mg/L
Zn 206.200†	1131.4	19.97	1.77%	[0.010] mg/L

Sequence No.: 4
 Sample ID: Calib 3 V-173274
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 11/15/2013 3:12:01 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: Calib 3 V-173274

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1021102.5	1419.28	0.14%	96.9	%
Y 371.029	351151.5	3907.35	1.11%	94.3	%
Ag 328.068†	17916.5	137.08	0.77%	[0.10]	mg/L
Al 308.215†	129643.4	1886.06	1.45%	[5.0]	mg/L
As 188.979†	638.3	4.28	0.67%	[0.50]	mg/L
Ba 233.527†	58248.3	793.01	1.36%	[0.50]	mg/L
Be 313.107†	1361699.6	5041.19	0.37%	[0.50]	mg/L
Ca 315.887†	5316160.8	15016.15	0.28%	[50]	mg/L
Cd 228.802†	29366.3	20.42	0.07%	[0.50]	mg/L
Co 228.616†	22023.5	82.72	0.38%	[0.50]	mg/L
Cr 267.716†	37376.1	145.41	0.39%	[0.50]	mg/L
Cu 327.393†	61436.7	692.98	1.13%	[0.50]	mg/L
Fe 273.955†	104212.2	1039.34	1.00%	[5.0]	mg/L
K 404.721†	4068.2	121.67	2.99%	[50]	mg/L
Mg 279.077†	950466.1	1853.50	0.20%	[50]	mg/L
Mn 257.610†	370881.3	4085.11	1.10%	[0.50]	mg/L
Mo 202.031†	10109.7	20.79	0.21%	[0.50]	mg/L
Na 330.237†	54834.0	659.78	1.20%	[50]	mg/L
Ni 231.604†	28259.4	150.18	0.53%	[0.50]	mg/L
Pb 220.353†	7226.8	52.06	0.72%	[0.50]	mg/L
Sb 206.836†	1090.9	11.52	1.06%	[0.50]	mg/L
Se 196.026†	625.1	0.91	0.14%	[0.50]	mg/L
Sn 189.927†	1971.9	23.04	1.17%	[0.50]	mg/L
Ti 334.940†	312019.4	4246.46	1.36%	[0.50]	mg/L
Tl 190.801†	837.9	5.87	0.70%	[0.50]	mg/L
V 290.880†	69993.8	684.90	0.98%	[0.50]	mg/L
Zn 206.200†	28994.9	64.45	0.22%	[0.50]	mg/L

Sequence No.: 5
 Sample ID: Calib 4 V-174144
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 11/15/2013 3:15:51 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: Calib 4 V-174144

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1000914.3	5774.18	0.58%	95.0	%
Y 371.029	345509.5	4538.27	1.31%	92.8	%
Ag 328.068†	37049.2	23.17	0.06%	[0.20]	mg/L
Al 308.215†	262256.5	1.60	0.00%	[10]	mg/L
As 188.979†	1320.2	13.30	1.01%	[1.0]	mg/L
Ba 233.527†	118390.6	242.61	0.20%	[1.0]	mg/L
Be 313.107†	2767876.9	4995.70	0.18%	[1.0]	mg/L
Ca 315.887†	10704477.0	1371.72	0.01%	[100]	mg/L
Cd 228.802†	60097.1	59.30	0.10%	[1.0]	mg/L
Co 228.616†	44849.7	47.51	0.11%	[1.0]	mg/L
Cr 267.716†	76376.6	70.32	0.09%	[1.0]	mg/L
Cu 327.393†	124426.5	505.00	0.41%	[1.0]	mg/L
Fe 273.955†	211911.3	190.98	0.09%	[10]	mg/L
K 404.721†	9379.2	263.09	2.81%	[100]	mg/L
Mg 279.077†	1928141.7	4838.88	0.25%	[100]	mg/L
Mn 257.610†	756244.5	617.76	0.08%	[1.0]	mg/L
Mo 202.031†	20452.2	100.45	0.49%	[1.0]	mg/L
Na 330.237†	118824.6	136.26	0.11%	[100]	mg/L
Ni 231.604†	57439.9	23.51	0.04%	[1.0]	mg/L
Pb 220.353†	14551.5	46.50	0.32%	[1.0]	mg/L
Sb 206.836†	2204.9	6.42	0.29%	[1.0]	mg/L
Se 196.026†	1262.7	4.18	0.33%	[1.0]	mg/L
Sn 189.927†	3995.9	26.98	0.68%	[1.0]	mg/L
Ti 334.940†	635879.9	248.50	0.04%	[1.0]	mg/L
Tl 190.801†	1670.0	0.51	0.03%	[1.0]	mg/L
V 290.880†	142999.4	162.40	0.11%	[1.0]	mg/L
Zn 206.200†	59436.7	51.85	0.09%	[1.0]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-120.7	184800	0.00000	0.999858	
Al 308.215	3	Lin, Calc Int	-65.6	26170	0.00000	0.999979	
As 188.979	4	Lin, Calc Int	-4.2	1317	0.00000	0.999878	
Ba 233.527	3	Lin, Calc Int	-180.9	118200	0.00000	0.999966	
Be 313.107	4	Lin, Calc Int	-3133.8	2763000	0.00000	0.999970	
Ca 315.887	3	Lin, Calc Int	-6812.3	107000	0.00000	0.999994	
Cd 228.802	4	Lin, Calc Int	-110.5	59960	0.00000	0.999941	
Co 228.616	3	Lin, Calc Int	-81.4	44790	0.00000	0.999958	
Cr 267.716	3	Lin, Calc Int	-146.8	76230	0.00000	0.999939	
Cu 327.393	3	Lin, Calc Int	-15.6	124100	0.00000	0.999973	
Fe 273.955	3	Lin, Calc Int	-269.5	21150	0.00000	0.999962	
K 404.721	3	Lin, Calc Int	121.0	89.89	0.00000	0.995074	
Mg 279.077	3	Lin, Calc Int	-3148.8	19260	0.00000	0.999975	
Mn 257.610	3	Lin, Calc Int	-1270.5	754900	0.00000	0.999950	
Mo 202.031	3	Lin, Calc Int	-22.0	20430	0.00000	0.999983	
Na 330.237	3	Lin, Calc Int	-930.5	1181	0.00000	0.999214	
Ni 231.604	3	Lin, Calc Int	-66.9	57340	0.00000	0.999964	
Pb 220.353	4	Lin, Calc Int	-7.2	14540	0.00000	0.999995	
Sb 206.836	3	Lin, Calc Int	-0.8	2201	0.00000	0.999983	
Se 196.026	3	Lin, Calc Int	-1.1	1261	0.00000	0.999987	
Sn 189.927	3	Lin, Calc Int	-2.2	3988	0.00000	0.999974	
Ti 334.940	3	Lin, Calc Int	-1183.0	634900	0.00000	0.999954	
Tl 190.801	4	Lin, Calc Int	0.4	1671	0.00000	0.999999	
V 290.880	3	Lin, Calc Int	-328.4	142800	0.00000	0.999943	
Zn 206.200	3	Lin, Calc Int	112.2	59020	0.00000	0.999856	

Sequence No.: 6
 Sample ID: ICS3 V-173274
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 11/15/2013 3:20:51 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICS3 V-173274

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1020253.0	96.8 %		0.65			0.67%
Y 371.029	350370.3	94.1 %		0.18			0.19%
Ag 328.068†	17875.3	0.0978314 mg/L	0.00100683	0.0978314 mg/L	0.00100683	1.03%	
QC value within limits for Ag		328.068 Recovery = 97.83%					
Al 308.215†	128697.9	4.91124 mg/L	0.030594	4.91124 mg/L	0.030594	0.62%	
QC value within limits for Al		308.215 Recovery = 98.22%					
As 188.979†	638.4	0.488638 mg/L	0.0072654	0.488638 mg/L	0.0072654	1.49%	
QC value within limits for As		188.979 Recovery = 97.73%					
Ba 233.527†	57432.2	0.487110 mg/L	0.0028138	0.487110 mg/L	0.0028138	0.58%	
QC value within limits for Ba		233.527 Recovery = 97.42%					
Be 313.107†	1354347.6	0.491173 mg/L	0.0011891	0.491173 mg/L	0.0011891	0.24%	
QC value within limits for Be		313.107 Recovery = 98.23%					
Ca 315.887†	5286192.6	49.4621 mg/L	0.09087	49.4621 mg/L	0.09087	0.18%	
QC value within limits for Ca		315.887 Recovery = 98.92%					
Cd 228.802†	29288.9	0.490006 mg/L	0.0038700	0.490006 mg/L	0.0038700	0.79%	
QC value within limits for Cd		228.802 Recovery = 98.00%					
Co 228.616†	21948.7	0.492746 mg/L	0.0042549	0.492746 mg/L	0.0042549	0.86%	
QC value within limits for Co		228.616 Recovery = 98.55%					
Cr 267.716†	37326.5	0.494324 mg/L	0.0034478	0.494324 mg/L	0.0034478	0.70%	
QC value within limits for Cr		267.716 Recovery = 98.86%					
Cu 327.393†	60702.3	0.488424 mg/L	0.0028766	0.488424 mg/L	0.0028766	0.59%	
QC value within limits for Cu		327.393 Recovery = 97.68%					
Fe 273.955†	103989.9	4.92858 mg/L	0.012345	4.92858 mg/L	0.012345	0.25%	
QC value within limits for Fe		273.955 Recovery = 98.57%					
K 404.721†	4490.2	48.6084 mg/L	2.91164	48.6084 mg/L	2.91164	5.99%	
QC value within limits for K		404.721 Recovery = 97.22%					
Mg 279.077†	945661.7	49.2557 mg/L	0.16404	49.2557 mg/L	0.16404	0.33%	
QC value within limits for Mg		279.077 Recovery = 98.51%					
Mn 257.610†	367970.3	0.487460 mg/L	0.0023199	0.487460 mg/L	0.0023199	0.48%	
QC value within limits for Mn		257.610 Recovery = 97.49%					
Mo 202.031†	10102.5	0.493549 mg/L	0.0049584	0.493549 mg/L	0.0049584	1.00%	
QC value within limits for Mo		202.031 Recovery = 98.71%					
Na 330.237†	54644.9	47.0517 mg/L	0.32895	47.0517 mg/L	0.32895	0.70%	
QC value within limits for Na		330.237 Recovery = 94.10%					
Ni 231.604†	28093.8	0.491720 mg/L	0.0021806	0.491720 mg/L	0.0021806	0.44%	
QC value within limits for Ni		231.604 Recovery = 98.34%					
Pb 220.353†	7222.1	0.497950 mg/L	0.0053897	0.497950 mg/L	0.0053897	1.08%	
QC value within limits for Pb		220.353 Recovery = 99.59%					
Sb 206.836†	1081.8	0.492717 mg/L	0.0018189	0.492717 mg/L	0.0018189	0.37%	
QC value within limits for Sb		206.836 Recovery = 98.54%					
Se 196.026†	633.3	0.504261 mg/L	0.0048979	0.504261 mg/L	0.0048979	0.97%	
QC value within limits for Se		196.026 Recovery = 100.85%					
Sn 189.927†	1954.6	0.489546 mg/L	0.0072080	0.489546 mg/L	0.0072080	1.47%	
QC value within limits for Sn		189.927 Recovery = 97.91%					
Ti 334.940†	308692.7	0.488040 mg/L	0.0021531	0.488040 mg/L	0.0021531	0.44%	
QC value within limits for Ti		334.940 Recovery = 97.61%					
Tl 190.801†	838.9	0.506957 mg/L	0.0004475	0.506957 mg/L	0.0004475	0.09%	
QC value within limits for Tl		190.801 Recovery = 101.39%					
V 290.880†	69598.7	0.487677 mg/L	0.0030740	0.487677 mg/L	0.0030740	0.63%	
QC value within limits for V		290.880 Recovery = 97.54%					
Zn 206.200†	28932.9	0.487944 mg/L	0.0045105	0.487944 mg/L	0.0045105	0.92%	
QC value within limits for Zn		206.200 Recovery = 97.59%					

All analyte(s) passed QC.

Sequence No.: 7
 Sample ID: ICV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/15/2013 3:24:42 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICV V-173510

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1015358.7	96.4 %	0.04			0.05%
Y 371.029	349705.5	93.9 %	0.55			0.59%
Ag 328.068†	18130.1	0.0992150 mg/L	0.00078926	0.0992150 mg/L	0.00078926	0.80%
QC value within limits for Ag		328.068 Recovery = 99.21%				
Al 308.215†	130185.0	4.96793 mg/L	0.030740	4.96793 mg/L	0.030740	0.62%
QC value within limits for Al		308.215 Recovery = 99.36%				
As 188.979†	648.0	0.495926 mg/L	0.0012592	0.495926 mg/L	0.0012592	0.25%
QC value within limits for As		188.979 Recovery = 99.19%				
Ba 233.527†	58502.2	0.496158 mg/L	0.0013452	0.496158 mg/L	0.0013452	0.27%
QC value within limits for Ba		233.527 Recovery = 99.23%				
Be 313.107†	1357722.4	0.492394 mg/L	0.0024464	0.492394 mg/L	0.0024464	0.50%
QC value within limits for Be		313.107 Recovery = 98.48%				
Ca 315.887†	5376536.9	50.3065 mg/L	0.09824	50.3065 mg/L	0.09824	0.20%
QC value within limits for Ca		315.887 Recovery = 100.61%				
Cd 228.802†	29896.3	0.500131 mg/L	0.0001169	0.500131 mg/L	0.0001169	0.02%
QC value within limits for Cd		228.802 Recovery = 100.03%				
Co 228.616†	22323.1	0.501128 mg/L	0.0011611	0.501128 mg/L	0.0011611	0.23%
QC value within limits for Co		228.616 Recovery = 100.23%				
Cr 267.716†	38044.0	0.503776 mg/L	0.0051716	0.503776 mg/L	0.0051716	1.03%
QC value within limits for Cr		267.716 Recovery = 100.76%				
Cu 327.393†	60685.8	0.488282 mg/L	0.0047023	0.488282 mg/L	0.0047023	0.96%
QC value within limits for Cu		327.393 Recovery = 97.66%				
Fe 273.955†	105184.3	4.98504 mg/L	0.028039	4.98504 mg/L	0.028039	0.56%
QC value within limits for Fe		273.955 Recovery = 99.70%				
K 404.721†	4192.1	45.2921 mg/L	2.98176	45.2921 mg/L	2.98176	6.58%
QC value within limits for K		404.721 Recovery = 90.58%				
Mg 279.077†	970796.6	50.5605 mg/L	0.22732	50.5605 mg/L	0.22732	0.45%
QC value within limits for Mg		279.077 Recovery = 101.12%				
Mn 257.610†	370215.3	0.490388 mg/L	0.0016866	0.490388 mg/L	0.0016866	0.34%
QC value within limits for Mn		257.610 Recovery = 98.08%				
Mo 202.031†	10257.0	0.501080 mg/L	0.0018955	0.501080 mg/L	0.0018955	0.38%
QC value within limits for Mo		202.031 Recovery = 100.22%				
Na 330.237†	55533.2	47.8037 mg/L	0.28740	47.8037 mg/L	0.28740	0.60%
QC value within limits for Na		330.237 Recovery = 95.61%				
Ni 231.604†	28568.9	0.500016 mg/L	0.0041901	0.500016 mg/L	0.0041901	0.84%
QC value within limits for Ni		231.604 Recovery = 100.00%				
Pb 220.353†	7279.1	0.501874 mg/L	0.0008742	0.501874 mg/L	0.0008742	0.17%
QC value within limits for Pb		220.353 Recovery = 100.37%				
Sb 206.836†	1109.5	0.505288 mg/L	0.0000156	0.505288 mg/L	0.0000156	0.00%
QC value within limits for Sb		206.836 Recovery = 101.06%				
Se 196.026†	620.4	0.494102 mg/L	0.0078618	0.494102 mg/L	0.0078618	1.59%
QC value within limits for Se		196.026 Recovery = 98.82%				
Sn 189.927†	2020.3	0.506017 mg/L	0.0056969	0.506017 mg/L	0.0056969	1.13%
QC value within limits for Sn		189.927 Recovery = 101.20%				
Ti 334.940†	310383.4	0.490703 mg/L	0.0040135	0.490703 mg/L	0.0040135	0.82%
QC value within limits for Ti		334.940 Recovery = 98.14%				
Tl 190.801†	850.9	0.514126 mg/L	0.0014663	0.514126 mg/L	0.0014663	0.29%
QC value within limits for Tl		190.801 Recovery = 102.83%				
V 290.880†	70122.0	0.491287 mg/L	0.0010826	0.491287 mg/L	0.0010826	0.22%
QC value within limits for V		290.880 Recovery = 98.26%				
Zn 206.200†	29406.3	0.495961 mg/L	0.0009335	0.495961 mg/L	0.0009335	0.19%
QC value within limits for Zn		206.200 Recovery = 99.19%				

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: LLICV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/15/2013 3:28:30 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1050935.9	99.8 %		0.05			0.05%
Y 371.029	367111.3	98.6 %		0.33			0.34%
Ag 328.068†	3550.6	0.0198972 mg/L		0.00008923	0.0198972 mg/L	0.00008923	0.45%
QC value within limits for Ag		328.068	Recovery = 99.49%				
Al 308.215†	4947.1	0.191151 mg/L		0.0063794	0.191151 mg/L	0.0063794	3.34%
QC value within limits for Al		308.215	Recovery = 95.58%				
As 188.979†	24.3	0.0217364 mg/L		0.00153485	0.0217364 mg/L	0.00153485	7.06%
QC value within limits for As		188.979	Recovery = 108.68%				
Ba 233.527†	5856.8	0.0510561 mg/L		0.00013742	0.0510561 mg/L	0.00013742	0.27%
QC value within limits for Ba		233.527	Recovery = 102.11%				
Be 313.107†	31892.3	0.0126607 mg/L		0.00000497	0.0126607 mg/L	0.00000497	0.04%
QC value within limits for Be		313.107	Recovery = 105.51%				
Ca 315.887†	536440.3	5.07716 mg/L		0.013953	5.07716 mg/L	0.013953	0.27%
QC value within limits for Ca		315.887	Recovery = 101.54%				
Cd 228.802†	668.9	0.0129717 mg/L		0.00014234	0.0129717 mg/L	0.00014234	1.10%
QC value within limits for Cd		228.802	Recovery = 108.10%				
Co 228.616†	879.3	0.0214330 mg/L		0.00007952	0.0214330 mg/L	0.00007952	0.37%
QC value within limits for Co		228.616	Recovery = 107.17%				
Cr 267.716†	3759.3	0.0513679 mg/L		0.00059301	0.0513679 mg/L	0.00059301	1.15%
QC value within limits for Cr		267.716	Recovery = 102.74%				
Cu 327.393†	6167.0	0.0497230 mg/L		0.00156156	0.0497230 mg/L	0.00156156	3.14%
QC value within limits for Cu		327.393	Recovery = 99.45%				
Fe 273.955†	6246.8	0.308040 mg/L		0.0032274	0.308040 mg/L	0.0032274	1.05%
QC value within limits for Fe		273.955	Recovery = 102.68%				
K 404.721†	550.8	4.78170 mg/L		0.743405	4.78170 mg/L	0.743405	15.55%
QC value within limits for K		404.721	Recovery = 95.63%				
Mg 279.077†	97034.5	5.20057 mg/L		0.013037	5.20057 mg/L	0.013037	0.25%
QC value within limits for Mg		279.077	Recovery = 104.01%				
Mn 257.610†	29335.7	0.0403580 mg/L		0.00000276	0.0403580 mg/L	0.00000276	0.01%
QC value within limits for Mn		257.610	Recovery = 100.89%				
Mo 202.031†	422.1	0.0215381 mg/L		0.00044098	0.0215381 mg/L	0.00044098	2.05%
QC value within limits for Mo		202.031	Recovery = 107.69%				
Na 330.237†	4921.4	4.95440 mg/L		0.007252	4.95440 mg/L	0.007252	0.15%
QC value within limits for Na		330.237	Recovery = 99.09%				
Ni 231.604†	2824.0	0.0504455 mg/L		0.00053021	0.0504455 mg/L	0.00053021	1.05%
QC value within limits for Ni		231.604	Recovery = 100.89%				
Pb 220.353†	183.4	0.0131074 mg/L		0.00092681	0.0131074 mg/L	0.00092681	7.07%
QC value within limits for Pb		220.353	Recovery = 109.23%				
Sb 206.836†	48.1	0.0222402 mg/L		0.00164818	0.0222402 mg/L	0.00164818	7.41%
QC value within limits for Sb		206.836	Recovery = 111.20%				
Se 196.026†	48.0	0.0389861 mg/L		0.00333959	0.0389861 mg/L	0.00333959	8.57%
QC value within limits for Se		196.026	Recovery = 97.47%				
Sn 189.927†	183.4	0.0464203 mg/L		0.00120506	0.0464203 mg/L	0.00120506	2.60%
QC value within limits for Sn		189.927	Recovery = 92.84%				
Ti 334.940†	29214.4	0.0478745 mg/L		0.00003563	0.0478745 mg/L	0.00003563	0.07%
QC value within limits for Ti		334.940	Recovery = 95.75%				
Tl 190.801†	33.9	0.0203987 mg/L		0.00013630	0.0203987 mg/L	0.00013630	0.67%
QC value within limits for Tl		190.801	Recovery = 101.99%				
V 290.880†	7046.3	0.0514325 mg/L		0.00089704	0.0514325 mg/L	0.00089704	1.74%
QC value within limits for V		290.880	Recovery = 102.86%				
Zn 206.200†	2850.7	0.0463821 mg/L		0.00009525	0.0463821 mg/L	0.00009525	0.21%
QC value within limits for Zn		206.200	Recovery = 92.76%				

All analyte(s) passed QC.

Sequence No.: 9
 Sample ID: ICB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 11/15/2013 3:32:09 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICB V-174666

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	1063905.7	101 %		1.4			1.43%
Y 371.029	372954.3	100 %		2.1			2.12%
Ag 328.068†	-53.3	0.0003654 mg/L		0.00049682	0.0003654 mg/L	0.00049682	135.96%
QC value within limits for Ag		328.068	Recovery = Not calculated				
Al 308.215†	-59.6	0.0002133 mg/L		0.00300152	0.0002133 mg/L	0.00300152	>999.9%
QC value within limits for Al		308.215	Recovery = Not calculated				
As 188.979†	-1.4	0.0021302 mg/L		0.00223644	0.0021302 mg/L	0.00223644	104.99%
QC value within limits for As		188.979	Recovery = Not calculated				
Ba 233.527†	43.8	0.0019007 mg/L		0.00024384	0.0019007 mg/L	0.00024384	12.83%
QC value within limits for Ba		233.527	Recovery = Not calculated				
Be 313.107†	121.1	0.0011774 mg/L		0.00002497	0.0011774 mg/L	0.00002497	2.12%
QC value within limits for Be		313.107	Recovery = Not calculated				
Ca 315.887†	1012.3	0.0731080 mg/L		0.00772768	0.0731080 mg/L	0.00772768	10.57%
QC value within limits for Ca		315.887	Recovery = Not calculated				
Cd 228.802†	-25.0	0.0014263 mg/L		0.00023981	0.0014263 mg/L	0.00023981	16.81%
QC value within limits for Cd		228.802	Recovery = Not calculated				
Co 228.616†	-9.7	0.0015994 mg/L		0.00017408	0.0015994 mg/L	0.00017408	10.88%
QC value within limits for Co		228.616	Recovery = Not calculated				
Cr 267.716†	23.4	0.0022379 mg/L		0.00009874	0.0022379 mg/L	0.00009874	4.41%
QC value within limits for Cr		267.716	Recovery = Not calculated				
Cu 327.393†	179.2	0.0015678 mg/L		0.00164527	0.0015678 mg/L	0.00164527	104.94%
QC value within limits for Cu		327.393	Recovery = Not calculated				
Fe 273.955†	-17.2	0.0119237 mg/L		0.00010223	0.0119237 mg/L	0.00010223	0.86%
QC value within limits for Fe		273.955	Recovery = Not calculated				
K 404.721†	230.5	1.21880 mg/L		2.367350	1.21880 mg/L	2.367350	194.24%
QC value within limits for K		404.721	Recovery = Not calculated				
Mg 279.077†	40.0	0.165535 mg/L		0.0030446	0.165535 mg/L	0.0030446	1.84%
QC value within limits for Mg		279.077	Recovery = Not calculated				
Mn 257.610†	147.8	0.0018730 mg/L		0.00000678	0.0018730 mg/L	0.00000678	0.36%
QC value within limits for Mn		257.610	Recovery = Not calculated				
Mo 202.031†	-3.2	0.0009185 mg/L		0.00030251	0.0009185 mg/L	0.00030251	32.93%
QC value within limits for Mo		202.031	Recovery = Not calculated				
Na 330.237†	-3.7	0.784656 mg/L		0.0399436	0.784656 mg/L	0.0399436	5.09%
QC value within limits for Na		330.237	Recovery = Not calculated				
Ni 231.604†	-7.5	0.0010376 mg/L		0.00000363	0.0010376 mg/L	0.00000363	0.35%
QC value within limits for Ni		231.604	Recovery = Not calculated				
Pb 220.353†	16.7	0.0016416 mg/L		0.00048057	0.0016416 mg/L	0.00048057	29.28%
QC value within limits for Pb		220.353	Recovery = Not calculated				
Sb 206.836†	-0.5	0.0001090 mg/L		0.00266160	0.0001090 mg/L	0.00266160	>999.9%
QC value within limits for Sb		206.836	Recovery = Not calculated				
Se 196.026†	-1.4	-0.0002395 mg/L		0.00144893	-0.0002395 mg/L	0.00144893	605.08%
QC value within limits for Se		196.026	Recovery = Not calculated				
Sn 189.927†	-0.7	0.0003754 mg/L		0.00054040	0.0003754 mg/L	0.00054040	143.95%
QC value within limits for Sn		189.927	Recovery = Not calculated				
Ti 334.940†	27.5	0.0019064 mg/L		0.00001129	0.0019064 mg/L	0.00001129	0.59%
QC value within limits for Ti		334.940	Recovery = Not calculated				
Tl 190.801†	1.6	0.0007233 mg/L		0.00300320	0.0007233 mg/L	0.00300320	415.24%
QC value within limits for Tl		190.801	Recovery = Not calculated				
V 290.880†	-51.9	0.0019299 mg/L		0.00090669	0.0019299 mg/L	0.00090669	46.98%
QC value within limits for V		290.880	Recovery = Not calculated				
Zn 206.200†	2.2	-0.0018644 mg/L		0.00032640	-0.0018644 mg/L	0.00032640	17.51%
QC value within limits for Zn		206.200	Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/15/2013 3:35:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	948913.6	90.1 %		0.46				0.51%
Y 371.029	327074.2	87.8 %		0.70				0.80%
Ag 328.068†	-2330.2	0.0037263 mg/L	0.00071487	0.0037263	mg/L	0.00071487	19.18%	
Al 308.215†	12121967.5	463.123 mg/L	4.1309	463.123	mg/L	4.1309	0.89%	
QC value within limits for Al 308.215 Recovery = 92.62%								
As 188.979†	-9.5	0.0051639 mg/L	0.00516405	0.0051639	mg/L	0.00516405	100.00%	
Ba 233.527†	766.7	0.0011689 mg/L	0.00027614	0.0011689	mg/L	0.00027614	23.62%	
Be 313.107†	-1670.0	0.0005288 mg/L	0.00001128	0.0005288	mg/L	0.00001128	2.13%	
Ca 315.887†	48791815.3	455.809 mg/L	3.3663	455.809	mg/L	3.3663	0.74%	
QC value within limits for Ca 315.887 Recovery = 91.16%								
Cd 228.802†	212.9	-0.0001390 mg/L	0.00039518	-0.0001390	mg/L	0.00039518	284.30%	
Co 228.616†	-70.8	0.0003138 mg/L	0.00016193	0.0003138	mg/L	0.00016193	51.60%	
Cr 267.716†	-183.8	-0.0003671 mg/L	0.00017570	-0.0003671	mg/L	0.00017570	47.85%	
Cu 327.393†	1970.8	0.0041616 mg/L	0.00130446	0.0041616	mg/L	0.00130446	31.35%	
Fe 273.955†	3819405.0	180.565 mg/L	0.3194	180.565	mg/L	0.3194	0.18%	
QC value within limits for Fe 273.955 Recovery = 90.28%								
K 404.721†	-2307.1	-27.0127 mg/L	1.08710	-27.0127	mg/L	1.08710	4.02%	
Mg 279.077†	9342525.3	484.988 mg/L	1.6321	484.988	mg/L	1.6321	0.34%	
QC value within limits for Mg 279.077 Recovery = 97.00%								
Mn 257.610†	1410.6	-0.0144363 mg/L	0.00013027	-0.0144363	mg/L	0.00013027	0.90%	
Mo 202.031†	438.7	-0.0017260 mg/L	0.00145485	-0.0017260	mg/L	0.00145485	84.29%	
Na 330.237†	16.7	0.801944 mg/L	0.0387182	0.801944	mg/L	0.0387182	4.83%	
Ni 231.604†	38.6	0.0018671 mg/L	0.00029124	0.0018671	mg/L	0.00029124	15.60%	
Pb 220.353†	-1172.8	0.0009213 mg/L	0.00092146	0.0009213	mg/L	0.00092146	100.02%	
Sb 206.836†	-87.1	-0.0024547 mg/L	0.00180637	-0.0024547	mg/L	0.00180637	73.59%	
Se 196.026†	-116.3	-0.0102207 mg/L	0.00708169	-0.0102207	mg/L	0.00708169	69.29%	
Sn 189.927†	3.8	-0.0104928 mg/L	0.00092566	-0.0104928	mg/L	0.00092566	8.82%	
Ti 334.940†	687.9	0.0029465 mg/L	0.00032573	0.0029465	mg/L	0.00032573	11.05%	
Tl 190.801†	5.5	-0.0039621 mg/L	0.00304966	-0.0039621	mg/L	0.00304966	76.97%	
V 290.880†	3643.5	0.0008925 mg/L	0.00038404	0.0008925	mg/L	0.00038404	43.03%	
Zn 206.200†	620.0	-0.0063611 mg/L	0.00010153	-0.0063611	mg/L	0.00010153	1.60%	

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/15/2013 3:41:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	942387.2	89.5 %		0.18			0.20%
Y 371.029	326139.1	87.6 %		0.47			0.53%
Ag 328.068†	187611.5	1.03192 mg/L		0.008375	1.03192 mg/L	0.008375	0.81%
QC value within limits for Ag	328.068	Recovery = 103.19%					
Al 308.215†	12429975.3	474.890 mg/L		0.6992	474.890 mg/L	0.6992	0.15%
QC value within limits for Al	308.215	Recovery = 94.98%					
As 188.979†	1311.8	1.00863 mg/L		0.000512	1.00863 mg/L	0.000512	0.05%
QC value within limits for As	188.979	Recovery = 100.86%					
Ba 233.527†	59190.6	0.495263 mg/L		0.0003581	0.495263 mg/L	0.0003581	0.07%
QC value within limits for Ba	233.527	Recovery = 99.05%					
Be 313.107†	1383106.6	0.501757 mg/L		0.0024696	0.501757 mg/L	0.0024696	0.49%
QC value within limits for Be	313.107	Recovery = 100.35%					
Ca 315.887†	50018825.6	467.271 mg/L		0.6204	467.271 mg/L	0.6204	0.13%
QC value within limits for Ca	315.887	Recovery = 93.45%					
Cd 228.802†	60943.6	1.01265 mg/L		0.001716	1.01265 mg/L	0.001716	0.17%
QC value within limits for Cd	228.802	Recovery = 101.26%					
Co 228.616†	21475.4	0.481396 mg/L		0.0019107	0.481396 mg/L	0.0019107	0.40%
QC value within limits for Co	228.616	Recovery = 96.28%					
Cr 267.716†	36528.5	0.481418 mg/L		0.0057292	0.481418 mg/L	0.0057292	1.19%
QC value within limits for Cr	267.716	Recovery = 96.28%					
Cu 327.393†	65069.9	0.512165 mg/L		0.0023946	0.512165 mg/L	0.0023946	0.47%
QC value within limits for Cu	327.393	Recovery = 102.43%					
Fe 273.955†	3852791.3	182.143 mg/L		0.1093	182.143 mg/L	0.1093	0.06%
QC value within limits for Fe	273.955	Recovery = 91.07%					
K 404.721†	-2384.9	-27.8783 mg/L		1.85119	-27.8783 mg/L	1.85119	6.64%
Mg 279.077†	9415419.3	488.773 mg/L		0.5021	488.773 mg/L	0.5021	0.10%
QC value within limits for Mg	279.077	Recovery = 97.75%					
Mn 257.610†	366735.1	0.469372 mg/L		0.0001486	0.469372 mg/L	0.0001486	0.03%
QC value within limits for Mn	257.610	Recovery = 93.87%					
Mo 202.031†	454.8	-0.0015546 mg/L		0.00058046	-0.0015546 mg/L	0.00058046	37.34%
Na 330.237†	1255.2	1.85047 mg/L		0.072340	1.85047 mg/L	0.072340	3.91%
Ni 231.604†	53670.2	0.937246 mg/L		0.0077493	0.937246 mg/L	0.0077493	0.83%
QC value within limits for Ni	231.604	Recovery = 93.72%					
Pb 220.353†	12737.2	0.959950 mg/L		0.0033541	0.959950 mg/L	0.0033541	0.35%
QC value within limits for Pb	220.353	Recovery = 95.99%					
Sb 206.836†	2147.4	1.01831 mg/L		0.006443	1.01831 mg/L	0.006443	0.63%
QC value within limits for Sb	206.836	Recovery = 101.83%					
Se 196.026†	1147.6	0.992778 mg/L		0.0109425	0.992778 mg/L	0.0109425	1.10%
QC value within limits for Se	196.026	Recovery = 99.28%					
Sn 189.927†	7.9	-0.0098527 mg/L		0.00251009	-0.0098527 mg/L	0.00251009	25.48%
Ti 334.940†	708.3	0.0029786 mg/L		0.00002947	0.0029786 mg/L	0.00002947	0.99%
Tl 190.801†	1607.0	0.953937 mg/L		0.0032912	0.953937 mg/L	0.0032912	0.35%
QC value within limits for Tl	190.801	Recovery = 95.39%					
V 290.880†	73109.2	0.487295 mg/L		0.0005085	0.487295 mg/L	0.0005085	0.10%
QC value within limits for V	290.880	Recovery = 97.46%					
Zn 206.200†	56152.8	0.934353 mg/L		0.0011297	0.934353 mg/L	0.0011297	0.12%
QC value within limits for Zn	206.200	Recovery = 93.44%					

All analyte(s) passed QC.

Sequence No.: 12
 Sample ID: MB 27401 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 38
 Date Collected: 11/15/2013 3:46:17 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 27401 (1)

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1071167.9	102	%	0.1			0.14%
Y 371.029	378100.6	102	%	0.2			0.15%
Ag 328.068†	-1.8	0.0006446	mg/L	0.00022651	0.0006446	mg/L	0.00022651 35.14%
Al 308.215†	134.3	0.0076219	mg/L	0.00307901	0.0076219	mg/L	0.00307901 40.40%
As 188.979†	1.4	0.0042635	mg/L	0.00064686	0.0042635	mg/L	0.00064686 15.17%
Ba 233.527†	38.1	0.0018522	mg/L	0.00006277	0.0018522	mg/L	0.00006277 3.39%
Be 313.107†	233.6	0.0012181	mg/L	0.00000150	0.0012181	mg/L	0.00000150 0.12%
Ca 315.887†	3307.7	0.0945568	mg/L	0.01002929	0.0945568	mg/L	0.01002929 10.61%
Cd 228.802†	-19.8	0.0015131	mg/L	0.00003911	0.0015131	mg/L	0.00003911 2.58%
Co 228.616†	3.8	0.0019010	mg/L	0.00004783	0.0019010	mg/L	0.00004783 2.52%
Cr 267.716†	4.5	0.0019908	mg/L	0.00008990	0.0019908	mg/L	0.00008990 4.52%
Cu 327.393†	336.9	0.0028376	mg/L	0.00133516	0.0028376	mg/L	0.00133516 47.05%
Fe 273.955†	67.0	0.0159042	mg/L	0.00006323	0.0159042	mg/L	0.00006323 0.40%
K 404.721†	191.7	0.786407	mg/L	0.5730856	0.786407	mg/L	0.5730856 72.87%
Mg 279.077†	159.7	0.171746	mg/L	0.0001151	0.171746	mg/L	0.0001151 0.07%
Mn 257.610†	43.6	0.0017347	mg/L	0.00000762	0.0017347	mg/L	0.00000762 0.44%
Mo 202.031†	-1.9	0.0009792	mg/L	0.00004485	0.0009792	mg/L	0.00004485 4.58%
Na 330.237†	-26.0	0.765807	mg/L	0.0574324	0.765807	mg/L	0.0574324 7.50%
Ni 231.604†	13.9	0.0014106	mg/L	0.00020188	0.0014106	mg/L	0.00020188 14.31%
Pb 220.353†	-1.1	0.0004189	mg/L	0.00048727	0.0004189	mg/L	0.00048727 116.33%
Sb 206.836†	1.8	0.0011745	mg/L	0.00001709	0.0011745	mg/L	0.00001709 1.46%
Se 196.026†	8.7	0.0077494	mg/L	0.00365405	0.0077494	mg/L	0.00365405 47.15%
Sn 189.927†	1.3	0.0008767	mg/L	0.00000499	0.0008767	mg/L	0.00000499 0.57%
Ti 334.940†	142.3	0.0020872	mg/L	0.00005282	0.0020872	mg/L	0.00005282 2.53%
Tl 190.801†	-0.1	-0.0002867	mg/L	0.00450209	-0.0002867	mg/L	0.00450209 >999.9%
V 290.880†	-24.1	0.0021244	mg/L	0.00026816	0.0021244	mg/L	0.00026816 12.62%
Zn 206.200†	107.5	-0.0000806	mg/L	0.00031044	-0.0000806	mg/L	0.00031044 385.39%

Sequence No.: 13
 Sample ID: LCSW 27401
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 39
 Date Collected: 11/15/2013 3:49:53 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW 27401

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1034727.1	98.2	%	0.28			0.28%
Y 371.029	357213.3	95.9	%	0.04			0.05%
Ag 328.068†	16590.7	0.0908658	mg/L	0.00028846	0.0908658 mg/L	0.00028846	0.32%
Al 308.215†	125692.1	4.79642	mg/L	0.018412	4.79642 mg/L	0.018412	0.38%
As 188.979†	615.7	0.471350	mg/L	0.0003020	0.471350 mg/L	0.0003020	0.06%
Ba 233.527†	57126.5	0.484529	mg/L	0.0024071	0.484529 mg/L	0.0024071	0.50%
Be 313.107†	1329664.2	0.482244	mg/L	0.0001908	0.482244 mg/L	0.0001908	0.04%
Ca 315.887†	5230770.8	48.9444	mg/L	0.03675	48.9444 mg/L	0.03675	0.08%
Cd 228.802†	28691.2	0.480042	mg/L	0.0017424	0.480042 mg/L	0.0017424	0.36%
Co 228.616†	21678.6	0.486739	mg/L	0.0000400	0.486739 mg/L	0.0000400	0.01%
Cr 267.716†	36261.5	0.480342	mg/L	0.0002142	0.480342 mg/L	0.0002142	0.04%
Cu 327.393†	60190.5	0.484315	mg/L	0.0025271	0.484315 mg/L	0.0025271	0.52%
Fe 273.955†	100916.6	4.78330	mg/L	0.030664	4.78330 mg/L	0.030664	0.64%
K 404.721†	3744.4	40.3116	mg/L	3.09577	40.3116 mg/L	3.09577	7.68%
Mg 279.077†	926130.3	48.2419	mg/L	0.04978	48.2419 mg/L	0.04978	0.10%
Mn 257.610†	358983.1	0.475592	mg/L	0.0019915	0.475592 mg/L	0.0019915	0.42%
Mo 202.031†	10076.3	0.492294	mg/L	0.0005008	0.492294 mg/L	0.0005008	0.10%
Na 330.237†	53069.5	45.7179	mg/L	0.12710	45.7179 mg/L	0.12710	0.28%
Ni 231.604†	27412.1	0.479830	mg/L	0.0022367	0.479830 mg/L	0.0022367	0.47%
Pb 220.353†	7102.7	0.489732	mg/L	0.0007148	0.489732 mg/L	0.0007148	0.15%
Sb 206.836†	1050.7	0.478555	mg/L	0.0040375	0.478555 mg/L	0.0040375	0.84%
Se 196.026†	622.9	0.496008	mg/L	0.0038643	0.496008 mg/L	0.0038643	0.78%
Sn 189.927†	1890.4	0.473455	mg/L	0.0014453	0.473455 mg/L	0.0014453	0.31%
Ti 334.940†	300217.0	0.474691	mg/L	0.0014223	0.474691 mg/L	0.0014223	0.30%
Tl 190.801†	833.8	0.503813	mg/L	0.0026087	0.503813 mg/L	0.0026087	0.52%
V 290.880†	68704.8	0.481461	mg/L	0.0024251	0.481461 mg/L	0.0024251	0.50%
Zn 206.200†	28604.1	0.482381	mg/L	0.0017227	0.482381 mg/L	0.0017227	0.36%

Sequence No.: 14
 Sample ID: LCSW MR 27401
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 40
 Date Collected: 11/15/2013 3:53:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW MR 27401

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	1026442.7	97.4 %		0.56			0.57%
Y 371.029	354220.0	95.1 %		0.08			0.09%
Ag 328.068†	16526.1	0.0905118 mg/L		0.00006245	0.0905118 mg/L	0.00006245	0.07%
Al 308.215†	125822.0	4.80134 mg/L		0.011753	4.80134 mg/L	0.011753	0.24%
As 188.979†	622.4	0.476489 mg/L		0.0047771	0.476489 mg/L	0.0047771	1.00%
Ba 233.527†	57093.5	0.484252 mg/L		0.0009938	0.484252 mg/L	0.0009938	0.21%
Be 313.107†	1322763.3	0.479746 mg/L		0.0005983	0.479746 mg/L	0.0005983	0.12%
Ca 315.887†	5207922.8	48.7309 mg/L		0.00460	48.7309 mg/L	0.00460	0.01%
Cd 228.802†	28764.7	0.481268 mg/L		0.0018462	0.481268 mg/L	0.0018462	0.38%
Co 228.616†	21749.0	0.488322 mg/L		0.0034244	0.488322 mg/L	0.0034244	0.70%
Cr 267.716†	35940.5	0.476143 mg/L		0.0036533	0.476143 mg/L	0.0036533	0.77%
Cu 327.393†	59722.6	0.480550 mg/L		0.0014862	0.480550 mg/L	0.0014862	0.31%
Fe 273.955†	99882.7	4.73442 mg/L		0.005479	4.73442 mg/L	0.005479	0.12%
K 404.721†	3921.2	42.2783 mg/L		3.42086	42.2783 mg/L	3.42086	8.09%
Mg 279.077†	921923.4	48.0236 mg/L		0.04390	48.0236 mg/L	0.04390	0.09%
Mn 257.610†	357389.7	0.473490 mg/L		0.0003274	0.473490 mg/L	0.0003274	0.07%
Mo 202.031†	10126.8	0.494770 mg/L		0.0031307	0.494770 mg/L	0.0031307	0.63%
Na 330.237†	52973.5	45.6366 mg/L		0.10517	45.6366 mg/L	0.10517	0.23%
Ni 231.604†	27217.1	0.476432 mg/L		0.0009316	0.476432 mg/L	0.0009316	0.20%
Pb 220.353†	7136.5	0.492068 mg/L		0.0012673	0.492068 mg/L	0.0012673	0.26%
Sb 206.836†	1051.3	0.478812 mg/L		0.0043146	0.478812 mg/L	0.0043146	0.90%
Se 196.026†	625.1	0.497702 mg/L		0.0073746	0.497702 mg/L	0.0073746	1.48%
Sn 189.927†	1907.7	0.477807 mg/L		0.0080407	0.477807 mg/L	0.0080407	1.68%
Ti 334.940†	299467.1	0.473510 mg/L		0.0013277	0.473510 mg/L	0.0013277	0.28%
Tl 190.801†	839.5	0.507202 mg/L		0.0046464	0.507202 mg/L	0.0046464	0.92%
V 290.880†	68527.5	0.480230 mg/L		0.0003705	0.480230 mg/L	0.0003705	0.08%
Zn 206.200†	28785.6	0.485457 mg/L		0.0015408	0.485457 mg/L	0.0015408	0.32%

Sequence No.: 15
 Sample ID: 75576-029
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 41
 Date Collected: 11/15/2013 3:57:33 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: 75576-029

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1064600.8	101 %		1.1			1.04%
Y 371.029	376956.8	101 %		0.7			0.69%
Ag 328.068†	-21.0	0.0005475 mg/L		0.00042409	0.0005475 mg/L	0.00042409	77.47%
Al 308.215†	3172.6	0.123580 mg/L		0.0009883	0.123580 mg/L	0.0009883	0.80%
As 188.979†	-0.1	0.0027683 mg/L		0.00160143	0.0027683 mg/L	0.00160143	57.85%
Ba 233.527†	3580.0	0.0318070 mg/L		0.00009575	0.0318070 mg/L	0.00009575	0.30%
Be 313.107†	112.1	0.0011736 mg/L		0.00001359	0.0011736 mg/L	0.00001359	1.16%
Ca 315.887†	3180889.9	29.7962 mg/L		0.09984	29.7962 mg/L	0.09984	0.34%
Cd 228.802†	57.4	0.0026733 mg/L		0.00021569	0.0026733 mg/L	0.00021569	8.07%
Co 228.616†	-3.1	0.0017723 mg/L		0.00019172	0.0017723 mg/L	0.00019172	10.82%
Cr 267.716†	4554.7	0.0617208 mg/L		0.00116036	0.0617208 mg/L	0.00116036	1.88%
Cu 327.393†	902.5	0.0069880 mg/L		0.00046454	0.0069880 mg/L	0.00046454	6.65%
Fe 273.955†	1689.4	0.0926015 mg/L		0.00197140	0.0926015 mg/L	0.00197140	2.13%
K 404.721†	79.2	-0.464567 mg/L		5.2314919	-0.464567 mg/L	5.2314919	>999.9%
Mg 279.077†	76653.8	4.14244 mg/L		0.023171	4.14244 mg/L	0.023171	0.56%
Mn 257.610†	3088.4	0.0056232 mg/L		0.00008515	0.0056232 mg/L	0.00008515	1.51%
Mo 202.031†	146.9	0.0072214 mg/L		0.00010588	0.0072214 mg/L	0.00010588	1.47%
Na 330.237†	15391.0	13.8182 mg/L		0.12974	13.8182 mg/L	0.12974	0.94%
Ni 231.604†	94.3	0.0028216 mg/L		0.00003382	0.0028216 mg/L	0.00003382	1.20%
Pb 220.353†	16.5	0.0016486 mg/L		0.00049086	0.0016486 mg/L	0.00049086	29.77%
Sb 206.836†	3.8	0.0020691 mg/L		0.00002360	0.0020691 mg/L	0.00002360	1.14%
Se 196.026†	12.4	0.0100257 mg/L		0.00338238	0.0100257 mg/L	0.00338238	33.74%
Sn 189.927†	16.0	0.0034850 mg/L		0.00031446	0.0034850 mg/L	0.00031446	9.02%
Ti 334.940†	1129.8	0.0036426 mg/L		0.00002441	0.0036426 mg/L	0.00002441	0.67%
Tl 190.801†	1.5	0.0008335 mg/L		0.00409217	0.0008335 mg/L	0.00409217	490.97%
V 290.880†	114.7	0.0029302 mg/L		0.00055359	0.0029302 mg/L	0.00055359	18.89%
Zn 206.200†	747.1	0.0107508 mg/L		0.00005856	0.0107508 mg/L	0.00005856	0.54%

Sequence No.: 16
 Sample ID: 75576-029 MR
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 42
 Date Collected: 11/15/2013 4:01:19 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-029 MR

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1064116.8	101	%	0.0			0.03%
Y 371.029	373627.0	100	%	0.7			0.71%
Ag 328.068†	-37.5	0.0004589	mg/L	0.00006238	0.0004589 mg/L	0.00006238	13.59%
Al 308.215†	3196.5	0.124490	mg/L	0.0040280	0.124490 mg/L	0.0040280	3.24%
As 188.979†	0.4	0.0031016	mg/L	0.00118711	0.0031016 mg/L	0.00118711	38.27%
Ba 233.527†	3624.9	0.0321858	mg/L	0.00016420	0.0321858 mg/L	0.00016420	0.51%
Be 313.107†	61.3	0.0011550	mg/L	0.00000225	0.0011550 mg/L	0.00000225	0.20%
Ca 315.887†	3256443.9	30.5024	mg/L	0.18797	30.5024 mg/L	0.18797	0.62%
Cd 228.802†	62.3	0.0027524	mg/L	0.00014118	0.0027524 mg/L	0.00014118	5.13%
Co 228.616†	-18.6	0.0014255	mg/L	0.00068108	0.0014255 mg/L	0.00068108	47.78%
Cr 267.716†	4690.1	0.0634974	mg/L	0.00040389	0.0634974 mg/L	0.00040389	0.64%
Cu 327.393†	985.2	0.0076449	mg/L	0.00143075	0.0076449 mg/L	0.00143075	18.72%
Fe 273.955†	1936.5	0.104282	mg/L	0.0005047	0.104282 mg/L	0.0005047	0.48%
K 404.721†	-104.8	-2.51195	mg/L	2.911357	-2.51195 mg/L	2.911357	115.90%
Mg 279.077†	78124.1	4.21876	mg/L	0.015881	4.21876 mg/L	0.015881	0.38%
Mn 257.610†	3303.2	0.0059050	mg/L	0.00004102	0.0059050 mg/L	0.00004102	0.69%
Mo 202.031†	150.4	0.0073722	mg/L	0.00023256	0.0073722 mg/L	0.00023256	3.15%
Na 330.237†	15654.2	14.0410	mg/L	0.13221	14.0410 mg/L	0.13221	0.94%
Ni 231.604†	150.8	0.0038078	mg/L	0.00029036	0.0038078 mg/L	0.00029036	7.63%
Pb 220.353†	13.2	0.0014247	mg/L	0.00003852	0.0014247 mg/L	0.00003852	2.70%
Sb 206.836†	1.3	0.0009662	mg/L	0.00159329	0.0009662 mg/L	0.00159329	164.90%
Se 196.026†	9.4	0.0076439	mg/L	0.00518292	0.0076439 mg/L	0.00518292	67.80%
Sn 189.927†	12.9	0.0026859	mg/L	0.00020074	0.0026859 mg/L	0.00020074	7.47%
Ti 334.940†	1346.6	0.0039840	mg/L	0.00009569	0.0039840 mg/L	0.00009569	2.40%
Tl 190.801†	0.3	0.0000838	mg/L	0.00191122	0.0000838 mg/L	0.00191122	>999.9%
V 290.880†	243.2	0.0038263	mg/L	0.00032549	0.0038263 mg/L	0.00032549	8.51%
Zn 206.200†	693.8	0.0098471	mg/L	0.00006161	0.0098471 mg/L	0.00006161	0.63%

Sequence No.: 17
 Sample ID: 75576-031 MS 1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 43
 Date Collected: 11/15/2013 4:05:04 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: 75576-031 MS 1

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1016725.7	96.5 %		0.07			0.07%
Y 371.029	359898.9	96.7 %		1.28			1.32%
Ag 328.068†	17109.4	0.0936932 mg/L		0.00188468	0.0936932 mg/L	0.00188468	2.01%
Al 308.215†	132586.5	5.05957 mg/L		0.088557	5.05957 mg/L	0.088557	1.75%
As 188.979†	638.5	0.488320 mg/L		0.0021002	0.488320 mg/L	0.0021002	0.43%
Ba 233.527†	62298.0	0.528261 mg/L		0.0100291	0.528261 mg/L	0.0100291	1.90%
Be 313.107†	1349025.2	0.489246 mg/L		0.0015680	0.489246 mg/L	0.0015680	0.32%
Ca 315.887†	8516675.0	79.6582 mg/L		0.14364	79.6582 mg/L	0.14364	0.18%
Cd 228.802†	29330.4	0.490569 mg/L		0.0021058	0.490569 mg/L	0.0021058	0.43%
Co 228.616†	22085.4	0.495851 mg/L		0.0031405	0.495851 mg/L	0.0031405	0.63%
Cr 267.716†	41517.3	0.549376 mg/L		0.0079731	0.549376 mg/L	0.0079731	1.45%
Cu 327.393†	61648.4	0.495637 mg/L		0.0055368	0.495637 mg/L	0.0055368	1.12%
Fe 273.955†	105746.3	5.01161 mg/L		0.070921	5.01161 mg/L	0.070921	1.42%
K 404.721†	4288.5	46.3641 mg/L		1.14565	46.3641 mg/L	1.14565	2.47%
Mg 279.077†	1016428.4	52.9292 mg/L		0.20765	52.9292 mg/L	0.20765	0.39%
Mn 257.610†	371539.9	0.492057 mg/L		0.0083545	0.492057 mg/L	0.0083545	1.70%
Mo 202.031†	10395.3	0.506824 mg/L		0.0020330	0.506824 mg/L	0.0020330	0.40%
Na 330.237†	72933.4	62.5352 mg/L		1.06826	62.5352 mg/L	1.06826	1.71%
Ni 231.604†	28071.3	0.491344 mg/L		0.0089209	0.491344 mg/L	0.0089209	1.82%
Pb 220.353†	7256.9	0.500383 mg/L		0.0006142	0.500383 mg/L	0.0006142	0.12%
Sb 206.836†	1071.7	0.488124 mg/L		0.0033566	0.488124 mg/L	0.0033566	0.69%
Se 196.026†	623.0	0.495455 mg/L		0.0113916	0.495455 mg/L	0.0113916	2.30%
Sn 189.927†	1961.5	0.490204 mg/L		0.0027965	0.490204 mg/L	0.0027965	0.57%
Ti 334.940†	309446.9	0.489228 mg/L		0.0093342	0.489228 mg/L	0.0093342	1.91%
Tl 190.801†	843.9	0.510089 mg/L		0.0016730	0.510089 mg/L	0.0016730	0.33%
V 290.880†	70510.4	0.493909 mg/L		0.0084157	0.493909 mg/L	0.0084157	1.70%
Zn 206.200†	29670.7	0.500437 mg/L		0.0035281	0.500437 mg/L	0.0035281	0.71%

Sequence No.: 18
 Sample ID: 75576-033 MS 2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 44
 Date Collected: 11/15/2013 4:08:54 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-033 MS 2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1028224.2	97.6	%	0.32			0.33%
Y 371.029	364881.9	98.0	%	0.35			0.36%
Ag 328.068†	16550.5	0.0906537	mg/L	0.00021507	0.0906537 mg/L	0.00021507	0.24%
Al 308.215†	126596.6	4.83088	mg/L	0.017732	4.83088 mg/L	0.017732	0.37%
As 188.979†	621.8	0.475593	mg/L	0.0049040	0.475593 mg/L	0.0049040	1.03%
Ba 233.527†	60330.5	0.511626	mg/L	0.0029982	0.511626 mg/L	0.0029982	0.59%
Be 313.107†	1320509.2	0.478928	mg/L	0.0018326	0.478928 mg/L	0.0018326	0.38%
Ca 315.887†	8282643.2	77.4710	mg/L	0.66792	77.4710 mg/L	0.66792	0.86%
Cd 228.802†	28661.5	0.479426	mg/L	0.0023118	0.479426 mg/L	0.0023118	0.48%
Co 228.616†	21482.4	0.482373	mg/L	0.0028230	0.482373 mg/L	0.0028230	0.59%
Cr 267.716†	40353.5	0.534055	mg/L	0.0036883	0.534055 mg/L	0.0036883	0.69%
Cu 327.393†	59970.2	0.482150	mg/L	0.0012898	0.482150 mg/L	0.0012898	0.27%
Fe 273.955†	102299.1	4.84865	mg/L	0.024389	4.84865 mg/L	0.024389	0.50%
K 404.721†	4088.1	44.1349	mg/L	0.00039	44.1349 mg/L	0.00039	0.00%
Mg 279.077†	992188.3	51.6709	mg/L	0.22925	51.6709 mg/L	0.22925	0.44%
Mn 257.610†	359576.3	0.476253	mg/L	0.0017647	0.476253 mg/L	0.0017647	0.37%
Mo 202.031†	10204.5	0.497568	mg/L	0.0027947	0.497568 mg/L	0.0027947	0.56%
Na 330.237†	70610.7	60.5688	mg/L	0.21755	60.5688 mg/L	0.21755	0.36%
Ni 231.604†	27355.3	0.478846	mg/L	0.0041898	0.478846 mg/L	0.0041898	0.87%
Pb 220.353†	7100.2	0.489570	mg/L	0.0026654	0.489570 mg/L	0.0026654	0.54%
Sb 206.836†	1050.6	0.478516	mg/L	0.0017896	0.478516 mg/L	0.0017896	0.37%
Se 196.026†	619.8	0.492869	mg/L	0.0117571	0.492869 mg/L	0.0117571	2.39%
Sn 189.927†	1902.6	0.475491	mg/L	0.0041631	0.475491 mg/L	0.0041631	0.88%
Ti 334.940†	302851.6	0.478841	mg/L	0.0014965	0.478841 mg/L	0.0014965	0.31%
Tl 190.801†	821.7	0.496701	mg/L	0.0013617	0.496701 mg/L	0.0013617	0.27%
V 290.880†	67996.8	0.476359	mg/L	0.0015137	0.476359 mg/L	0.0015137	0.32%
Zn 206.200†	28977.2	0.488698	mg/L	0.0032973	0.488698 mg/L	0.0032973	0.67%

Sequence No.: 19
 Sample ID: 75576-029 PS
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 45
 Date Collected: 11/15/2013 4:12:50 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-029 PS

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1023932.4	97.2	%	0.73			0.75%
Y 371.029	357537.3	96.0	%	0.62			0.65%
Ag 328.068†	15878.2	0.0870367	mg/L	0.00163181	0.0870367 mg/L	0.00163181	1.87%
Al 308.215†	133792.6	5.10624	mg/L	0.081370	5.10624 mg/L	0.081370	1.59%
As 188.979†	648.4	0.495808	mg/L	0.0091937	0.495808 mg/L	0.0091937	1.85%
Ba 233.527†	63067.3	0.534765	mg/L	0.0079993	0.534765 mg/L	0.0079993	1.50%
Be 313.107†	1380395.2	0.500611	mg/L	0.0003534	0.500611 mg/L	0.0003534	0.07%
Ca 315.887†	8619295.7	80.6175	mg/L	0.00942	80.6175 mg/L	0.00942	0.01%
Cd 228.802†	30260.0	0.506072	mg/L	0.0035102	0.506072 mg/L	0.0035102	0.69%
Co 228.616†	22365.6	0.502029	mg/L	0.0052329	0.502029 mg/L	0.0052329	1.04%
Cr 267.716†	42665.3	0.564254	mg/L	0.0111922	0.564254 mg/L	0.0111922	1.98%
Cu 327.393†	62495.4	0.502439	mg/L	0.0066981	0.502439 mg/L	0.0066981	1.33%
Fe 273.955†	107543.5	5.09657	mg/L	0.097827	5.09657 mg/L	0.097827	1.92%
K 404.721†	4329.6	46.8212	mg/L	0.53157	46.8212 mg/L	0.53157	1.14%
Mg 279.077†	1063149.7	55.3540	mg/L	0.01204	55.3540 mg/L	0.01204	0.02%
Mn 257.610†	377163.2	0.499405	mg/L	0.0084613	0.499405 mg/L	0.0084613	1.69%
Mo 202.031†	9660.9	0.470857	mg/L	0.0043517	0.470857 mg/L	0.0043517	0.92%
Na 330.237†	73399.2	62.9296	mg/L	0.65548	62.9296 mg/L	0.65548	1.04%
Ni 231.604†	28723.2	0.502672	mg/L	0.0104025	0.502672 mg/L	0.0104025	2.07%
Pb 220.353†	7326.2	0.505106	mg/L	0.0018902	0.505106 mg/L	0.0018902	0.37%
Sb 206.836†	1035.7	0.471729	mg/L	0.0015269	0.471729 mg/L	0.0015269	0.32%
Se 196.026†	642.6	0.510982	mg/L	0.0018234	0.510982 mg/L	0.0018234	0.36%
Sn 189.927†	1860.5	0.464839	mg/L	0.0051286	0.464839 mg/L	0.0051286	1.10%
Ti 334.940†	291898.4	0.461590	mg/L	0.0071715	0.461590 mg/L	0.0071715	1.55%
Tl 190.801†	854.8	0.516252	mg/L	0.0047672	0.516252 mg/L	0.0047672	0.92%
V 290.880†	71016.1	0.497344	mg/L	0.0085368	0.497344 mg/L	0.0085368	1.72%
Zn 206.200†	30163.1	0.508786	mg/L	0.0041578	0.508786 mg/L	0.0041578	0.82%

Sequence No.: 20
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/15/2013 4:16:40 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1018832.2	96.7 %		0.93			0.96%
Y 371.029	354733.4	95.3 %		1.63			1.71%
Ag 328.068†	17917.1	0.0980589 mg/L	0.00038126	0.0980589 mg/L	0.00038126	0.39%	
QC value within limits for Ag	328.068	Recovery = 98.06%					
Al 308.215†	130010.5	4.96134 mg/L	0.037241	4.96134 mg/L	0.037241	0.75%	
QC value within limits for Al	308.215	Recovery = 99.23%					
As 188.979†	635.5	0.486406 mg/L	0.0096155	0.486406 mg/L	0.0096155	1.98%	
QC value within limits for As	188.979	Recovery = 97.28%					
Ba 233.527†	58559.1	0.496640 mg/L	0.0057232	0.496640 mg/L	0.0057232	1.15%	
QC value within limits for Ba	233.527	Recovery = 99.33%					
Be 313.107†	1354405.0	0.491193 mg/L	0.0019149	0.491193 mg/L	0.0019149	0.39%	
QC value within limits for Be	313.107	Recovery = 98.24%					
Ca 315.887†	5344518.7	50.0073 mg/L	0.10693	50.0073 mg/L	0.10693	0.21%	
QC value within limits for Ca	315.887	Recovery = 100.01%					
Cd 228.802†	29728.3	0.497331 mg/L	0.0061704	0.497331 mg/L	0.0061704	1.24%	
QC value within limits for Cd	228.802	Recovery = 99.47%					
Co 228.616†	21988.0	0.493629 mg/L	0.0054244	0.493629 mg/L	0.0054244	1.10%	
QC value within limits for Co	228.616	Recovery = 98.73%					
Cr 267.716†	37702.1	0.499268 mg/L	0.0013779	0.499268 mg/L	0.0013779	0.28%	
QC value within limits for Cr	267.716	Recovery = 99.85%					
Cu 327.393†	61112.4	0.491720 mg/L	0.0041966	0.491720 mg/L	0.0041966	0.85%	
QC value within limits for Cu	327.393	Recovery = 98.34%					
Fe 273.955†	104346.9	4.94546 mg/L	0.018922	4.94546 mg/L	0.018922	0.38%	
QC value within limits for Fe	273.955	Recovery = 98.91%					
K 404.721†	3903.6	42.0822 mg/L	1.01886	42.0822 mg/L	1.01886	2.42%	
QC value less than the lower limit for K 404.721		Recovery = 84.16%					
Mg 279.077†	961618.8	50.0841 mg/L	0.20270	50.0841 mg/L	0.20270	0.40%	
QC value within limits for Mg	279.077	Recovery = 100.17%					
Mn 257.610†	369413.9	0.489343 mg/L	0.0038101	0.489343 mg/L	0.0038101	0.78%	
QC value within limits for Mn	257.610	Recovery = 97.87%					
Mo 202.031†	10166.7	0.496673 mg/L	0.0068713	0.496673 mg/L	0.0068713	1.38%	
QC value within limits for Mo	202.031	Recovery = 99.33%					
Na 330.237†	55382.6	47.6762 mg/L	0.24392	47.6762 mg/L	0.24392	0.51%	
QC value within limits for Na	330.237	Recovery = 95.35%					
Ni 231.604†	28288.1	0.495113 mg/L	0.0036161	0.495113 mg/L	0.0036161	0.73%	
QC value within limits for Ni	231.604	Recovery = 99.02%					
Pb 220.353†	7209.6	0.497096 mg/L	0.0074445	0.497096 mg/L	0.0074445	1.50%	
QC value within limits for Pb	220.353	Recovery = 99.42%					
Sb 206.836†	1097.5	0.499834 mg/L	0.0040837	0.499834 mg/L	0.0040837	0.82%	
QC value within limits for Sb	206.836	Recovery = 99.97%					
Se 196.026†	627.0	0.499329 mg/L	0.0001865	0.499329 mg/L	0.0001865	0.04%	
QC value within limits for Se	196.026	Recovery = 99.87%					
Sn 189.927†	1963.7	0.491841 mg/L	0.0058003	0.491841 mg/L	0.0058003	1.18%	
QC value within limits for Sn	189.927	Recovery = 98.37%					
Ti 334.940†	311016.0	0.491699 mg/L	0.0046965	0.491699 mg/L	0.0046965	0.96%	
QC value within limits for Ti	334.940	Recovery = 98.34%					
Tl 190.801†	849.6	0.513341 mg/L	0.0106595	0.513341 mg/L	0.0106595	2.08%	
QC value within limits for Tl	190.801	Recovery = 102.67%					
V 290.880†	69877.4	0.489594 mg/L	0.0027516	0.489594 mg/L	0.0027516	0.56%	
QC value within limits for V	290.880	Recovery = 97.92%					
Zn 206.200†	29161.6	0.491817 mg/L	0.0068349	0.491817 mg/L	0.0068349	1.39%	
QC value within limits for Zn	206.200	Recovery = 98.36%					

QC Failed. Continue with analysis.

Sequence No.: 21

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/15/2013 4:20:28 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1040867.7	98.8 %		0.73			0.74%
Y 371.029	366791.0	98.5 %		0.96			0.98%
Ag 328.068†	3528.0	0.0197747 mg/L		0.00055155	0.0197747 mg/L	0.00055155	2.79%
QC value within limits for Ag	328.068	Recovery = 98.87%					
Al 308.215†	5127.3	0.198028 mg/L		0.0006501	0.198028 mg/L	0.0006501	0.33%
QC value within limits for Al	308.215	Recovery = 99.01%					
As 188.979†	22.2	0.0201044 mg/L		0.00029479	0.0201044 mg/L	0.00029479	1.47%
QC value within limits for As	188.979	Recovery = 100.52%					
Ba 233.527†	5898.7	0.0514103 mg/L		0.00006861	0.0514103 mg/L	0.00006861	0.13%
QC value within limits for Ba	233.527	Recovery = 102.82%					
Be 313.107†	31963.9	0.0126865 mg/L		0.00002250	0.0126865 mg/L	0.00002250	0.18%
QC value within limits for Be	313.107	Recovery = 105.72%					
Ca 315.887†	535883.3	5.07195 mg/L		0.003780	5.07195 mg/L	0.003780	0.07%
QC value within limits for Ca	315.887	Recovery = 101.44%					
Cd 228.802†	682.3	0.0131963 mg/L		0.00002864	0.0131963 mg/L	0.00002864	0.22%
QC value within limits for Cd	228.802	Recovery = 109.97%					
Co 228.616†	876.0	0.0213619 mg/L		0.00009982	0.0213619 mg/L	0.00009982	0.47%
QC value within limits for Co	228.616	Recovery = 106.81%					
Cr 267.716†	3749.5	0.0512423 mg/L		0.00002665	0.0512423 mg/L	0.00002665	0.05%
QC value within limits for Cr	267.716	Recovery = 102.48%					
Cu 327.393†	6483.6	0.0522738 mg/L		0.00058419	0.0522738 mg/L	0.00058419	1.12%
QC value within limits for Cu	327.393	Recovery = 104.55%					
Fe 273.955†	6221.5	0.306842 mg/L		0.0013924	0.306842 mg/L	0.0013924	0.45%
QC value within limits for Fe	273.955	Recovery = 102.28%					
K 404.721†	159.7	0.430782 mg/L		0.4274087	0.430782 mg/L	0.4274087	99.22%
QC value less than the lower limit for K 404.721		Recovery = 8.62%					
Mg 279.077†	96427.0	5.16903 mg/L		0.011029	5.16903 mg/L	0.011029	0.21%
QC value within limits for Mg	279.077	Recovery = 103.38%					
Mn 257.610†	29223.0	0.0402099 mg/L		0.00000251	0.0402099 mg/L	0.00000251	0.01%
QC value within limits for Mn	257.610	Recovery = 100.52%					
Mo 202.031†	429.6	0.0219069 mg/L		0.00027806	0.0219069 mg/L	0.00027806	1.27%
QC value within limits for Mo	202.031	Recovery = 109.53%					
Na 330.237†	4872.0	4.91257 mg/L		0.038026	4.91257 mg/L	0.038026	0.77%
QC value within limits for Na	330.237	Recovery = 98.25%					
Ni 231.604†	2881.3	0.0514462 mg/L		0.00002730	0.0514462 mg/L	0.00002730	0.05%
QC value within limits for Ni	231.604	Recovery = 102.89%					
Pb 220.353†	153.9	0.0110839 mg/L		0.00062168	0.0110839 mg/L	0.00062168	5.61%
QC value within limits for Pb	220.353	Recovery = 92.37%					
Sb 206.836†	45.3	0.0209469 mg/L		0.00156059	0.0209469 mg/L	0.00156059	7.45%
QC value within limits for Sb	206.836	Recovery = 104.73%					
Se 196.026†	57.4	0.0464243 mg/L		0.00708796	0.0464243 mg/L	0.00708796	15.27%
QC value within limits for Se	196.026	Recovery = 116.06%					
Sn 189.927†	179.3	0.0453927 mg/L		0.00140969	0.0453927 mg/L	0.00140969	3.11%
QC value within limits for Sn	189.927	Recovery = 90.79%					
Ti 334.940†	29306.3	0.0480193 mg/L		0.00011568	0.0480193 mg/L	0.00011568	0.24%
QC value within limits for Ti	334.940	Recovery = 96.04%					
Tl 190.801†	38.6	0.0232333 mg/L		0.00162835	0.0232333 mg/L	0.00162835	7.01%
QC value within limits for Tl	190.801	Recovery = 116.17%					
V 290.880†	7030.6	0.0513241 mg/L		0.00098295	0.0513241 mg/L	0.00098295	1.92%
QC value within limits for V 290.880	290.880	Recovery = 102.65%					
Zn 206.200†	2896.2	0.0471534 mg/L		0.00014515	0.0471534 mg/L	0.00014515	0.31%
QC value within limits for Zn 206.200	206.200	Recovery = 94.31%					

QC Failed. Continue with analysis.

Sequence No.: 22
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/15/2013 4:24:06 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	1043620.2	99.1 %		0.54			0.54%
Y 371.029	372297.6	100.0 %		1.11			1.11%
Ag 328.068†	-9.1	0.0006044 mg/L	0.00007417	0.0006044 mg/L	0.00007417	12.27%	
QC value within limits for Ag	328.068	Recovery = Not calculated					
Al 308.215†	-48.0	0.0006502 mg/L	0.00163801	0.0006502 mg/L	0.00163801	251.93%	
QC value within limits for Al	308.215	Recovery = Not calculated					
As 188.979†	-1.2	0.0022799 mg/L	0.00109132	0.0022799 mg/L	0.00109132	47.87%	
QC value within limits for As	188.979	Recovery = Not calculated					
Ba 233.527†	-17.6	0.0013812 mg/L	0.00001490	0.0013812 mg/L	0.00001490	1.08%	
QC value within limits for Ba	233.527	Recovery = Not calculated					
Be 313.107†	80.5	0.0011627 mg/L	0.00000635	0.0011627 mg/L	0.00000635	0.55%	
QC value within limits for Be	313.107	Recovery = Not calculated					
Ca 315.887†	1689.8	0.0794411 mg/L	0.00127976	0.0794411 mg/L	0.00127976	1.61%	
QC value within limits for Ca	315.887	Recovery = Not calculated					
Cd 228.802†	-19.9	0.0015104 mg/L	0.00010553	0.0015104 mg/L	0.00010553	6.99%	
QC value within limits for Cd	228.802	Recovery = Not calculated					
Co 228.616†	0.7	0.0018340 mg/L	0.00000952	0.0018340 mg/L	0.00000952	0.52%	
QC value within limits for Co	228.616	Recovery = Not calculated					
Cr 267.716†	0.7	0.0019430 mg/L	0.00022801	0.0019430 mg/L	0.00022801	11.73%	
QC value within limits for Cr	267.716	Recovery = Not calculated					
Cu 327.393†	-2.3	0.0001059 mg/L	0.00023540	0.0001059 mg/L	0.00023540	222.33%	
QC value within limits for Cu	327.393	Recovery = Not calculated					
Fe 273.955†	-64.8	0.0096723 mg/L	0.00047770	0.0096723 mg/L	0.00047770	4.94%	
QC value within limits for Fe	273.955	Recovery = Not calculated					
K 404.721†	28.9	-1.02477 mg/L	1.241458	-1.02477 mg/L	1.241458	121.15%	
QC value within limits for K	404.721	Recovery = Not calculated					
Mg 279.077†	-131.3	0.156652 mg/L	0.0019884	0.156652 mg/L	0.0019884	1.27%	
QC value within limits for Mg	279.077	Recovery = Not calculated					
Mn 257.610†	91.7	0.0017992 mg/L	0.00000052	0.0017992 mg/L	0.00000052	0.03%	
QC value within limits for Mn	257.610	Recovery = Not calculated					
Mo 202.031†	5.1	0.0013252 mg/L	0.00013827	0.0013252 mg/L	0.00013827	10.43%	
QC value within limits for Mo	202.031	Recovery = Not calculated					
Na 330.237†	-91.3	0.710531 mg/L	0.0362457	0.710531 mg/L	0.0362457	5.10%	
QC value within limits for Na	330.237	Recovery = Not calculated					
Ni 231.604†	22.9	0.0015687 mg/L	0.00023261	0.0015687 mg/L	0.00023261	14.83%	
QC value within limits for Ni	231.604	Recovery = Not calculated					
Pb 220.353†	-26.6	-0.0013348 mg/L	0.00079823	-0.0013348 mg/L	0.00079823	59.80%	
QC value within limits for Pb	220.353	Recovery = Not calculated					
Sb 206.836†	-5.9	-0.0023456 mg/L	0.00101725	-0.0023456 mg/L	0.00101725	43.37%	
QC value within limits for Sb	206.836	Recovery = Not calculated					
Se 196.026†	-0.2	0.0006453 mg/L	0.01080487	0.0006453 mg/L	0.01080487	>999.9%	
QC value within limits for Se	196.026	Recovery = Not calculated					
Sn 189.927†	2.8	0.0012392 mg/L	0.00025106	0.0012392 mg/L	0.00025106	20.26%	
QC value within limits for Sn	189.927	Recovery = Not calculated					
Ti 334.940†	63.5	0.0019632 mg/L	0.00023144	0.0019632 mg/L	0.00023144	11.79%	
QC value within limits for Ti	334.940	Recovery = Not calculated					
Tl 190.801†	2.2	0.0010897 mg/L	0.00163374	0.0010897 mg/L	0.00163374	149.93%	
QC value within limits for Tl	190.801	Recovery = Not calculated					
V 290.880†	152.3	0.0033608 mg/L	0.00005671	0.0033608 mg/L	0.00005671	1.69%	
QC value within limits for V	290.880	Recovery = Not calculated					
Zn 206.200†	-21.4	-0.0022636 mg/L	0.00004905	-0.0022636 mg/L	0.00004905	2.17%	
QC value within limits for Zn	206.200	Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 23
 Sample ID: 75576-029 SD
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 46
 Date Collected: 11/15/2013 4:27:41 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-029 SD

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1061363.3	101	%	0.1				0.06%
Y 371.029	375954.6	101	%	0.3				0.33%
Ag 328.068†	-118.9	0.0000120	mg/L	0.00010792	0.0000120	mg/L	0.00010792	898.76%
Al 308.215†	440.7	0.0192894	mg/L	0.00055002	0.0192894	mg/L	0.00055002	2.85%
As 188.979†	-1.4	0.0020806	mg/L	0.00093824	0.0020806	mg/L	0.00093824	45.09%
Ba 233.527†	780.1	0.0081278	mg/L	0.00014339	0.0081278	mg/L	0.00014339	1.76%
Be 313.107†	350.4	0.0012603	mg/L	0.00000395	0.0012603	mg/L	0.00000395	0.31%
Ca 315.887†	656762.0	6.20256	mg/L	0.013077	6.20256	mg/L	0.013077	0.21%
Cd 228.802†	-1.5	0.0017912	mg/L	0.00012144	0.0017912	mg/L	0.00012144	6.78%
Co 228.616†	-8.5	0.0016344	mg/L	0.00018490	0.0016344	mg/L	0.00018490	11.31%
Cr 267.716†	937.0	0.0142348	mg/L	0.00045998	0.0142348	mg/L	0.00045998	3.23%
Cu 327.393†	571.5	0.0046447	mg/L	0.00013414	0.0046447	mg/L	0.00013414	2.89%
Fe 273.955†	303.3	0.0270767	mg/L	0.00117845	0.0270767	mg/L	0.00117845	4.35%
K 404.721†	187.8	0.743484	mg/L	0.2944632	0.743484	mg/L	0.2944632	39.61%
Mg 279.077†	15871.3	0.987323	mg/L	0.0015229	0.987323	mg/L	0.0015229	0.15%
Mn 257.610†	698.7	0.0025730	mg/L	0.00003473	0.0025730	mg/L	0.00003473	1.35%
Mo 202.031†	43.5	0.0029874	mg/L	0.00025162	0.0029874	mg/L	0.00025162	8.42%
Na 330.237†	3015.6	3.34086	mg/L	0.014908	3.34086	mg/L	0.014908	0.45%
Ni 231.604†	3.1	0.0012257	mg/L	0.00002789	0.0012257	mg/L	0.00002789	2.28%
Pb 220.353†	-3.4	0.0002656	mg/L	0.00024321	0.0002656	mg/L	0.00024321	91.57%
Sb 206.836†	-0.4	0.0001559	mg/L	0.00089006	0.0001559	mg/L	0.00089006	570.85%
Se 196.026†	8.1	0.0071546	mg/L	0.00386565	0.0071546	mg/L	0.00386565	54.03%
Sn 189.927†	6.5	0.0019519	mg/L	0.00086453	0.0019519	mg/L	0.00086453	44.29%
Ti 334.940†	308.6	0.0023491	mg/L	0.00019084	0.0023491	mg/L	0.00019084	8.12%
Tl 190.801†	5.2	0.0029351	mg/L	0.00130364	0.0029351	mg/L	0.00130364	44.42%
V 290.880†	-39.7	0.0019808	mg/L	0.00005542	0.0019808	mg/L	0.00005542	2.80%
Zn 206.200†	175.7	0.0010740	mg/L	0.00021970	0.0010740	mg/L	0.00021970	20.46%

Sequence No.: 24
 Sample ID: 75676-001
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 47
 Date Collected: 11/15/2013 4:31:17 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75676-001

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1053066.1	100.0 %		0.39			0.39%
Y 371.029	368399.4	98.9 %		0.41			0.42%
Ag 328.068†	-87.7	0.0001907 mg/L		0.00045862	0.0001907 mg/L	0.00045862	240.44%
Al 308.215†	5016.9	0.194089 mg/L		0.0043383	0.194089 mg/L	0.0043383	2.24%
As 188.979†	1.6	0.0041676 mg/L		0.00099113	0.0041676 mg/L	0.00099113	23.78%
Ba 233.527†	2495.8	0.0226349 mg/L		0.00007784	0.0226349 mg/L	0.00007784	0.34%
Be 313.107†	39.8	0.0011470 mg/L		0.00008215	0.0011470 mg/L	0.00008215	7.16%
Ca 315.887†	2296939.3	21.5336 mg/L		0.07981	21.5336 mg/L	0.07981	0.37%
Cd 228.802†	-4.6	0.0016734 mg/L		0.00018198	0.0016734 mg/L	0.00018198	10.87%
Co 228.616†	-6.7	0.0016779 mg/L		0.00007522	0.0016779 mg/L	0.00007522	4.48%
Cr 267.716†	8.5	0.0020666 mg/L		0.00018202	0.0020666 mg/L	0.00018202	8.81%
Cu 327.393†	754.1	0.0059034 mg/L		0.00039457	0.0059034 mg/L	0.00039457	6.68%
Fe 273.955†	2756.2	0.143028 mg/L		0.0001567	0.143028 mg/L	0.0001567	0.11%
K 404.721†	-63.0	-2.04697 mg/L		0.397703	-2.04697 mg/L	0.397703	19.43%
Mg 279.077†	82423.1	4.44184 mg/L		0.039953	4.44184 mg/L	0.039953	0.90%
Mn 257.610†	3018.1	0.0055180 mg/L		0.00001647	0.0055180 mg/L	0.00001647	0.30%
Mo 202.031†	86.1	0.0045343 mg/L		0.00012472	0.0045343 mg/L	0.00012472	2.75%
Na 330.237†	31223.7	27.2226 mg/L		0.14581	27.2226 mg/L	0.14581	0.54%
Ni 231.604†	41.5	0.0018970 mg/L		0.00003417	0.0018970 mg/L	0.00003417	1.80%
Pb 220.353†	1.5	0.0006232 mg/L		0.00023978	0.0006232 mg/L	0.00023978	38.47%
Sb 206.836†	-2.1	-0.0006063 mg/L		0.00342253	-0.0006063 mg/L	0.00342253	564.54%
Se 196.026†	5.3	0.0045837 mg/L		0.00267692	0.0045837 mg/L	0.00267692	58.40%
Sn 189.927†	7.7	0.0017249 mg/L		0.00044020	0.0017249 mg/L	0.00044020	25.52%
Ti 334.940†	1836.0	0.0047548 mg/L		0.00025078	0.0047548 mg/L	0.00025078	5.27%
Tl 190.801†	1.6	0.0008335 mg/L		0.00166387	0.0008335 mg/L	0.00166387	199.63%
V 290.880†	426.5	0.0050987 mg/L		0.00058473	0.0050987 mg/L	0.00058473	11.47%
Zn 206.200†	186.4	0.0012481 mg/L		0.00008574	0.0012481 mg/L	0.00008574	6.87%

Sequence No.: 25
 Sample ID: 75677-004
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 48
 Date Collected: 11/15/2013 4:35:03 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75677-004

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1003122.2	95.2	%	1.13			1.18%
Y 371.029	345165.2	92.7	%	0.81			0.87%
Ag 328.068†	2620.6	0.0149343	mg/L	0.00023072	0.0149343 mg/L	0.00023072	1.54%
Al 308.215†	35534.8	0.792947	mg/L	0.0021355	0.792947 mg/L	0.0021355	0.27%
As 188.979†	-25.5	-0.0242345	mg/L	0.00230669	-0.0242345 mg/L	0.00230669	9.52%
Ba 233.527†	4002.3	0.0353398	mg/L	0.00039022	0.0353398 mg/L	0.00039022	1.10%
Be 313.107†	-3094.3	0.0000119	mg/L	0.00008546	0.0000119 mg/L	0.00008546	717.48%
Ca 315.887†	199161.8	1.68874	mg/L	0.003970	1.68874 mg/L	0.003970	0.24%
Cd 228.802†	637.4	0.0085364	mg/L	0.00046233	0.0085364 mg/L	0.00046233	5.42%
Co 228.616†	-6066.9	-0.0044355	mg/L	0.00202552	-0.0044355 mg/L	0.00202552	45.67%
Cr 267.716†	-14115.4	-0.0058581	mg/L	0.00353370	-0.0058581 mg/L	0.00353370	60.32%
Cu 327.393†	31170.2	0.268407	mg/L	0.0021843	0.268407 mg/L	0.0021843	0.81%
Fe 273.955†	23482.6	1.12281	mg/L	0.016702	1.12281 mg/L	0.016702	1.49%
K 404.721†	55774.3	619.151	mg/L	8.8168	619.151 mg/L	8.8168	1.42%
Mg 279.077†	-17304.8	-0.342547	mg/L	0.0373742	-0.342547 mg/L	0.0373742	10.91%
Mn 257.610†	27608.5	0.0487675	mg/L	0.00026126	0.0487675 mg/L	0.00026126	0.54%
Mo 202.031†	702227.5	34.3695	mg/L	0.09629	34.3695 mg/L	0.09629	0.28%
Na 330.237†	685396.8	581.064	mg/L	1.0733	581.064 mg/L	1.0733	0.18%
Ni 231.604†	-1552.6	0.0139737	mg/L	0.00101055	0.0139737 mg/L	0.00101055	7.23%
Pb 220.353†	3888.8	0.300863	mg/L	0.0039375	0.300863 mg/L	0.0039375	1.31%
Sb 206.836†	51.6	0.0466409	mg/L	0.00266802	0.0466409 mg/L	0.00266802	5.72%
Se 196.026†	413.0	0.337736	mg/L	0.0045067	0.337736 mg/L	0.0045067	1.33%
Sn 189.927†	206.7	0.0522844	mg/L	0.00014365	0.0522844 mg/L	0.00014365	0.27%
Ti 334.940†	3024.0	0.0066258	mg/L	0.00012384	0.0066258 mg/L	0.00012384	1.87%
Tl 190.801†	-519.4	-0.149400	mg/L	0.0007624	-0.149400 mg/L	0.0007624	0.51%
V 290.880†	1069.5	0.0139684	mg/L	0.00273652	0.0139684 mg/L	0.00273652	19.59%
Zn 206.200†	25330.5	0.418060	mg/L	0.0066181	0.418060 mg/L	0.0066181	1.58%

Sequence No.: 26
 Sample ID: 75677-004 2D
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 37
 Date Collected: 11/15/2013 4:39:42 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75677-004 2D

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1041042.2	98.8	%	0.18			0.19%
Y 371.029	359108.3	96.5	%	0.46			0.48%
Ag 328.068†	1204.2	0.0072170	mg/L	0.00015465	0.0072170 mg/L	0.00015465	2.14%
Al 308.215†	17262.5	0.386231	mg/L	0.0039120	0.386231 mg/L	0.0039120	1.01%
As 188.979†	-9.2	-0.0077156	mg/L	0.00279321	-0.0077156 mg/L	0.00279321	36.20%
Ba 233.527†	1847.9	0.0171399	mg/L	0.00010064	0.0171399 mg/L	0.00010064	0.59%
Be 313.107†	-1419.0	0.0006192	mg/L	0.00002747	0.0006192 mg/L	0.00002747	4.44%
Ca 315.887†	95015.9	0.836796	mg/L	0.0062218	0.836796 mg/L	0.0062218	0.74%
Cd 228.802†	305.0	0.0050149	mg/L	0.00001731	0.0050149 mg/L	0.00001731	0.35%
Co 228.616†	-2879.2	0.0003571	mg/L	0.00072822	0.0003571 mg/L	0.00072822	203.90%
Cr 267.716†	-6671.1	0.0006685	mg/L	0.00083647	0.0006685 mg/L	0.00083647	125.13%
Cu 327.393†	16468.7	0.141147	mg/L	0.0017026	0.141147 mg/L	0.0017026	1.21%
Fe 273.955†	11033.4	0.534310	mg/L	0.0024739	0.534310 mg/L	0.0024739	0.46%
K 404.721†	24827.6	274.864	mg/L	0.7507	274.864 mg/L	0.7507	0.27%
Mg 279.077†	-7869.0	-0.0542628	mg/L	0.01668354	-0.0542628 mg/L	0.01668354	30.75%
Mn 257.610†	13559.7	0.0247527	mg/L	0.00004479	0.0247527 mg/L	0.00004479	0.18%
Mo 202.031†	341451.9	16.7124	mg/L	0.13476	16.7124 mg/L	0.13476	0.81%
Na 330.237†	338965.6	287.765	mg/L	0.8744	287.765 mg/L	0.8744	0.30%
Ni 231.604†	-679.2	0.0087167	mg/L	0.00074443	0.0087167 mg/L	0.00074443	8.54%
Pb 220.353†	1826.8	0.142138	mg/L	0.0019189	0.142138 mg/L	0.0019189	1.35%
Sb 206.836†	19.9	0.0205085	mg/L	0.00165118	0.0205085 mg/L	0.00165118	8.05%
Se 196.026†	200.0	0.164009	mg/L	0.0077164	0.164009 mg/L	0.0077164	4.70%
Sn 189.927†	85.3	0.0219087	mg/L	0.00043951	0.0219087 mg/L	0.00043951	2.01%
Ti 334.940†	1474.3	0.0041851	mg/L	0.00027368	0.0041851 mg/L	0.00027368	6.54%
Tl 190.801†	-233.4	-0.0613109	mg/L	0.00010749	-0.0613109 mg/L	0.00010749	0.18%
V 290.880†	345.6	0.0067482	mg/L	0.00177543	0.0067482 mg/L	0.00177543	26.31%
Zn 206.200†	11170.2	0.182874	mg/L	0.0000765	0.182874 mg/L	0.0000765	0.04%

Sequence No.: 27
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/15/2013 4:43:20 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	950523.5	90.2 %		0.86			0.95%
Y 371.029	329824.9	88.6 %		1.44			1.63%
Ag 238.068†	-2354.1	0.0037297 mg/L		0.00027997	0.0037297 mg/L	0.00027997	7.51%
Al 308.215†	12199363.4	466.079 mg/L		3.4757	466.079 mg/L	3.4757	0.75%
QC value within limits for Al 308.215 Recovery = 93.22%							
As 188.979†	-6.8	0.0072410 mg/L		0.00205001	0.0072410 mg/L	0.00205001	28.31%
Ba 233.527†	729.2	0.0007936 mg/L		0.00009267	0.0007936 mg/L	0.00009267	11.68%
Be 313.107†	-1638.7	0.0005401 mg/L		0.00000055	0.0005401 mg/L	0.00000055	0.10%
Ca 315.887†	49229391.0	459.897 mg/L		3.4661	459.897 mg/L	3.4661	0.75%
QC value within limits for Ca 315.887 Recovery = 91.98%							
Cd 228.802†	230.4	0.0001086 mg/L		0.00041049	0.0001086 mg/L	0.00041049	377.98%
Co 228.616†	-76.4	0.0002072 mg/L		0.00042452	0.0002072 mg/L	0.00042452	204.90%
Cr 267.716†	-226.0	-0.0008973 mg/L		0.00018136	-0.0008973 mg/L	0.00018136	20.21%
Cu 327.393†	1948.8	0.0038952 mg/L		0.00124602	0.0038952 mg/L	0.00124602	31.99%
Fe 273.955†	3851761.5	182.094 mg/L		0.0454	182.094 mg/L	0.0454	0.02%
QC value within limits for Fe 273.955 Recovery = 91.05%							
K 404.721†	-2489.8	-29.0454 mg/L		0.64800	-29.0454 mg/L	0.64800	2.23%
Mg 279.077†	9294227.1	482.480 mg/L		3.5808	482.480 mg/L	3.5808	0.74%
QC value within limits for Mg 279.077 Recovery = 96.50%							
Mn 257.610†	1253.2	-0.0145503 mg/L		0.00006936	-0.0145503 mg/L	0.00006936	0.48%
Mo 202.031†	532.7	0.0026764 mg/L		0.00125118	0.0026764 mg/L	0.00125118	46.75%
Na 330.237†	30.1	0.813313 mg/L		0.0744456	0.813313 mg/L	0.0744456	9.15%
Ni 231.604†	70.4	0.0024265 mg/L		0.00009467	0.0024265 mg/L	0.00009467	3.90%
Pb 220.353†	-1223.6	-0.0020542 mg/L		0.00067132	-0.0020542 mg/L	0.00067132	32.68%
Sb 206.836†	-84.0	-0.0042130 mg/L		0.00007585	-0.0042130 mg/L	0.00007585	1.80%
Se 196.026†	-93.0	0.0087516 mg/L		0.00273598	0.0087516 mg/L	0.00273598	31.26%
Sn 189.927†	3.1	-0.0108470 mg/L		0.00064039	-0.0108470 mg/L	0.00064039	5.90%
Ti 334.940†	613.5	0.0028293 mg/L		0.00014765	0.0028293 mg/L	0.00014765	5.22%
Tl 190.801†	-0.5	-0.0074702 mg/L		0.00205885	-0.0074702 mg/L	0.00205885	27.56%
V 290.880†	3684.6	0.0012288 mg/L		0.00062966	0.0012288 mg/L	0.00062966	51.24%
Zn 206.200†	637.8	-0.0061709 mg/L		0.00023429	-0.0061709 mg/L	0.00023429	3.80%

All analyte(s) passed QC.

Sequence No.: 28
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/15/2013 4:48:42 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	947391.4	89.9 %		0.88			0.97%
Y 371.029	327739.3	88.0 %		0.80			0.91%
Ag 328.068†	187421.7	1.03097 mg/L		0.000875	1.03097 mg/L	0.000875	0.08%
QC value within limits for Ag		328.068 Recovery =	103.10%				
Al 308.215†	12196594.4	465.974 mg/L		6.9981	465.974 mg/L	6.9981	1.50%
QC value within limits for Al		308.215 Recovery =	93.19%				
As 188.979†	1300.6	1.00032 mg/L		0.008643	1.00032 mg/L	0.008643	0.86%
QC value within limits for As		188.979 Recovery =	100.03%				
Ba 233.527†	59021.1	0.493796 mg/L		0.0003096	0.493796 mg/L	0.0003096	0.06%
QC value within limits for Ba		233.527 Recovery =	98.76%				
Be 313.107†	1385721.1	0.502704 mg/L		0.0007044	0.502704 mg/L	0.0007044	0.14%
QC value within limits for Be		313.107 Recovery =	100.54%				
Ca 315.887†	49169362.2	459.332 mg/L		6.7000	459.332 mg/L	6.7000	1.46%
QC value within limits for Ca		315.887 Recovery =	91.87%				
Cd 228.802†	60621.1	1.00733 mg/L		0.000342	1.00733 mg/L	0.000342	0.03%
QC value within limits for Cd		228.802 Recovery =	100.73%				
Co 228.616†	21392.5	0.479546 mg/L		0.0049497	0.479546 mg/L	0.0049497	1.03%
QC value within limits for Co		228.616 Recovery =	95.91%				
Cr 267.716†	36571.6	0.481985 mg/L		0.0004883	0.481985 mg/L	0.0004883	0.10%
QC value within limits for Cr		267.716 Recovery =	96.40%				
Cu 327.393†	65074.3	0.512417 mg/L		0.0001659	0.512417 mg/L	0.0001659	0.03%
QC value within limits for Cu		327.393 Recovery =	102.48%				
Fe 273.955†	3871082.6	183.008 mg/L		0.0010	183.008 mg/L	0.0010	0.00%
QC value within limits for Fe		273.955 Recovery =	91.50%				
K 404.721†	-2061.3	-24.2784 mg/L		0.59631	-24.2784 mg/L	0.59631	2.46%
Mg 279.077†	9271373.3	481.296 mg/L		7.0894	481.296 mg/L	7.0894	1.47%
QC value within limits for Mg		279.077 Recovery =	96.26%				
Mn 257.610†	366325.2	0.469106 mg/L		0.0003338	0.469106 mg/L	0.0003338	0.07%
QC value within limits for Mn		257.610 Recovery =	93.82%				
Mo 202.031†	461.8	-0.0007709 mg/L		0.00057541	-0.0007709 mg/L	0.00057541	74.64%
Na 330.237†	1357.8	1.93737 mg/L		0.003757	1.93737 mg/L	0.003757	0.19%
Ni 231.604†	53949.4	0.942115 mg/L		0.0028589	0.942115 mg/L	0.0028589	0.30%
QC value within limits for Ni		231.604 Recovery =	94.21%				
Pb 220.353†	12674.0	0.953619 mg/L		0.0137879	0.953619 mg/L	0.0137879	1.45%
QC value within limits for Pb		220.353 Recovery =	95.36%				
Sb 206.836†	2132.7	1.01136 mg/L		0.005039	1.01136 mg/L	0.005039	0.50%
QC value within limits for Sb		206.836 Recovery =	101.14%				
Se 196.026†	1190.0	1.02574 mg/L		0.002468	1.02574 mg/L	0.002468	0.24%
QC value within limits for Se		196.026 Recovery =	102.57%				
Sn 189.927†	2.4	-0.0110129 mg/L		0.00033228	-0.0110129 mg/L	0.00033228	3.02%
Ti 334.940†	657.1	0.0028981 mg/L		0.00010290	0.0028981 mg/L	0.00010290	3.55%
Tl 190.801†	1608.3	0.954927 mg/L		0.0007157	0.954927 mg/L	0.0007157	0.07%
QC value within limits for Tl		190.801 Recovery =	95.49%				
V 290.880†	73016.9	0.486927 mg/L		0.0012591	0.486927 mg/L	0.0012591	0.26%
QC value within limits for V		290.880 Recovery =	97.39%				
Zn 206.200†	56173.4	0.934820 mg/L		0.0015088	0.934820 mg/L	0.0015088	0.16%
QC value within limits for Zn		206.200 Recovery =	93.48%				

All analyte(s) passed QC.

Sequence No.: 29
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/15/2013 4:54:08 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1031338.6	97.9 %		0.01			0.01%
Y 371.029	357447.3	96.0 %		1.25			1.30%
Ag 328.068†	17761.9	0.0972160 mg/L		0.00136166	0.0972160 mg/L	0.00136166	1.40%
QC value within limits for Ag	328.068	Recovery = 97.22%					
Al 308.215†	129429.3	4.93919 mg/L		0.050278	4.93919 mg/L	0.050278	1.02%
QC value within limits for Al	308.215	Recovery = 98.78%					
As 188.979†	625.7	0.478981 mg/L		0.0049134	0.478981 mg/L	0.0049134	1.03%
QC value within limits for As	188.979	Recovery = 95.80%					
Ba 233.527†	58469.1	0.495880 mg/L		0.0069019	0.495880 mg/L	0.0069019	1.39%
QC value within limits for Ba	233.527	Recovery = 99.18%					
Be 313.107†	1343832.5	0.487367 mg/L		0.0009936	0.487367 mg/L	0.0009936	0.20%
QC value within limits for Be	313.107	Recovery = 97.47%					
Ca 315.887†	5324330.2	49.8186 mg/L		0.01605	49.8186 mg/L	0.01605	0.03%
QC value within limits for Ca	315.887	Recovery = 99.64%					
Cd 228.802†	29475.9	0.493124 mg/L		0.0006600	0.493124 mg/L	0.0006600	0.13%
QC value within limits for Cd	228.802	Recovery = 98.62%					
Co 228.616†	21797.6	0.489371 mg/L		0.0010979	0.489371 mg/L	0.0010979	0.22%
QC value within limits for Co	228.616	Recovery = 97.87%					
Cr 267.716†	37271.7	0.493604 mg/L		0.0046485	0.493604 mg/L	0.0046485	0.94%
QC value within limits for Cr	267.716	Recovery = 98.72%					
Cu 327.393†	61293.2	0.493178 mg/L		0.0054099	0.493178 mg/L	0.0054099	1.10%
QC value within limits for Cu	327.393	Recovery = 98.64%					
Fe 273.955†	103671.9	4.91355 mg/L		0.034353	4.91355 mg/L	0.034353	0.70%
QC value within limits for Fe	273.955	Recovery = 98.27%					
K 404.721†	3910.8	42.1620 mg/L		2.30883	42.1620 mg/L	2.30883	5.48%
QC value less than the lower limit for K 404.721		Recovery = 84.32%					
Mg 279.077†	956224.7	49.8040 mg/L		0.01522	49.8040 mg/L	0.01522	0.03%
QC value within limits for Mg	279.077	Recovery = 99.61%					
Mn 257.610†	367186.5	0.486401 mg/L		0.0049410	0.486401 mg/L	0.0049410	1.02%
QC value within limits for Mn	257.610	Recovery = 97.28%					
Mo 202.031†	10099.4	0.493386 mg/L		0.0021146	0.493386 mg/L	0.0021146	0.43%
QC value within limits for Mo	202.031	Recovery = 98.68%					
Na 330.237†	54943.1	47.3041 mg/L		0.32526	47.3041 mg/L	0.32526	0.69%
QC value within limits for Na	330.237	Recovery = 94.61%					
Ni 231.604†	28154.5	0.492779 mg/L		0.0058625	0.492779 mg/L	0.0058625	1.19%
QC value within limits for Ni	231.604	Recovery = 98.56%					
Pb 220.353†	7172.5	0.494543 mg/L		0.0005398	0.494543 mg/L	0.0005398	0.11%
QC value within limits for Pb	220.353	Recovery = 98.91%					
Sb 206.836†	1085.8	0.494513 mg/L		0.0025508	0.494513 mg/L	0.0025508	0.52%
QC value within limits for Sb	206.836	Recovery = 98.90%					
Se 196.026†	642.5	0.511546 mg/L		0.0048280	0.511546 mg/L	0.0048280	0.94%
QC value within limits for Se	196.026	Recovery = 102.31%					
Sn 189.927†	1945.1	0.487176 mg/L		0.0052280	0.487176 mg/L	0.0052280	1.07%
QC value within limits for Sn	189.927	Recovery = 97.44%					
Ti 334.940†	309557.5	0.489402 mg/L		0.0051064	0.489402 mg/L	0.0051064	1.04%
QC value within limits for Ti	334.940	Recovery = 97.88%					
Tl 190.801†	845.0	0.510580 mg/L		0.0092316	0.510580 mg/L	0.0092316	1.81%
QC value within limits for Tl	190.801	Recovery = 102.12%					
V 290.880†	69455.2	0.486649 mg/L		0.0045374	0.486649 mg/L	0.0045374	0.93%
QC value within limits for V 290.880		Recovery = 97.33%					
Zn 206.200†	28927.7	0.487856 mg/L		0.0007200	0.487856 mg/L	0.0007200	0.15%
QC value within limits for Zn 206.200		Recovery = 97.57%					

QC Failed. Continue with analysis.

Sequence No.: 30

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/15/2013 4:57:56 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte		Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc	361.383	1049767.0	99.6 %		0.37			0.37%
Y	371.029	368128.9	98.9 %		0.26			0.26%
Ag	328.068†	3478.0	0.0195041 mg/L	0.00006004		0.0195041 mg/L	0.00006004	0.31%
	QC value	within limits for Ag	328.068	Recovery = 97.52%				
Al	308.215†	5079.1	0.196180 mg/L	0.0035988		0.196180 mg/L	0.0035988	1.83%
	QC value	within limits for Al	308.215	Recovery = 98.09%				
As	188.979†	24.9	0.0221319 mg/L	0.00236824		0.0221319 mg/L	0.00236824	10.70%
	QC value	within limits for As	188.979	Recovery = 110.66%				
Ba	233.527†	5839.9	0.0509133 mg/L	0.00031065		0.0509133 mg/L	0.00031065	0.61%
	QC value	within limits for Ba	233.527	Recovery = 101.83%				
Be	313.107†	32041.7	0.0127146 mg/L	0.00001299		0.0127146 mg/L	0.00001299	0.10%
	QC value	within limits for Be	313.107	Recovery = 105.95%				
Ca	315.887†	536379.5	5.07659 mg/L	0.004713		5.07659 mg/L	0.004713	0.09%
	QC value	within limits for Ca	315.887	Recovery = 101.53%				
Cd	228.802†	656.1	0.0127588 mg/L	0.00024789		0.0127588 mg/L	0.00024789	1.94%
	QC value	within limits for Cd	228.802	Recovery = 106.32%				
Co	228.616†	870.1	0.0212300 mg/L	0.00012828		0.0212300 mg/L	0.00012828	0.60%
	QC value	within limits for Co	228.616	Recovery = 106.15%				
Cr	267.716†	3710.8	0.0507369 mg/L	0.00016098		0.0507369 mg/L	0.00016098	0.32%
	QC value	within limits for Cr	267.716	Recovery = 101.47%				
Cu	327.393†	6530.9	0.0526545 mg/L	0.00133945		0.0526545 mg/L	0.00133945	2.54%
	QC value	within limits for Cu	327.393	Recovery = 105.31%				
Fe	273.955†	6198.8	0.305769 mg/L	0.0021552		0.305769 mg/L	0.0021552	0.70%
	QC value	within limits for Fe	273.955	Recovery = 101.92%				
K	404.721†	451.3	3.67456 mg/L	1.376264		3.67456 mg/L	1.376264	37.45%
	QC value	within limits for K	404.721	Recovery = 73.49%				
Mg	279.077†	96312.0	5.16307 mg/L	0.000482		5.16307 mg/L	0.000482	0.01%
	QC value	within limits for Mg	279.077	Recovery = 103.26%				
Mn	257.610†	29042.1	0.0399707 mg/L	0.00003453		0.0399707 mg/L	0.00003453	0.09%
	QC value	within limits for Mn	257.610	Recovery = 99.93%				
Mo	202.031†	439.0	0.0223664 mg/L	0.00024724		0.0223664 mg/L	0.00024724	1.11%
	QC value	within limits for Mo	202.031	Recovery = 111.83%				
Na	330.237†	4878.7	4.91823 mg/L	0.024403		4.91823 mg/L	0.024403	0.50%
	QC value	within limits for Na	330.237	Recovery = 98.36%				
Ni	231.604†	2814.5	0.0502803 mg/L	0.00024954		0.0502803 mg/L	0.00024954	0.50%
	QC value	within limits for Ni	231.604	Recovery = 100.56%				
Pb	220.353†	164.4	0.0118051 mg/L	0.00099236		0.0118051 mg/L	0.00099236	8.41%
	QC value	within limits for Pb	220.353	Recovery = 98.38%				
Sb	206.836†	48.6	0.0224811 mg/L	0.00038961		0.0224811 mg/L	0.00038961	1.73%
	QC value	within limits for Sb	206.836	Recovery = 112.41%				
Se	196.026†	71.7	0.0577636 mg/L	0.00018289		0.0577636 mg/L	0.00018289	0.32%
	QC value	greater than the upper limit for Se	196.026	Recovery = 144.41%				
Sn	189.927†	174.4	0.0441539 mg/L	0.00059549		0.0441539 mg/L	0.00059549	1.35%
	QC value	within limits for Sn	189.927	Recovery = 88.31%				
Ti	334.940†	29423.4	0.0482036 mg/L	0.00006938		0.0482036 mg/L	0.00006938	0.14%
	QC value	within limits for Ti	334.940	Recovery = 96.41%				
Tl	190.801†	28.6	0.0172252 mg/L	0.00170779		0.0172252 mg/L	0.00170779	9.91%
	QC value	within limits for Tl	190.801	Recovery = 86.13%				
V	290.880†	6892.5	0.0503573 mg/L	0.00045977		0.0503573 mg/L	0.00045977	0.91%
	QC value	within limits for V	290.880	Recovery = 100.71%				
Zn	206.200†	2856.7	0.0464839 mg/L	0.00022467		0.0464839 mg/L	0.00022467	0.48%
	QC value	within limits for Zn	206.200	Recovery = 92.97%				
QC Failed. Continue with analysis.								

QC Failed. Continue with analysis.

Sequence No.: 31
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/15/2013 5:01:34 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	1060051.6	101 %		0.4			0.44%
Y 371.029	375081.5	101 %		0.2			0.18%
Ag 328.068†	-104.7	0.0000874 mg/L	0.00018372	0.0000874 mg/L	0.00018372	210.11%	
QC value within limits for Ag	328.068	Recovery = Not calculated					
Al 308.215†	-91.3	-0.0010015 mg/L	0.00087815	-0.0010015 mg/L	0.00087815	87.68%	
QC value within limits for Al	308.215	Recovery = Not calculated					
As 188.979†	-1.9	0.0017464 mg/L	0.00170926	0.0017464 mg/L	0.00170926	97.87%	
QC value within limits for As	188.979	Recovery = Not calculated					
Ba 233.527†	13.3	0.0016428 mg/L	0.00003859	0.0016428 mg/L	0.00003859	2.35%	
QC value within limits for Ba	233.527	Recovery = Not calculated					
Be 313.107†	229.3	0.0012166 mg/L	0.00003530	0.0012166 mg/L	0.00003530	2.90%	
QC value within limits for Be	313.107	Recovery = Not calculated					
Ca 315.887†	1196.4	0.0748300 mg/L	0.00081548	0.0748300 mg/L	0.00081548	1.09%	
QC value within limits for Ca	315.887	Recovery = Not calculated					
Cd 228.802†	-17.2	0.0015564 mg/L	0.00003494	0.0015564 mg/L	0.00003494	2.24%	
QC value within limits for Cd	228.802	Recovery = Not calculated					
Co 228.616†	-7.2	0.0016573 mg/L	0.00002583	0.0016573 mg/L	0.00002583	1.56%	
QC value within limits for Co	228.616	Recovery = Not calculated					
Cr 267.716†	-3.0	0.0018940 mg/L	0.00009474	0.0018940 mg/L	0.00009474	5.00%	
QC value within limits for Cr	267.716	Recovery = Not calculated					
Cu 327.393†	47.9	0.0005104 mg/L	0.00159825	0.0005104 mg/L	0.00159825	313.12%	
QC value within limits for Cu	327.393	Recovery = Not calculated					
Fe 273.955†	-44.3	0.0106451 mg/L	0.00033247	0.0106451 mg/L	0.00033247	3.12%	
QC value within limits for Fe	273.955	Recovery = Not calculated					
K 404.721†	119.8	-0.0133878 mg/L	3.57762792	-0.0133878 mg/L	3.57762792	>999.9%	
QC value within limits for K	404.721	Recovery = Not calculated					
Mg 279.077†	92.2	0.168248 mg/L	0.0013744	0.168248 mg/L	0.0013744	0.82%	
QC value within limits for Mg	279.077	Recovery = Not calculated					
Mn 257.610†	-86.0	0.0015633 mg/L	0.00002015	0.0015633 mg/L	0.00002015	1.29%	
QC value within limits for Mn	257.610	Recovery = Not calculated					
Mo 202.031†	3.3	0.0012365 mg/L	0.00005007	0.0012365 mg/L	0.00005007	4.05%	
QC value within limits for Mo	202.031	Recovery = Not calculated					
Na 330.237†	-59.3	0.737551 mg/L	0.0110787	0.737551 mg/L	0.0110787	1.50%	
QC value within limits for Na	330.237	Recovery = Not calculated					
Ni 231.604†	-5.9	0.0010667 mg/L	0.00021539	0.0010667 mg/L	0.00021539	20.19%	
QC value within limits for Ni	231.604	Recovery = Not calculated					
Pb 220.353†	-21.2	-0.0009667 mg/L	0.00197326	-0.0009667 mg/L	0.00197326	204.13%	
QC value within limits for Pb	220.353	Recovery = Not calculated					
Sb 206.836†	1.5	0.0010490 mg/L	0.00129975	0.0010490 mg/L	0.00129975	123.90%	
QC value within limits for Sb	206.836	Recovery = Not calculated					
Se 196.026†	15.4	0.0130760 mg/L	0.00855217	0.0130760 mg/L	0.00855217	65.40%	
QC value within limits for Se	196.026	Recovery = Not calculated					
Sn 189.927†	-0.4	0.0004351 mg/L	0.00057432	0.0004351 mg/L	0.00057432	131.99%	
QC value within limits for Sn	189.927	Recovery = Not calculated					
Ti 334.940†	7.3	0.0018747 mg/L	0.00012570	0.0018747 mg/L	0.00012570	6.71%	
QC value within limits for Ti	334.940	Recovery = Not calculated					
Tl 190.801†	-0.1	-0.0002902 mg/L	0.00172896	-0.0002902 mg/L	0.00172896	595.79%	
QC value within limits for Tl	190.801	Recovery = Not calculated					
V 290.880†	-26.4	0.0021082 mg/L	0.00059530	0.0021082 mg/L	0.00059530	28.24%	
QC value within limits for V	290.880	Recovery = Not calculated					
Zn 206.200†	-27.2	-0.0023618 mg/L	0.00004059	-0.0023618 mg/L	0.00004059	1.72%	
QC value within limits for Zn	206.200	Recovery = Not calculated					

All analyte(s) passed QC.

File SW15686C2

Batch 15686 SW15686

Method: PE2 4300DV AXIAL

Page 1

Date: 11/16/2013 11:52:44 AM

Analyst SBE 11/18/13

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Analysis Begun

Start Time: 11/16/2013 11:50:23 AM

Plasma On Time: 11/16/2013 11:12:20 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\11.14.13.sif

Batch ID: PEICP 2

Results Data Set: SW15686C2

Results Library: C:\pe\administrator\Results\Results.mdb

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Method Loaded

Method Name: PE2 4300DV AXIAL

Method Last Saved: 11/15/2013 11:35:27 AM

IEC File: IECax092613.iec

MSF File:

Method Description: 200.7/6010B/6010C

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Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blk 1 V-174666

Date Collected: 11/16/2013 11:50:23 AM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: Calib Blk 1 V-174666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Sc 361.383	1077388.9	3761.23	0.35%	100 %
Y 371.029	373869.6	1168.88	0.31%	100 %
Ag 328.068†	3338.2	38.83	1.16%	[0.00] mg/L
Al 308.215†	10133.0	129.22	1.28%	[0.00] mg/L
As 188.979†	-2.9	1.37	47.89%	[0.00] mg/L
Ba 233.527†	-2515.6	9.55	0.38%	[0.00] mg/L
Be 313.107†	-6262.9	43.57	0.70%	[0.00] mg/L
Ca 315.887†	-7791.2	1030.97	13.23%	[0.00] mg/L
Cd 228.802†	1029.8	8.78	0.85%	[0.00] mg/L
Co 228.616†	106.9	2.06	1.92%	[0.00] mg/L
Cr 267.716†	165.1	3.51	2.13%	[0.00] mg/L
Cu 327.393†	-7359.1	175.71	2.39%	[0.00] mg/L
Fe 273.955†	136.8	8.03	5.87%	[0.00] mg/L
K 404.721†	-15512.9	408.06	2.63%	[0.00] mg/L
Mg 279.077†	-5056.8	17.13	0.34%	[0.00] mg/L
Mn 257.610†	685.7	9.10	1.33%	[0.00] mg/L
Mo 202.031†	65.3	2.64	4.04%	[0.00] mg/L
Na 330.237†	158.2	13.69	8.65%	[0.00] mg/L
Ni 231.604†	830.7	12.31	1.48%	[0.00] mg/L
Pb 220.353†	-290.1	1.11	0.38%	[0.00] mg/L
Sb 206.836†	-38.2	0.49	1.29%	[0.00] mg/L
Se 196.026†	-62.8	3.55	5.66%	[0.00] mg/L
Sn 189.927†	-21.0	9.68	46.07%	[0.00] mg/L
Ti 334.940†	-5380.4	24.90	0.46%	[0.00] mg/L
Tl 190.801†	-25.4	0.20	0.79%	[0.00] mg/L
V 290.880†	4948.1	13.27	0.27%	[0.00] mg/L
Zn 206.200†	78.2	4.49	5.75%	[0.00] mg/L

15686
27401

Se reported

75677.004 not reported

75576.001-027 all elements
reported
except Na, K

Sequence No.: 2
Sample ID: Calib 1 V-173067
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 11/16/2013 11:54:00 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib 1 V-173067

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1084728.2	9692.61	0.89%	101 %
Y 371.029	376053.8	2332.03	0.62%	101 %
As 188.979†	7.7	2.55	33.27%	[0.005] mg/L
Be 313.107†	9154.2	28.30	0.31%	[0.003] mg/L
Cd 228.802†	175.9	35.01	19.91%	[0.003] mg/L
Pb 220.353†	76.1	6.54	8.60%	[0.004] mg/L
Tl 190.801†	9.0	1.00	11.20%	[0.005] mg/L

Sequence No.: 3
 Sample ID: Calib 2 V-173273
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 9
 Date Collected: 11/16/2013 11:57:34 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: Calib 2 V-173273

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Sc 361.383	1082269.5	219.43	0.02%	100 %
Y 371.029	374638.8	1048.31	0.28%	100 %
Ag 328.068†	457.6	46.25	10.11%	[0.002] mg/L
Al 308.215†	3229.9	77.02	2.38%	[0.10] mg/L
As 188.979†	15.8	0.94	5.92%	[0.010] mg/L
Ba 233.527†	1210.5	13.31	1.10%	[0.010] mg/L
Be 313.107†	28151.7	60.71	0.22%	[0.010] mg/L
Ca 315.887†	104273.0	258.14	0.25%	[1.0] mg/L
Cd 228.802†	592.5	3.94	0.67%	[0.010] mg/L
Co 228.616†	467.9	17.86	3.82%	[0.010] mg/L
Cr 267.716†	822.4	13.58	1.65%	[0.010] mg/L
Cu 327.393†	932.8	220.79	23.67%	[0.010] mg/L
Fe 273.955†	2280.3	27.59	1.21%	[0.10] mg/L
K 404.721†	-169.8	16.23	9.55%	[1.0] mg/L
No calibration curve because standard intensity and concentration values are not in the same order.				
Mg 279.077†	19438.4	87.02	0.45%	[1.0] mg/L
Mn 257.610†	7825.8	31.42	0.40%	[0.010] mg/L
Mo 202.031†	211.5	11.42	5.40%	[0.010] mg/L
Na 330.237†	929.6	55.25	5.94%	[1.0] mg/L
Ni 231.604†	601.2	4.55	0.76%	[0.010] mg/L
Pb 220.353†	156.3	15.01	9.60%	[0.010] mg/L
Sb 206.836†	21.9	1.59	7.24%	[0.010] mg/L
Se 196.026†	27.6	5.80	21.00%	[0.010] mg/L
Sn 189.927†	48.2	0.76	1.57%	[0.010] mg/L
Ti 334.940†	6251.5	27.86	0.45%	[0.010] mg/L
Tl 190.801†	18.9	3.61	19.10%	[0.010] mg/L
V 290.880†	1387.0	16.18	1.17%	[0.010] mg/L
Zn 206.200†	680.0	7.09	1.04%	[0.010] mg/L

Sequence No.: 4
 Sample ID: Calib 3 V-173274
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 11/16/2013 12:01:11 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: Calib 3 V-173274

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1062532.3	2959.18	0.28%	98.6	%
Y 371.029	360273.2	1070.53	0.30%	96.4	%
Ag 328.068†	19357.7	124.03	0.64%	[0.10]	mg/L
Al 308.215†	138718.3	161.68	0.12%	[5.0]	mg/L
As 188.979†	727.6	4.34	0.60%	[0.50]	mg/L
Ba 233.527†	61845.1	300.25	0.49%	[0.50]	mg/L
Be 313.107†	1472879.9	3399.10	0.23%	[0.50]	mg/L
Ca 315.887†	5754506.2	8409.14	0.15%	[50]	mg/L
Cd 228.802†	31536.0	78.31	0.25%	[0.50]	mg/L
Co 228.616†	24144.9	7.66	0.03%	[0.50]	mg/L
Cr 267.716†	41017.4	277.20	0.68%	[0.50]	mg/L
Cu 327.393†	63259.6	270.57	0.43%	[0.50]	mg/L
Fe 273.955†	114687.7	417.65	0.36%	[5.0]	mg/L
K 404.721†	3943.4	58.83	1.49%	[50]	mg/L
No calibration curve because standard intensity and concentration values are not in the same order.					
Mg 279.077†	1066475.2	713.78	0.07%	[50]	mg/L
Mn 257.610†	398648.8	1556.60	0.39%	[0.50]	mg/L
Mo 202.031†	10798.9	18.97	0.18%	[0.50]	mg/L
Na 330.237†	59671.8	4.76	0.01%	[50]	mg/L
Ni 231.604†	31364.6	191.54	0.61%	[0.50]	mg/L
Pb 220.353†	7931.2	4.27	0.05%	[0.50]	mg/L
Sb 206.836†	1166.1	4.35	0.37%	[0.50]	mg/L
Se 196.026†	675.0	2.14	0.32%	[0.50]	mg/L
Sn 189.927†	2234.5	4.46	0.20%	[0.50]	mg/L
Ti 334.940†	325513.3	871.87	0.27%	[0.50]	mg/L
Tl 190.801†	899.8	5.66	0.63%	[0.50]	mg/L
V 290.880†	74841.4	334.05	0.45%	[0.50]	mg/L
Zn 206.200†	32494.6	38.80	0.12%	[0.50]	mg/L

Sequence No.: 5
 Sample ID: Calib 4 V-174144
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 11/16/2013 12:05:01 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: Calib 4 V-174144

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Sc 361.383	1042317.3	483.76	0.05%	96.7 %
Y 371.029	356125.7	753.64	0.21%	95.3 %
Ag 328.068†	39399.5	61.62	0.16%	[0.20] mg/L
Al 308.215†	276971.8	13.85	0.00%	[10] mg/L
As 188.979†	1480.7	7.97	0.54%	[1.0] mg/L
Ba 233.527†	125032.1	256.53	0.21%	[1.0] mg/L
Be 313.107†	2988785.2	778.49	0.03%	[1.0] mg/L
Ca 315.887†	11547767.3	2929.71	0.03%	[100] mg/L
Cd 228.802†	64138.5	15.60	0.02%	[1.0] mg/L
Co 228.616†	48834.1	15.36	0.03%	[1.0] mg/L
Cr 267.716†	82751.2	188.59	0.23%	[1.0] mg/L
Cu 327.393†	128276.7	253.34	0.20%	[1.0] mg/L
Fe 273.955†	229981.4	601.21	0.26%	[10] mg/L
K 404.721†	9496.6	420.59	4.43%	[100] mg/L
No calibration curve because standard intensity and concentration values are not in the same order.				
Mg 279.077†	2136955.8	2897.35	0.14%	[100] mg/L
Mn 257.610†	806035.3	22.81	0.00%	[1.0] mg/L
Mo 202.031†	21711.5	2.91	0.01%	[1.0] mg/L
Na 330.237†	126697.0	98.49	0.08%	[100] mg/L
Ni 231.604†	62879.0	94.57	0.15%	[1.0] mg/L
Pb 220.353†	15920.1	20.73	0.13%	[1.0] mg/L
Sb 206.836†	2366.3	2.69	0.11%	[1.0] mg/L
Se 196.026†	1373.9	10.06	0.73%	[1.0] mg/L
Sn 189.927†	4482.5	41.45	0.92%	[1.0] mg/L
Ti 334.940†	661726.7	272.74	0.04%	[1.0] mg/L
Tl 190.801†	1796.5	6.53	0.36%	[1.0] mg/L
V 290.880†	151061.1	95.97	0.06%	[1.0] mg/L
Zn 206.200†	66020.9	122.08	0.18%	[1.0] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-33.4	196500	0.00000	0.999955	
Al 308.215	3	Lin, Calc Int	251.2	27680	0.00000	0.999999	
As 188.979	4	Lin, Calc Int	-1.2	1477	0.00000	0.999963	
Ba 233.527	3	Lin, Calc Int	-140.2	124900	0.00000	0.999985	
Be 313.107	4	Lin, Calc Int	-3162.8	2984000	0.00000	0.999976	
Ca 315.887	3	Lin, Calc Int	-8613.6	115500	0.00000	0.999999	
Cd 228.802	4	Lin, Calc Int	-86.9	64030	0.00000	0.999968	
Co 228.616	3	Lin, Calc Int	-58.8	48800	0.00000	0.999984	
Cr 267.716	3	Lin, Calc Int	-67.5	82690	0.00000	0.999990	
Cu 327.393	3	Lin, Calc Int	-318.8	128300	0.00000	0.999977	
Fe 273.955	3	Lin, Calc Int	-64.0	22990	0.00000	0.999999	
Mg 279.077	3	Lin, Calc Int	-1241.2	21380	0.00000	0.999999	
Mn 257.610	3	Lin, Calc Int	-901.6	805400	0.00000	0.999985	
Mo 202.031	3	Lin, Calc Int	-12.9	21700	0.00000	0.999996	
Na 330.237	3	Lin, Calc Int	-822.3	1262	0.00000	0.999564	
Ni 231.604	3	Lin, Calc Int	-26.2	62880	0.00000	0.999999	
Pb 220.353	4	Lin, Calc Int	-0.6	15910	0.00000	0.999998	
Sb 206.836	3	Lin, Calc Int	-3.9	2364	0.00000	0.999973	
Se 196.026	3	Lin, Calc Int	4.1	1364	0.00000	0.999893	
Sn 189.927	3	Lin, Calc Int	0.3	4479	0.00000	0.999998	
Ti 334.940	3	Lin, Calc Int	-1139.8	661000	0.00000	0.999966	
Tl 190.801	4	Lin, Calc Int	0.5	1796	0.00000	1.000000	
V 290.880	3	Lin, Calc Int	-181.5	151000	0.00000	0.999990	
Zn 206.200	3	Lin, Calc Int	-84.9	65920	0.00000	0.999967	

Sequence No.: 6
 Sample ID: ICS3 V-173274
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 11/16/2013 12:10:01 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICS3 V-173274

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1049459.1	97.4 %		0.25			0.26%
Y 371.029	353751.0	94.6 %		0.35			0.37%
Ag 328.068†	19014.6	0.0973530 mg/L	0.00034611		0.0973530 mg/L	0.00034611	0.36%
QC value within limits for Ag	328.068	Recovery = 97.35%					
Al 308.215†	136790.0	4.92519 mg/L	0.025032		4.92519 mg/L	0.025032	0.51%
QC value within limits for Al	308.215	Recovery = 98.50%					
As 188.979†	708.0	0.480705 mg/L	0.0010922		0.480705 mg/L	0.0010922	0.23%
QC value within limits for As	188.979	Recovery = 96.14%					
Ba 233.527†	61042.4	0.489539 mg/L	0.0027134		0.489539 mg/L	0.0027134	0.55%
QC value within limits for Ba	233.527	Recovery = 97.91%					
Be 313.107†	1459101.5	0.489859 mg/L	0.0007059		0.489859 mg/L	0.0007059	0.14%
QC value within limits for Be	313.107	Recovery = 97.97%					
Ca 315.887†	5701166.7	49.4208 mg/L	0.11039		49.4208 mg/L	0.11039	0.22%
QC value within limits for Ca	315.887	Recovery = 98.84%					
Cd 228.802†	31299.0	0.489844 mg/L	0.0020796		0.489844 mg/L	0.0020796	0.42%
QC value within limits for Cd	228.802	Recovery = 97.97%					
Co 228.616†	23900.7	0.491878 mg/L	0.0019253		0.491878 mg/L	0.0019253	0.39%
QC value within limits for Co	228.616	Recovery = 98.38%					
Cr 267.716†	40353.4	0.491567 mg/L	0.0026188		0.491567 mg/L	0.0026188	0.53%
QC value within limits for Cr	267.716	Recovery = 98.31%					
Cu 327.393†	62805.6	0.491282 mg/L	0.0028051		0.491282 mg/L	0.0028051	0.57%
QC value within limits for Cu	327.393	Recovery = 98.26%					
Fe 273.955†	112506.2	4.89569 mg/L	0.031747		4.89569 mg/L	0.031747	0.65%
QC value within limits for Fe	273.955	Recovery = 97.91%					
K 404.721†	4137.7					195.45	4.72%
Unable to evaluate QC.							
Mg 279.077†	1049920.1	49.1790 mg/L	0.17334		49.1790 mg/L	0.17334	0.35%
QC value within limits for Mg	279.077	Recovery = 98.36%					
Mn 257.610†	391562.7	0.485634 mg/L	0.0029028		0.485634 mg/L	0.0029028	0.60%
QC value within limits for Mn	257.610	Recovery = 97.13%					
Mo 202.031†	10757.2	0.494254 mg/L	0.0003044		0.494254 mg/L	0.0003044	0.06%
QC value within limits for Mo	202.031	Recovery = 98.85%					
Na 330.237†	58983.8	47.3836 mg/L	0.29539		47.3836 mg/L	0.29539	0.62%
QC value within limits for Na	330.237	Recovery = 94.77%					
Ni 231.604†	30659.4	0.488574 mg/L	0.0035862		0.488574 mg/L	0.0035862	0.73%
QC value within limits for Ni	231.604	Recovery = 97.71%					
Pb 220.353†	7847.4	0.494072 mg/L	0.0012018		0.494072 mg/L	0.0012018	0.24%
QC value within limits for Pb	220.353	Recovery = 98.81%					
Sb 206.836†	1158.2	0.492468 mg/L	0.0057681		0.492468 mg/L	0.0057681	1.17%
QC value within limits for Sb	206.836	Recovery = 98.49%					
Se 196.026†	666.0	0.486523 mg/L	0.0055278		0.486523 mg/L	0.0055278	1.14%
QC value within limits for Se	196.026	Recovery = 97.30%					
Sn 189.927†	2199.6	0.489884 mg/L	0.0026097		0.489884 mg/L	0.0026097	0.53%
QC value within limits for Sn	189.927	Recovery = 97.98%					
Ti 334.940†	322070.4	0.489001 mg/L	0.0025031		0.489001 mg/L	0.0025031	0.51%
QC value within limits for Ti	334.940	Recovery = 97.80%					
Tl 190.801†	893.6	0.502218 mg/L	0.0032324		0.502218 mg/L	0.0032324	0.64%
QC value within limits for Tl	190.801	Recovery = 100.44%					
V 290.880†	73685.9	0.487147 mg/L	0.0034531		0.487147 mg/L	0.0034531	0.71%
QC value within limits for V	290.880	Recovery = 97.43%					
Zn 206.200†	31824.3	0.483671 mg/L	0.0010551		0.483671 mg/L	0.0010551	0.22%
QC value within limits for Zn	206.200	Recovery = 96.73%					
All analyte(s) passed QC. One or more analytes were not evaluated.							

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 7
 Sample ID: ICV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 12:13:51 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1044743.1	97.0 %		0.48			0.50%
Y 371.029	356175.2	95.3 %		0.23			0.24%
Ag 328.068†	18533.4	0.0948964 mg/L	0.00160075	0.00160075	0.0948964 mg/L	0.00160075	1.69%
QC value within limits for Ag 328.068 Recovery = 94.90%							
Al 308.215†	134111.9	4.82855 mg/L	0.045432	0.045432	4.82855 mg/L	0.045432	0.94%
QC value within limits for Al 308.215 Recovery = 96.57%							
As 188.979†	690.0	0.468481 mg/L	0.0034513	0.0034513	0.468481 mg/L	0.0034513	0.74%
QC value within limits for As 188.979 Recovery = 93.70%							
Ba 233.527†	60046.9	0.481574 mg/L	0.0040327	0.0040327	0.481574 mg/L	0.0040327	0.84%
QC value within limits for Ba 233.527 Recovery = 96.31%							
Be 313.107†	1409000.7	0.473073 mg/L	0.0004089	0.0004089	0.473073 mg/L	0.0004089	0.09%
QC value within limits for Be 313.107 Recovery = 94.61%							
Ca 315.887†	5617455.2	48.6963 mg/L	0.02093	0.02093	48.6963 mg/L	0.02093	0.04%
QC value within limits for Ca 315.887 Recovery = 97.39%							
Cd 228.802†	30923.8	0.483990 mg/L	0.0020243	0.0020243	0.483990 mg/L	0.0020243	0.42%
QC value within limits for Cd 228.802 Recovery = 96.80%							
Co 228.616†	23423.1	0.482084 mg/L	0.0030082	0.0030082	0.482084 mg/L	0.0030082	0.62%
QC value within limits for Co 228.616 Recovery = 96.42%							
Cr 267.716†	39644.9	0.482958 mg/L	0.0054743	0.0054743	0.482958 mg/L	0.0054743	1.13%
QC value within limits for Cr 267.716 Recovery = 96.59%							
Cu 327.393†	61358.8	0.480018 mg/L	0.0024345	0.0024345	0.480018 mg/L	0.0024345	0.51%
QC value within limits for Cu 327.393 Recovery = 96.00%							
Fe 273.955†	110395.9	4.80391 mg/L	0.046090	0.046090	4.80391 mg/L	0.046090	0.96%
QC value within limits for Fe 273.955 Recovery = 96.08%							
K 404.721†	4260.4					140.86	3.31%
Unable to evaluate QC.							
Mg 279.077†	1040991.2	48.7612 mg/L	0.02152	0.02152	48.7612 mg/L	0.02152	0.04%
QC value within limits for Mg 279.077 Recovery = 97.52%							
Mn 257.610†	381173.4	0.472747 mg/L	0.0040127	0.0040127	0.472747 mg/L	0.0040127	0.85%
QC value within limits for Mn 257.610 Recovery = 94.55%							
Mo 202.031†	10601.9	0.487132 mg/L	0.0029690	0.0029690	0.487132 mg/L	0.0029690	0.61%
QC value within limits for Mo 202.031 Recovery = 97.43%							
Na 330.237†	58278.6	46.8249 mg/L	0.35557	0.35557	46.8249 mg/L	0.35557	0.76%
QC value within limits for Na 330.237 Recovery = 93.65%							
Ni 231.604†	29941.1	0.477143 mg/L	0.0045564	0.0045564	0.477143 mg/L	0.0045564	0.95%
QC value within limits for Ni 231.604 Recovery = 95.43%							
Pb 220.353†	7632.2	0.480532 mg/L	0.0040623	0.0040623	0.480532 mg/L	0.0040623	0.85%
QC value within limits for Pb 220.353 Recovery = 96.11%							
Sb 206.836†	1153.5	0.490454 mg/L	0.0048123	0.0048123	0.490454 mg/L	0.0048123	0.98%
QC value within limits for Sb 206.836 Recovery = 98.09%							
Se 196.026†	637.0	0.465224 mg/L	0.0037181	0.0037181	0.465224 mg/L	0.0037181	0.80%
QC value within limits for Se 196.026 Recovery = 93.04%							
Sn 189.927†	2186.2	0.486916 mg/L	0.0056193	0.0056193	0.486916 mg/L	0.0056193	1.15%
QC value within limits for Sn 189.927 Recovery = 97.38%							
Ti 334.940†	315482.1	0.479033 mg/L	0.0047170	0.0047170	0.479033 mg/L	0.0047170	0.98%
QC value within limits for Ti 334.940 Recovery = 95.81%							
Tl 190.801†	885.7	0.497742 mg/L	0.0018510	0.0018510	0.497742 mg/L	0.0018510	0.37%
QC value within limits for Tl 190.801 Recovery = 99.55%							
V 290.880†	71697.8	0.473997 mg/L	0.0046651	0.0046651	0.473997 mg/L	0.0046651	0.98%
QC value within limits for V 290.880 Recovery = 94.80%							
Zn 206.200†	31021.2	0.471494 mg/L	0.0032281	0.0032281	0.471494 mg/L	0.0032281	0.68%
QC value within limits for Zn 206.200 Recovery = 94.30%							

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 8

Sample ID: LLICV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/16/2013 12:17:39 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1073287.9	99.6 %		0.03			0.03%
Y 371.029	372045.1	99.5 %		0.16			0.16%
Ag 328.068†	3849.4	0.0197835 mg/L		0.00031919	0.0197835 mg/L	0.00031919	1.61%
QC value within limits for Ag 328.068 Recovery = 98.92%							
Al 308.215†	5540.9	0.190767 mg/L		0.0041168	0.190767 mg/L	0.0041168	2.16%
QC value within limits for Al 308.215 Recovery = 95.38%							
As 188.979†	33.6	0.0235745 mg/L		0.00002253	0.0235745 mg/L	0.00002253	0.10%
QC value within limits for As 188.979 Recovery = 117.87%							
Ba 233.527†	6216.4	0.0508689 mg/L		0.00011276	0.0508689 mg/L	0.00011276	0.22%
QC value within limits for Ba 233.527 Recovery = 101.74%							
Be 313.107†	34279.8	0.0125304 mg/L		0.00005273	0.0125304 mg/L	0.00005273	0.42%
QC value within limits for Be 313.107 Recovery = 104.42%							
Ca 315.887†	576460.0	5.06466 mg/L		0.013904	5.06466 mg/L	0.013904	0.27%
QC value within limits for Ca 315.887 Recovery = 101.29%							
Cd 228.802†	727.0	0.0126833 mg/L		0.00023312	0.0126833 mg/L	0.00023312	1.84%
QC value within limits for Cd 228.802 Recovery = 105.69%							
Co 228.616†	980.7	0.0212852 mg/L		0.00012990	0.0212852 mg/L	0.00012990	0.61%
QC value within limits for Co 228.616 Recovery = 106.43%							
Cr 267.716†	4031.8	0.0497011 mg/L		0.00029708	0.0497011 mg/L	0.00029708	0.60%
QC value within limits for Cr 267.716 Recovery = 99.40%							
Cu 327.393†	6449.0	0.0526653 mg/L		0.00097498	0.0526653 mg/L	0.00097498	1.85%
QC value within limits for Cu 327.393 Recovery = 105.33%							
Fe 273.955†	6693.8	0.293897 mg/L		0.0000472	0.293897 mg/L	0.0000472	0.02%
QC value within limits for Fe 273.955 Recovery = 97.97%							
K 404.721†	-337.2					331.19	98.22%
Unable to evaluate QC.							
Mg 279.077†	107121.6	5.06955 mg/L		0.023375	5.06955 mg/L	0.023375	0.46%
QC value within limits for Mg 279.077 Recovery = 101.39%							
Mn 257.610†	31197.2	0.0396743 mg/L		0.00011079	0.0396743 mg/L	0.00011079	0.28%
QC value within limits for Mn 257.610 Recovery = 99.19%							
Mo 202.031†	459.3	0.0215613 mg/L		0.00009713	0.0215613 mg/L	0.00009713	0.45%
QC value within limits for Mo 202.031 Recovery = 107.81%							
Na 330.237†	5327.7	4.87262 mg/L		0.017548	4.87262 mg/L	0.017548	0.36%
QC value within limits for Na 330.237 Recovery = 97.45%							
Ni 231.604†	3147.6	0.0504974 mg/L		0.00042342	0.0504974 mg/L	0.00042342	0.84%
QC value within limits for Ni 231.604 Recovery = 100.99%							
Pb 220.353†	171.8	0.0108413 mg/L		0.00068203	0.0108413 mg/L	0.00068203	6.29%
QC value within limits for Pb 220.353 Recovery = 90.34%							
Sb 206.836†	49.5	0.0226045 mg/L		0.00026992	0.0226045 mg/L	0.00026992	1.19%
QC value within limits for Sb 206.836 Recovery = 113.02%							
Se 196.026†	48.0	0.0321950 mg/L		0.00112019	0.0321950 mg/L	0.00112019	3.48%
QC value within limits for Se 196.026 Recovery = 80.49%							
Sn 189.927†	204.2	0.0454190 mg/L		0.00066920	0.0454190 mg/L	0.00066920	1.47%
QC value within limits for Sn 189.927 Recovery = 90.84%							
Ti 334.940†	30743.0	0.0482370 mg/L		0.00018721	0.0482370 mg/L	0.00018721	0.39%
QC value within limits for Ti 334.940 Recovery = 96.47%							
Tl 190.801†	40.6	0.0227268 mg/L		0.00249009	0.0227268 mg/L	0.00249009	10.96%
QC value within limits for Tl 190.801 Recovery = 113.63%							
V 290.880†	7417.4	0.0501152 mg/L		0.00017618	0.0501152 mg/L	0.00017618	0.35%
QC value within limits for V 290.880 Recovery = 100.23%							
Zn 206.200†	3183.4	0.0495613 mg/L		0.00001839	0.0495613 mg/L	0.00001839	0.04%
QC value within limits for Zn 206.200 Recovery = 99.12%							

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 9
 Sample ID: ICB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 11/16/2013 12:21:18 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICB V-174666

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	1093925.7	102 %		0.8			0.84%
Y 371.029	378764.8	101 %		0.6			0.58%
Ag 328.068†	62.1	0.0004862 mg/L	0.00001196	0.0004862 mg/L	0.00001196	2.46%	
QC value within limits for Ag	328.068	Recovery = Not calculated					
Al 308.215†	33.9	-0.0078625 mg/L	0.00418380	-0.0078625 mg/L	0.00418380	53.21%	
QC value within limits for Al	308.215	Recovery = Not calculated					
As 188.979†	-0.7	0.0003466 mg/L	0.00090253	0.0003466 mg/L	0.00090253	260.37%	
QC value within limits for As	188.979	Recovery = Not calculated					
Ba 233.527†	-26.9	0.0009067 mg/L	0.00022103	0.0009067 mg/L	0.00022103	24.38%	
QC value within limits for Ba	233.527	Recovery = Not calculated					
Be 313.107†	-82.4	0.0010317 mg/L	0.00004827	0.0010317 mg/L	0.00004827	4.68%	
QC value within limits for Be	313.107	Recovery = Not calculated					
Ca 315.887†	-797.0	0.0676616 mg/L	0.00186893	0.0676616 mg/L	0.00186893	2.76%	
QC value within limits for Ca	315.887	Recovery = Not calculated					
Cd 228.802†	-2.4	0.0013199 mg/L	0.00029359	0.0013199 mg/L	0.00029359	22.24%	
QC value within limits for Cd	228.802	Recovery = Not calculated					
Co 228.616†	17.2	0.0015570 mg/L	0.00013774	0.0015570 mg/L	0.00013774	8.85%	
QC value within limits for Co	228.616	Recovery = Not calculated					
Cr 267.716†	33.7	0.0012280 mg/L	0.00018336	0.0012280 mg/L	0.00018336	14.93%	
QC value within limits for Cr	267.716	Recovery = Not calculated					
Cu 327.393†	-390.0	-0.0005557 mg/L	0.00147145	-0.0005557 mg/L	0.00147145	264.78%	
QC value within limits for Cu	327.393	Recovery = Not calculated					
Fe 273.955†	9.8	0.0032089 mg/L	0.00074431	0.0032089 mg/L	0.00074431	23.20%	
QC value within limits for Fe	273.955	Recovery = Not calculated					
K 404.721†	-715.2				409.09	57.20%	
Unable to evaluate QC.							
Mg 279.077†	-73.7	0.0546297 mg/L	0.00269341	0.0546297 mg/L	0.00269341	4.93%	
QC value within limits for Mg	279.077	Recovery = Not calculated					
Mn 257.610†	3.2	0.0011217 mg/L	0.00000421	0.0011217 mg/L	0.00000421	0.38%	
QC value within limits for Mn	257.610	Recovery = Not calculated					
Mo 202.031†	1.0	0.0006385 mg/L	0.00047376	0.0006385 mg/L	0.00047376	74.20%	
QC value within limits for Mo	202.031	Recovery = Not calculated					
Na 330.237†	37.6	0.681294 mg/L	0.0535997	0.681294 mg/L	0.0535997	7.87%	
QC value within limits for Na	330.237	Recovery = Not calculated					
Ni 231.604†	1.0	0.0004320 mg/L	0.00029306	0.0004320 mg/L	0.00029306	67.84%	
QC value within limits for Ni	231.604	Recovery = Not calculated					
Pb 220.353†	-1.7	-0.0000731 mg/L	0.00061750	-0.0000731 mg/L	0.00061750	845.13%	
QC value within limits for Pb	220.353	Recovery = Not calculated					
Sb 206.836†	3.2	0.0029842 mg/L	0.00233675	0.0029842 mg/L	0.00233675	78.30%	
QC value within limits for Sb	206.836	Recovery = Not calculated					
Se 196.026†	0.6	-0.0026158 mg/L	0.00059900	-0.0026158 mg/L	0.00059900	22.90%	
QC value within limits for Se	196.026	Recovery = Not calculated					
Sn 189.927†	2.5	0.0004850 mg/L	0.00075179	0.0004850 mg/L	0.00075179	155.00%	
QC value within limits for Sn	189.927	Recovery = Not calculated					
Ti 334.940†	-64.4	0.0016269 mg/L	0.00031522	0.0016269 mg/L	0.00031522	19.38%	
QC value within limits for Ti	334.940	Recovery = Not calculated					
Tl 190.801†	2.5	0.0011649 mg/L	0.00081925	0.0011649 mg/L	0.00081925	70.33%	
QC value within limits for Tl	190.801	Recovery = Not calculated					
V 290.880†	-52.0	0.0008555 mg/L	0.00013257	0.0008555 mg/L	0.00013257	15.50%	
QC value within limits for V	290.880	Recovery = Not calculated					
Zn 206.200†	32.4	0.0017793 mg/L	0.00011988	0.0017793 mg/L	0.00011988	6.74%	
QC value within limits for Zn	206.200	Recovery = Not calculated					

All analyte(s) passed QC. One or more analytes were not evaluated.

Autosampler Location: 7
Date Collected: 11/16/2013 12:24:52 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

[illegible]

Sequence No.: 11
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/16/2013 12:30:14 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	970437.3	90.1 %	0.13			0.14%
Y 371.029	332939.9	89.1 %	0.19			0.22%
Ag 328.068†	203694.8	1.05259 mg/L	0.001714	1.05259 mg/L	0.001714	0.16%
QC value within limits for Ag		328.068 Recovery = 105.26%				
Al 308.215†	13075272.4	472.423 mg/L	0.6893	472.423 mg/L	0.6893	0.15%
QC value within limits for Al		308.215 Recovery = 94.48%				
As 188.979†	1460.6	0.998816 mg/L	0.0040058	0.998816 mg/L	0.0040058	0.40%
QC value within limits for As		188.979 Recovery = 99.88%				
Ba 233.527†	63397.4	0.501634 mg/L	0.0004093	0.501634 mg/L	0.0004093	0.08%
QC value within limits for Ba		233.527 Recovery = 100.33%				
Be 313.107†	1506236.3	0.505830 mg/L	0.0000417	0.505830 mg/L	0.0000417	0.01%
QC value within limits for Be		313.107 Recovery = 101.17%				
Ca 315.887†	53394481.9	462.017 mg/L	1.0004	462.017 mg/L	1.0004	0.22%
QC value within limits for Ca		315.887 Recovery = 92.40%				
Cd 228.802†	66040.3	1.02713 mg/L	0.003439	1.02713 mg/L	0.003439	0.33%
QC value within limits for Cd		228.802 Recovery = 102.71%				
Co 228.616†	23504.6	0.482980 mg/L	0.0013219	0.482980 mg/L	0.0013219	0.27%
QC value within limits for Co		228.616 Recovery = 96.60%				
Cr 267.716†	40192.9	0.487192 mg/L	0.0032042	0.487192 mg/L	0.0032042	0.66%
QC value within limits for Cr		267.716 Recovery = 97.44%				
Cu 327.393†	68671.4	0.525658 mg/L	0.0001154	0.525658 mg/L	0.0001154	0.02%
QC value within limits for Cu		327.393 Recovery = 105.13%				
Fe 273.955†	4209021.1	183.054 mg/L	0.1685	183.054 mg/L	0.1685	0.09%
QC value within limits for Fe		273.955 Recovery = 91.53%				
K 404.721†	-3222.2				58.01	1.80%
Mg 279.077†	10319115.7	482.668 mg/L	1.4519	482.668 mg/L	1.4519	0.30%
QC value within limits for Mg		279.077 Recovery = 96.53%				
Mn 257.610†	397352.4	0.476594 mg/L	0.0007422	0.476594 mg/L	0.0007422	0.16%
QC value within limits for Mn		257.610 Recovery = 95.32%				
Mo 202.031†	510.4	-0.0005534 mg/L	0.00099262	-0.0005534 mg/L	0.00099262	179.36%
Na 330.237†	1397.0	1.75834 mg/L	0.004088	1.75834 mg/L	0.004088	0.23%
Ni 231.604†	59094.5	0.940235 mg/L	0.0045047	0.940235 mg/L	0.0045047	0.48%
QC value within limits for Ni		231.604 Recovery = 94.02%				
Pb 220.353†	13896.9	0.956431 mg/L	0.0049785	0.956431 mg/L	0.0049785	0.52%
QC value within limits for Pb		220.353 Recovery = 95.64%				
Sb 206.836†	2293.7	1.01429 mg/L	0.002560	1.01429 mg/L	0.002560	0.25%
QC value within limits for Sb		206.836 Recovery = 101.43%				
Se 196.026†	1231.1	0.981498 mg/L	0.0107420	0.981498 mg/L	0.0107420	1.09%
QC value within limits for Se		196.026 Recovery = 98.15%				
Sn 189.927†	-9.7	-0.0144774 mg/L	0.00118835	-0.0144774 mg/L	0.00118835	8.21%
Ti 334.940†	1080.1	0.0033586 mg/L	0.00005601	0.0033586 mg/L	0.00005601	1.67%
Tl 190.801†	1718.6	0.948775 mg/L	0.0056408	0.948775 mg/L	0.0056408	0.59%
QC value within limits for Tl		190.801 Recovery = 94.88%				
V 290.880†	78635.1	0.495173 mg/L	0.0009566	0.495173 mg/L	0.0009566	0.19%
QC value within limits for V		290.880 Recovery = 99.03%				
Zn 206.200†	62132.7	0.928651 mg/L	0.0021666	0.928651 mg/L	0.0021666	0.23%
QC value within limits for Zn		206.200 Recovery = 92.87%				

All analyte(s) passed QC.

Sequence No.: 12
 Sample ID: MB 27401 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 38
 Date Collected: 11/16/2013 12:35:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 27401 (1)

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1108980.6	103	%	0.9			0.88%
Y 371.029	384868.0	103	%	1.2			1.21%
Ag 328.068†	-82.5	-0.0002486	mg/L	0.00023561	-0.0002486	mg/L	0.00023561 94.76%
Al 308.215†	477.0	0.0081465	mg/L	0.00348434	0.0081465	mg/L	0.00348434 42.77%
As 188.979†	1.8	0.0020244	mg/L	0.00131742	0.0020244	mg/L	0.00131742 65.08%
Ba 233.527†	42.1	0.0014586	mg/L	0.00013324	0.0014586	mg/L	0.00013324 9.13%
Be 313.107†	153.5	0.0011107	mg/L	0.00002644	0.0011107	mg/L	0.00002644 2.38%
Ca 315.887†	2552.7	0.0966438	mg/L	0.00820529	0.0966438	mg/L	0.00820529 8.49%
Cd 228.802†	-20.9	0.0010302	mg/L	0.00020624	0.0010302	mg/L	0.00020624 20.02%
Co 228.616†	15.5	0.0015222	mg/L	0.00004543	0.0015222	mg/L	0.00004543 2.98%
Cr 267.716†	55.6	0.0014934	mg/L	0.00009525	0.0014934	mg/L	0.00009525 6.38%
Cu 327.393†	-157.4	0.0012563	mg/L	0.00120956	0.0012563	mg/L	0.00120956 96.28%
Fe 273.955†	257.0	0.0139606	mg/L	0.00110315	0.0139606	mg/L	0.00110315 7.90%
K 404.721†	-154.7					350.81	226.78%
Mg 279.077†	505.7	0.0817268	mg/L	0.00014657	0.0817268	mg/L	0.00014657 0.18%
Mn 257.610†	-0.2	0.0011165	mg/L	0.00002852	0.0011165	mg/L	0.00002852 2.55%
Mo 202.031†	5.2	0.0008294	mg/L	0.00004249	0.0008294	mg/L	0.00004249 5.12%
Na 330.237†	108.6	0.737548	mg/L	0.0379339	0.737548	mg/L	0.0379339 5.14%
Ni 231.604†	-15.6	0.0001681	mg/L	0.00004707	0.0001681	mg/L	0.00004707 28.00%
Pb 220.353†	0.5	0.0000705	mg/L	0.00068919	0.0000705	mg/L	0.00068919 978.18%
Sb 206.836†	-3.4	0.0002091	mg/L	0.00083138	0.0002091	mg/L	0.00083138 397.59%
Se 196.026†	4.3	0.0001497	mg/L	0.00168922	0.0001497	mg/L	0.00168922 >999.9%
Sn 189.927†	5.3	0.0011273	mg/L	0.00040453	0.0011273	mg/L	0.00040453 35.89%
Ti 334.940†	153.5	0.0019567	mg/L	0.00006569	0.0019567	mg/L	0.00006569 3.36%
Tl 190.801†	5.2	0.0026205	mg/L	0.00280085	0.0026205	mg/L	0.00280085 106.88%
V 290.880†	-170.1	0.0000723	mg/L	0.00040342	0.0000723	mg/L	0.00040342 557.78%
Zn 206.200†	113.8	0.0030136	mg/L	0.00002616	0.0030136	mg/L	0.00002616 0.87%

Sequence No.: 13
 Sample ID: LCSW 27401
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 39
 Date Collected: 11/16/2013 12:38:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW 27401

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1072615.7	99.6 %		0.30			0.30%
Y 371.029	361665.2	96.7 %		0.38			0.40%
Ag 328.068†	17983.6	0.0921014 mg/L		0.00140850	0.0921014 mg/L	0.00140850	1.53%
Al 308.215†	135338.4	4.87267 mg/L		0.029973	4.87267 mg/L	0.029973	0.62%
As 188.979†	706.4	0.479565 mg/L		0.0016123	0.479565 mg/L	0.0016123	0.34%
Ba 233.527†	61110.7	0.490088 mg/L		0.0034438	0.490088 mg/L	0.0034438	0.70%
Be 313.107†	1440284.4	0.483557 mg/L		0.0013775	0.483557 mg/L	0.0013775	0.28%
Ca 315.887†	5693274.7	49.3525 mg/L		0.08487	49.3525 mg/L	0.08487	0.17%
Cd 228.802†	30998.1	0.485144 mg/L		0.0017407	0.485144 mg/L	0.0017407	0.36%
Co 228.616†	23999.5	0.493940 mg/L		0.0003998	0.493940 mg/L	0.0003998	0.08%
Cr 267.716†	39628.7	0.482825 mg/L		0.0055467	0.482825 mg/L	0.0055467	1.15%
Cu 327.393†	62064.6	0.485515 mg/L		0.0028755	0.485515 mg/L	0.0028755	0.59%
Fe 273.955†	111091.5	4.83416 mg/L		0.025449	4.83416 mg/L	0.025449	0.53%
K 404.721†	3060.7					439.79	14.37%
Mg 279.077†	1044633.5	48.9318 mg/L		0.06843	48.9318 mg/L	0.06843	0.14%
Mn 257.610†	386706.5	0.479614 mg/L		0.0031831	0.479614 mg/L	0.0031831	0.66%
Mo 202.031†	10857.7	0.498890 mg/L		0.0012654	0.498890 mg/L	0.0012654	0.25%
Na 330.237†	57820.0	46.4615 mg/L		0.32191	46.4615 mg/L	0.32191	0.69%
Ni 231.604†	30312.6	0.483064 mg/L		0.0042655	0.483064 mg/L	0.0042655	0.88%
Pb 220.353†	7879.3	0.496080 mg/L		0.0026405	0.496080 mg/L	0.0026405	0.53%
Sb 206.836†	1129.3	0.480209 mg/L		0.0030480	0.480209 mg/L	0.0030480	0.63%
Se 196.026†	665.0	0.485811 mg/L		0.0039607	0.485811 mg/L	0.0039607	0.82%
Sn 189.927†	2185.8	0.486796 mg/L		0.0002755	0.486796 mg/L	0.0002755	0.06%
Ti 334.940†	315479.2	0.479029 mg/L		0.0032301	0.479029 mg/L	0.0032301	0.67%
Tl 190.801†	904.2	0.508096 mg/L		0.0037488	0.508096 mg/L	0.0037488	0.74%
V 290.880†	73504.9	0.485959 mg/L		0.0044134	0.485959 mg/L	0.0044134	0.91%
Zn 206.200†	32248.1	0.490102 mg/L		0.0006846	0.490102 mg/L	0.0006846	0.14%

Sequence No.: 14
 Sample ID: LCSW MR 27401
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 40
 Date Collected: 11/16/2013 12:42:33 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW MR 27401

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1063848.9	98.7 %		0.68			0.69%
Y 371.029	362507.5	97.0 %		0.14			0.14%
Ag 328.068†	17946.3	0.0919114 mg/L		0.00050000	0.0919114 mg/L	0.00050000	0.54%
Al 308.215†	135536.0	4.87990 mg/L		0.011654	4.87990 mg/L	0.011654	0.24%
As 188.979†	691.9	0.469750 mg/L		0.0026876	0.469750 mg/L	0.0026876	0.57%
Ba 233.527†	60931.4	0.488652 mg/L		0.0012639	0.488652 mg/L	0.0012639	0.26%
Be 313.107†	1419445.2	0.476574 mg/L		0.0004403	0.476574 mg/L	0.0004403	0.09%
Ca 315.887†	5619377.9	48.7128 mg/L		0.08090	48.7128 mg/L	0.08090	0.17%
Cd 228.802†	30525.7	0.477771 mg/L		0.0027411	0.477771 mg/L	0.0027411	0.57%
Co 228.616†	23691.0	0.487599 mg/L		0.0038015	0.487599 mg/L	0.0038015	0.78%
Cr 267.716†	39717.4	0.483870 mg/L		0.0030472	0.483870 mg/L	0.0030472	0.63%
Cu 327.393†	61983.7	0.484891 mg/L		0.0007453	0.484891 mg/L	0.0007453	0.15%
Fe 273.955†	111169.3	4.83755 mg/L		0.003370	4.83755 mg/L	0.003370	0.07%
K 404.721†	3652.3					192.93	5.28%
Mg 279.077†	1027072.3	48.1102 mg/L		0.17934	48.1102 mg/L	0.17934	0.37%
Mn 257.610†	386423.1	0.479291 mg/L		0.0012536	0.479291 mg/L	0.0012536	0.26%
Mo 202.031†	10737.7	0.493386 mg/L		0.0029725	0.493386 mg/L	0.0029725	0.60%
Na 330.237†	57852.1	46.4870 mg/L		0.01614	46.4870 mg/L	0.01614	0.03%
Ni 231.604†	30289.7	0.482694 mg/L		0.0002108	0.482694 mg/L	0.0002108	0.04%
Pb 220.353†	7745.6	0.487673 mg/L		0.0017027	0.487673 mg/L	0.0017027	0.35%
Sb 206.836†	1124.5	0.478179 mg/L		0.0016907	0.478179 mg/L	0.0016907	0.35%
Se 196.026†	643.2	0.469819 mg/L		0.0077328	0.469819 mg/L	0.0077328	1.65%
Sn 189.927†	2174.0	0.484178 mg/L		0.0059050	0.484178 mg/L	0.0059050	1.22%
Ti 334.940†	315177.2	0.478572 mg/L		0.0018017	0.478572 mg/L	0.0018017	0.38%
Tl 190.801†	888.5	0.499335 mg/L		0.0020527	0.499335 mg/L	0.0020527	0.41%
V 290.880†	73549.3	0.486287 mg/L		0.0020313	0.486287 mg/L	0.0020313	0.42%
Zn 206.200†	31599.1	0.480258 mg/L		0.0025927	0.480258 mg/L	0.0025927	0.54%

Sequence No.: 15
 Sample ID: 75576-029
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 41
 Date Collected: 11/16/2013 12:46:23 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-029

Mean Data: 75576 625		Mean Corrected		Calib		Sample		
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc 361.383	1095011.0	102	%	0.1				0.10%
Y 371.029	380920.0	102	%	0.6				0.56%
Ag 328.068†	-66.2	-0.0001588	mg/L	0.00023957	-0.0001588	mg/L	0.00023957	150.87%
Al 308.215†	3370.0	0.112551	mg/L	0.0022668	0.112551	mg/L	0.0022668	2.01%
As 188.979†	2.6	0.0021747	mg/L	0.00071375	0.0021747	mg/L	0.00071375	32.82%
Ba 233.527†	3857.3	0.0319936	mg/L	0.00018679	0.0319936	mg/L	0.00018679	0.58%
Be 313.107†	12.0	0.0010625	mg/L	0.00003548	0.0010625	mg/L	0.00003548	3.34%
Ca 315.887†	3452028.8	29.9612	mg/L	0.11032	29.9612	mg/L	0.11032	0.37%
Cd 228.802†	59.7	0.0021610	mg/L	0.00012448	0.0021610	mg/L	0.00012448	5.76%
Co 228.616†	11.6	0.0014659	mg/L	0.00035062	0.0014659	mg/L	0.00035062	23.92%
Cr 267.716†	5151.9	0.0631657	mg/L	0.00077877	0.0631657	mg/L	0.00077877	1.23%
Cu 327.393†	178.0	0.0034625	mg/L	0.00233686	0.0034625	mg/L	0.00233686	67.49%
Fe 273.955†	2058.1	0.0922916	mg/L	0.00112124	0.0922916	mg/L	0.00112124	1.21%
K 404.721†	-312.7						244.83	78.29%
Mg 279.077†	86452.3	4.10242	mg/L	0.038816	4.10242	mg/L	0.038816	0.95%
Mn 257.610†	3250.9	0.0050064	mg/L	0.00000100	0.0050064	mg/L	0.00000100	0.02%
Mo 202.031†	168.9	0.0073280	mg/L	0.00056455	0.0073280	mg/L	0.00056455	7.70%
Na 330.237†	17117.5	14.2134	mg/L	0.10494	14.2134	mg/L	0.10494	0.74%
Ni 231.604†	77.0	0.0016500	mg/L	0.00004905	0.0016500	mg/L	0.00004905	2.97%
Pb 220.353†	41.4	0.0026582	mg/L	0.00056927	0.0026582	mg/L	0.00056927	21.42%
Sb 206.836†	5.3	0.0039037	mg/L	0.00091392	0.0039037	mg/L	0.00091392	23.41%
Se 196.026†	15.0	0.0073276	mg/L	0.00282193	0.0073276	mg/L	0.00282193	38.51%
Sn 189.927†	15.4	0.0022935	mg/L	0.00002433	0.0022935	mg/L	0.00002433	1.06%
Ti 334.940†	1521.4	0.0040263	mg/L	0.00044080	0.0040263	mg/L	0.00044080	10.95%
Tl 190.801†	4.7	0.0025225	mg/L	0.00300351	0.0025225	mg/L	0.00300351	119.07%
V 290.880†	117.5	0.0018087	mg/L	0.00042363	0.0018087	mg/L	0.00042363	23.42%
Zn 206.200†	824.1	0.0137818	mg/L	0.00025581	0.0137818	mg/L	0.00025581	1.86%

Sequence No.: 16
 Sample ID: 75576-029 MR
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 42
 Date Collected: 11/16/2013 12:50:08 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-029 MR

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1083526.4	101 %		0.0				0.02%
Y 371.029	378321.6	101 %		0.5				0.52%
Ag 328.068†	11.4	0.0002362 mg/L		0.00006425	0.0002362 mg/L		0.00006425	27.20%
Al 308.215†	3598.3	0.120803 mg/L		0.0047628	0.120803 mg/L		0.0047628	3.94%
As 188.979†	3.3	0.0026413 mg/L		0.00235499	0.0026413 mg/L		0.00235499	89.16%
Ba 233.527†	3894.4	0.0322908 mg/L		0.00010244	0.0322908 mg/L		0.00010244	0.32%
Be 313.107†	0.9	0.0010588 mg/L		0.00005634	0.0010588 mg/L		0.00005634	5.32%
Ca 315.887†	3486750.4	30.2618 mg/L		0.06729	30.2618 mg/L		0.06729	0.22%
Cd 228.802†	46.6	0.0019550 mg/L		0.00003937	0.0019550 mg/L		0.00003937	2.01%
Co 228.616†	-7.8	0.0010674 mg/L		0.00022716	0.0010674 mg/L		0.00022716	21.28%
Cr 267.716†	5221.5	0.0640060 mg/L		0.00026278	0.0640060 mg/L		0.00026278	0.41%
Cu 327.393†	355.0	0.0048375 mg/L		0.00154580	0.0048375 mg/L		0.00154580	31.95%
Fe 273.955†	2165.1	0.0969425 mg/L		0.00069160	0.0969425 mg/L		0.00069160	0.71%
K 404.721†	-973.4						172.53	17.72%
Mg 279.077†	86812.9	4.11928 mg/L		0.025785	4.11928 mg/L		0.025785	0.63%
Mn 257.610†	3386.6	0.0051742 mg/L		0.00000626	0.0051742 mg/L		0.00000626	0.12%
Mo 202.031†	161.7	0.0069863 mg/L		0.00010615	0.0069863 mg/L		0.00010615	1.52%
Na 330.237†	17328.1	14.3804 mg/L		0.08108	14.3804 mg/L		0.08108	0.56%
Ni 231.604†	136.3	0.0025926 mg/L		0.00014697	0.0025926 mg/L		0.00014697	5.67%
Pb 220.353†	54.7	0.0034937 mg/L		0.00012392	0.0034937 mg/L		0.00012392	3.55%
Sb 206.836†	1.5	0.0022806 mg/L		0.00093081	0.0022806 mg/L		0.00093081	40.81%
Se 196.026†	2.8	-0.0016277 mg/L		0.00156009	-0.0016277 mg/L		0.00156009	95.85%
Sn 189.927†	10.9	0.0012802 mg/L		0.00101735	0.0012802 mg/L		0.00101735	79.47%
Ti 334.940†	1520.1	0.0040243 mg/L		0.00000118	0.0040243 mg/L		0.00000118	0.03%
Tl 190.801†	-0.4	-0.0002914 mg/L		0.00127250	-0.0002914 mg/L		0.00127250	436.65%
V 290.880†	246.9	0.0026644 mg/L		0.00055472	0.0026644 mg/L		0.00055472	20.82%
Zn 206.200†	750.4	0.0126632 mg/L		0.00012420	0.0126632 mg/L		0.00012420	0.98%

Sequence No.: 17
 Sample ID: 75576-031 MS 1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 43
 Date Collected: 11/16/2013 12:53:53 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-031 MS 1

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1059497.9	98.3 %		0.31			0.31%
Y 371.029	369942.8	98.9 %		0.08			0.08%
Ag 328.068†	18002.7	0.0922118 mg/L		0.00048653	0.0922118 mg/L	0.00048653	0.53%
Al 308.215†	138713.5	4.99448 mg/L		0.007938	4.99448 mg/L	0.007938	0.16%
As 188.979†	715.8	0.485595 mg/L		0.0012057	0.485595 mg/L	0.0012057	0.25%
Ba 233.527†	65107.5	0.522073 mg/L		0.0006866	0.522073 mg/L	0.0006866	0.13%
Be 313.107†	1441715.9	0.484034 mg/L		0.0011177	0.484034 mg/L	0.0011177	0.23%
Ca 315.887†	9098982.5	78.8380 mg/L		0.32723	78.8380 mg/L	0.32723	0.42%
Cd 228.802†	31279.0	0.489406 mg/L		0.0037275	0.489406 mg/L	0.0037275	0.76%
Co 228.616†	24102.5	0.496066 mg/L		0.0025693	0.496066 mg/L	0.0025693	0.52%
Cr 267.716†	44744.5	0.544739 mg/L		0.0042286	0.544739 mg/L	0.0042286	0.78%
Cu 327.393†	62991.7	0.492336 mg/L		0.0028402	0.492336 mg/L	0.0028402	0.58%
Fe 273.955†	114688.1	4.99058 mg/L		0.035177	4.99058 mg/L	0.035177	0.70%
K 404.721†	3905.9					14.26	0.36%
Mg 279.077†	1125752.7	52.7266 mg/L		0.21945	52.7266 mg/L	0.21945	0.42%
Mn 257.610†	392595.2	0.486788 mg/L		0.0011069	0.486788 mg/L	0.0011069	0.23%
Mo 202.031†	11044.6	0.506471 mg/L		0.0031034	0.506471 mg/L	0.0031034	0.61%
Na 330.237†	78220.6	62.6246 mg/L		0.22103	62.6246 mg/L	0.22103	0.35%
Ni 231.604†	30501.6	0.486081 mg/L		0.0033955	0.486081 mg/L	0.0033955	0.70%
Pb 220.353†	7914.1	0.498282 mg/L		0.0014906	0.498282 mg/L	0.0014906	0.30%
Sb 206.836†	1147.8	0.488047 mg/L		0.0032751	0.488047 mg/L	0.0032751	0.67%
Se 196.026†	669.8	0.488670 mg/L		0.0090082	0.488670 mg/L	0.0090082	1.84%
Sn 189.927†	2217.5	0.492823 mg/L		0.0010879	0.492823 mg/L	0.0010879	0.22%
Ti 334.940†	320962.9	0.487325 mg/L		0.0003906	0.487325 mg/L	0.0003906	0.08%
Tl 190.801†	902.7	0.507458 mg/L		0.0047787	0.507458 mg/L	0.0047787	0.94%
V 290.880†	73683.2	0.486980 mg/L		0.0008293	0.486980 mg/L	0.0008293	0.17%
Zn 206.200†	32864.1	0.499437 mg/L		0.0036081	0.499437 mg/L	0.0036081	0.72%

Sequence No.: 18
 Sample ID: 75576-033 MS 2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 44
 Date Collected: 11/16/2013 12:57:49 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-033 MS 2

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1073413.6	99.6 %		0.01			0.01%
Y 371.029	373168.9	99.8 %		0.01			0.01%
Ag 328.068†	17824.4	0.0912997 mg/L		0.00013636	0.0912997 mg/L	0.00013636	0.15%
Al 308.215†	135881.2	4.89227 mg/L		0.010561	4.89227 mg/L	0.010561	0.22%
As 188.979†	703.5	0.477234 mg/L		0.0013484	0.477234 mg/L	0.0013484	0.28%
Ba 233.527†	64365.8	0.516139 mg/L		0.0004793	0.516139 mg/L	0.0004793	0.09%
Be 313.107†	1430804.6	0.480379 mg/L		0.0003077	0.480379 mg/L	0.0003077	0.06%
Ca 315.887†	8963078.0	77.6615 mg/L		0.01056	77.6615 mg/L	0.01056	0.01%
Cd 228.802†	30682.0	0.480088 mg/L		0.0018759	0.480088 mg/L	0.0018759	0.39%
Co 228.616†	23710.7	0.488018 mg/L		0.0025347	0.488018 mg/L	0.0025347	0.52%
Cr 267.716†	44282.4	0.539108 mg/L		0.0006996	0.539108 mg/L	0.0006996	0.13%
Cu 327.393†	61687.6	0.482188 mg/L		0.0007396	0.482188 mg/L	0.0007396	0.15%
Fe 273.955†	113393.4	4.93427 mg/L		0.009784	4.93427 mg/L	0.009784	0.20%
K 404.721†	3437.5					337.84	9.83%
Mg 279.077†	1121625.7	52.5335 mg/L		0.07089	52.5335 mg/L	0.07089	0.13%
Mn 257.610†	388037.2	0.481133 mg/L		0.0005815	0.481133 mg/L	0.0005815	0.12%
Mo 202.031†	10870.8	0.498505 mg/L		0.0020342	0.498505 mg/L	0.0020342	0.41%
Na 330.237†	76889.0	61.5696 mg/L		0.18024	61.5696 mg/L	0.18024	0.29%
Ni 231.604†	30292.2	0.482740 mg/L		0.0003420	0.482740 mg/L	0.0003420	0.07%
Pb 220.353†	7784.3	0.490099 mg/L		0.0016157	0.490099 mg/L	0.0016157	0.33%
Sb 206.836†	1130.0	0.480499 mg/L		0.0053427	0.480499 mg/L	0.0053427	1.11%
Se 196.026†	651.1	0.474988 mg/L		0.0033325	0.474988 mg/L	0.0033325	0.70%
Sn 189.927†	2207.8	0.490696 mg/L		0.0018205	0.490696 mg/L	0.0018205	0.37%
Ti 334.940†	317284.9	0.481760 mg/L		0.0006563	0.481760 mg/L	0.0006563	0.14%
Tl 190.801†	886.3	0.498238 mg/L		0.0028311	0.498238 mg/L	0.0028311	0.57%
V 290.880†	72863.6	0.481559 mg/L		0.0005771	0.481559 mg/L	0.0005771	0.12%
Zn 206.200†	32407.8	0.492520 mg/L		0.0017600	0.492520 mg/L	0.0017600	0.36%

Sequence No.: 19
 Sample ID: 75576-029 PS
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 45
 Date Collected: 11/16/2013 1:01:45 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-029 PS

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	1053941.5	97.8 %		0.10			0.10%
Y 371.029	365866.7	97.9 %		0.16			0.17%
Ag 328.068†	17249.1	0.0883929 mg/L		0.00016051	0.0883929 mg/L	0.00016051	0.18%
Al 308.215†	142764.6	5.14132 mg/L		0.007569	5.14132 mg/L	0.007569	0.15%
As 188.979†	735.4	0.498877 mg/L		0.0013214	0.498877 mg/L	0.0013214	0.26%
Ba 233.527†	67159.8	0.538493 mg/L		0.0008155	0.538493 mg/L	0.0008155	0.15%
Be 313.107†	1487495.6	0.499383 mg/L		0.0005413	0.499383 mg/L	0.0005413	0.11%
Ca 315.887†	9317881.7	80.7330 mg/L		0.19168	80.7330 mg/L	0.19168	0.24%
Cd 228.802†	32183.1	0.503518 mg/L		0.0002249	0.503518 mg/L	0.0002249	0.04%
Co 228.616†	24752.4	0.509321 mg/L		0.0004401	0.509321 mg/L	0.0004401	0.09%
Cr 267.716†	47276.6	0.575222 mg/L		0.0010320	0.575222 mg/L	0.0010320	0.18%
Cu 327.393†	64323.6	0.502682 mg/L		0.0006538	0.502682 mg/L	0.0006538	0.13%
Fe 273.955†	118879.5	5.17287 mg/L		0.018206	5.17287 mg/L	0.018206	0.35%
K 404.721†	3837.1					79.56	2.07%
Mg 279.077†	1190856.7	55.7719 mg/L		0.09110	55.7719 mg/L	0.09110	0.16%
Mn 257.610†	405883.9	0.503167 mg/L		0.0009944	0.503167 mg/L	0.0009944	0.20%
Mo 202.031†	10432.9	0.478223 mg/L		0.0010594	0.478223 mg/L	0.0010594	0.22%
Na 330.237†	80320.5	64.2884 mg/L		0.11033	64.2884 mg/L	0.11033	0.17%
Ni 231.604†	31891.6	0.508152 mg/L		0.0010834	0.508152 mg/L	0.0010834	0.21%
Pb 220.353†	8105.4	0.510283 mg/L		0.0000802	0.510283 mg/L	0.0000802	0.02%
Sb 206.836†	1116.6	0.474869 mg/L		0.0020135	0.474869 mg/L	0.0020135	0.42%
Se 196.026†	678.3	0.494955 mg/L		0.0093697	0.494955 mg/L	0.0093697	1.89%
Sn 189.927†	2138.1	0.475052 mg/L		0.0015758	0.475052 mg/L	0.0015758	0.33%
Ti 334.940†	307667.2	0.467209 mg/L		0.0005970	0.467209 mg/L	0.0005970	0.13%
Tl 190.801†	923.3	0.518598 mg/L		0.0013663	0.518598 mg/L	0.0013663	0.26%
V 290.880†	75728.9	0.500395 mg/L		0.0011473	0.500395 mg/L	0.0011473	0.23%
Zn 206.200†	33891.5	0.515021 mg/L		0.0011032	0.515021 mg/L	0.0011032	0.21%

Sequence No.: 20
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 1:05:41 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1050727.8	97.5 %	0.27			0.28%
Y 371.029	355998.4	95.2 %	0.80			0.85%
Ag 328.068†	18730.7	0.0959045 mg/L	0.00025616	0.0959045 mg/L	0.00025616	0.27%
QC value within limits for Ag		328.068 Recovery = 95.90%				
Al 308.215†	134838.0	4.85480 mg/L	0.039090	4.85480 mg/L	0.039090	0.81%
QC value within limits for Al		308.215 Recovery = 97.10%				
As 188.979†	687.2	0.466618 mg/L	0.0021297	0.466618 mg/L	0.0021297	0.46%
QC value within limits for As		188.979 Recovery = 93.32%				
Ba 233.527†	60487.3	0.485097 mg/L	0.0047862	0.485097 mg/L	0.0047862	0.99%
QC value within limits for Ba		233.527 Recovery = 97.02%				
Be 313.107†	1414379.1	0.474875 mg/L	0.0005075	0.474875 mg/L	0.0005075	0.11%
QC value within limits for Be		313.107 Recovery = 94.98%				
Ca 315.887†	5656457.9	49.0339 mg/L	0.03979	49.0339 mg/L	0.03979	0.08%
QC value within limits for Ca		315.887 Recovery = 98.07%				
Cd 228.802†	30919.0	0.483912 mg/L	0.0011083	0.483912 mg/L	0.0011083	0.23%
QC value within limits for Cd		228.802 Recovery = 96.78%				
Co 228.616†	23381.3	0.481219 mg/L	0.0009678	0.481219 mg/L	0.0009678	0.20%
QC value within limits for Co		228.616 Recovery = 96.24%				
Cr 267.716†	40057.6	0.487942 mg/L	0.0033953	0.487942 mg/L	0.0033953	0.70%
QC value within limits for Cr		267.716 Recovery = 97.59%				
Cu 327.393†	61263.8	0.479271 mg/L	0.0037799	0.479271 mg/L	0.0037799	0.79%
QC value within limits for Cu		327.393 Recovery = 95.85%				
Fe 273.955†	111513.4	4.85251 mg/L	0.039390	4.85251 mg/L	0.039390	0.81%
QC value within limits for Fe		273.955 Recovery = 97.05%				
K 404.721†	3941.5				58.19	1.48%
Unable to evaluate QC.						
Mg 279.077†	1052600.8	49.3043 mg/L	0.08520	49.3043 mg/L	0.08520	0.17%
QC value within limits for Mg		279.077 Recovery = 98.61%				
Mn 257.610†	383760.1	0.475938 mg/L	0.0044254	0.475938 mg/L	0.0044254	0.93%
QC value within limits for Mn		257.610 Recovery = 95.19%				
Mo 202.031†	10573.4	0.485803 mg/L	0.0014697	0.485803 mg/L	0.0014697	0.30%
QC value within limits for Mo		202.031 Recovery = 97.16%				
Na 330.237†	58634.3	47.1066 mg/L	0.41531	47.1066 mg/L	0.41531	0.88%
QC value within limits for Na		330.237 Recovery = 94.21%				
Ni 231.604†	30188.9	0.481082 mg/L	0.0042545	0.481082 mg/L	0.0042545	0.88%
QC value within limits for Ni		231.604 Recovery = 96.22%				
Pb 220.353†	7636.6	0.480801 mg/L	0.0022097	0.480801 mg/L	0.0022097	0.46%
QC value within limits for Pb		220.353 Recovery = 96.16%				
Sb 206.836†	1144.5	0.486661 mg/L	0.0027970	0.486661 mg/L	0.0027970	0.57%
QC value within limits for Sb		206.836 Recovery = 97.33%				
Se 196.026†	655.1	0.478516 mg/L	0.0020035	0.478516 mg/L	0.0020035	0.42%
QC value within limits for Se		196.026 Recovery = 95.70%				
Sn 189.927†	2183.6	0.486318 mg/L	0.0015931	0.486318 mg/L	0.0015931	0.33%
QC value within limits for Sn		189.927 Recovery = 97.26%				
Ti 334.940†	316434.5	0.480474 mg/L	0.0044097	0.480474 mg/L	0.0044097	0.92%
QC value within limits for Ti		334.940 Recovery = 96.09%				
Tl 190.801†	883.1	0.496272 mg/L	0.0020976	0.496272 mg/L	0.0020976	0.42%
QC value within limits for Tl		190.801 Recovery = 99.25%				
V 290.880†	72123.8	0.476794 mg/L	0.0046305	0.476794 mg/L	0.0046305	0.97%
QC value within limits for V		290.880 Recovery = 95.36%				
Zn 206.200†	31155.7	0.473533 mg/L	0.0012916	0.473533 mg/L	0.0012916	0.27%
QC value within limits for Zn		206.200 Recovery = 94.71%				

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 21

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/16/2013 1:09:29 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1086096.9	101 %	0.1			0.07%
Y 371.029	375539.7	100 %	0.2			0.19%
Ag 328.068†	3885.5	0.0199672 mg/L	0.00011562	0.0199672 mg/L	0.00011562	0.58%
QC value within limits for Ag		328.068 Recovery = 99.84%				
Al 308.215†	5430.6	0.186791 mg/L	0.0015139	0.186791 mg/L	0.0015139	0.81%
QC value within limits for Al		308.215 Recovery = 93.40%				
As 188.979†	29.6	0.0208814 mg/L	0.00018717	0.0208814 mg/L	0.00018717	0.90%
QC value within limits for As		188.979 Recovery = 104.41%				
Ba 233.527†	6179.6	0.0505745 mg/L	0.00044056	0.0505745 mg/L	0.00044056	0.87%
QC value within limits for Ba		233.527 Recovery = 101.15%				
Be 313.107†	34318.8	0.0125435 mg/L	0.00001274	0.0125435 mg/L	0.00001274	0.10%
QC value within limits for Be		313.107 Recovery = 104.53%				
Ca 315.887†	578366.8	5.08117 mg/L	0.005693	5.08117 mg/L	0.005693	0.11%
QC value within limits for Ca		315.887 Recovery = 101.62%				
Cd 228.802†	729.3	0.0127200 mg/L	0.00011162	0.0127200 mg/L	0.00011162	0.88%
QC value within limits for Cd		228.802 Recovery = 106.00%				
Co 228.616†	971.2	0.0210889 mg/L	0.00011580	0.0210889 mg/L	0.00011580	0.55%
QC value within limits for Co		228.616 Recovery = 105.44%				
Cr 267.716†	4062.1	0.0500649 mg/L	0.00010492	0.0500649 mg/L	0.00010492	0.21%
QC value within limits for Cr		267.716 Recovery = 100.13%				
Cu 327.393†	6184.7	0.0506052 mg/L	0.00181675	0.0506052 mg/L	0.00181675	3.59%
QC value within limits for Cu		327.393 Recovery = 101.21%				
Fe 273.955†	6753.2	0.296481 mg/L	0.0008672	0.296481 mg/L	0.0008672	0.29%
QC value within limits for Fe		273.955 Recovery = 98.83%				
K 404.721†	-404.5				81.59	20.17%
Unable to evaluate QC.						
Mg 279.077†	107815.9	5.10202 mg/L	0.006854	5.10202 mg/L	0.006854	0.13%
QC value within limits for Mg		279.077 Recovery = 102.04%				
Mn 257.610†	31217.8	0.0396985 mg/L	0.00014218	0.0396985 mg/L	0.00014218	0.36%
QC value within limits for Mn		257.610 Recovery = 99.25%				
Mo 202.031†	447.7	0.0210242 mg/L	0.00049017	0.0210242 mg/L	0.00049017	2.33%
QC value within limits for Mo		202.031 Recovery = 105.12%				
Na 330.237†	5513.9	5.02012 mg/L	0.026992	5.02012 mg/L	0.026992	0.54%
QC value within limits for Na		330.237 Recovery = 100.40%				
Ni 231.604†	3096.7	0.0496884 mg/L	0.00074885	0.0496884 mg/L	0.00074885	1.51%
QC value within limits for Ni		231.604 Recovery = 99.38%				
Pb 220.353†	186.4	0.0117533 mg/L	0.00093282	0.0117533 mg/L	0.00093282	7.94%
QC value within limits for Pb		220.353 Recovery = 97.94%				
Sb 206.836†	48.2	0.0220540 mg/L	0.00072722	0.0220540 mg/L	0.00072722	3.30%
QC value within limits for Sb		206.836 Recovery = 110.27%				
Se 196.026†	44.1	0.0293904 mg/L	0.00218214	0.0293904 mg/L	0.00218214	7.42%
QC value within limits for Se		196.026 Recovery = 73.48%				
Sn 189.927†	206.0	0.0458120 mg/L	0.00077995	0.0458120 mg/L	0.00077995	1.70%
QC value within limits for Sn		189.927 Recovery = 91.62%				
Ti 334.940†	30708.8	0.0481852 mg/L	0.00006951	0.0481852 mg/L	0.00006951	0.14%
QC value within limits for Ti		334.940 Recovery = 96.37%				
Tl 190.801†	41.3	0.0231144 mg/L	0.00152389	0.0231144 mg/L	0.00152389	6.59%
QC value within limits for Tl		190.801 Recovery = 115.57%				
V 290.880†	7308.3	0.0493909 mg/L	0.00012704	0.0493909 mg/L	0.00012704	0.26%
QC value within limits for V		290.880 Recovery = 98.78%				
Zn 206.200†	3170.5	0.0493659 mg/L	0.00028152	0.0493659 mg/L	0.00028152	0.57%
QC value within limits for Zn		206.200 Recovery = 98.73%				

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 22
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/16/2013 1:13:08 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	1101127.6	102 %		0.1				0.13%
Y 371.029	379053.5	101 %		0.3				0.32%
Ag 328.068†	116.3	0.0007621 mg/L	0.00013027	0.0007621 mg/L	0.00013027	17.09%		
QC value within limits for Ag	328.068	Recovery = Not calculated						
Al 308.215†	-89.0	-0.0123055 mg/L	0.00086090	-0.0123055 mg/L	0.00086090	7.00%		
QC value within limits for Al	308.215	Recovery = Not calculated						
As 188.979†	0.8	0.0013113 mg/L	0.00090649	0.0013113 mg/L	0.00090649	69.13%		
QC value within limits for As	188.979	Recovery = Not calculated						
Ba 233.527†	-66.0	0.0005939 mg/L	0.00000398	0.0005939 mg/L	0.00000398	0.67%		
QC value within limits for Ba	233.527	Recovery = Not calculated						
Be 313.107†	-169.8	0.0010024 mg/L	0.00001454	0.0010024 mg/L	0.00001454	1.45%		
QC value within limits for Be	313.107	Recovery = Not calculated						
Ca 315.887†	25.2	0.0747799 mg/L	0.00378076	0.0747799 mg/L	0.00378076	5.06%		
QC value within limits for Ca	315.887	Recovery = Not calculated						
Cd 228.802†	3.7	0.0014141 mg/L	0.00021667	0.0014141 mg/L	0.00021667	15.32%		
QC value within limits for Cd	228.802	Recovery = Not calculated						
Co 228.616†	18.3	0.0015794 mg/L	0.00013823	0.0015794 mg/L	0.00013823	8.75%		
QC value within limits for Co	228.616	Recovery = Not calculated						
Cr 267.716†	36.7	0.0012648 mg/L	0.00010628	0.0012648 mg/L	0.00010628	8.40%		
QC value within limits for Cr	267.716	Recovery = Not calculated						
Cu 327.393†	-208.7	0.0008573 mg/L	0.00118487	0.0008573 mg/L	0.00118487	138.21%		
QC value within limits for Cu	327.393	Recovery = Not calculated						
Fe 273.955†	17.1	0.0035285 mg/L	0.00014637	0.0035285 mg/L	0.00014637	4.15%		
QC value within limits for Fe	273.955	Recovery = Not calculated						
K 404.721†	-1156.1				27.99	2.42%		
Unable to evaluate QC.								
Mg 279.077†	-141.7	0.0514513 mg/L	0.00001367	0.0514513 mg/L	0.00001367	0.03%		
QC value within limits for Mg	279.077	Recovery = Not calculated						
Mn 257.610†	-39.9	0.0010683 mg/L	0.00002218	0.0010683 mg/L	0.00002218	2.08%		
QC value within limits for Mn	257.610	Recovery = Not calculated						
Mo 202.031†	4.9	0.0008154 mg/L	0.00018261	0.0008154 mg/L	0.00018261	22.39%		
QC value within limits for Mo	202.031	Recovery = Not calculated						
Na 330.237†	-39.2	0.620496 mg/L	0.1042622	0.620496 mg/L	0.1042622	16.80%		
QC value within limits for Na	330.237	Recovery = Not calculated						
Ni 231.604†	-10.7	0.0002472 mg/L	0.00003592	0.0002472 mg/L	0.00003592	14.53%		
QC value within limits for Ni	231.604	Recovery = Not calculated						
Pb 220.353†	-5.0	-0.0002798 mg/L	0.00073201	-0.0002798 mg/L	0.00073201	261.65%		
QC value within limits for Pb	220.353	Recovery = Not calculated						
Sb 206.836†	0.1	0.0017137 mg/L	0.00257730	0.0017137 mg/L	0.00257730	150.39%		
QC value within limits for Sb	206.836	Recovery = Not calculated						
Se 196.026†	-0.9	-0.0036634 mg/L	0.00573511	-0.0036634 mg/L	0.00573511	156.55%		
QC value within limits for Se	196.026	Recovery = Not calculated						
Sn 189.927†	7.8	0.0016738 mg/L	0.00091646	0.0016738 mg/L	0.00091646	54.75%		
QC value within limits for Sn	189.927	Recovery = Not calculated						
Ti 334.940†	-63.4	0.0016285 mg/L	0.00003450	0.0016285 mg/L	0.00003450	2.12%		
QC value within limits for Ti	334.940	Recovery = Not calculated						
Tl 190.801†	6.3	0.0032629 mg/L	0.00431141	0.0032629 mg/L	0.00431141	132.14%		
QC value within limits for Tl	190.801	Recovery = Not calculated						
V 290.880†	-106.7	0.0004935 mg/L	0.00029234	0.0004935 mg/L	0.00029234	59.23%		
QC value within limits for V	290.880	Recovery = Not calculated						
Zn 206.200†	31.5	0.0017649 mg/L	0.00020649	0.0017649 mg/L	0.00020649	11.70%		
QC value within limits for Zn	206.200	Recovery = Not calculated						

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 23
 Sample ID: 75576-029 SD
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 46
 Date Collected: 11/16/2013 1:16:42 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-029 SD

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1107375.7	103 %		0.0			0.04%
Y 371.029	382538.0	102 %		0.1			0.06%
Ag 328.068†	77.1	0.0005637 mg/L		0.00037407	0.0005637 mg/L	0.00037407	66.36%
Al 308.215†	456.4	0.0073736 mg/L		0.00216340	0.0073736 mg/L	0.00216340	29.34%
As 188.979†	1.7	0.0018408 mg/L		0.00010356	0.0018408 mg/L	0.00010356	5.63%
Ba 233.527†	743.6	0.0070738 mg/L		0.00010442	0.0070738 mg/L	0.00010442	1.48%
Be 313.107†	-141.3	0.0010118 mg/L		0.00006109	0.0010118 mg/L	0.00006109	6.04%
Ca 315.887†	719048.2	6.29987 mg/L		0.003159	6.29987 mg/L	0.003159	0.05%
Cd 228.802†	7.1	0.0014406 mg/L		0.00001058	0.0014406 mg/L	0.00001058	0.73%
Co 228.616†	23.1	0.0016842 mg/L		0.00026125	0.0016842 mg/L	0.00026125	15.51%
Cr 267.716†	1059.9	0.0136474 mg/L		0.00002818	0.0136474 mg/L	0.00002818	0.21%
Cu 327.393†	-64.8	0.0018938 mg/L		0.00052304	0.0018938 mg/L	0.00052304	27.62%
Fe 273.955†	387.7	0.0196452 mg/L		0.00049199	0.0196452 mg/L	0.00049199	2.50%
K 404.721†	-1216.8					91.07	7.48%
Mg 279.077†	18011.9	0.900697 mg/L		0.0007446	0.900697 mg/L	0.0007446	0.08%
Mn 257.610†	689.7	0.0019432 mg/L		0.00004875	0.0019432 mg/L	0.00004875	2.51%
Mo 202.031†	39.8	0.0022054 mg/L		0.00023228	0.0022054 mg/L	0.00023228	10.53%
Na 330.237†	3443.9	3.38008 mg/L		0.096554	3.38008 mg/L	0.096554	2.86%
Ni 231.604†	0.2	0.0004216 mg/L		0.00018058	0.0004216 mg/L	0.00018058	42.84%
Pb 220.353†	6.5	0.0004443 mg/L		0.00115535	0.0004443 mg/L	0.00115535	260.06%
Sb 206.836†	0.6	0.0019022 mg/L		0.00116819	0.0019022 mg/L	0.00116819	61.41%
Se 196.026†	6.7	0.0017411 mg/L		0.00791690	0.0017411 mg/L	0.00791690	454.72%
Sn 189.927†	10.3	0.0020013 mg/L		0.00029496	0.0020013 mg/L	0.00029496	14.74%
Ti 334.940†	201.1	0.0020286 mg/L		0.00018035	0.0020286 mg/L	0.00018035	8.89%
Tl 190.801†	2.3	0.0010566 mg/L		0.00363225	0.0010566 mg/L	0.00363225	343.76%
V 290.880†	-49.3	0.0008385 mg/L		0.00047161	0.0008385 mg/L	0.00047161	56.25%
Zn 206.200†	178.9	0.0040006 mg/L		0.00004323	0.0040006 mg/L	0.00004323	1.08%

Sequence No.: 24
 Sample ID: 75676-001
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 47
 Date Collected: 11/16/2013 1:20:19 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75676-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1100925.6	102	%	0.3			0.28%
Y 371.029	368970.9	98.7	%	0.50			0.51%
Ag 328.068†	16.4	0.0002652	mg/L	0.00007789	0.0002652 mg/L	0.00007789	29.37%
Al 308.215†	5102.7	0.175211	mg/L	0.0044279	0.175211 mg/L	0.0044279	2.53%
As 188.979†	0.5	0.0008836	mg/L	0.00050348	0.0008836 mg/L	0.00050348	56.98%
Ba 233.527†	2613.8	0.0220384	mg/L	0.00012209	0.0220384 mg/L	0.00012209	0.55%
Be 313.107†	-139.3	0.0010116	mg/L	0.00000543	0.0010116 mg/L	0.00000543	0.54%
Ca 315.887†	2501061.0	21.7279	mg/L	0.05203	21.7279 mg/L	0.05203	0.24%
Cd 228.802†	-15.8	0.0010157	mg/L	0.00012972	0.0010157 mg/L	0.00012972	12.77%
Co 228.616†	16.5	0.0015514	mg/L	0.00003403	0.0015514 mg/L	0.00003403	2.19%
Cr 267.716†	47.5	0.0014177	mg/L	0.00015872	0.0014177 mg/L	0.00015872	11.20%
Cu 327.393†	310.2	0.0046029	mg/L	0.00155110	0.0046029 mg/L	0.00155110	33.70%
Fe 273.955†	3104.8	0.137812	mg/L	0.0001194	0.137812 mg/L	0.0001194	0.09%
K 404.721†	-722.5					214.75	29.73%
Mg 279.077†	91050.1	4.31743	mg/L	0.001638	4.31743 mg/L	0.001638	0.04%
Mn 257.610†	3105.8	0.0048172	mg/L	0.00002846	0.0048172 mg/L	0.00002846	0.59%
Mo 202.031†	92.5	0.0040931	mg/L	0.00003940	0.0040931 mg/L	0.00003940	0.96%
Na 330.237†	33996.5	27.5865	mg/L	0.04889	27.5865 mg/L	0.04889	0.18%
Ni 231.604†	-20.5	0.0000963	mg/L	0.00018302	0.0000963 mg/L	0.00018302	190.09%
Pb 220.353†	18.2	0.0012020	mg/L	0.00067806	0.0012020 mg/L	0.00067806	56.41%
Sb 206.836†	0.6	0.0019182	mg/L	0.00032936	0.0019182 mg/L	0.00032936	17.17%
Se 196.026†	1.1	-0.0026449	mg/L	0.00078926	-0.0026449 mg/L	0.00078926	29.84%
Sn 189.927†	5.1	0.0003008	mg/L	0.00066633	0.0003008 mg/L	0.00066633	221.54%
Ti 334.940†	1868.2	0.0045509	mg/L	0.00007498	0.0045509 mg/L	0.00007498	1.65%
Tl 190.801†	5.1	0.0026930	mg/L	0.00028489	0.0026930 mg/L	0.00028489	10.58%
V 290.880†	266.0	0.0027810	mg/L	0.00037108	0.0027810 mg/L	0.00037108	13.34%
Zn 206.200†	234.4	0.0048343	mg/L	0.00009366	0.0048343 mg/L	0.00009366	1.94%

Sequence No.: 25
 Sample ID: 75677-004
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 48
 Date Collected: 11/16/2013 1:24:05 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75677-004

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1028840.5	95.5 %		0.01			0.01%
Y 371.029	347359.8	92.9 %		0.50			0.54%
Ag 328.068†	2531.8	0.0131526 mg/L		0.00047022	0.0131526 mg/L	0.00047022	3.58%
Al 308.215†	38268.1	0.792319 mg/L		0.0053131	0.792319 mg/L	0.0053131	0.67%
As 188.979†	0.5	-0.0071088 mg/L		0.00209554	-0.0071088 mg/L	0.00209554	29.48%
Ba 233.527†	4101.8	0.0339107 mg/L		0.00008761	0.0339107 mg/L	0.00008761	0.26%
Be 313.107†	-3674.6	-0.0001738 mg/L		0.00001392	-0.0001738 mg/L	0.00001392	8.01%
Ca 315.887†	216839.9	1.70947 mg/L		0.007533	1.70947 mg/L	0.007533	0.44%
Cd 228.802†	682.4	0.0079787 mg/L		0.00034232	0.0079787 mg/L	0.00034232	4.29%
Co 228.616†	-6427.7	0.0019072 mg/L		0.00098704	0.0019072 mg/L	0.00098704	51.75%
Cr 267.716†	-15235.5	-0.0016262 mg/L		0.00053309	-0.0016262 mg/L	0.00053309	32.78%
Cu 327.393†	32165.9	0.270793 mg/L		0.0002599	0.270793 mg/L	0.0002599	0.10%
Fe 273.955†	26257.9	1.14474 mg/L		0.006605	1.14474 mg/L	0.006605	0.58%
K 404.721†	59240.2					49.94	0.08%
Mg 279.077†	-13420.0	-0.167689 mg/L		0.0170508	-0.167689 mg/L	0.0170508	10.17%
Mn 257.610†	31468.1	0.0509586 mg/L		0.00040499	0.0509586 mg/L	0.00040499	0.79%
Mo 202.031†	764541.7	35.2259 mg/L		0.13135	35.2259 mg/L	0.13135	0.37%
Na 330.237†	734085.5	582.257 mg/L		1.9839	582.257 mg/L	1.9839	0.34%
Ni 231.604†	-2200.7	0.0062975 mg/L		0.00001083	0.0062975 mg/L	0.00001083	0.17%
Pb 220.353†	4345.4	0.306915 mg/L		0.0030243	0.306915 mg/L	0.0030243	0.99%
Sb 206.836†	93.9	0.0647530 mg/L		0.00289259	0.0647530 mg/L	0.00289259	4.47%
Se 196.026†	719.5	0.534047 mg/L		0.0079670	0.534047 mg/L	0.0079670	1.49%
Sn 189.927†	239.5	0.0533375 mg/L		0.00198798	0.0533375 mg/L	0.00198798	3.73%
Ti 334.940†	3108.8	0.0064279 mg/L		0.00046492	0.0064279 mg/L	0.00046492	7.23%
Tl 190.801†	-609.8	-0.173971 mg/L		0.0044904	-0.173971 mg/L	0.0044904	2.58%
V 290.880†	-869.9	-0.0002829 mg/L		0.00029273	-0.0002829 mg/L	0.00029273	103.48%
Zn 206.200†	28097.3	0.418055 mg/L		0.0043222	0.418055 mg/L	0.0043222	1.03%

Sequence No.: 26
 Sample ID: 75677-004 2D
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 36
 Date Collected: 11/16/2013 1:28:44 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75677-004 2D

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1063551.3	98.7	%	0.45				0.46%
Y 371.029	357531.6	95.6	%	0.48				0.50%
Ag 328.068†	1332.2	0.0069963	mg/L	0.00007605	0.0069963	mg/L	0.00007605	1.09%
Al 308.215†	18741.1	0.388177	mg/L	0.0009469	0.388177	mg/L	0.0009469	0.24%
As 188.979†	7.2	0.0017135	mg/L	0.00136315	0.0017135	mg/L	0.00136315	79.55%
Ba 233.527†	1787.0	0.0154053	mg/L	0.00002556	0.0154053	mg/L	0.00002556	0.17%
Be 313.107†	-2132.8	0.0003438	mg/L	0.00001840	0.0003438	mg/L	0.00001840	5.35%
Ca 315.887†	103300.5	0.852181	mg/L	0.0033084	0.852181	mg/L	0.0033084	0.39%
Cd 228.802†	330.9	0.0045810	mg/L	0.00001928	0.0045810	mg/L	0.00001928	0.42%
Co 228.616†	-3080.8	0.0018324	mg/L	0.00022170	0.0018324	mg/L	0.00022170	12.10%
Cr 267.716†	-7200.2	0.0012815	mg/L	0.00015192	0.0012815	mg/L	0.00015192	11.85%
Cu 327.393†	16741.3	0.141443	mg/L	0.0006012	0.141443	mg/L	0.0006012	0.43%
Fe 273.955†	12553.9	0.548755	mg/L	0.0009574	0.548755	mg/L	0.0009574	0.17%
K 404.721†	26016.2						982.15	3.78%
Mg 279.077†	-6768.8	-0.0649938	mg/L	0.00928756	-0.0649938	mg/L	0.00928756	14.29%
Mn 257.610†	15421.2	0.0254508	mg/L	0.00002324	0.0254508	mg/L	0.00002324	0.09%
Mo 202.031†	368121.3	16.9613	mg/L	0.03128	16.9613	mg/L	0.03128	0.18%
Na 330.237†	366738.3	291.213	mg/L	0.0783	291.213	mg/L	0.0783	0.03%
Ni 231.604†	-1021.3	0.0038565	mg/L	0.00025953	0.0038565	mg/L	0.00025953	6.73%
Pb 220.353†	2072.8	0.146572	mg/L	0.0007053	0.146572	mg/L	0.0007053	0.48%
Sb 206.836†	46.4	0.0325394	mg/L	0.00199718	0.0325394	mg/L	0.00199718	6.14%
Se 196.026†	305.7	0.225757	mg/L	0.0148999	0.225757	mg/L	0.0148999	6.60%
Sn 189.927†	99.0	0.0220111	mg/L	0.00208104	0.0220111	mg/L	0.00208104	9.45%
Ti 334.940†	1295.0	0.0036836	mg/L	0.00013907	0.0036836	mg/L	0.00013907	3.78%
Tl 190.801†	-276.5	-0.0743320	mg/L	0.00117620	-0.0743320	mg/L	0.00117620	1.58%
V 290.880†	-468.9	0.0001556	mg/L	0.00004239	0.0001556	mg/L	0.00004239	27.24%
Zn 206.200†	12684.3	0.189149	mg/L	0.0006680	0.189149	mg/L	0.0006680	0.35%

Sequence No.: 27
 Sample ID: 75677-004 4D
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 37
 Date Collected: 11/16/2013 1:32:22 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75677-004 4D

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1100465.2	102	%	0.6			0.59%
Y 371.029	371646.3	99.4	%	0.39			0.39%
Ag 328.068†	855.0	0.0045441	mg/L	0.00044374	0.0045441 mg/L	0.00044374	9.77%
Al 308.215†	9164.9	0.184921	mg/L	0.0019787	0.184921 mg/L	0.0019787	1.07%
As 188.979†	6.4	0.0031938	mg/L	0.00120863	0.0031938 mg/L	0.00120863	37.84%
Ba 233.527†	780.6	0.0073603	mg/L	0.00011891	0.0073603 mg/L	0.00011891	1.62%
Be 313.107†	-1273.8	0.0006322	mg/L	0.00000527	0.0006322 mg/L	0.00000527	0.83%
Ca 315.887†	49045.1	0.441987	mg/L	0.0001179	0.441987 mg/L	0.0001179	0.03%
Cd 228.802†	179.4	0.0032070	mg/L	0.00015746	0.0032070 mg/L	0.00015746	4.91%
Co 228.616†	-1480.0	0.0021162	mg/L	0.00005451	0.0021162 mg/L	0.00005451	2.58%
Cr 267.716†	-3460.2	0.0018643	mg/L	0.00002408	0.0018643 mg/L	0.00002408	1.29%
Cu 327.393†	8909.5	0.0760782	mg/L	0.00035924	0.0760782 mg/L	0.00035924	0.47%
Fe 273.955†	6185.8	0.271804	mg/L	0.0015171	0.271804 mg/L	0.0015171	0.56%
K 404.721†	10593.8					224.82	2.12%
Mg 279.077†	-3483.5	-0.0100361	mg/L	0.00026949	-0.0100361 mg/L	0.00026949	2.69%
Mn 257.610†	7406.8	0.0128553	mg/L	0.00000055	0.0128553 mg/L	0.00000055	0.00%
Mo 202.031†	180368.6	8.31085	mg/L	0.029234	8.31085 mg/L	0.029234	0.35%
Na 330.237†	182580.5	145.308	mg/L	0.2483	145.308 mg/L	0.2483	0.17%
Ni 231.604†	-525.5	0.0017036	mg/L	0.00001329	0.0017036 mg/L	0.00001329	0.78%
Pb 220.353†	1018.3	0.0720031	mg/L	0.00018233	0.0720031 mg/L	0.00018233	0.25%
Sb 206.836†	19.9	0.0155723	mg/L	0.00451043	0.0155723 mg/L	0.00451043	28.96%
Se 196.026†	155.1	0.112959	mg/L	0.0034248	0.112959 mg/L	0.0034248	3.03%
Sn 189.927†	46.5	0.0103037	mg/L	0.00040259	0.0103037 mg/L	0.00040259	3.91%
Ti 334.940†	468.1	0.0024326	mg/L	0.00007252	0.0024326 mg/L	0.00007252	2.98%
Tl 190.801†	-123.4	-0.0298507	mg/L	0.00326846	-0.0298507 mg/L	0.00326846	10.95%
V 290.880†	-315.8	0.0001188	mg/L	0.00053705	0.0001188 mg/L	0.00053705	451.97%
Zn 206.200†	5923.3	0.0889098	mg/L	0.00013639	0.0889098 mg/L	0.00013639	0.15%

Sequence No.: 28
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/16/2013 1:36:00 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	984966.6	91.4 %	0.31			0.34%
Y 371.029	334385.4	89.4 %	0.14			0.15%
Ag 328.068†	-2531.0	0.0034425 mg/L	0.00002030	0.0034425 mg/L	0.00002030	0.59%
Al 308.215†	12997594.2	469.616 mg/L	3.5608	469.616 mg/L	3.5608	0.76%
QC value within limits for Al 308.215 Recovery = 93.92%						
As 188.979†	1.2	0.0111297 mg/L	0.00131545	0.0111297 mg/L	0.00131545	11.82%
Ba 233.527†	756.9	0.0001310 mg/L	0.00014018	0.0001310 mg/L	0.00014018	106.97%
Be 313.107†	-2090.4	0.0003584 mg/L	0.00005963	0.0003584 mg/L	0.00005963	16.64%
Ca 315.887†	53605559.6	463.844 mg/L	3.6085	463.844 mg/L	3.6085	0.78%
QC value within limits for Ca 315.887 Recovery = 92.77%						
Cd 228.802†	257.6	-0.0002652 mg/L	0.00023576	-0.0002652 mg/L	0.00023576	88.89%
Co 228.616†	-70.7	-0.0001496 mg/L	0.00032979	-0.0001496 mg/L	0.00032979	220.46%
Cr 267.716†	-199.3	-0.0014558 mg/L	0.00008788	-0.0014558 mg/L	0.00008788	6.04%
Cu 327.393†	1626.1	0.0031321 mg/L	0.00027803	0.0031321 mg/L	0.00027803	8.88%
Fe 273.955†	4275236.4	185.933 mg/L	0.2981	185.933 mg/L	0.2981	0.16%
QC value within limits for Fe 273.955 Recovery = 92.97%						
K 404.721†	-3466.5				615.77	17.76%
Mg 279.077†	10449321.4	488.754 mg/L	4.4625	488.754 mg/L	4.4625	0.91%
QC value within limits for Mg 279.077 Recovery = 97.75%						
Mn 257.610†	1397.9	-0.0152713 mg/L	0.00012055	-0.0152713 mg/L	0.00012055	0.79%
Mo 202.031†	563.5	0.0018817 mg/L	0.00034874	0.0018817 mg/L	0.00034874	18.53%
Na 330.237†	193.3	0.804671 mg/L	0.0213439	0.804671 mg/L	0.0213439	2.65%
Ni 231.604†	5.4	0.0005327 mg/L	0.00003855	0.0005327 mg/L	0.00003855	7.24%
Pb 220.353†	-1415.6	-0.0069713 mg/L	0.00034423	-0.0069713 mg/L	0.00034423	4.94%
Sb 206.836†	-98.1	0.0028276 mg/L	0.00144575	0.0028276 mg/L	0.00144575	51.13%
Se 196.026†	-104.9	0.0028871 mg/L	0.00364815	0.0028871 mg/L	0.00364815	126.36%
Sn 189.927†	-5.2	-0.0134875 mg/L	0.00150710	-0.0134875 mg/L	0.00150710	11.17%
Ti 334.940†	674.2	0.0027444 mg/L	0.00003918	0.0027444 mg/L	0.00003918	1.43%
Tl 190.801†	13.9	0.0005314 mg/L	0.00260659	0.0005314 mg/L	0.00260659	490.50%
V 290.880†	4338.1	0.0026503 mg/L	0.00083663	0.0026503 mg/L	0.00083663	31.57%
Zn 206.200†	688.1	-0.0035606 mg/L	0.00019532	-0.0035606 mg/L	0.00019532	5.49%

All analyte(s) passed QC.

Sequence No.: 29
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/16/2013 1:41:22 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	976358.1	90.6 %		0.10			0.11%
Y 371.029	331004.1	88.5 %		0.00			0.00%
Ag 328.068†	204490.0	1.05681 mg/L		0.000197	1.05681 mg/L	0.000197	0.02%
QC value within limits for Ag	328.068	Recovery = 105.68%					
Al 308.215†	12940063.0	467.538 mg/L		2.5456	467.538 mg/L	2.5456	0.54%
QC value within limits for Al	308.215	Recovery = 93.51%					
As 188.979†	1501.2	1.02664 mg/L		0.009699	1.02664 mg/L	0.009699	0.94%
QC value within limits for As	188.979	Recovery = 102.66%					
Ba 233.527†	63731.7	0.504234 mg/L		0.0048130	0.504234 mg/L	0.0048130	0.95%
QC value within limits for Ba	233.527	Recovery = 100.85%					
Be 313.107†	1517037.0	0.509450 mg/L		0.0002723	0.509450 mg/L	0.0002723	0.05%
QC value within limits for Be	313.107	Recovery = 101.89%					
Ca 315.887†	53031197.5	458.870 mg/L		2.4098	458.870 mg/L	2.4098	0.53%
QC value within limits for Ca	315.887	Recovery = 91.77%					
Cd 228.802†	66152.2	1.02890 mg/L		0.011026	1.02890 mg/L	0.011026	1.07%
QC value within limits for Cd	228.802	Recovery = 102.89%					
Co 228.616†	23966.7	0.492451 mg/L		0.0046253	0.492451 mg/L	0.0046253	0.94%
QC value within limits for Co	228.616	Recovery = 98.49%					
Cr 267.716†	41066.2	0.497755 mg/L		0.0065398	0.497755 mg/L	0.0065398	1.31%
QC value within limits for Cr	267.716	Recovery = 99.55%					
Cu 327.393†	67719.9	0.518345 mg/L		0.0014379	0.518345 mg/L	0.0014379	0.28%
QC value within limits for Cu	327.393	Recovery = 103.67%					
Fe 273.955†	4254734.1	185.042 mg/L		0.2780	185.042 mg/L	0.2780	0.15%
QC value within limits for Fe	273.955	Recovery = 92.52%					
K 404.721†	-3307.7					218.66	6.61%
Mg 279.077†	10290134.9	481.311 mg/L		2.6573	481.311 mg/L	2.6573	0.55%
QC value within limits for Mg	279.077	Recovery = 96.26%					
Mn 257.610†	398165.9	0.477654 mg/L		0.0000129	0.477654 mg/L	0.0000129	0.00%
QC value within limits for Mn	257.610	Recovery = 95.53%					
Mo 202.031†	513.7	-0.0001998 mg/L		0.00103645	-0.0001998 mg/L	0.00103645	518.75%
Na 330.237†	1362.4	1.73092 mg/L		0.028175	1.73092 mg/L	0.028175	1.63%
Ni 231.604†	60197.8	0.957781 mg/L		0.0007792	0.957781 mg/L	0.0007792	0.08%
QC value within limits for Ni	231.604	Recovery = 95.78%					
Pb 220.353†	14057.4	0.965274 mg/L		0.0086570	0.965274 mg/L	0.0086570	0.90%
QC value within limits for Pb	220.353	Recovery = 96.53%					
Sb 206.836†	2300.7	1.01732 mg/L		0.012353	1.01732 mg/L	0.012353	1.21%
QC value within limits for Sb	206.836	Recovery = 101.73%					
Se 196.026†	1202.3	0.960417 mg/L		0.0064844	0.960417 mg/L	0.0064844	0.68%
QC value within limits for Se	196.026	Recovery = 96.04%					
Sn 189.927†	-7.3	-0.0138315 mg/L		0.00282678	-0.0138315 mg/L	0.00282678	20.44%
Ti 334.940†	877.5	0.0030521 mg/L		0.00019216	0.0030521 mg/L	0.00019216	6.30%
Tl 190.801†	1718.2	0.948700 mg/L		0.0133027	0.948700 mg/L	0.0133027	1.40%
QC value within limits for Tl	190.801	Recovery = 94.87%					
V 290.880†	79004.5	0.497602 mg/L		0.0005385	0.497602 mg/L	0.0005385	0.11%
QC value within limits for V	290.880	Recovery = 99.52%					
Zn 206.200†	63144.8	0.944011 mg/L		0.0104415	0.944011 mg/L	0.0104415	1.11%
QC value within limits for Zn	206.200	Recovery = 94.40%					

All analyte(s) passed QC.

Sequence No.: 30
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 1:46:22 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte		Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc	361.383	1064811.2	98.8 %		0.57			0.58%
Y	371.029	362888.2	97.1 %		0.99			1.02%
Ag	328.068†	18692.7	0.0957143 mg/L	0.00119019		0.0957143 mg/L	0.00119019	1.24%
QC value within limits for Ag		328.068	Recovery = 95.71%					
Al	308.215†	135444.7	4.87675 mg/L	0.063324		4.87675 mg/L	0.063324	1.30%
QC value within limits for Al		308.215	Recovery = 97.53%					
As	188.979†	691.2	0.469339 mg/L	0.0055259		0.469339 mg/L	0.0055259	1.18%
QC value within limits for As		188.979	Recovery = 93.87%					
Ba	233.527†	60474.5	0.484993 mg/L	0.0064659		0.484993 mg/L	0.0064659	1.33%
QC value within limits for Ba		233.527	Recovery = 97.00%					
Be	313.107†	1410182.6	0.473469 mg/L	0.0012566		0.473469 mg/L	0.0012566	0.27%
QC value within limits for Be		313.107	Recovery = 94.69%					
Ca	315.887†	5643361.3	48.9204 mg/L	0.00729		48.9204 mg/L	0.00729	0.01%
QC value within limits for Ca		315.887	Recovery = 97.84%					
Cd	228.802†	30602.1	0.478963 mg/L	0.0065368		0.478963 mg/L	0.0065368	1.36%
QC value within limits for Cd		228.802	Recovery = 95.79%					
Co	228.616†	23376.1	0.481110 mg/L	0.0057794		0.481110 mg/L	0.0057794	1.20%
QC value within limits for Co		228.616	Recovery = 96.22%					
Cr	267.716†	40198.9	0.489647 mg/L	0.0088474		0.489647 mg/L	0.0088474	1.81%
QC value within limits for Cr		267.716	Recovery = 97.93%					
Cu	327.393†	61096.5	0.477969 mg/L	0.0053752		0.477969 mg/L	0.0053752	1.12%
QC value within limits for Cu		327.393	Recovery = 95.59%					
Fe	273.955†	112394.3	4.89082 mg/L	0.057660		4.89082 mg/L	0.057660	1.18%
QC value within limits for Fe		273.955	Recovery = 97.82%					
K	404.721†	3342.9					149.42	4.47%
Unable to evaluate QC.								
Mg	279.077†	1050794.9	49.2198 mg/L	0.01867		49.2198 mg/L	0.01867	0.04%
QC value within limits for Mg		279.077	Recovery = 98.44%					
Mn	257.610†	384167.2	0.476446 mg/L	0.0063762		0.476446 mg/L	0.0063762	1.34%
QC value within limits for Mn		257.610	Recovery = 95.29%					
Mo	202.031†	10550.8	0.484765 mg/L	0.0056368		0.484765 mg/L	0.0056368	1.16%
QC value within limits for Mo		202.031	Recovery = 96.95%					
Na	330.237†	58549.6	47.0396 mg/L	0.48596		47.0396 mg/L	0.48596	1.03%
QC value within limits for Na		330.237	Recovery = 94.08%					
Ni	231.604†	30350.1	0.483644 mg/L	0.0076042		0.483644 mg/L	0.0076042	1.57%
QC value within limits for Ni		231.604	Recovery = 96.73%					
Pb	220.353†	7610.3	0.479152 mg/L	0.0079040		0.479152 mg/L	0.0079040	1.65%
QC value within limits for Pb		220.353	Recovery = 95.83%					
Sb	206.836†	1133.5	0.482016 mg/L	0.0054424		0.482016 mg/L	0.0054424	1.13%
QC value within limits for Sb		206.836	Recovery = 96.40%					
Se	196.026†	649.9	0.474707 mg/L	0.0083800		0.474707 mg/L	0.0083800	1.77%
QC value within limits for Se		196.026	Recovery = 94.94%					
Sn	189.927†	2199.3	0.489838 mg/L	0.0053233		0.489838 mg/L	0.0053233	1.09%
QC value within limits for Sn		189.927	Recovery = 97.97%					
Ti	334.940†	315989.0	0.479800 mg/L	0.0065551		0.479800 mg/L	0.0065551	1.37%
QC value within limits for Ti		334.940	Recovery = 95.96%					
Tl	190.801†	875.3	0.491934 mg/L	0.0084260		0.491934 mg/L	0.0084260	1.71%
QC value within limits for Tl		190.801	Recovery = 98.39%					
V	290.880†	72088.7	0.476564 mg/L	0.0062536		0.476564 mg/L	0.0062536	1.31%
QC value within limits for V		290.880	Recovery = 95.31%					
Zn	206.200†	31120.2	0.472993 mg/L	0.0085324		0.472993 mg/L	0.0085324	1.80%
QC value within limits for Zn		206.200	Recovery = 94.60%					

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 31

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/16/2013 1:50:10 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1090870.7	101 %		0.1			0.13%
Y 371.029	375119.2	100 %		0.0			0.03%
Ag 328.068†	3997.0	0.0205355 mg/L		0.00050709	0.0205355 mg/L	0.00050709	2.47%
QC value within limits for Ag	328.068	Recovery = 102.68%					
Al 308.215†	5747.3	0.198218 mg/L		0.0045627	0.198218 mg/L	0.0045627	2.30%
QC value within limits for Al	308.215	Recovery = 99.11%					
As 188.979†	29.0	0.0204771 mg/L		0.00196715	0.0204771 mg/L	0.00196715	9.61%
QC value within limits for As	188.979	Recovery = 102.39%					
Ba 233.527†	6125.3	0.0501394 mg/L		0.00032836	0.0501394 mg/L	0.00032836	0.65%
QC value within limits for Ba	233.527	Recovery = 100.28%					
Be 313.107†	34360.9	0.0125577 mg/L		0.00001713	0.0125577 mg/L	0.00001713	0.14%
QC value within limits for Be	313.107	Recovery = 104.65%					
Ca 315.887†	584274.1	5.13229 mg/L		0.011691	5.13229 mg/L	0.011691	0.23%
QC value within limits for Ca	315.887	Recovery = 102.65%					
Cd 228.802†	760.7	0.0132100 mg/L		0.00004642	0.0132100 mg/L	0.00004642	0.35%
QC value within limits for Cd	228.802	Recovery = 110.08%					
Co 228.616†	1000.4	0.0216909 mg/L		0.00038031	0.0216909 mg/L	0.00038031	1.75%
QC value within limits for Co	228.616	Recovery = 108.45%					
Cr 267.716†	4082.8	0.0503205 mg/L		0.00017702	0.0503205 mg/L	0.00017702	0.35%
QC value within limits for Cr	267.716	Recovery = 100.64%					
Cu 327.393†	6329.8	0.0517361 mg/L		0.00042604	0.0517361 mg/L	0.00042604	0.82%
QC value within limits for Cu	327.393	Recovery = 103.47%					
Fe 273.955†	6973.3	0.306055 mg/L		0.0000672	0.306055 mg/L	0.0000672	0.02%
QC value within limits for Fe	273.955	Recovery = 102.02%					
K 404.721†	-1234.4					353.53	28.64%
Unable to evaluate QC.							
Mg 279.077†	109455.8	5.17874 mg/L		0.010059	5.17874 mg/L	0.010059	0.19%
QC value within limits for Mg	279.077	Recovery = 103.57%					
Mn 257.610†	31366.5	0.0398806 mg/L		0.00003458	0.0398806 mg/L	0.00003458	0.09%
QC value within limits for Mn	257.610	Recovery = 99.70%					
Mo 202.031†	466.0	0.0218664 mg/L		0.00044770	0.0218664 mg/L	0.00044770	2.05%
QC value within limits for Mo	202.031	Recovery = 109.33%					
Na 330.237†	5558.7	5.05560 mg/L		0.036831	5.05560 mg/L	0.036831	0.73%
QC value within limits for Na	330.237	Recovery = 101.11%					
Ni 231.604†	3184.5	0.0510857 mg/L		0.00014406	0.0510857 mg/L	0.00014406	0.28%
QC value within limits for Ni	231.604	Recovery = 102.17%					
Pb 220.353†	183.1	0.0115508 mg/L		0.00030442	0.0115508 mg/L	0.00030442	2.64%
QC value within limits for Pb	220.353	Recovery = 96.26%					
Sb 206.836†	52.8	0.0240124 mg/L		0.00100496	0.0240124 mg/L	0.00100496	4.19%
QC value within limits for Sb	206.836	Recovery = 120.06%					
Se 196.026†	65.7	0.0452147 mg/L		0.00132143	0.0452147 mg/L	0.00132143	2.92%
QC value within limits for Se	196.026	Recovery = 113.04%					
Sn 189.927†	211.8	0.0471061 mg/L		0.00020227	0.0471061 mg/L	0.00020227	0.43%
QC value within limits for Sn	189.927	Recovery = 94.21%					
Ti 334.940†	30541.5	0.0479321 mg/L		0.00012373	0.0479321 mg/L	0.00012373	0.26%
QC value within limits for Ti	334.940	Recovery = 95.86%					
Tl 190.801†	42.3	0.0236656 mg/L		0.00181286	0.0236656 mg/L	0.00181286	7.66%
QC value within limits for Tl	190.801	Recovery = 118.33%					
V 290.880†	7321.2	0.0494728 mg/L		0.00018297	0.0494728 mg/L	0.00018297	0.37%
QC value within limits for V	290.880	Recovery = 98.95%					
Zn 206.200†	3255.3	0.0506509 mg/L		0.00037926	0.0506509 mg/L	0.00037926	0.75%
QC value within limits for Zn	206.200	Recovery = 101.30%					

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 32
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/16/2013 1:53:49 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	1106921.0	103 %		0.2			0.21%
Y 371.029	381174.6	102 %		0.2			0.19%
Ag 328.068†	108.5	0.0007226 mg/L		0.00013255	0.0007226 mg/L	0.00013255	18.34%
QC value within limits for Ag	328.068	Recovery = Not calculated					
Al 308.215†	47.7	-0.0073707 mg/L		0.00251491	-0.0073707 mg/L	0.00251491	34.12%
QC value within limits for Al	308.215	Recovery = Not calculated					
As 188.979†	1.1	0.0015774 mg/L		0.00037262	0.0015774 mg/L	0.00037262	23.62%
QC value within limits for As	188.979	Recovery = Not calculated					
Ba 233.527†	-30.8	0.0008752 mg/L		0.00006643	0.0008752 mg/L	0.00006643	7.59%
QC value within limits for Ba	233.527	Recovery = Not calculated					
Be 313.107†	-99.9	0.0010258 mg/L		0.00003952	0.0010258 mg/L	0.00003952	3.85%
QC value within limits for Be	313.107	Recovery = Not calculated					
Ca 315.887†	-431.6	0.0708196 mg/L		0.00175467	0.0708196 mg/L	0.00175467	2.48%
QC value within limits for Ca	315.887	Recovery = Not calculated					
Cd 228.802†	-9.4	0.0012093 mg/L		0.00003138	0.0012093 mg/L	0.00003138	2.59%
QC value within limits for Cd	228.802	Recovery = Not calculated					
Co 228.616†	15.0	0.0015137 mg/L		0.00007682	0.0015137 mg/L	0.00007682	5.07%
QC value within limits for Co	228.616	Recovery = Not calculated					
Cr 267.716†	26.2	0.0011400 mg/L		0.00022201	0.0011400 mg/L	0.00022201	19.47%
QC value within limits for Cr	267.716	Recovery = Not calculated					
Cu 327.393†	-409.1	-0.0007044 mg/L		0.00052136	-0.0007044 mg/L	0.00052136	74.01%
QC value within limits for Cu	327.393	Recovery = Not calculated					
Fe 273.955†	56.4	0.0052345 mg/L		0.00027825	0.0052345 mg/L	0.00027825	5.32%
QC value within limits for Fe	273.955	Recovery = Not calculated					
K 404.721†	-1552.5					243.43	15.68%
Unable to evaluate QC.							
Mg 279.077†	47.9	0.0603202 mg/L		0.00401885	0.0603202 mg/L	0.00401885	6.66%
QC value within limits for Mg	279.077	Recovery = Not calculated					
Mn 257.610†	-63.5	0.0010388 mg/L		0.00000724	0.0010388 mg/L	0.00000724	0.70%
QC value within limits for Mn	257.610	Recovery = Not calculated					
Mo 202.031†	12.7	0.0011771 mg/L		0.00003025	0.0011771 mg/L	0.00003025	2.57%
QC value within limits for Mo	202.031	Recovery = Not calculated					
Na 330.237†	97.3	0.728646 mg/L		0.0096751	0.728646 mg/L	0.0096751	1.33%
QC value within limits for Na	330.237	Recovery = Not calculated					
Ni 231.604†	-39.6	-0.0002123 mg/L		0.00003575	-0.0002123 mg/L	0.00003575	16.84%
QC value within limits for Ni	231.604	Recovery = Not calculated					
Pb 220.353†	-15.6	-0.0009468 mg/L		0.00112609	-0.0009468 mg/L	0.00112609	118.94%
QC value within limits for Pb	220.353	Recovery = Not calculated					
Sb 206.836†	-0.9	0.0012657 mg/L		0.00246750	0.0012657 mg/L	0.00246750	194.95%
QC value within limits for Sb	206.836	Recovery = Not calculated					
Se 196.026†	7.9	0.0027717 mg/L		0.00179878	0.0027717 mg/L	0.00179878	64.90%
QC value within limits for Se	196.026	Recovery = Not calculated					
Sn 189.927†	6.3	0.0013447 mg/L		0.00087309	0.0013447 mg/L	0.00087309	64.93%
QC value within limits for Sn	189.927	Recovery = Not calculated					
Ti 334.940†	-41.2	0.0016622 mg/L		0.00022040	0.0016622 mg/L	0.00022040	13.26%
QC value within limits for Ti	334.940	Recovery = Not calculated					
Tl 190.801†	4.0	0.0020045 mg/L		0.00079686	0.0020045 mg/L	0.00079686	39.75%
QC value within limits for Tl	190.801	Recovery = Not calculated					
V 290.880†	-83.4	0.0006476 mg/L		0.00018239	0.0006476 mg/L	0.00018239	28.16%
QC value within limits for V	290.880	Recovery = Not calculated					
Zn 206.200†	9.6	0.0014338 mg/L		0.00002113	0.0014338 mg/L	0.00002113	1.47%
QC value within limits for Zn	206.200	Recovery = Not calculated					

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 33
 Sample ID: 75576-001
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 49
 Date Collected: 11/16/2013 1:57:23 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1094166.3	102	%	0.8			0.77%
Y 371.029	376890.8	101	%	0.8			0.75%
Ag 328.068†	22.2	0.0003389	mg/L	0.00049102	0.0003389 mg/L	0.00049102	144.88%
Al 308.215†	13257.1	0.469582	mg/L	0.0128805	0.469582 mg/L	0.0128805	2.74%
As 188.979†	4.6	0.0035839	mg/L	0.00201428	0.0035839 mg/L	0.00201428	56.20%
Ba 233.527†	4531.6	0.0373699	mg/L	0.00002095	0.0373699 mg/L	0.00002095	0.06%
Be 313.107†	-170.3	0.0009963	mg/L	0.00005564	0.0009963 mg/L	0.00005564	5.58%
Ca 315.887†	3286110.3	28.5238	mg/L	0.07813	28.5238 mg/L	0.07813	0.27%
Cd 228.802†	267.6	0.0054062	mg/L	0.00007864	0.0054062 mg/L	0.00007864	1.45%
Co 228.616†	48.2	0.0022345	mg/L	0.00017682	0.0022345 mg/L	0.00017682	7.91%
Cr 267.716†	11519.6	0.140238	mg/L	0.0026985	0.140238 mg/L	0.0026985	1.92%
Cu 327.393†	2515.4	0.0216948	mg/L	0.00085846	0.0216948 mg/L	0.00085846	3.96%
Fe 273.955†	14796.6	0.646291	mg/L	0.0132349	0.646291 mg/L	0.0132349	2.05%
K 404.721†	-1235.2					412.05	33.36%
Mg 279.077†	96139.5	4.55535	mg/L	0.082710	4.55535 mg/L	0.082710	1.82%
Mn 257.610†	4885.9	0.0070235	mg/L	0.00002438	0.0070235 mg/L	0.00002438	0.35%
Mo 202.031†	438.8	0.0198016	mg/L	0.00011729	0.0198016 mg/L	0.00011729	0.59%
Na 330.237†	45650.3	36.8196	mg/L	0.78655	36.8196 mg/L	0.78655	2.14%
Ni 231.604†	262.5	0.0046142	mg/L	0.00008462	0.0046142 mg/L	0.00008462	1.83%
Pb 220.353†	144.0	0.0091384	mg/L	0.00037891	0.0091384 mg/L	0.00037891	4.15%
Sb 206.836†	2.8	0.0029154	mg/L	0.00126651	0.0029154 mg/L	0.00126651	43.44%
Se 196.026†	14.0	0.0068031	mg/L	0.00701594	0.0068031 mg/L	0.00701594	103.13%
Sn 189.927†	18.4	0.0030397	mg/L	0.00055093	0.0030397 mg/L	0.00055093	18.12%
Ti 334.940†	10799.7	0.0180639	mg/L	0.00069065	0.0180639 mg/L	0.00069065	3.82%
Tl 190.801†	3.3	0.0018751	mg/L	0.00271863	0.0018751 mg/L	0.00271863	144.99%
V 290.880†	314.1	0.0030729	mg/L	0.00085937	0.0030729 mg/L	0.00085937	27.97%
Zn 206.200†	2223.6	0.0349826	mg/L	0.00005042	0.0349826 mg/L	0.00005042	0.14%

Sequence No.: 34
 Sample ID: 75576-003
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 50
 Date Collected: 11/16/2013 2:01:11 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-003

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1093731.9	102 %		0.9			0.91%
Y 371.029	366654.6	98.1 %		0.66			0.68%
Ag 328.068†	37.9	0.0003903 mg/L		0.00019443	0.0003903 mg/L	0.00019443	49.81%
Al 308.215†	8736.0	0.306470 mg/L		0.0046790	0.306470 mg/L	0.0046790	1.53%
As 188.979†	5.5	0.0041274 mg/L		0.00317760	0.0041274 mg/L	0.00317760	76.99%
Ba 233.527†	3694.7	0.0306838 mg/L		0.00000794	0.0306838 mg/L	0.00000794	0.03%
Be 313.107†	-148.8	0.0010055 mg/L		0.00001788	0.0010055 mg/L	0.00001788	1.78%
Ca 315.887†	3856832.4	33.4655 mg/L		0.02468	33.4655 mg/L	0.02468	0.07%
Cd 228.802†	1545.5	0.0253487 mg/L		0.00011570	0.0253487 mg/L	0.00011570	0.46%
Co 228.616†	17.0	0.0015500 mg/L		0.00029142	0.0015500 mg/L	0.00029142	18.80%
Cr 267.716†	2088.4	0.0261078 mg/L		0.00000858	0.0261078 mg/L	0.00000858	0.03%
Cu 327.393†	2738.6	0.0233640 mg/L		0.00139574	0.0233640 mg/L	0.00139574	5.97%
Fe 273.955†	7306.8	0.320557 mg/L		0.0048162	0.320557 mg/L	0.0048162	1.50%
K 404.721†	-854.5					150.49	17.61%
Mg 279.077†	98061.8	4.64538 mg/L		0.024113	4.64538 mg/L	0.024113	0.52%
Mn 257.610†	10406.7	0.0138706 mg/L		0.00007273	0.0138706 mg/L	0.00007273	0.52%
Mo 202.031†	117.6	0.0048357 mg/L		0.00029909	0.0048357 mg/L	0.00029909	6.19%
Na 330.237†	24496.1	20.0595 mg/L		0.21913	20.0595 mg/L	0.21913	1.09%
Ni 231.604†	386.5	0.0065691 mg/L		0.00001946	0.0065691 mg/L	0.00001946	0.30%
Pb 220.353†	61.2	0.0039214 mg/L		0.00109378	0.0039214 mg/L	0.00109378	27.89%
Sb 206.836†	5.6	0.0040555 mg/L		0.00155270	0.0040555 mg/L	0.00155270	38.29%
Se 196.026†	6.8	0.0013085 mg/L		0.00433560	0.0013085 mg/L	0.00433560	331.34%
Sn 189.927†	13.6	0.0017792 mg/L		0.00009296	0.0017792 mg/L	0.00009296	5.22%
Ti 334.940†	7263.5	0.0127138 mg/L		0.00155897	0.0127138 mg/L	0.00155897	12.26%
Tl 190.801†	-1.4	-0.0007899 mg/L		0.00054209	-0.0007899 mg/L	0.00054209	68.63%
V 290.880†	91.8	0.0016093 mg/L		0.00088349	0.0016093 mg/L	0.00088349	54.90%
Zn 206.200†	10610.1	0.162230 mg/L		0.0005862	0.162230 mg/L	0.0005862	0.36%

Sequence No.: 35
 Sample ID: 75576-005
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 51
 Date Collected: 11/16/2013 2:04:58 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-005

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1091336.8	101	%	0.7			0.72%
Y 371.029	373610.6	99.9	%	0.39			0.39%
Ag 328.068†	-42.0	-0.0000075	mg/L	0.00013968	-0.0000075	mg/L	0.00013968 >999.9%
Al 308.215†	6086.1	0.210708	mg/L	0.0021832	0.210708	mg/L	0.0021832 1.04%
As 188.979†	3.9	0.0030752	mg/L	0.00328402	0.0030752	mg/L	0.00328402 106.79%
Ba 233.527†	2913.0	0.0244229	mg/L	0.00014217	0.0244229	mg/L	0.00014217 0.58%
Be 313.107†	-132.3	0.0010128	mg/L	0.00000753	0.0010128	mg/L	0.00000753 0.74%
Ca 315.887†	3237180.6	28.1006	mg/L	0.03351	28.1006	mg/L	0.03351 0.12%
Cd 228.802†	3097.9	0.0496158	mg/L	0.00033909	0.0496158	mg/L	0.00033909 0.68%
Co 228.616†	28.7	0.0018042	mg/L	0.00001231	0.0018042	mg/L	0.00001231 0.68%
Cr 267.716†	11436.4	0.139166	mg/L	0.0014068	0.139166	mg/L	0.0014068 1.01%
Cu 327.393†	-74.3	0.0015180	mg/L	0.00173353	0.0015180	mg/L	0.00173353 114.20%
Fe 273.955†	9595.8	0.420106	mg/L	0.0018606	0.420106	mg/L	0.0018606 0.44%
K 404.721†	-1454.1						164.16 11.29%
Mg 279.077†	79705.2	3.78661	mg/L	0.010984	3.78661	mg/L	0.010984 0.29%
Mn 257.610†	13132.4	0.0172871	mg/L	0.00000092	0.0172871	mg/L	0.00000092 0.01%
Mo 202.031†	143.4	0.0062139	mg/L	0.00003220	0.0062139	mg/L	0.00003220 0.52%
Na 330.237†	10584.7	9.03762	mg/L	0.006014	9.03762	mg/L	0.006014 0.07%
Ni 231.604†	287.4	0.0049954	mg/L	0.00026182	0.0049954	mg/L	0.00026182 5.24%
Pb 220.353†	41.1	0.0026313	mg/L	0.00004647	0.0026313	mg/L	0.00004647 1.77%
Sb 206.836†	2.9	0.0029294	mg/L	0.00006983	0.0029294	mg/L	0.00006983 2.38%
Se 196.026†	16.2	0.0083064	mg/L	0.00442318	0.0083064	mg/L	0.00442318 53.25%
Sn 189.927†	15.4	0.0023708	mg/L	0.00034274	0.0023708	mg/L	0.00034274 14.46%
Ti 334.940†	3963.1	0.0077204	mg/L	0.00024963	0.0077204	mg/L	0.00024963 3.23%
Tl 190.801†	1.6	0.0008053	mg/L	0.00141550	0.0008053	mg/L	0.00141550 175.78%
V 290.880†	78.3	0.0015534	mg/L	0.00038280	0.0015534	mg/L	0.00038280 24.64%
Zn 206.200†	293.6	0.0057193	mg/L	0.00002093	0.0057193	mg/L	0.00002093 0.37%

Sequence No.: 36
 Sample ID: 75576-007
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 52
 Date Collected: 11/16/2013 2:08:44 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-007

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1093340.8	101	%	0.5				0.50%
Y 371.029	396959.3	106	%	0.6				0.55%
Ag 328.068†	80.1	0.0007367	mg/L	0.00026135	0.0007367	mg/L	0.00026135	35.48%
Al 308.215†	40110.3	1.44014	mg/L	0.004293	1.44014	mg/L	0.004293	0.30%
As 188.979†	2.1	0.0022660	mg/L	0.00168695	0.0022660	mg/L	0.00168695	74.45%
Ba 233.527†	29123.3	0.234164	mg/L	0.0003266	0.234164	mg/L	0.0003266	0.14%
Be 313.107†	3661.9	0.0022737	mg/L	0.00004942	0.0022737	mg/L	0.00004942	2.17%
Ca 315.887†	1124222.7	9.80220	mg/L	0.038894	9.80220	mg/L	0.038894	0.40%
Cd 228.802†	246.5	0.0051424	mg/L	0.00030358	0.0051424	mg/L	0.00030358	5.90%
Co 228.616†	54.3	0.0022506	mg/L	0.00004083	0.0022506	mg/L	0.00004083	1.81%
Cr 267.716†	756.9	0.0101916	mg/L	0.00001399	0.0101916	mg/L	0.00001399	0.14%
Cu 327.393†	1567.3	0.0145337	mg/L	0.00060368	0.0145337	mg/L	0.00060368	4.15%
Fe 273.955†	42140.2	1.83547	mg/L	0.007930	1.83547	mg/L	0.007930	0.43%
K 404.721†	-1000.3						223.00	22.29%
Mg 279.077†	59248.5	2.83181	mg/L	0.015737	2.83181	mg/L	0.015737	0.56%
Mn 257.610†	462114.0	0.574803	mg/L	0.0021534	0.574803	mg/L	0.0021534	0.37%
Mo 202.031†	36.2	0.0018800	mg/L	0.00008709	0.0018800	mg/L	0.00008709	4.63%
Na 330.237†	12397.9	10.4742	mg/L	0.09122	10.4742	mg/L	0.09122	0.87%
Ni 231.604†	745.1	0.0122675	mg/L	0.00028463	0.0122675	mg/L	0.00028463	2.32%
Pb 220.353†	17.8	0.0012783	mg/L	0.00154191	0.0012783	mg/L	0.00154191	120.62%
Sb 206.836†	-1.2	0.0014208	mg/L	0.00140975	0.0014208	mg/L	0.00140975	99.22%
Se 196.026†	-5.0	-0.0066021	mg/L	0.00612406	-0.0066021	mg/L	0.00612406	92.76%
Sn 189.927†	8.1	0.0014185	mg/L	0.00110116	0.0014185	mg/L	0.00110116	77.63%
Ti 334.940†	23492.8	0.0372679	mg/L	0.00077247	0.0372679	mg/L	0.00077247	2.07%
Tl 190.801†	5.3	0.0023492	mg/L	0.00156203	0.0023492	mg/L	0.00156203	66.49%
V 290.880†	358.9	0.0035581	mg/L	0.00016592	0.0035581	mg/L	0.00016592	4.66%
Zn 206.200†	1918.7	0.0302990	mg/L	0.00025919	0.0302990	mg/L	0.00025919	0.86%

Sequence No.: 37
 Sample ID: 75576-009
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 53
 Date Collected: 11/16/2013 2:12:21 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-009

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1106841.7	103	%	1.1			1.09%
Y 371.029	375287.0	100	%	0.1			0.10%
Ag 328.068†	120.1	0.0007916	mg/L	0.00016153	0.0007916 mg/L	0.00016153	20.40%
Al 308.215†	3916.3	0.132379	mg/L	0.0029466	0.132379 mg/L	0.0029466	2.23%
As 188.979†	1.1	0.0013747	mg/L	0.00329171	0.0013747 mg/L	0.00329171	239.45%
Ba 233.527†	4155.7	0.0343808	mg/L	0.00029946	0.0343808 mg/L	0.00029946	0.87%
Be 313.107†	-62.9	0.0010382	mg/L	0.00002576	0.0010382 mg/L	0.00002576	2.48%
Ca 315.887†	1806725.5	15.7164	mg/L	0.00287	15.7164 mg/L	0.00287	0.02%
Cd 228.802†	5.4	0.0013737	mg/L	0.00020587	0.0013737 mg/L	0.00020587	14.99%
Co 228.616†	18.3	0.0015870	mg/L	0.00007416	0.0015870 mg/L	0.00007416	4.67%
Cr 267.716†	370.0	0.0053176	mg/L	0.00004928	0.0053176 mg/L	0.00004928	0.93%
Cu 327.393†	35.6	0.0025460	mg/L	0.00122230	0.0025460 mg/L	0.00122230	48.01%
Fe 273.955†	2788.8	0.124068	mg/L	0.0003566	0.124068 mg/L	0.0003566	0.29%
K 404.721†	-1228.9					386.92	31.48%
Mg 279.077†	46412.6	2.22941	mg/L	0.019300	2.22941 mg/L	0.019300	0.87%
Mn 257.610†	25127.3	0.0322373	mg/L	0.00041398	0.0322373 mg/L	0.00041398	1.28%
Mo 202.031†	49.2	0.0023084	mg/L	0.00006435	0.0023084 mg/L	0.00006435	2.79%
Na 330.237†	10202.3	8.73464	mg/L	0.147746	8.73464 mg/L	0.147746	1.69%
Ni 231.604†	50.0	0.0012142	mg/L	0.00021887	0.0012142 mg/L	0.00021887	18.03%
Pb 220.353†	-5.1	-0.0002651	mg/L	0.00029990	-0.0002651 mg/L	0.00029990	113.12%
Sb 206.836†	-3.9	0.0000089	mg/L	0.00120319	0.0000089 mg/L	0.00120319	>999.9%
Se 196.026†	1.8	-0.0020341	mg/L	0.00146016	-0.0020341 mg/L	0.00146016	71.79%
Sn 189.927†	8.1	0.0011927	mg/L	0.00103630	0.0011927 mg/L	0.00103630	86.89%
Ti 334.940†	92.9	0.0018650	mg/L	0.00002459	0.0018650 mg/L	0.00002459	1.32%
Tl 190.801†	4.7	0.0024079	mg/L	0.00064121	0.0024079 mg/L	0.00064121	26.63%
V 290.880†	-18.3	0.0009931	mg/L	0.00069198	0.0009931 mg/L	0.00069198	69.68%
Zn 206.200†	787.7	0.0132301	mg/L	0.00029084	0.0132301 mg/L	0.00029084	2.20%

Sequence No.: 38
 Sample ID: 75576-011
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 54
 Date Collected: 11/16/2013 2:16:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-011

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1086763.0	101	%	0.2			0.15%
Y 371.029	373333.6	99.9	%	0.50			0.50%
Ag 328.068†	151.3	0.0009531	mg/L	0.00030419	0.0009531 mg/L	0.00030419	31.92%
Al 308.215†	3811.6	0.128606	mg/L	0.0027130	0.128606 mg/L	0.0027130	2.11%
As 188.979†	1.2	0.0015920	mg/L	0.00087054	0.0015920 mg/L	0.00087054	54.68%
Ba 233.527†	1133.4	0.0101888	mg/L	0.00006275	0.0101888 mg/L	0.00006275	0.62%
Be 313.107†	-89.3	0.0010287	mg/L	0.00003601	0.0010287 mg/L	0.00003601	3.50%
Ca 315.887†	664114.9	5.82403	mg/L	0.006453	5.82403 mg/L	0.006453	0.11%
Cd 228.802†	8.1	0.0014570	mg/L	0.00022381	0.0014570 mg/L	0.00022381	15.36%
Co 228.616†	46.5	0.0021594	mg/L	0.00030681	0.0021594 mg/L	0.00030681	14.21%
Cr 267.716†	179.5	0.0030033	mg/L	0.00006351	0.0030033 mg/L	0.00006351	2.11%
Cu 327.393†	352.2	0.0051482	mg/L	0.00187520	0.0051482 mg/L	0.00187520	36.42%
Fe 273.955†	3442.9	0.152517	mg/L	0.0019530	0.152517 mg/L	0.0019530	1.28%
K 404.721†	-1169.8					25.90	2.21%
Mg 279.077†	46390.7	2.22824	mg/L	0.000634	2.22824 mg/L	0.000634	0.03%
Mn 257.610†	8265.7	0.0113008	mg/L	0.00005045	0.0113008 mg/L	0.00005045	0.45%
Mo 202.031†	37.0	0.0020897	mg/L	0.00000431	0.0020897 mg/L	0.00000431	0.21%
Na 330.237†	8346.6	7.26438	mg/L	0.072943	7.26438 mg/L	0.072943	1.00%
Ni 231.604†	115.5	0.0022561	mg/L	0.00002843	0.0022561 mg/L	0.00002843	1.26%
Pb 220.353†	14.6	0.0009594	mg/L	0.00101201	0.0009594 mg/L	0.00101201	105.48%
Sb 206.836†	-3.8	0.0000700	mg/L	0.00121504	0.0000700 mg/L	0.00121504	>999.9%
Se 196.026†	-1.0	-0.0038030	mg/L	0.00784221	-0.0038030 mg/L	0.00784221	206.21%
Sn 189.927†	8.8	0.0017171	mg/L	0.00000294	0.0017171 mg/L	0.00000294	0.17%
Ti 334.940†	1276.7	0.0036561	mg/L	0.00042265	0.0036561 mg/L	0.00042265	11.56%
Tl 190.801†	0.1	-0.0001993	mg/L	0.00139653	-0.0001993 mg/L	0.00139653	700.79%
V 290.880†	12.8	0.0011921	mg/L	0.00017605	0.0011921 mg/L	0.00017605	14.77%
Zn 206.200†	547.0	0.0095776	mg/L	0.00014981	0.0095776 mg/L	0.00014981	1.56%

Sequence No.: 39
 Sample ID: 75576-013
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 55
 Date Collected: 11/16/2013 2:19:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-013

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1104777.5	103 %		0.5			0.52%
Y 371.029	370932.8	99.2 %		0.68			0.69%
Ag 328.068†	-7.8	0.0001413 mg/L		0.00007122	0.0001413 mg/L	0.00007122	50.41%
Al 308.215†	3179.2	0.105723 mg/L		0.0014295	0.105723 mg/L	0.0014295	1.35%
As 188.979†	2.0	0.0019371 mg/L		0.00290985	0.0019371 mg/L	0.00290985	150.22%
Ba 233.527†	7654.0	0.0623826 mg/L		0.00060547	0.0623826 mg/L	0.00060547	0.97%
Be 313.107†	44.5	0.0010735 mg/L		0.00005867	0.0010735 mg/L	0.00005867	5.46%
Ca 315.887†	2219231.6	19.2816 mg/L		0.03037	19.2816 mg/L	0.03037	0.16%
Cd 228.802†	-15.9	0.0010256 mg/L		0.00013608	0.0010256 mg/L	0.00013608	13.27%
Co 228.616†	24.7	0.0017188 mg/L		0.00010572	0.0017188 mg/L	0.00010572	6.15%
Cr 267.716†	301.6	0.0049331 mg/L		0.00004600	0.0049331 mg/L	0.00004600	0.93%
Cu 327.393†	32.9	0.0024759 mg/L		0.00057672	0.0024759 mg/L	0.00057672	23.29%
Fe 273.955†	2834.0	0.126036 mg/L		0.0010584	0.126036 mg/L	0.0010584	0.84%
K 404.721†	-557.7					138.56	24.85%
Mg 279.077†	88811.0	4.21972 mg/L		0.005875	4.21972 mg/L	0.005875	0.14%
Mn 257.610†	983124.3	1.22167 mg/L		0.001950	1.22167 mg/L	0.001950	0.16%
Mo 202.031†	78.4	0.0035273 mg/L		0.00035117	0.0035273 mg/L	0.00035117	9.96%
Na 330.237†	29437.1	23.9741 mg/L		0.09516	23.9741 mg/L	0.09516	0.40%
Ni 231.604†	38.4	0.0010312 mg/L		0.00007775	0.0010312 mg/L	0.00007775	7.54%
Pb 220.353†	32.2	0.0020628 mg/L		0.00001333	0.0020628 mg/L	0.00001333	0.65%
Sb 206.836†	0.2	0.0017520 mg/L		0.00171965	0.0017520 mg/L	0.00171965	98.15%
Se 196.026†	1.0	-0.0032585 mg/L		0.00283717	-0.0032585 mg/L	0.00283717	87.07%
Sn 189.927†	7.8	0.0009914 mg/L		0.00054145	0.0009914 mg/L	0.00054145	54.61%
Ti 334.940†	1229.5	0.0035846 mg/L		0.00010028	0.0035846 mg/L	0.00010028	2.80%
Tl 190.801†	6.4	0.0020453 mg/L		0.00072031	0.0020453 mg/L	0.00072031	35.22%
V 290.880†	23.3	0.0015276 mg/L		0.00000649	0.0015276 mg/L	0.00000649	0.42%
Zn 206.200†	404.0	0.0074094 mg/L		0.00006025	0.0074094 mg/L	0.00006025	0.81%

Sequence No.: 40
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 2:23:29 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Mean Corrected			Calib		Sample			
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc 361.383	1043873.5	96.9	%	0.03				0.03%
Y 371.029	355874.0	95.2	%	1.53				1.61%
Ag 328.068†	18756.3	0.0960357	mg/L	0.00099021	0.0960357	mg/L	0.00099021	1.03%
QC value	within limits	for Ag	328.068	Recovery = 96.04%				
Al 308.215†	134912.1	4.85745	mg/L	0.089917	4.85745	mg/L	0.089917	1.85%
QC value	within limits	for Al	308.215	Recovery = 97.15%				
As 188.979†	696.0	0.472569	mg/L	0.0014955	0.472569	mg/L	0.0014955	0.32%
QC value	within limits	for As	188.979	Recovery = 94.51%				
Ba 233.527†	60306.0	0.483646	mg/L	0.0087998	0.483646	mg/L	0.0087998	1.82%
QC value	within limits	for Ba	233.527	Recovery = 96.73%				
Be 313.107†	1403489.9	0.471226	mg/L	0.0016584	0.471226	mg/L	0.0016584	0.35%
QC value	within limits	for Be	313.107	Recovery = 94.25%				
Ca 315.887†	5615092.6	48.6757	mg/L	0.01034	48.6757	mg/L	0.01034	0.02%
QC value	within limits	for Ca	315.887	Recovery = 97.35%				
Cd 228.802†	30909.5	0.483765	mg/L	0.0027241	0.483765	mg/L	0.0027241	0.56%
QC value	within limits	for Cd	228.802	Recovery = 96.75%				
Co 228.616†	23518.2	0.484034	mg/L	0.0028916	0.484034	mg/L	0.0028916	0.60%
QC value	within limits	for Co	228.616	Recovery = 96.81%				
Cr 267.716†	39857.3	0.485530	mg/L	0.0064114	0.485530	mg/L	0.0064114	1.32%
QC value	within limits	for Cr	267.716	Recovery = 97.11%				
Cu 327.393†	61041.3	0.477543	mg/L	0.0081233	0.477543	mg/L	0.0081233	1.70%
QC value	within limits	for Cu	327.393	Recovery = 95.51%				
Fe 273.955†	111826.2	4.86612	mg/L	0.089782	4.86612	mg/L	0.089782	1.85%
QC value	within limits	for Fe	273.955	Recovery = 97.32%				
K 404.721†	3194.8						0.57	0.02%
Unable to evaluate QC.								
Mg 279.077†	1042432.6	48.8286	mg/L	0.03029	48.8286	mg/L	0.03029	0.06%
QC value	within limits	for Mg	279.077	Recovery = 97.66%				
Mn 257.610†	383169.0	0.475222	mg/L	0.0087541	0.475222	mg/L	0.0087541	1.84%
QC value	within limits	for Mn	257.610	Recovery = 95.04%				
Mo 202.031†	10612.0	0.487597	mg/L	0.0033513	0.487597	mg/L	0.0033513	0.69%
QC value	within limits	for Mo	202.031	Recovery = 97.52%				
Na 330.237†	58800.2	47.2381	mg/L	0.83434	47.2381	mg/L	0.83434	1.77%
QC value	within limits	for Na	330.237	Recovery = 94.48%				
Ni 231.604†	30131.1	0.480164	mg/L	0.0096251	0.480164	mg/L	0.0096251	2.00%
QC value	within limits	for Ni	231.604	Recovery = 96.03%				
Pb 220.353†	7683.0	0.483726	mg/L	0.0029881	0.483726	mg/L	0.0029881	0.62%
QC value	within limits	for Pb	220.353	Recovery = 96.75%				
Sb 206.836†	1150.3	0.489100	mg/L	0.0060818	0.489100	mg/L	0.0060818	1.24%
QC value	within limits	for Sb	206.836	Recovery = 97.82%				
Se 196.026†	634.2	0.463255	mg/L	0.0008092	0.463255	mg/L	0.0008092	0.17%
QC value	within limits	for Se	196.026	Recovery = 92.65%				
Sn 189.927†	2214.6	0.493256	mg/L	0.0051322	0.493256	mg/L	0.0051322	1.04%
QC value	within limits	for Sn	189.927	Recovery = 98.65%				
Ti 334.940†	315486.2	0.479039	mg/L	0.0084682	0.479039	mg/L	0.0084682	1.77%
QC value	within limits	for Ti	334.940	Recovery = 95.81%				
Tl 190.801†	884.0	0.496754	mg/L	0.0009914	0.496754	mg/L	0.0009914	0.20%
QC value	within limits	for Tl	190.801	Recovery = 99.35%				
V 290.880†	72125.4	0.476825	mg/L	0.0084766	0.476825	mg/L	0.0084766	1.78%
QC value	within limits	for V	290.880	Recovery = 95.36%				
Zn 206.200†	31260.9	0.475128	mg/L	0.0029416	0.475128	mg/L	0.0029416	0.62%
QC value	within limits	for Zn	206.200	Recovery = 95.03%				

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 41

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/16/2013 2:27:17 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1079015.2	100	%	0.3				0.29%
Y 371.029	372518.1	99.6	%	0.56				0.56%
Ag 328.068†	3848.3	0.0197782	mg/L	0.00024912	0.0197782	mg/L	0.00024912	1.26%
QC value within limits for Ag		328.068	Recovery = 98.89%					
Al 308.215†	5420.3	0.186417	mg/L	0.0003477	0.186417	mg/L	0.0003477	0.19%
QC value within limits for Al		308.215	Recovery = 93.21%					
As 188.979†	30.5	0.0215110	mg/L	0.00124906	0.0215110	mg/L	0.00124906	5.81%
QC value within limits for As		188.979	Recovery = 107.55%					
Ba 233.527†	6109.1	0.0500105	mg/L	0.00038959	0.0500105	mg/L	0.00038959	0.78%
QC value within limits for Ba		233.527	Recovery = 100.02%					
Be 313.107†	34035.3	0.0124486	mg/L	0.00007679	0.0124486	mg/L	0.00007679	0.62%
QC value within limits for Be		313.107	Recovery = 103.74%					
Ca 315.887†	574418.8	5.04699	mg/L	0.011817	5.04699	mg/L	0.011817	0.23%
QC value within limits for Ca		315.887	Recovery = 100.94%					
Cd 228.802†	705.6	0.0123491	mg/L	0.00000710	0.0123491	mg/L	0.00000710	0.06%
QC value within limits for Cd		228.802	Recovery = 102.91%					
Co 228.616†	965.4	0.0209723	mg/L	0.00032332	0.0209723	mg/L	0.00032332	1.54%
QC value within limits for Co		228.616	Recovery = 104.86%					
Cr 267.716†	4055.9	0.0499909	mg/L	0.00050751	0.0499909	mg/L	0.00050751	1.02%
QC value within limits for Cr		267.716	Recovery = 99.98%					
Cu 327.393†	6123.2	0.0501268	mg/L	0.00014742	0.0501268	mg/L	0.00014742	0.29%
QC value within limits for Cu		327.393	Recovery = 100.25%					
Fe 273.955†	6740.8	0.295941	mg/L	0.0020203	0.295941	mg/L	0.0020203	0.68%
QC value within limits for Fe		273.955	Recovery = 98.65%					
K 404.721†	-731.5						144.14	19.70%
Unable to evaluate QC.								
Mg 279.077†	107001.5	5.06393	mg/L	0.005959	5.06393	mg/L	0.005959	0.12%
QC value within limits for Mg		279.077	Recovery = 101.28%					
Mn 257.610†	30998.6	0.0394278	mg/L	0.00014277	0.0394278	mg/L	0.00014277	0.36%
QC value within limits for Mn		257.610	Recovery = 98.57%					
Mo 202.031†	449.2	0.0210946	mg/L	0.00034615	0.0210946	mg/L	0.00034615	1.64%
QC value within limits for Mo		202.031	Recovery = 105.47%					
Na 330.237†	5452.4	4.97139	mg/L	0.036201	4.97139	mg/L	0.036201	0.73%
QC value within limits for Na		330.237	Recovery = 99.43%					
Ni 231.604†	3029.7	0.0486224	mg/L	0.00086945	0.0486224	mg/L	0.00086945	1.79%
QC value within limits for Ni		231.604	Recovery = 97.24%					
Pb 220.353†	185.0	0.0116681	mg/L	0.00116142	0.0116681	mg/L	0.00116142	9.95%
QC value within limits for Pb		220.353	Recovery = 97.23%					
Sb 206.836†	49.1	0.0224336	mg/L	0.00002533	0.0224336	mg/L	0.00002533	0.11%
QC value within limits for Sb		206.836	Recovery = 112.17%					
Se 196.026†	46.9	0.0313876	mg/L	0.00050713	0.0313876	mg/L	0.00050713	1.62%
QC value within limits for Se		196.026	Recovery = 78.47%					
Sn 189.927†	202.2	0.0449730	mg/L	0.00018333	0.0449730	mg/L	0.00018333	0.41%
QC value within limits for Sn		189.927	Recovery = 89.95%					
Ti 334.940†	30555.0	0.0479527	mg/L	0.00021677	0.0479527	mg/L	0.00021677	0.45%
QC value within limits for Ti		334.940	Recovery = 95.91%					
Tl 190.801†	37.2	0.0208362	mg/L	0.00128214	0.0208362	mg/L	0.00128214	6.15%
QC value within limits for Tl		190.801	Recovery = 104.18%					
V 290.880†	7283.7	0.0492298	mg/L	0.00003052	0.0492298	mg/L	0.00003052	0.06%
QC value within limits for V		290.880	Recovery = 98.46%					
Zn 206.200†	3088.9	0.0481283	mg/L	0.00025249	0.0481283	mg/L	0.00025249	0.52%
QC value within limits for Zn		206.200	Recovery = 96.26%					

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 42
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/16/2013 2:30:56 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	1092453.4	101 %		0.9			0.94%
Y 371.029	378113.2	101 %		1.4			1.39%
Ag 328.068†	7.2	0.0002068 mg/L		0.00046031	0.0002068 mg/L	0.00046031	222.57%
QC value within limits for Ag	328.068	Recovery = Not calculated					
Al 308.215†	-98.2	-0.0126422 mg/L		0.00091067	-0.0126422 mg/L	0.00091067	7.20%
QC value within limits for Al	308.215	Recovery = Not calculated					
As 188.979†	-1.6	-0.0002484 mg/L		0.00181744	-0.0002484 mg/L	0.00181744	731.69%
QC value within limits for As	188.979	Recovery = Not calculated					
Ba 233.527†	26.9	0.0013376 mg/L		0.00000639	0.0013376 mg/L	0.00000639	0.48%
QC value within limits for Ba	233.527	Recovery = Not calculated					
Be 313.107†	119.1	0.0010992 mg/L		0.00003954	0.0010992 mg/L	0.00003954	3.60%
QC value within limits for Be	313.107	Recovery = Not calculated					
Ca 315.887†	-881.2	0.0669301 mg/L		0.00995564	0.0669301 mg/L	0.00995564	14.87%
QC value within limits for Ca	315.887	Recovery = Not calculated					
Cd 228.802†	-29.9	0.0008901 mg/L		0.00008003	0.0008901 mg/L	0.00008003	8.99%
QC value within limits for Cd	228.802	Recovery = Not calculated					
Co 228.616†	-1.4	0.0011769 mg/L		0.00012245	0.0011769 mg/L	0.00012245	10.40%
QC value within limits for Co	228.616	Recovery = Not calculated					
Cr 267.716†	17.9	0.0010385 mg/L		0.00005135	0.0010385 mg/L	0.00005135	4.94%
QC value within limits for Cr	267.716	Recovery = Not calculated					
Cu 327.393†	-458.4	-0.0010892 mg/L		0.00161941	-0.0010892 mg/L	0.00161941	148.68%
QC value within limits for Cu	327.393	Recovery = Not calculated					
Fe 273.955†	34.1	0.0042651 mg/L		0.00046970	0.0042651 mg/L	0.00046970	11.01%
QC value within limits for Fe	273.955	Recovery = Not calculated					
K 404.721†	-1146.1					136.88	11.94%
Unable to evaluate QC.							
Mg 279.077†	73.3	0.0615069 mg/L		0.00472367	0.0615069 mg/L	0.00472367	7.68%
QC value within limits for Mg	279.077	Recovery = Not calculated					
Mn 257.610†	-76.3	0.0010228 mg/L		0.00000857	0.0010228 mg/L	0.00000857	0.84%
QC value within limits for Mn	257.610	Recovery = Not calculated					
Mo 202.031†	8.4	0.0009783 mg/L		0.00014952	0.0009783 mg/L	0.00014952	15.28%
QC value within limits for Mo	202.031	Recovery = Not calculated					
Na 330.237†	61.8	0.700454 mg/L		0.0783518	0.700454 mg/L	0.0783518	11.19%
QC value within limits for Na	330.237	Recovery = Not calculated					
Ni 231.604†	-38.4	-0.0001932 mg/L		0.00015908	-0.0001932 mg/L	0.00015908	82.35%
QC value within limits for Ni	231.604	Recovery = Not calculated					
Pb 220.353†	2.4	0.0001866 mg/L		0.00079591	0.0001866 mg/L	0.00079591	426.60%
QC value within limits for Pb	220.353	Recovery = Not calculated					
Sb 206.836†	1.2	0.0021740 mg/L		0.00102960	0.0021740 mg/L	0.00102960	47.36%
QC value within limits for Sb	206.836	Recovery = Not calculated					
Se 196.026†	5.3	0.0008414 mg/L		0.00005719	0.0008414 mg/L	0.00005719	6.80%
QC value within limits for Se	196.026	Recovery = Not calculated					
Sn 189.927†	5.7	0.0012073 mg/L		0.00021228	0.0012073 mg/L	0.00021228	17.58%
QC value within limits for Sn	189.927	Recovery = Not calculated					
Ti 334.940†	61.8	0.0018180 mg/L		0.00012233	0.0018180 mg/L	0.00012233	6.73%
QC value within limits for Ti	334.940	Recovery = Not calculated					
Tl 190.801†	2.1	0.0009066 mg/L		0.00000960	0.0009066 mg/L	0.00000960	1.06%
QC value within limits for Tl	190.801	Recovery = Not calculated					
V 290.880†	-101.6	0.0005274 mg/L		0.00068065	0.0005274 mg/L	0.00068065	129.06%
QC value within limits for V	290.880	Recovery = Not calculated					
Zn 206.200†	16.3	0.0015349 mg/L		0.00005995	0.0015349 mg/L	0.00005995	3.91%
QC value within limits for Zn	206.200	Recovery = Not calculated					

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 43
 Sample ID: 75576-015
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 56
 Date Collected: 11/16/2013 2:34:30 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-015

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1086270.3	101	%	0.2			0.20%
Y 371.029	373296.3	99.8	%	0.08			0.08%
Ag 328.068†	-38.7	-0.0000241	mg/L	0.00007147	-0.0000241	mg/L	0.00007147 296.24%
Al 308.215†	168.4	-0.0030330	mg/L	0.00139794	-0.0030330	mg/L	0.00139794 46.09%
As 188.979†	2.4	0.0022740	mg/L	0.00121623	0.0022740	mg/L	0.00121623 53.48%
Ba 233.527†	1372.7	0.0121084	mg/L	0.00016327	0.0121084	mg/L	0.00016327 1.35%
Be 313.107†	-4.8	0.0010577	mg/L	0.00005129	0.0010577	mg/L	0.00005129 4.85%
Ca 315.887†	1311068.7	11.4254	mg/L	0.02702	11.4254	mg/L	0.02702 0.24%
Cd 228.802†	-0.8	0.0012960	mg/L	0.00022572	0.0012960	mg/L	0.00022572 17.42%
Co 228.616†	17.3	0.0015662	mg/L	0.00006298	0.0015662	mg/L	0.00006298 4.02%
Cr 267.716†	99.9	0.0020381	mg/L	0.00005600	0.0020381	mg/L	0.00005600 2.75%
Cu 327.393†	475.5	0.0060345	mg/L	0.00174964	0.0060345	mg/L	0.00174964 28.99%
Fe 273.955†	704.3	0.0334152	mg/L	0.00125143	0.0334152	mg/L	0.00125143 3.75%
K 404.721†	-826.5					299.76	36.27%
Mg 279.077†	88577.3	4.20179	mg/L	0.012122	4.20179	mg/L	0.012122 0.29%
Mn 257.610†	1215.3	0.0024734	mg/L	0.00002038	0.0024734	mg/L	0.00002038 0.82%
Mo 202.031†	42.0	0.0021274	mg/L	0.00006876	0.0021274	mg/L	0.00006876 3.23%
Na 330.237†	15786.3	13.1588	mg/L	0.01932	13.1588	mg/L	0.01932 0.15%
Ni 231.604†	7.0	0.0005303	mg/L	0.00034427	0.0005303	mg/L	0.00034427 64.93%
Pb 220.353†	16.2	0.0010379	mg/L	0.00120703	0.0010379	mg/L	0.00120703 116.29%
Sb 206.836†	-2.4	0.0006378	mg/L	0.00197905	0.0006378	mg/L	0.00197905 310.30%
Se 196.026†	-2.0	-0.0046855	mg/L	0.00503091	-0.0046855	mg/L	0.00503091 107.37%
Sn 189.927†	12.1	0.0022563	mg/L	0.00083390	0.0022563	mg/L	0.00083390 36.96%
Ti 334.940†	22.0	0.0017578	mg/L	0.00000025	0.0017578	mg/L	0.00000025 0.01%
Tl 190.801†	6.1	0.0031766	mg/L	0.00331599	0.0031766	mg/L	0.00331599 104.39%
V 290.880†	-7.0	0.0009810	mg/L	0.00047234	0.0009810	mg/L	0.00047234 48.15%
Zn 206.200†	776.0	0.0130577	mg/L	0.00013851	0.0130577	mg/L	0.00013851 1.06%

Sequence No.: 44
 Sample ID: 75576-017
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 57
 Date Collected: 11/16/2013 2:38:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-017

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1080670.6	100 %		0.2			0.22%
Y 371.029	373084.2	99.8 %		0.24			0.24%
Ag 328.068†	45.5	0.0004023 mg/L		0.00052548	0.0004023 mg/L	0.00052548	130.61%
Al 308.215†	404.5	0.0055264 mg/L		0.00134628	0.0055264 mg/L	0.00134628	24.36%
As 188.979†	2.0	0.0021299 mg/L		0.00089436	0.0021299 mg/L	0.00089436	41.99%
Ba 233.527†	30.6	0.0013667 mg/L		0.00005462	0.0013667 mg/L	0.00005462	4.00%
Be 313.107†	21.3	0.0010664 mg/L		0.00001531	0.0010664 mg/L	0.00001531	1.44%
Ca 315.887†	2821.1	0.0989728 mg/L		0.00443335	0.0989728 mg/L	0.00443335	4.48%
Cd 228.802†	-1.6	0.0013313 mg/L		0.00012720	0.0013313 mg/L	0.00012720	9.56%
Co 228.616†	19.1	0.0015951 mg/L		0.00006339	0.0015951 mg/L	0.00006339	3.97%
Cr 267.716†	45.9	0.0013756 mg/L		0.00007077	0.0013756 mg/L	0.00007077	5.14%
Cu 327.393†	-270.1	0.0003779 mg/L		0.00042697	0.0003779 mg/L	0.00042697	112.98%
Fe 273.955†	168.1	0.0100936 mg/L		0.00021068	0.0100936 mg/L	0.00021068	2.09%
K 404.721†	-773.0					83.38	10.79%
Mg 279.077†	119.7	0.0636720 mg/L		0.00228635	0.0636720 mg/L	0.00228635	3.59%
Mn 257.610†	73.0	0.0012080 mg/L		0.00001036	0.0012080 mg/L	0.00001036	0.86%
Mo 202.031†	4.9	0.0008145 mg/L		0.00011167	0.0008145 mg/L	0.00011167	13.71%
Na 330.237†	154.0	0.773534 mg/L		0.0256201	0.773534 mg/L	0.0256201	3.31%
Ni 231.604†	-11.4	0.0002359 mg/L		0.00040705	0.0002359 mg/L	0.00040705	172.56%
Pb 220.353†	-3.6	-0.0001858 mg/L		0.00087111	-0.0001858 mg/L	0.00087111	468.79%
Sb 206.836†	-1.8	0.0008819 mg/L		0.00062893	0.0008819 mg/L	0.00062893	71.32%
Se 196.026†	2.7	-0.0010451 mg/L		0.00525779	-0.0010451 mg/L	0.00525779	503.08%
Sn 189.927†	4.9	0.0010258 mg/L		0.00075538	0.0010258 mg/L	0.00075538	73.63%
Ti 334.940†	91.6	0.0018630 mg/L		0.00006843	0.0018630 mg/L	0.00006843	3.67%
Tl 190.801†	3.0	0.0014396 mg/L		0.00209088	0.0014396 mg/L	0.00209088	145.24%
V 290.880†	-93.0	0.0005839 mg/L		0.00002909	0.0005839 mg/L	0.00002909	4.98%
Zn 206.200†	229.4	0.0047665 mg/L		0.00022843	0.0047665 mg/L	0.00022843	4.79%

Sequence No.: 45
 Sample ID: 75576-019
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 58
 Date Collected: 11/16/2013 2:41:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-019

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1094365.3	102 %		0.5			0.52%
Y 371.029	377065.1	101 %		0.7			0.74%
Ag 328.068†	-0.1	0.0002376 mg/L		0.00045023	0.0002376 mg/L	0.00045023	189.52%
Al 308.215†	23563.8	0.842230 mg/L		0.0179049	0.842230 mg/L	0.0179049	2.13%
As 188.979†	5.9	0.0043519 mg/L		0.00110468	0.0043519 mg/L	0.00110468	25.38%
Ba 233.527†	5835.2	0.0477995 mg/L		0.00000030	0.0477995 mg/L	0.00000030	0.00%
Be 313.107†	127.8	0.0010913 mg/L		0.00003801	0.0010913 mg/L	0.00003801	3.48%
Ca 315.887†	4545951.7	39.4311 mg/L		0.04434	39.4311 mg/L	0.04434	0.11%
Cd 228.802†	155.1	0.0036015 mg/L		0.00002444	0.0036015 mg/L	0.00002444	0.68%
Co 228.616†	24.6	0.0016649 mg/L		0.00003185	0.0016649 mg/L	0.00003185	1.91%
Cr 267.716†	593.2	0.0080221 mg/L		0.00016791	0.0080221 mg/L	0.00016791	2.09%
Cu 327.393†	1104.3	0.0105299 mg/L		0.00383045	0.0105299 mg/L	0.00383045	36.38%
Fe 273.955†	17986.6	0.785021 mg/L		0.0119340	0.785021 mg/L	0.0119340	1.52%
K 404.721†	-475.7					107.95	22.69%
Mg 279.077†	134832.1	6.36515 mg/L		0.104763	6.36515 mg/L	0.104763	1.65%
Mn 257.610†	4820.3	0.0068703 mg/L		0.00011768	0.0068703 mg/L	0.00011768	1.71%
Mo 202.031†	113.1	0.0044033 mg/L		0.00023406	0.0044033 mg/L	0.00023406	5.32%
Na 330.237†	13516.8	11.3607 mg/L		0.18723	11.3607 mg/L	0.18723	1.65%
Ni 231.604†	41.6	0.0010839 mg/L		0.00003391	0.0010839 mg/L	0.00003391	3.13%
Pb 220.353†	201.9	0.0128300 mg/L		0.00037180	0.0128300 mg/L	0.00037180	2.90%
Sb 206.836†	0.3	0.0018706 mg/L		0.00165614	0.0018706 mg/L	0.00165614	88.53%
Se 196.026†	7.5	0.0018359 mg/L		0.01033081	0.0018359 mg/L	0.01033081	562.71%
Sn 189.927†	18.8	0.0027421 mg/L		0.00001671	0.0027421 mg/L	0.00001671	0.61%
Ti 334.940†	19931.8	0.0318802 mg/L		0.00063712	0.0318802 mg/L	0.00063712	2.00%
Tl 190.801†	4.8	0.0027806 mg/L		0.00345806	0.0027806 mg/L	0.00345806	124.37%
V 290.880†	651.7	0.0052267 mg/L		0.00009830	0.0052267 mg/L	0.00009830	1.88%
Zn 206.200†	2038.0	0.0321593 mg/L		0.00040843	0.0321593 mg/L	0.00040843	1.27%

Sequence No.: 46
 Sample ID: 75576-021
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 59
 Date Collected: 11/16/2013 2:45:35 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-021

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1102878.6	102	%	0.3			0.28%
Y 371.029	391137.6	105	%	0.0			0.02%
Ag 328.068†	-105.2	0.0001590	mg/L	0.00008462	0.0001590 mg/L	0.00008462	53.22%
Al 308.215†	146347.1	5.27865	mg/L	0.016265	5.27865 mg/L	0.016265	0.31%
As 188.979†	4.5	0.0043935	mg/L	0.00096108	0.0043935 mg/L	0.00096108	21.88%
Ba 233.527†	6881.7	0.0559762	mg/L	0.00005997	0.0559762 mg/L	0.00005997	0.11%
Be 313.107†	824.9	0.0012717	mg/L	0.00002814	0.0012717 mg/L	0.00002814	2.21%
Ca 315.887†	1222828.8	10.6513	mg/L	0.02184	10.6513 mg/L	0.02184	0.21%
Cd 228.802†	336.8	0.0064914	mg/L	0.00015155	0.0064914 mg/L	0.00015155	2.33%
Co 228.616†	103.9	0.0029783	mg/L	0.00008212	0.0029783 mg/L	0.00008212	2.76%
Cr 267.716†	13590.9	0.165298	mg/L	0.0008100	0.165298 mg/L	0.0008100	0.49%
Cu 327.393†	3385.1	0.0285829	mg/L	0.00163064	0.0285829 mg/L	0.00163064	5.70%
Fe 273.955†	138751.7	6.03711	mg/L	0.010524	6.03711 mg/L	0.010524	0.17%
K 404.721†	-11.2					300.60	>999.9%
Mg 279.077†	62665.1	2.98704	mg/L	0.007497	2.98704 mg/L	0.007497	0.25%
Mn 257.610†	229005.1	0.285355	mg/L	0.0001348	0.285355 mg/L	0.0001348	0.05%
Mo 202.031†	54.7	0.0025898	mg/L	0.00012657	0.0025898 mg/L	0.00012657	4.89%
Na 330.237†	11174.3	9.50476	mg/L	0.023543	9.50476 mg/L	0.023543	0.25%
Ni 231.604†	583.2	0.0096947	mg/L	0.00015411	0.0096947 mg/L	0.00015411	1.59%
Pb 220.353†	813.1	0.0516826	mg/L	0.00157521	0.0516826 mg/L	0.00157521	3.05%
Sb 206.836†	0.1	0.0027149	mg/L	0.00278252	0.0027149 mg/L	0.00278252	102.49%
Se 196.026†	5.0	0.0021782	mg/L	0.00639824	0.0021782 mg/L	0.00639824	293.73%
Sn 189.927†	14.1	0.0028132	mg/L	0.00090433	0.0028132 mg/L	0.00090433	32.15%
Ti 334.940†	117450.2	0.179421	mg/L	0.0000530	0.179421 mg/L	0.0000530	0.03%
Tl 190.801†	3.8	0.0029316	mg/L	0.00303900	0.0029316 mg/L	0.00303900	103.66%
V 290.880†	2137.5	0.0150903	mg/L	0.00036001	0.0150903 mg/L	0.00036001	2.39%
Zn 206.200†	6117.5	0.0937655	mg/L	0.00014205	0.0937655 mg/L	0.00014205	0.15%

Sequence No.: 47
 Sample ID: 75576-023
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 60
 Date Collected: 11/16/2013 2:49:12 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-023

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1093791.8	102	%	0.8			0.82%
Y 371.029	377879.9	101	%	0.4			0.37%
Ag 328.068†	-191.4	-0.0007405	mg/L	0.00027612	-0.0007405	mg/L	0.00027612 37.29%
Al 308.215†	22654.6	0.809378	mg/L	0.0083910	0.809378	mg/L	0.0083910 1.04%
As 188.979†	4.8	0.0036079	mg/L	0.00109674	0.0036079	mg/L	0.00109674 30.40%
Ba 233.527†	5907.2	0.0483770	mg/L	0.00023929	0.0483770	mg/L	0.00023929 0.49%
Be 313.107†	218.0	0.0011220	mg/L	0.00001273	0.0011220	mg/L	0.00001273 1.13%
Ca 315.887†	4568992.8	39.6306	mg/L	0.08796	39.6306	mg/L	0.08796 0.22%
Cd 228.802†	122.5	0.0030922	mg/L	0.00019365	0.0030922	mg/L	0.00019365 6.26%
Co 228.616†	19.5	0.0015634	mg/L	0.00007153	0.0015634	mg/L	0.00007153 4.58%
Cr 267.716†	524.1	0.0071871	mg/L	0.00003417	0.0071871	mg/L	0.00003417 0.48%
Cu 327.393†	1123.5	0.0106776	mg/L	0.00032178	0.0106776	mg/L	0.00032178 3.01%
Fe 273.955†	16856.3	0.735867	mg/L	0.0021083	0.735867	mg/L	0.0021083 0.29%
K 404.721†	-30.0						83.73 279.25%
Mg 279.077†	134875.0	6.36719	mg/L	0.025214	6.36719	mg/L	0.025214 0.40%
Mn 257.610†	5116.3	0.0072378	mg/L	0.00002241	0.0072378	mg/L	0.00002241 0.31%
Mo 202.031†	112.6	0.0043723	mg/L	0.00011473	0.0043723	mg/L	0.00011473 2.62%
Na 330.237†	13635.9	11.4551	mg/L	0.02250	11.4551	mg/L	0.02250 0.20%
Ni 231.604†	40.9	0.0010738	mg/L	0.00010626	0.0010738	mg/L	0.00010626 9.90%
Pb 220.353†	180.7	0.0114945	mg/L	0.00086711	0.0114945	mg/L	0.00086711 7.54%
Sb 206.836†	2.5	0.0028216	mg/L	0.00031206	0.0028216	mg/L	0.00031206 11.06%
Se 196.026†	5.7	0.0004650	mg/L	0.00124660	0.0004650	mg/L	0.00124660 268.08%
Sn 189.927†	25.3	0.0041918	mg/L	0.00033598	0.0041918	mg/L	0.00033598 8.02%
Ti 334.940†	18940.0	0.0303798	mg/L	0.00009871	0.0303798	mg/L	0.00009871 0.32%
Tl 190.801†	2.9	0.0017114	mg/L	0.00110277	0.0017114	mg/L	0.00110277 64.44%
V 290.880†	568.2	0.0046754	mg/L	0.00019331	0.0046754	mg/L	0.00019331 4.13%
Zn 206.200†	2161.3	0.0340318	mg/L	0.00008761	0.0340318	mg/L	0.00008761 0.26%

Sequence No.: 48
 Sample ID: 75576-025
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 61
 Date Collected: 11/16/2013 2:53:01 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-025

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1091580.7	101 %		0.2			0.19%
Y 371.029	367022.3	98.2 %		0.86			0.88%
Ag 328.068†	-83.6	-0.0002478 mg/L		0.00024022	-0.0002478 mg/L	0.00024022	96.94%
Al 308.215†	2219.2	0.0710437 mg/L		0.00460011	0.0710437 mg/L	0.00460011	6.48%
As 188.979†	4.2	0.0035021 mg/L		0.00018971	0.0035021 mg/L	0.00018971	5.42%
Ba 233.527†	5065.5	0.0416644 mg/L		0.00013151	0.0416644 mg/L	0.00013151	0.32%
Be 313.107†	43.5	0.0010731 mg/L		0.00001550	0.0010731 mg/L	0.00001550	1.44%
Ca 315.887†	2133314.0	18.5441 mg/L		0.03910	18.5441 mg/L	0.03910	0.21%
Cd 228.802†	-59.5	0.0003489 mg/L		0.00001469	0.0003489 mg/L	0.00001469	4.21%
Co 228.616†	-1.2	0.0011873 mg/L		0.00024249	0.0011873 mg/L	0.00024249	20.42%
Cr 267.716†	131.9	0.0024350 mg/L		0.00002916	0.0024350 mg/L	0.00002916	1.20%
Cu 327.393†	4.7	0.0022661 mg/L		0.00215129	0.0022661 mg/L	0.00215129	94.93%
Fe 273.955†	1996.7	0.0896213 mg/L		0.00038960	0.0896213 mg/L	0.00038960	0.43%
K 404.721†	-310.9					378.21	121.67%
Mg 279.077†	190171.0	8.95442 mg/L		0.073962	8.95442 mg/L	0.073962	0.83%
Mn 257.610†	7378.6	0.0099502 mg/L		0.00001080	0.0099502 mg/L	0.00001080	0.11%
Mo 202.031†	69.2	0.0031317 mg/L		0.00025932	0.0031317 mg/L	0.00025932	8.28%
Na 330.237†	24122.4	19.7633 mg/L		0.26136	19.7633 mg/L	0.26136	1.32%
Ni 231.604†	-19.2	0.0001152 mg/L		0.00012254	0.0001152 mg/L	0.00012254	106.38%
Pb 220.353†	20.5	0.0013014 mg/L		0.00060375	0.0013014 mg/L	0.00060375	46.39%
Sb 206.836†	-2.9	0.0004083 mg/L		0.00252378	0.0004083 mg/L	0.00252378	618.18%
Se 196.026†	5.3	0.0006200 mg/L		0.00100538	0.0006200 mg/L	0.00100538	162.15%
Sn 189.927†	11.1	0.0018266 mg/L		0.00033376	0.0018266 mg/L	0.00033376	18.27%
Ti 334.940†	1486.3	0.0039731 mg/L		0.00017498	0.0039731 mg/L	0.00017498	4.40%
Tl 190.801†	5.7	0.0029493 mg/L		0.00345179	0.0029493 mg/L	0.00345179	117.04%
V 290.880†	260.3	0.0025530 mg/L		0.00010370	0.0025530 mg/L	0.00010370	4.06%
Zn 206.200†	377.5	0.0070092 mg/L		0.00003774	0.0070092 mg/L	0.00003774	0.54%

Sequence No.: 49
 Sample ID: 75576-027
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 62
 Date Collected: 11/16/2013 2:56:48 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-027

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1086832.8	101 %		0.3			0.26%
Y 371.029	371359.9	99.3 %		0.56			0.57%
Ag 328.068†	-51.2	-0.0000248 mg/L		0.00026217	-0.0000248 mg/L	0.00026217	>999.9%
Al 308.215†	11570.4	0.408939 mg/L		0.0086127	0.408939 mg/L	0.0086127	2.11%
As 188.979†	0.7	0.0012029 mg/L		0.00013565	0.0012029 mg/L	0.00013565	11.28%
Ba 233.527†	8288.5	0.0674373 mg/L		0.00011907	0.0674373 mg/L	0.00011907	0.18%
Be 313.107†	214.7	0.0011264 mg/L		0.00005257	0.0011264 mg/L	0.00005257	4.67%
Ca 315.887†	1651827.2	14.3741 mg/L		0.00230	14.3741 mg/L	0.00230	0.02%
Cd 228.802†	-29.2	0.0008320 mg/L		0.00006819	0.0008320 mg/L	0.00006819	8.20%
Co 228.616†	29.8	0.0017951 mg/L		0.00003864	0.0017951 mg/L	0.00003864	2.15%
Cr 267.716†	1422.8	0.0180739 mg/L		0.00015894	0.0180739 mg/L	0.00015894	0.88%
Cu 327.393†	322.8	0.0047930 mg/L		0.00006031	0.0047930 mg/L	0.00006031	1.26%
Fe 273.955†	17356.0	0.757596 mg/L		0.0094058	0.757596 mg/L	0.0094058	1.24%
K 404.721†	-124.1					43.79	35.29%
Mg 279.077†	129723.6	6.12671 mg/L		0.067074	6.12671 mg/L	0.067074	1.09%
Mn 257.610†	82330.8	0.103120 mg/L		0.0011212	0.103120 mg/L	0.0011212	1.09%
Mo 202.031†	43.0	0.0020621 mg/L		0.00015315	0.0020621 mg/L	0.00015315	7.43%
Na 330.237†	19453.2	16.0640 mg/L		0.06402	16.0640 mg/L	0.06402	0.40%
Ni 231.604†	38.8	0.0010362 mg/L		0.00008621	0.0010362 mg/L	0.00008621	8.32%
Pb 220.353†	29.8	0.0019050 mg/L		0.00045447	0.0019050 mg/L	0.00045447	23.86%
Sb 206.836†	-2.7	0.0006119 mg/L		0.00085092	0.0006119 mg/L	0.00085092	139.06%
Se 196.026†	-0.2	-0.0032526 mg/L		0.00092080	-0.0032526 mg/L	0.00092080	28.31%
Sn 189.927†	10.4	0.0018027 mg/L		0.00145066	0.0018027 mg/L	0.00145066	80.47%
Ti 334.940†	8812.9	0.0150580 mg/L		0.00057511	0.0150580 mg/L	0.00057511	3.82%
Tl 190.801†	4.9	0.0025087 mg/L		0.00060585	0.0025087 mg/L	0.00060585	24.15%
V 290.880†	226.3	0.0024474 mg/L		0.00099642	0.0024474 mg/L	0.00099642	40.71%
Zn 206.200†	710.9	0.0120346 mg/L		0.00033075	0.0120346 mg/L	0.00033075	2.75%

Sequence No.: 50
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/16/2013 3:00:34 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	957732.6	88.9 %	0.30			0.34%
Y 371.029	327922.1	87.7 %	0.08			0.09%
Ag 328.068†	-2647.4	0.0027122 mg/L	0.00007360	0.0027122 mg/L	0.00007360	2.71%
Al 308.215†	13030906.3	470.820 mg/L	2.4216	470.820 mg/L	2.4216	0.51%
QC value within limits for Al 308.215 Recovery = 94.16%						
As 188.979†	-5.1	0.0066323 mg/L	0.00052060	0.0066323 mg/L	0.00052060	7.85%
Ba 233.527†	818.8	0.0006861 mg/L	0.00015277	0.0006861 mg/L	0.00015277	22.26%
Be 313.107†	-1778.4	0.0004629 mg/L	0.00001164	0.0004629 mg/L	0.00001164	2.51%
Ca 315.887†	53236123.7	460.647 mg/L	2.9742	460.647 mg/L	2.9742	0.65%
QC value within limits for Ca 315.887 Recovery = 92.13%						
Cd 228.802†	226.7	-0.0007238 mg/L	0.00010161	-0.0007238 mg/L	0.00010161	14.04%
Co 228.616†	-40.7	0.0004527 mg/L	0.00038382	0.0004527 mg/L	0.00038382	84.79%
Cr 267.716†	-199.3	-0.0014732 mg/L	0.00008484	-0.0014732 mg/L	0.00008484	5.76%
Cu 327.393†	1612.6	0.0030541 mg/L	0.00114075	0.0030541 mg/L	0.00114075	37.35%
Fe 273.955†	4238813.3	184.349 mg/L	0.1665	184.349 mg/L	0.1665	0.09%
QC value within limits for Fe 273.955 Recovery = 92.17%						
K 404.721†	-2733.4				280.43	10.26%
Mg 279.077†	10271731.0	480.447 mg/L	3.2323	480.447 mg/L	3.2323	0.67%
QC value within limits for Mg 279.077 Recovery = 96.09%						
Mn 257.610†	1432.5	-0.0149212 mg/L	0.00021513	-0.0149212 mg/L	0.00021513	1.44%
Mo 202.031†	491.8	-0.0013335 mg/L	0.00065512	-0.0013335 mg/L	0.00065512	49.13%
Na 330.237†	107.9	0.736982 mg/L	0.0071016	0.736982 mg/L	0.0071016	0.96%
Ni 231.604†	44.9	0.0011572 mg/L	0.00003815	0.0011572 mg/L	0.00003815	3.30%
Pb 220.353†	-1300.6	0.0007101 mg/L	0.00133827	0.0007101 mg/L	0.00133827	188.46%
Sb 206.836†	-107.8	-0.0014003 mg/L	0.00132792	-0.0014003 mg/L	0.00132792	94.83%
Se 196.026†	-140.0	-0.0231828 mg/L	0.00127551	-0.0231828 mg/L	0.00127551	5.50%
Sn 189.927†	-3.5	-0.0130662 mg/L	0.00213636	-0.0130662 mg/L	0.00213636	16.35%
Ti 334.940†	806.3	0.0029443 mg/L	0.00016997	0.0029443 mg/L	0.00016997	5.77%
TL 190.801†	7.3	-0.0031866 mg/L	0.00082917	-0.0031866 mg/L	0.00082917	26.02%
V 290.880†	4338.2	0.0030558 mg/L	0.00106279	0.0030558 mg/L	0.00106279	34.78%
Zn 206.200†	651.2	-0.0040780 mg/L	0.00027729	-0.0040780 mg/L	0.00027729	6.80%

All analyte(s) passed QC.

Sequence No.: 51
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/16/2013 3:05:56 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	964346.6	89.5 %		0.09			0.10%
Y 371.029	330303.7	88.3 %		0.11			0.12%
Ag 328.068†	203232.8	1.05019 mg/L		0.003739	1.05019 mg/L	0.003739	0.36%
QC value within limits for Ag		328.068	Recovery = 105.02%				
Al 308.215†	12946514.4	467.771 mg/L		1.5311	467.771 mg/L	1.5311	0.33%
QC value within limits for Al		308.215	Recovery = 93.55%				
As 188.979†	1441.3	0.985789 mg/L		0.0095419	0.985789 mg/L	0.0095419	0.97%
QC value within limits for As		188.979	Recovery = 98.58%				
Ba 233.527†	62571.7	0.495049 mg/L		0.0025469	0.495049 mg/L	0.0025469	0.51%
QC value within limits for Ba		233.527	Recovery = 99.01%				
Be 313.107†	1503849.0	0.505030 mg/L		0.0006453	0.505030 mg/L	0.0006453	0.13%
QC value within limits for Be		313.107	Recovery = 101.01%				
Ca 315.887†	52777175.2	456.674 mg/L		0.6455	456.674 mg/L	0.6455	0.14%
QC value within limits for Ca		315.887	Recovery = 91.33%				
Cd 228.802†	65044.9	1.01163 mg/L		0.003929	1.01163 mg/L	0.003929	0.39%
QC value within limits for Cd		228.802	Recovery = 101.16%				
Co 228.616†	23298.8	0.478759 mg/L		0.0016345	0.478759 mg/L	0.0016345	0.34%
QC value within limits for Co		228.616	Recovery = 95.75%				
Cr 267.716†	40222.8	0.487549 mg/L		0.0010935	0.487549 mg/L	0.0010935	0.22%
QC value within limits for Cr		267.716	Recovery = 97.51%				
Cu 327.393†	68185.2	0.521997 mg/L		0.0001305	0.521997 mg/L	0.0001305	0.03%
QC value within limits for Cu		327.393	Recovery = 104.40%				
Fe 273.955†	4194328.1	182.415 mg/L		0.0032	182.415 mg/L	0.0032	0.00%
QC value within limits for Fe		273.955	Recovery = 91.21%				
K 404.721†	-3059.4					209.91	6.86%
Mg 279.077†	10158927.6	475.174 mg/L		0.1084	475.174 mg/L	0.1084	0.02%
QC value within limits for Mg		279.077	Recovery = 95.03%				
Mn 257.610†	395317.4	0.474345 mg/L		0.0005819	0.474345 mg/L	0.0005819	0.12%
QC value within limits for Mn		257.610	Recovery = 94.87%				
Mo 202.031†	493.7	-0.0010504 mg/L		0.00028004	-0.0010504 mg/L	0.00028004	26.66%
Na 330.237†	1379.1	1.74415 mg/L		0.055082	1.74415 mg/L	0.055082	3.16%
Ni 231.604†	58805.9	0.935645 mg/L		0.0012594	0.935645 mg/L	0.0012594	0.13%
QC value within limits for Ni		231.604	Recovery = 93.56%				
Pb 220.353†	13734.3	0.945299 mg/L		0.0042633	0.945299 mg/L	0.0042633	0.45%
QC value within limits for Pb		220.353	Recovery = 94.53%				
Sb 206.836†	2287.9	1.01159 mg/L		0.003101	1.01159 mg/L	0.003101	0.31%
QC value within limits for Sb		206.836	Recovery = 101.16%				
Se 196.026†	1163.4	0.931260 mg/L		0.0192542	0.931260 mg/L	0.0192542	2.07%
QC value within limits for Se		196.026	Recovery = 93.13%				
Sn 189.927†	0.9	-0.0119910 mg/L		0.00245925	-0.0119910 mg/L	0.00245925	20.51%
Ti 334.940†	968.6	0.0031899 mg/L		0.00007649	0.0031899 mg/L	0.00007649	2.40%
Tl 190.801†	1685.1	0.930258 mg/L		0.0030294	0.930258 mg/L	0.0030294	0.33%
QC value within limits for Tl		190.801	Recovery = 93.03%				
V 290.880†	78419.2	0.494078 mg/L		0.0002792	0.494078 mg/L	0.0002792	0.06%
QC value within limits for V		290.880	Recovery = 98.82%				
Zn 206.200†	61037.0	0.912134 mg/L		0.0022464	0.912134 mg/L	0.0022464	0.25%
QC value within limits for Zn		206.200	Recovery = 91.21%				

All analyte(s) passed QC.

Sequence No.: 52
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 3:10:55 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1041775.3	96.7 %		0.93			0.97%
Y 371.029	357339.8	95.6 %		0.19			0.20%
Ag 328.068†	18753.9	0.0960230 mg/L	0.00091335	0.00091335	0.0960230 mg/L	0.00091335	0.95%
QC value within limits for Ag		328.068	Recovery = 96.02%				
Al 308.215†	135283.9	4.87095 mg/L	0.044799	0.044799	4.87095 mg/L	0.044799	0.92%
QC value within limits for Al		308.215	Recovery = 97.42%				
As 188.979†	685.8	0.465675 mg/L	0.0052899	0.0052899	0.465675 mg/L	0.0052899	1.14%
QC value within limits for As		188.979	Recovery = 93.14%				
Ba 233.527†	60316.4	0.483729 mg/L	0.0043614	0.0043614	0.483729 mg/L	0.0043614	0.90%
QC value within limits for Ba		233.527	Recovery = 96.75%				
Be 313.107†	1403009.3	0.471065 mg/L	0.0011737	0.0011737	0.471065 mg/L	0.0011737	0.25%
QC value within limits for Be		313.107	Recovery = 94.21%				
Ca 315.887†	5601016.2	48.5539 mg/L	0.08557	0.08557	48.5539 mg/L	0.08557	0.18%
QC value within limits for Ca		315.887	Recovery = 97.11%				
Cd 228.802†	30738.0	0.481087 mg/L	0.0059477	0.0059477	0.481087 mg/L	0.0059477	1.24%
QC value within limits for Cd		228.802	Recovery = 96.22%				
Co 228.616†	23327.0	0.480098 mg/L	0.0060587	0.0060587	0.480098 mg/L	0.0060587	1.26%
QC value within limits for Co		228.616	Recovery = 96.02%				
Cr 267.716†	40139.4	0.488921 mg/L	0.0055842	0.0055842	0.488921 mg/L	0.0055842	1.14%
QC value within limits for Cr		267.716	Recovery = 97.78%				
Cu 327.393†	61382.9	0.480205 mg/L	0.0032097	0.0032097	0.480205 mg/L	0.0032097	0.67%
QC value within limits for Cu		327.393	Recovery = 96.04%				
Fe 273.955†	111579.0	4.85537 mg/L	0.057480	0.057480	4.85537 mg/L	0.057480	1.18%
QC value within limits for Fe		273.955	Recovery = 97.11%				
K 404.721†	3591.7					245.15	6.83%
Unable to evaluate QC.							
Mg 279.077†	1037501.0	48.5979 mg/L	0.06831	0.06831	48.5979 mg/L	0.06831	0.14%
QC value within limits for Mg		279.077	Recovery = 97.20%				
Mn 257.610†	383186.6	0.475252 mg/L	0.0044288	0.0044288	0.475252 mg/L	0.0044288	0.93%
QC value within limits for Mn		257.610	Recovery = 95.05%				
Mo 202.031†	10528.3	0.483741 mg/L	0.0063928	0.0063928	0.483741 mg/L	0.0063928	1.32%
QC value within limits for Mo		202.031	Recovery = 96.75%				
Na 330.237†	58064.2	46.6550 mg/L	0.34500	0.34500	46.6550 mg/L	0.34500	0.74%
QC value within limits for Na		330.237	Recovery = 93.31%				
Ni 231.604†	30176.1	0.480876 mg/L	0.0057834	0.0057834	0.480876 mg/L	0.0057834	1.20%
QC value within limits for Ni		231.604	Recovery = 96.18%				
Pb 220.353†	7612.9	0.479321 mg/L	0.0072956	0.0072956	0.479321 mg/L	0.0072956	1.52%
QC value within limits for Pb		220.353	Recovery = 95.86%				
Sb 206.836†	1134.1	0.482246 mg/L	0.0066902	0.0066902	0.482246 mg/L	0.0066902	1.39%
QC value within limits for Sb		206.836	Recovery = 96.45%				
Se 196.026†	624.4	0.456064 mg/L	0.0016920	0.0016920	0.456064 mg/L	0.0016920	0.37%
QC value within limits for Se		196.026	Recovery = 91.21%				
Sn 189.927†	2188.6	0.487463 mg/L	0.0056398	0.0056398	0.487463 mg/L	0.0056398	1.16%
QC value within limits for Sn		189.927	Recovery = 97.49%				
Ti 334.940†	316353.8	0.480352 mg/L	0.0033340	0.0033340	0.480352 mg/L	0.0033340	0.69%
QC value within limits for Ti		334.940	Recovery = 96.07%				
Tl 190.801†	875.9	0.492279 mg/L	0.0055932	0.0055932	0.492279 mg/L	0.0055932	1.14%
QC value within limits for Tl		190.801	Recovery = 98.46%				
V 290.880†	72096.0	0.476639 mg/L	0.0048307	0.0048307	0.476639 mg/L	0.0048307	1.01%
QC value within limits for V		290.880	Recovery = 95.33%				
Zn 206.200†	30920.0	0.469958 mg/L	0.0066707	0.0066707	0.469958 mg/L	0.0066707	1.42%
QC value within limits for Zn		206.200	Recovery = 93.99%				

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 53

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/16/2013 3:14:43 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte		Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc	361.383	1073399.6	99.6 %		0.45			0.46%
Y	371.029	371271.8	99.3 %		0.26			0.26%
Ag	328.068†	3942.4	0.0202572 mg/L	0.00039961		0.0202572 mg/L	0.00039961	1.97%
	QC value within limits for Ag	328.068	Recovery = 101.29%					
Al	308.215†	5760.7	0.198717 mg/L	0.0000031		0.198717 mg/L	0.0000031	0.00%
	QC value within limits for Al	308.215	Recovery = 99.36%					
As	188.979†	27.2	0.0192389 mg/L	0.00083821		0.0192389 mg/L	0.00083821	4.36%
	QC value within limits for As	188.979	Recovery = 96.19%					
Ba	233.527†	6179.3	0.0505720 mg/L	0.00039136		0.0505720 mg/L	0.00039136	0.77%
	QC value within limits for Ba	233.527	Recovery = 101.14%					
Be	313.107†	34365.1	0.0125591 mg/L	0.00002906		0.0125591 mg/L	0.00002906	0.23%
	QC value within limits for Be	313.107	Recovery = 104.66%					
Ca	315.887†	579034.1	5.08694 mg/L	0.018563		5.08694 mg/L	0.018563	0.36%
	QC value within limits for Ca	315.887	Recovery = 101.74%					
Cd	228.802†	740.4	0.0128930 mg/L	0.00026725		0.0128930 mg/L	0.00026725	2.07%
	QC value within limits for Cd	228.802	Recovery = 107.44%					
Co	228.616†	989.7	0.0214692 mg/L	0.00045877		0.0214692 mg/L	0.00045877	2.14%
	QC value within limits for Co	228.616	Recovery = 107.35%					
Cr	267.716†	4080.9	0.0502931 mg/L	0.00010709		0.0502931 mg/L	0.00010709	0.21%
	QC value within limits for Cr	267.716	Recovery = 100.59%					
Cu	327.393†	6358.5	0.0519599 mg/L	0.00042765		0.0519599 mg/L	0.00042765	0.82%
	QC value within limits for Cu	327.393	Recovery = 103.92%					
Fe	273.955†	6889.9	0.302428 mg/L	0.0004720		0.302428 mg/L	0.0004720	0.16%
	QC value within limits for Fe	273.955	Recovery = 100.81%					
K	404.721†	-456.8					144.82	31.70%
	Unable to evaluate QC.							
Mg	279.077†	107843.7	5.10332 mg/L	0.020645		5.10332 mg/L	0.020645	0.40%
	QC value within limits for Mg	279.077	Recovery = 102.07%					
Mn	257.610†	31203.0	0.0396802 mg/L	0.00015548		0.0396802 mg/L	0.00015548	0.39%
	QC value within limits for Mn	257.610	Recovery = 99.20%					
Mo	202.031†	447.7	0.0210243 mg/L	0.00027992		0.0210243 mg/L	0.00027992	1.33%
	QC value within limits for Mo	202.031	Recovery = 105.12%					
Na	330.237†	5342.6	4.88443 mg/L	0.000705		4.88443 mg/L	0.000705	0.01%
	QC value within limits for Na	330.237	Recovery = 97.69%					
Ni	231.604†	3134.2	0.0502849 mg/L	0.00040502		0.0502849 mg/L	0.00040502	0.81%
	QC value within limits for Ni	231.604	Recovery = 100.57%					
Pb	220.353†	198.3	0.0125075 mg/L	0.00039766		0.0125075 mg/L	0.00039766	3.18%
	QC value within limits for Pb	220.353	Recovery = 104.23%					
Sb	206.836†	42.9	0.0198461 mg/L	0.00269590		0.0198461 mg/L	0.00269590	13.58%
	QC value within limits for Sb	206.836	Recovery = 99.23%					
Se	196.026†	47.9	0.0321641 mg/L	0.00215196		0.0321641 mg/L	0.00215196	6.69%
	QC value within limits for Se	196.026	Recovery = 80.41%					
Sn	189.927†	205.6	0.0457199 mg/L	0.00198867		0.0457199 mg/L	0.00198867	4.35%
	QC value within limits for Sn	189.927	Recovery = 91.44%					
Ti	334.940†	30641.2	0.0480830 mg/L	0.00009145		0.0480830 mg/L	0.00009145	0.19%
	QC value within limits for Ti	334.940	Recovery = 96.17%					
Tl	190.801†	41.1	0.0229861 mg/L	0.00014944		0.0229861 mg/L	0.00014944	0.65%
	QC value within limits for Tl	190.801	Recovery = 114.93%					
V	290.880†	7408.0	0.0500507 mg/L	0.00023673		0.0500507 mg/L	0.00023673	0.47%
	QC value within limits for V	290.880	Recovery = 100.10%					
Zn	206.200†	3184.9	0.0495840 mg/L	0.00023893		0.0495840 mg/L	0.00023893	0.48%
	QC value within limits for Zn	206.200	Recovery = 99.17%					

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 54
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/16/2013 3:18:22 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		1085234.3		101 %		0.3			0.33%
Y 371.029		375379.4		100 %		0.3			0.30%
Ag 328.068†		-55.9	-0.0001142	mg/L	0.00050360	-0.0001142	mg/L	0.00050360	440.98%
QC value	within limits	for Ag	328.068	Recovery	=	Not calculated			
Al 308.215†		21.2	-0.0083188	mg/L	0.00357490	-0.0083188	mg/L	0.00357490	42.97%
QC value	within limits	for Al	308.215	Recovery	=	Not calculated			
As 188.979†		1.9	0.0021080	mg/L	0.00088714	0.0021080	mg/L	0.00088714	42.08%
QC value	within limits	for As	188.979	Recovery	=	Not calculated			
Ba 233.527†		42.8	0.0014645	mg/L	0.00016124	0.0014645	mg/L	0.00016124	11.01%
QC value	within limits	for Ba	233.527	Recovery	=	Not calculated			
Be 313.107†		-39.4	0.0010461	mg/L	0.00006809	0.0010461	mg/L	0.00006809	6.51%
QC value	within limits	for Be	313.107	Recovery	=	Not calculated			
Ca 315.887†		-293.6	0.0720181	mg/L	0.00231105	0.0720181	mg/L	0.00231105	3.21%
QC value	within limits	for Ca	315.887	Recovery	=	Not calculated			
Cd 228.802†		-22.7	0.0010026	mg/L	0.00006209	0.0010026	mg/L	0.00006209	6.19%
QC value	within limits	for Cd	228.802	Recovery	=	Not calculated			
Co 228.616†		13.4	0.0014777	mg/L	0.00026802	0.0014777	mg/L	0.00026802	18.14%
QC value	within limits	for Co	228.616	Recovery	=	Not calculated			
Cr 267.716†		21.0	0.0010738	mg/L	0.00006371	0.0010738	mg/L	0.00006371	5.93%
QC value	within limits	for Cr	267.716	Recovery	=	Not calculated			
Cu 327.393†		-262.6	0.0004365	mg/L	0.00326706	0.0004365	mg/L	0.00326706	748.48%
QC value	within limits	for Cu	327.393	Recovery	=	Not calculated			
Fe 273.955†		61.6	0.0054606	mg/L	0.00035802	0.0054606	mg/L	0.00035802	6.56%
QC value	within limits	for Fe	273.955	Recovery	=	Not calculated			
K 404.721†		-646.7						105.78	16.36%
Unable to evaluate QC.									
Mg 279.077†		203.7	0.0676015	mg/L	0.00298713	0.0676015	mg/L	0.00298713	4.42%
QC value	within limits	for Mg	279.077	Recovery	=	Not calculated			
Mn 257.610†		-51.6	0.0010531	mg/L	0.00002377	0.0010531	mg/L	0.00002377	2.26%
QC value	within limits	for Mn	257.610	Recovery	=	Not calculated			
Mo 202.031†		-1.2	0.0005349	mg/L	0.00009102	0.0005349	mg/L	0.00009102	17.01%
QC value	within limits	for Mo	202.031	Recovery	=	Not calculated			
Na 330.237†		140.3	0.762673	mg/L	0.0030808	0.762673	mg/L	0.0030808	0.40%
QC value	within limits	for Na	330.237	Recovery	=	Not calculated			
Ni 231.604†		-31.5	-0.0000841	mg/L	0.00003140	-0.0000841	mg/L	0.00003140	37.36%
QC value	within limits	for Ni	231.604	Recovery	=	Not calculated			
Pb 220.353†		4.9	0.0003413	mg/L	0.00048161	0.0003413	mg/L	0.00048161	141.09%
QC value	within limits	for Pb	220.353	Recovery	=	Not calculated			
Sb 206.836†		2.4	0.0026476	mg/L	0.00005175	0.0026476	mg/L	0.00005175	1.95%
QC value	within limits	for Sb	206.836	Recovery	=	Not calculated			
Se 196.026†		4.0	-0.0001021	mg/L	0.00427887	-0.0001021	mg/L	0.00427887	>999.9%
QC value	within limits	for Se	196.026	Recovery	=	Not calculated			
Sn 189.927†		6.7	0.0014281	mg/L	0.00031266	0.0014281	mg/L	0.00031266	21.89%
QC value	within limits	for Sn	189.927	Recovery	=	Not calculated			
Ti 334.940†		24.6	0.0017617	mg/L	0.00005374	0.0017617	mg/L	0.00005374	3.05%
QC value	within limits	for Ti	334.940	Recovery	=	Not calculated			
Tl 190.801†		1.2	0.0004265	mg/L	0.00095749	0.0004265	mg/L	0.00095749	224.51%
QC value	within limits	for Tl	190.801	Recovery	=	Not calculated			
V 290.880†		-135.4	0.0003027	mg/L	0.00038984	0.0003027	mg/L	0.00038984	128.77%
QC value	within limits	for V	290.880	Recovery	=	Not calculated			
Zn 206.200†		14.4	0.0015057	mg/L	0.00008934	0.0015057	mg/L	0.00008934	5.93%
QC value	within limits	for Zn	206.200	Recovery	=	Not calculated			
All analyte(s) passed QC. One or more analytes were not evaluated.									

All analyte(s) passed QC. One or more analytes were not evaluated.

F.6 SW15686D2

3110620 0398
Ret.L 15686 SW846
Date: 11/16/2013 5:39:02 PM

Method: PE 2 4300DV RADIAL

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Analyst J Bl 11/18/13

Method Loaded

Method Name: PE 2 4300DV RADIAL

IEC File: IECrad101413.iec

Method Description: 200.7/6010B/6010C

Method Last Saved: 11/14/2013 5:54:55 PM

MSF File:

Sequence No.: 1

Sample ID: Calib Blk 1 V-174666

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 11/16/2013 5:36:41 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib Blk 1 V-174666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	29636.6	37.24	0.13%	100.000	%
Sc 361.383	80255.2	339.46	0.42%	100	%
Al 308.215†	488.7	9.75	2.00%	[0.00]	mg/L
Ca 315.887†	2047.9	15.54	0.76%	[0.00]	mg/L
Fe 273.955†	85.1	3.38	3.97%	[0.00]	mg/L
Mg 279.077†	-1386.1	12.23	0.88%	[0.00]	mg/L
Mn 257.610†	263.3	2.34	0.89%	[0.00]	mg/L
K 766.490†	1155.3	11.36	0.98%	[0.00]	mg/L
Na 589.592†	19922.0	45.18	0.23%	[0.00]	mg/L
Ti 334.940†	-939.4	19.72	2.10%	[0.00]	mg/L

15686
27401

Na, K reported

75576-001-027 not reported

Sequence No.: 2
Sample ID: Calib 1 V-173273
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 11/16/2013 5:39:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib 1 V-173273

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	29701.4	171.55	0.58%	100.219	%
Sc 361.383	80641.7	610.15	0.76%	100	%
Al 308.215†	167.6	10.37	6.19%	[0.1]	mg/L
Ca 315.887†	9177.7	137.34	1.50%	[1]	mg/L
Fe 273.955†	175.1	3.26	1.86%	[0.1]	mg/L
Mg 279.077†	1718.5	30.62	1.78%	[1]	mg/L
Mn 257.610†	580.4	2.89	0.50%	[0.01]	mg/L
K 766.490†	1187.9	71.48	6.02%	[1]	mg/L
Na 589.592†	6772.0	129.66	1.91%	[1]	mg/L
Ti 334.940†	469.7	32.81	6.99%	[0.01]	mg/L

Sequence No.: 3
Sample ID: Calib 2 V-173274
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 11/16/2013 5:43:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib 2 V-173274

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	29026.8	427.79	1.47%	97.9425	%
Sc 361.383	79038.3	1163.97	1.47%	98.5	%
Al 308.215†	7670.9	79.74	1.04%	[5]	mg/L
Ca 315.887†	510836.0	15154.02	2.97%	[50]	mg/L
Fe 273.955†	9614.4	24.13	0.25%	[5]	mg/L
Mg 279.077†	96820.0	362.37	0.37%	[50]	mg/L
Mn 257.610†	29748.1	9.70	0.03%	[0.5]	mg/L
K 766.490†	68327.1	2310.37	3.38%	[50]	mg/L
Na 589.592†	349468.2	10607.69	3.04%	[50]	mg/L
Ti 334.940†	24701.0	37.58	0.15%	[0.5]	mg/L

Sequence No.: 4
 Sample ID: Calib 3 V-174144
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 11/16/2013 5:45:51 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: Calib 3 V-174144

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Y 371.029	29072.3	50.26	0.17%	98.0960	%
Sc 361.383	79288.3	115.42	0.15%	98.8	%
Al 308.215†	15469.7	13.48	0.09%	[10]	mg/L
Ca 315.887†	1034664.9	6602.49	0.64%	[100]	mg/L
Fe 273.955†	19503.2	27.11	0.14%	[10]	mg/L
Mg 279.077†	195712.1	9.10	0.00%	[100]	mg/L
Mn 257.610†	60496.5	46.99	0.08%	[1.0]	mg/L
K 766.490†	147846.9	1078.72	0.73%	[100]	mg/L
Na 589.592†	719020.4	1325.74	0.18%	[100]	mg/L
Ti 334.940†	50445.4	30.02	0.06%	[1.0]	mg/L

 Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Al 308.215	3	Lin, Calc Int	-5.8	1545	0.00000	0.999990	
Ca 315.887	3	Lin, Calc Int	-1713.1	10340	0.00000	0.999980	
Fe 273.955	3	Lin, Calc Int	-34.0	1949	0.00000	0.999975	
Mg 279.077	3	Lin, Calc Int	-296.9	1957	0.00000	0.999986	
Mn 257.610	3	Lin, Calc Int	-102.2	60420	0.00000	0.999964	
K 766.490	3	Lin, Calc Int	-1150.4	1470	0.00000	0.999244	
Na 589.592	3	Lin, Calc Int	-2017.5	7174	0.00000	0.999897	
Ti 334.940	3	Lin, Calc Int	-110.7	50370	0.00000	0.999944	

Sequence No.: 5
 Sample ID: ICS3 V-173274
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 11/16/2013 5:48:34 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICS3 V-173274

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29496.2	99.5262 %		0.15473			0.16%
Sc 361.383	80257.8	100 %		0.3			0.28%
Al 308.215†	7612.3	4.93045 mg/L		0.010217	4.93045 mg/L	0.010217	0.21%
QC value within limits for Al 308.215 Recovery = 98.61%							
Ca 315.887†	502714.3	48.7781 mg/L		0.46916	48.7781 mg/L	0.46916	0.96%
QC value within limits for Ca 315.887 Recovery = 97.56%							
Fe 273.955†	9567.7	4.92669 mg/L		0.024412	4.92669 mg/L	0.024412	0.50%
QC value within limits for Fe 273.955 Recovery = 98.53%							
Mg 279.077†	96064.4	49.2508 mg/L		0.12996	49.2508 mg/L	0.12996	0.26%
QC value within limits for Mg 279.077 Recovery = 98.50%							
Mn 257.610†	29687.0	0.496249 mg/L		0.0008108	0.496249 mg/L	0.0008108	0.16%
QC value within limits for Mn 257.610 Recovery = 99.25%							
K 766.490†	66838.9	46.2526 mg/L		0.73576	46.2526 mg/L	0.73576	1.59%
QC value within limits for K 766.490 Recovery = 92.51%							
Na 589.592†	344755.3	48.3349 mg/L		0.52745	48.3349 mg/L	0.52745	1.09%
QC value within limits for Na 589.592 Recovery = 96.67%							
Ti 334.940†	24832.9	0.495206 mg/L		0.0004918	0.495206 mg/L	0.0004918	0.10%
QC value within limits for Ti 334.940 Recovery = 99.04%							

All analyte(s) passed QC.

Sequence No.: 6
 Sample ID: ICV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 5:51:16 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29183.9	98.4726 %		0.42672			0.43%
Sc 361.383	79242.5	98.7 %		0.41			0.41%
Al 308.215†	7412.6	4.80118 mg/L		0.028171	4.80118 mg/L	0.028171	0.59%
QC value within limits for Al 308.215 Recovery = 96.02%							
Ca 315.887†	498194.9	48.3411 mg/L		0.60262	48.3411 mg/L	0.60262	1.25%
QC value within limits for Ca 315.887 Recovery = 96.68%							
Fe 273.955†	9354.0	4.81702 mg/L		0.007455	4.81702 mg/L	0.007455	0.15%
QC value within limits for Fe 273.955 Recovery = 96.34%							
Mg 279.077†	95437.2	48.9302 mg/L		0.03222	48.9302 mg/L	0.03222	0.07%
QC value within limits for Mg 279.077 Recovery = 97.86%							
Mn 257.610†	28725.7	0.480266 mg/L		0.0000933	0.480266 mg/L	0.0000933	0.02%
QC value within limits for Mn 257.610 Recovery = 96.05%							
K 766.490†	67535.7	46.7266 mg/L		0.80863	46.7266 mg/L	0.80863	1.73%
QC value within limits for K 766.490 Recovery = 93.45%							
Na 589.592†	342061.6	47.9595 mg/L		0.60360	47.9595 mg/L	0.60360	1.26%
QC value within limits for Na 589.592 Recovery = 95.92%							
Ti 334.940†	24108.0	0.480815 mg/L		0.0004529	0.480815 mg/L	0.0004529	0.09%
QC value within limits for Ti 334.940 Recovery = 96.16%							

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/16/2013 5:53:56 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29809.0	100.582 %		0.5433			0.54%
Sc 361.383	81127.6	101 %		0.6			0.55%
Al 308.215†	263.0	0.173936 mg/L		0.0021507	0.173936 mg/L	0.0021507	1.24%
QC value within limits for Al 308.215 Recovery = 86.97%							
Ca 315.887†	50395.6	5.03891 mg/L		0.001678	5.03891 mg/L	0.001678	0.03%
QC value within limits for Ca 315.887 Recovery = 100.78%							
Fe 273.955†	554.2	0.301821 mg/L		0.0012469	0.301821 mg/L	0.0012469	0.41%
QC value within limits for Fe 273.955 Recovery = 100.61%							
Mg 279.077†	9587.0	5.05169 mg/L		0.010467	5.05169 mg/L	0.010467	0.21%
QC value within limits for Mg 279.077 Recovery = 101.03%							
Mn 257.610†	2311.6	0.0401467 mg/L		0.00020003	0.0401467 mg/L	0.00020003	0.50%
QC value within limits for Mn 257.610 Recovery = 100.37%							
K 766.490†	6784.5	5.39808 mg/L		0.042928	5.39808 mg/L	0.042928	0.80%
QC value within limits for K 766.490 Recovery = 107.96%							
Na 589.592†	34572.4	5.10009 mg/L		0.015105	5.10009 mg/L	0.015105	0.30%
QC value within limits for Na 589.592 Recovery = 102.00%							
Ti 334.940†	2294.8	0.0477581 mg/L		0.00023479	0.0477581 mg/L	0.00023479	0.49%
QC value within limits for Ti 334.940 Recovery = 95.52%							

All analyte(s) passed QC.

Sequence No.: 8
 Sample ID: ICB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 11/16/2013 5:57:09 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICB V-174666

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29491.9	99.5118 %		0.40617			0.41%
Sc 361.383	79828.5	99.5 %		0.31			0.31%
Al 308.215†	-25.0	-0.0124382 mg/L		0.00434136	-0.0124382 mg/L	0.00434136	34.90%
QC value within limits for Al 308.215 Recovery = Not calculated							
Ca 315.887†	11.0	0.166717 mg/L		0.0012532	0.166717 mg/L	0.0012532	0.75%
QC value within limits for Ca 315.887 Recovery = Not calculated							
Fe 273.955†	-3.4	0.0156933 mg/L		0.00452236	0.0156933 mg/L	0.00452236	28.82%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	-17.1	0.142991 mg/L		0.0095487	0.142991 mg/L	0.0095487	6.68%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	-8.7	0.0015579 mg/L		0.00005714	0.0015579 mg/L	0.00005714	3.67%
QC value within limits for Mn 257.610 Recovery = Not calculated							
K 766.490†	58.6	0.822483 mg/L		0.0169617	0.822483 mg/L	0.0169617	2.06%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	50.1	0.288191 mg/L		0.0145498	0.288191 mg/L	0.0145498	5.05%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	-18.9	0.0018242 mg/L		0.00021523	0.0018242 mg/L	0.00021523	11.80%
QC value within limits for Ti 334.940 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSA V-173614

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 11/16/2013 6:00:20 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28183.6	95.0972 %		1.08213			1.14%
Sc 361.383	77356.3	96.4 %		1.10			1.14%
Al 308.215†	725150.4	469.321 mg/L		5.1890	469.321 mg/L	5.1890	1.11%
QC value within limits for Al 308.215 Recovery = 93.86%							
Ca 315.887†	4710918.0	455.711 mg/L		4.6848	455.711 mg/L	4.6848	1.03%
QC value within limits for Ca 315.887 Recovery = 91.14%							
Fe 273.955†	361832.6	185.675 mg/L		0.1109	185.675 mg/L	0.1109	0.06%
QC value within limits for Fe 273.955 Recovery = 92.84%							
Mg 279.077†	926406.7	473.643 mg/L		5.3450	473.643 mg/L	5.3450	1.13%
QC value within limits for Mg 279.077 Recovery = 94.73%							
Mn 257.610†	-6807.0	0.0100583 mg/L		0.00105937	0.0100583 mg/L	0.00105937	10.53%
QC value within limits for Mn 257.610 Recovery = 1.01%							
K 766.490†	292.6	0.981696 mg/L		0.0089485	0.981696 mg/L	0.0089485	0.91%
QC value within limits for K 766.490 Recovery = 98.17%							
Na 589.592†	1586.6	0.502366 mg/L		0.0118328	0.502366 mg/L	0.0118328	2.36%
QC value within limits for Na 589.592 Recovery = 50.24%							
Ti 334.940†	-1587.2	-0.0293114 mg/L		0.00020291	-0.0293114 mg/L	0.00020291	0.69%
QC value within limits for Ti 334.940 Recovery = -2.93%							

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/16/2013 6:04:02 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28189.2	95.1164	%	0.14931			0.16%
Sc 361.383	77463.6	96.5	%	0.14			0.15%
Al 308.215†	729343.0	472.034	mg/L	3.1283	472.034 mg/L	3.1283	0.66%
QC value within limits for Al 308.215 Recovery = 94.41%							
Ca 315.887†	4735569.7	458.095	mg/L	3.5632	458.095 mg/L	3.5632	0.78%
QC value within limits for Ca 315.887 Recovery = 91.62%							
Fe 273.955†	361566.6	185.539	mg/L	0.1053	185.539 mg/L	0.1053	0.06%
QC value within limits for Fe 273.955 Recovery = 92.77%							
Mg 279.077†	931613.3	476.304	mg/L	4.4450	476.304 mg/L	4.4450	0.93%
QC value within limits for Mg 279.077 Recovery = 95.26%							
Mn 257.610†	22774.2	0.499564	mg/L	0.0006611	0.499564 mg/L	0.0006611	0.13%
QC value within limits for Mn 257.610 Recovery = 99.91%							
K 766.490†	298.8	0.985931	mg/L	0.0171446	0.985931 mg/L	0.0171446	1.74%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	1258.0	0.456564	mg/L	0.0333627	0.456564 mg/L	0.0333627	7.31%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	-1544.5	-0.0284635	mg/L	0.00126375	-0.0284635 mg/L	0.00126375	4.44%

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: MB 27401 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 38
 Date Collected: 11/16/2013 6:07:42 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 27401 (1)

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29360.9	99.0699	%	0.53834			0.54%
Sc 361.383	79684.9	99.3	%	0.69			0.70%
Al 308.215†	57.8	0.0411669	mg/L	0.00396215	0.0411669 mg/L	0.00396215	9.62%
Ca 315.887†	585.3	0.222248	mg/L	0.0003728	0.222248 mg/L	0.0003728	0.17%
Fe 273.955†	45.4	0.0407466	mg/L	0.00133105	0.0407466 mg/L	0.00133105	3.27%
Mg 279.077†	-60.1	0.121045	mg/L	0.0073201	0.121045 mg/L	0.0073201	6.05%
Mn 257.610†	0.4	0.0017248	mg/L	0.00035044	0.0017248 mg/L	0.00035044	20.32%
K 766.490†	94.9	0.847222	mg/L	0.0187793	0.847222 mg/L	0.0187793	2.22%
Na 589.592†	1298.8	0.462249	mg/L	0.0010577	0.462249 mg/L	0.0010577	0.23%
Ti 334.940†	-62.7	0.0009531	mg/L	0.00066976	0.0009531 mg/L	0.00066976	70.27%

Sequence No.: 12
Sample ID: LCSW 27401
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 11/16/2013 6:10:53 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCSW 27401

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28837.9	97.3051	%	0.39028			0.40%
Sc 361.383	78175.2	97.4	%	0.48			0.50%
Al 308.215†	7547.6	4.88857	mg/L	0.007988	4.88857 mg/L	0.007988	0.16%
Ca 315.887†	508150.6	49.3038	mg/L	0.40258	49.3038 mg/L	0.40258	0.82%
Fe 273.955†	9400.7	4.84101	mg/L	0.014471	4.84101 mg/L	0.014471	0.30%
Mg 279.077†	95507.5	48.9661	mg/L	0.07912	48.9661 mg/L	0.07912	0.16%
Mn 257.610†	29113.2	0.486697	mg/L	0.0002434	0.486697 mg/L	0.0002434	0.05%
K 766.490†	68553.5	47.4190	mg/L	0.65204	47.4190 mg/L	0.65204	1.38%
Na 589.592†	345768.9	48.4762	mg/L	0.40947	48.4762 mg/L	0.40947	0.84%
Ti 334.940†	24037.0	0.479405	mg/L	0.0002286	0.479405 mg/L	0.0002286	0.05%

Sequence No.: 13
 Sample ID: LCSW MR 27401
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 40
 Date Collected: 11/16/2013 6:13:34 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW MR 27401

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28958.7	97.7127	%	0.89407			0.92%
Sc 361.383	78328.8	97.6	%	1.13			1.16%
Al 308.215†	7506.4	4.86189	mg/L	0.003068	4.86189 mg/L	0.003068	0.06%
Ca 315.887†	502720.4	48.7787	mg/L	0.19116	48.7787 mg/L	0.19116	0.39%
Fe 273.955†	9368.4	4.82440	mg/L	0.001275	4.82440 mg/L	0.001275	0.03%
Mg 279.077†	94905.6	48.6585	mg/L	0.18203	48.6585 mg/L	0.18203	0.37%
Mn 257.610†	28931.7	0.483682	mg/L	0.0002859	0.483682 mg/L	0.0002859	0.06%
K 766.490†	68047.6	47.0749	mg/L	0.57255	47.0749 mg/L	0.57255	1.22%
Na 589.592†	345693.8	48.4657	mg/L	0.28616	48.4657 mg/L	0.28616	0.59%
Ti 334.940†	23955.9	0.477795	mg/L	0.0003216	0.477795 mg/L	0.0003216	0.07%

Sequence No.: 14
 Sample ID: 75576-029
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 41
 Date Collected: 11/16/2013 6:16:15 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-029

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29888.0	100.848	%	0.8238			0.82%
Sc 361.383	80054.5	99.7	%	0.28			0.28%
Al 308.215†	156.6	0.105077	mg/L	0.0020087	0.105077 mg/L	0.0020087	1.91%
Ca 315.887†	305223.2	29.6807	mg/L	0.17661	29.6807 mg/L	0.17661	0.60%
Fe 273.955†	181.6	0.110655	mg/L	0.0031055	0.110655 mg/L	0.0031055	2.81%
Mg 279.077†	7810.5	4.14375	mg/L	0.014003	4.14375 mg/L	0.014003	0.34%
Mn 257.610†	239.1	0.0057198	mg/L	0.00008014	0.0057198 mg/L	0.00008014	1.40%
K 766.490†	3549.4	3.19728	mg/L	0.112757	3.19728 mg/L	0.112757	3.53%
Na 589.592†	108048.0	15.3415	mg/L	0.17137	15.3415 mg/L	0.17137	1.12%
Ti 334.940†	-35.9	0.0014867	mg/L	0.00002799	0.0014867 mg/L	0.00002799	1.88%

Sequence No.: 15
 Sample ID: 75576-029 MR
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 42
 Date Collected: 11/16/2013 6:19:26 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-029 MR

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	29588.7	99.8384	%	0.36960				0.37%
Sc 361.383	79357.9	98.9	%	0.17				0.18%
Al 308.215†	164.0	0.109859	mg/L	0.0020241	0.109859	mg/L	0.0020241	1.84%
Ca 315.887†	307515.0	29.9024	mg/L	0.10795	29.9024	mg/L	0.10795	0.36%
Fe 273.955†	180.4	0.110002	mg/L	0.0027926	0.110002	mg/L	0.0027926	2.54%
Mg 279.077†	7810.3	4.14363	mg/L	0.007231	4.14363	mg/L	0.007231	0.17%
Mn 257.610†	245.3	0.0058227	mg/L	0.00013639	0.0058227	mg/L	0.00013639	2.34%
K 766.490†	3516.3	3.17474	mg/L	0.040165	3.17474	mg/L	0.040165	1.27%
Na 589.592†	108543.0	15.4105	mg/L	0.04603	15.4105	mg/L	0.04603	0.30%
Ti 334.940†	6.5	0.0023275	mg/L	0.00005990	0.0023275	mg/L	0.00005990	2.57%

Sequence No.: 16
Sample ID: 75576-031 MS 1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 43
Date Collected: 11/16/2013 6:22:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75576-031 MS 1

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29494.3	99.5198 %	%	0.23606			0.24%
Sc 361.383	78604.0	97.9 %	%	0.13			0.13%
Al 308.215†	7796.5	5.04965 mg/L	mg/L	0.020765	5.04965 mg/L	0.020765	0.41%
Ca 315.887†	810525.2	78.5434 mg/L	mg/L	0.96409	78.5434 mg/L	0.96409	1.23%
Fe 273.955†	9685.0	4.98684 mg/L	mg/L	0.017140	4.98684 mg/L	0.017140	0.34%
Mg 279.077†	102658.8	52.6212 mg/L	mg/L	0.06123	52.6212 mg/L	0.06123	0.12%
Mn 257.610†	29631.9	0.495377 mg/L	mg/L	0.0004120	0.495377 mg/L	0.0004120	0.08%
K 766.490†	71972.5	49.7449 mg/L	mg/L	0.48153	49.7449 mg/L	0.48153	0.97%
Na 589.592†	459316.1	64.3030 mg/L	mg/L	0.58646	64.3030 mg/L	0.58646	0.91%
Ti 334.940†	24503.8	0.488674 mg/L	mg/L	0.0013666	0.488674 mg/L	0.0013666	0.28%

Sequence No.: 17
 Sample ID: 75576-033 MS 2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 44
 Date Collected: 11/16/2013 6:25:19 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-033 MS 2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29839.3	100.684	%	1.2031			1.19%
Sc 361.383	79538.8	99.1	%	0.80			0.81%
Al 308.215†	7583.2	4.91159	mg/L	0.002975	4.91159 mg/L	0.002975	0.06%
Ca 315.887†	789195.6	76.4808	mg/L	2.20659	76.4808 mg/L	2.20659	2.89%
Fe 273.955†	9448.6	4.86559	mg/L	0.004565	4.86559 mg/L	0.004565	0.09%
Mg 279.077†	99761.7	51.1405	mg/L	0.11534	51.1405 mg/L	0.11534	0.23%
Mn 257.610†	28813.5	0.481751	mg/L	0.0003862	0.481751 mg/L	0.0003862	0.08%
K 766.490†	71252.5	49.2551	mg/L	1.01068	49.2551 mg/L	1.01068	2.05%
Na 589.592†	451990.6	63.2819	mg/L	1.70793	63.2819 mg/L	1.70793	2.70%
Ti 334.940†	23982.2	0.478317	mg/L	0.0010589	0.478317 mg/L	0.0010589	0.22%

Sequence No.: 18
 Sample ID: 75576-029 PS
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 45
 Date Collected: 11/16/2013 6:28:01 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: 75576-029 PS

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29338.2	98.9932	%	0.30697			0.31%
Sc 361.383	78326.1	97.6	%	0.14			0.15%
Al 308.215†	7926.6	5.13385	mg/L	0.006963	5.13385 mg/L	0.006963	0.14%
Ca 315.887†	822135.4	79.6661	mg/L	0.15800	79.6661 mg/L	0.15800	0.20%
Fe 273.955†	9883.8	5.08886	mg/L	0.024794	5.08886 mg/L	0.024794	0.49%
Mg 279.077†	106207.2	54.4348	mg/L	0.21383	54.4348 mg/L	0.21383	0.39%
Mn 257.610†	30157.9	0.504148	mg/L	0.0002516	0.504148 mg/L	0.0002516	0.05%
K 766.490†	73855.6	51.0260	mg/L	0.24396	51.0260 mg/L	0.24396	0.48%
Na 589.592†	467865.0	65.4946	mg/L	0.13800	65.4946 mg/L	0.13800	0.21%
Ti 334.940†	23146.3	0.461722	mg/L	0.0003103	0.461722 mg/L	0.0003103	0.07%

Sequence No.: 19
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 6:30:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28895.8	97.5003 %		0.83037			0.85%
Sc 361.383	78883.1	98.3 %		0.26			0.27%
Al 308.215†	7453.3	4.82750 mg/L		0.035761	4.82750 mg/L	0.035761	0.74%
QC value within limits for Al 308.215 Recovery = 96.55%							
Ca 315.887†	495772.3	48.1068 mg/L		0.08940	48.1068 mg/L	0.08940	0.19%
QC value within limits for Ca 315.887 Recovery = 96.21%							
Fe 273.955†	9367.7	4.82406 mg/L		0.000062	4.82406 mg/L	0.000062	0.00%
QC value within limits for Fe 273.955 Recovery = 96.48%							
Mg 279.077†	95934.7	49.1844 mg/L		0.10485	49.1844 mg/L	0.10485	0.21%
QC value within limits for Mg 279.077 Recovery = 98.37%							
Mn 257.610†	28771.1	0.481023 mg/L		0.0007028	0.481023 mg/L	0.0007028	0.15%
QC value within limits for Mn 257.610 Recovery = 96.20%							
K 766.490†	66912.9	46.3029 mg/L		0.11664	46.3029 mg/L	0.11664	0.25%
QC value within limits for K 766.490 Recovery = 92.61%							
Na 589.592†	342409.3	48.0079 mg/L		0.11449	48.0079 mg/L	0.11449	0.24%
QC value within limits for Na 589.592 Recovery = 96.02%							
Ti 334.940†	24104.5	0.480746 mg/L		0.0008959	0.480746 mg/L	0.0008959	0.19%
QC value within limits for Ti 334.940 Recovery = 96.15%							

All analyte(s) passed QC.

Sequence No.: 20
 Sample ID: LLCCV V-176606 [aq]
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 11/16/2013 6:33:23 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29621.3	99.9484 %		0.72070			0.72%
Sc 361.383	80360.6	100 %		1.3			1.27%
Al 308.215†	290.7	0.191884 mg/L		0.0082160	0.191884 mg/L	0.0082160	4.28%
QC value within limits for Al 308.215 Recovery = 95.94%							
Ca 315.887†	50933.1	5.09089 mg/L		0.020035	5.09089 mg/L	0.020035	0.39%
QC value within limits for Ca 315.887 Recovery = 101.82%							
Fe 273.955†	569.7	0.309786 mg/L		0.0005283	0.309786 mg/L	0.0005283	0.17%
QC value within limits for Fe 273.955 Recovery = 103.26%							
Mg 279.077†	9667.5	5.09287 mg/L		0.048044	5.09287 mg/L	0.048044	0.94%
QC value within limits for Mg 279.077 Recovery = 101.86%							
Mn 257.610†	2347.7	0.0407502 mg/L		0.00070299	0.0407502 mg/L	0.00070299	1.73%
QC value within limits for Mn 257.610 Recovery = 101.88%							
K 766.490†	6684.8	5.33025 mg/L		0.015904	5.33025 mg/L	0.015904	0.30%
QC value within limits for K 766.490 Recovery = 106.61%							
Na 589.592†	35602.4	5.24366 mg/L		0.075304	5.24366 mg/L	0.075304	1.44%
QC value within limits for Na 589.592 Recovery = 104.87%							
Ti 334.940†	2259.4	0.0470539 mg/L		0.00018929	0.0470539 mg/L	0.00018929	0.40%
QC value within limits for Ti 334.940 Recovery = 94.11%							

All analyte(s) passed QC.

Sequence No.: 21
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/16/2013 6:36:36 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	29246.0	98.6822 %		0.03532			0.04%
Sc 361.383	79100.8	98.6 %		0.42			0.42%
Al 308.215†	-8.3	-0.0016016 mg/L		0.00308936	-0.0016016 mg/L	0.00308936	192.90%
QC value within limits for Al 308.215 Recovery = Not calculated							
Ca 315.887†	101.4	0.175463 mg/L		0.0024879	0.175463 mg/L	0.0024879	1.42%
QC value within limits for Ca 315.887 Recovery = Not calculated							
Fe 273.955†	-2.9	0.0159604 mg/L		0.00224571	0.0159604 mg/L	0.00224571	14.07%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	-117.8	0.0915147 mg/L		0.00178790	0.0915147 mg/L	0.00178790	1.95%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	-10.7	0.0015247 mg/L		0.00021359	0.0015247 mg/L	0.00021359	14.01%
QC value within limits for Mn 257.610 Recovery = Not calculated							
K 766.490†	69.8	0.830140 mg/L		0.0506196	0.830140 mg/L	0.0506196	6.10%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	1247.9	0.455157 mg/L		0.0236279	0.455157 mg/L	0.0236279	5.19%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	-56.8	0.0010706 mg/L		0.00032066	0.0010706 mg/L	0.00032066	29.95%
QC value within limits for Ti 334.940 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 22
 Sample ID: 75576-029 SD
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 46
 Date Collected: 11/16/2013 6:39:45 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-029 SD

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	29346.4	99.0210	%	0.39844				0.40%
Sc 361.383	79390.2	98.9	%	0.69				0.70%
Al 308.215†	-11.9	-0.0039588	mg/L	0.01062892	-0.0039588	mg/L	0.01062892	268.49%
Ca 315.887†	63284.4	6.28525	mg/L	0.014928	6.28525	mg/L	0.014928	0.24%
Fe 273.955†	38.6	0.0372765	mg/L	0.00431416	0.0372765	mg/L	0.00431416	11.57%
Mg 279.077†	1534.0	0.935783	mg/L	0.0144928	0.935783	mg/L	0.0144928	1.55%
Mn 257.610†	41.7	0.0024063	mg/L	0.00021936	0.0024063	mg/L	0.00021936	9.12%
K 766.490†	736.2	1.28348	mg/L	0.047800	1.28348	mg/L	0.047800	3.72%
Na 589.592†	22868.0	3.46867	mg/L	0.001894	3.46867	mg/L	0.001894	0.05%
Ti 334.940†	-40.5	0.0013945	mg/L	0.00008743	0.0013945	mg/L	0.00008743	6.27%

Sequence No.: 23
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/16/2013 6:42:57 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27547.5	92.9510 %		0.65121			0.70%
Sc 361.383	75780.1	94.4 %		0.48			0.51%
Al 308.215†	735945.0	476.307 mg/L		3.3168	476.307 mg/L	3.3168	0.70%
QC value within limits for Al 308.215 Recovery = 95.26%							
Ca 315.887†	4814284.8	465.707 mg/L		3.7218	465.707 mg/L	3.7218	0.80%
QC value within limits for Ca 315.887 Recovery = 93.14%							
Fe 273.955†	362264.8	185.897 mg/L		0.3266	185.897 mg/L	0.3266	0.18%
QC value within limits for Fe 273.955 Recovery = 92.95%							
Mg 279.077†	952868.7	487.168 mg/L		4.1022	487.168 mg/L	4.1022	0.84%
QC value within limits for Mg 279.077 Recovery = 97.43%							
Mn 257.610†	-6879.1	0.0090102 mg/L		0.00046144	0.0090102 mg/L	0.00046144	5.12%
QC value within limits for Mn 257.610 Recovery = 0.90%							
K 766.490†	368.1	1.03304 mg/L		0.007718	1.03304 mg/L	0.007718	0.75%
QC value within limits for K 766.490 Recovery = 103.30%							
Na 589.592†	2469.4	0.625409 mg/L		0.0008575	0.625409 mg/L	0.0008575	0.14%
QC value within limits for Na 589.592 Recovery = 62.54%							
Ti 334.940†	-1580.3	-0.0291741 mg/L		0.00154164	-0.0291741 mg/L	0.00154164	5.28%
QC value within limits for Ti 334.940 Recovery = -2.92%							

All analyte(s) passed QC.

Sequence No.: 24
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/16/2013 6:46:35 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27791.4	93.7741 %		0.00847			0.01%
Sc 361.383	76119.8	94.8 %		0.23			0.24%
Al 308.215†	726097.5	469.934 mg/L		0.0189	469.934 mg/L	0.0189	0.00%
QC value within limits for Al 308.215 Recovery = 93.99%							
Ca 315.887†	4729867.1	457.544 mg/L		0.3698	457.544 mg/L	0.3698	0.08%
QC value within limits for Ca 315.887 Recovery = 91.51%							
Fe 273.955†	362402.0	185.967 mg/L		0.5124	185.967 mg/L	0.5124	0.28%
QC value within limits for Fe 273.955 Recovery = 92.98%							
Mg 279.077†	931665.4	476.331 mg/L		0.9317	476.331 mg/L	0.9317	0.20%
QC value within limits for Mg 279.077 Recovery = 95.27%							
Mn 257.610†	22660.9	0.497970 mg/L		0.0007805	0.497970 mg/L	0.0007805	0.16%
QC value within limits for Mn 257.610 Recovery = 99.59%							
K 766.490†	262.9	0.961490 mg/L		0.0278058	0.961490 mg/L	0.0278058	2.89%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	2167.5	0.583324 mg/L		0.0149039	0.583324 mg/L	0.0149039	2.55%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	-1569.7	-0.0289648 mg/L		0.00114720	-0.0289648 mg/L	0.00114720	3.96%

All analyte(s) passed QC.

Sequence No.: 25
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 6:50:15 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28628.3	96.5979 %		0.35696			0.37%
Sc 361.383	77658.8	96.8 %		0.19			0.20%
Al 308.215†	7569.4	4.90269 mg/L		0.003777	4.90269 mg/L	0.003777	0.08%
QC value within limits for Al 308.215 Recovery = 98.05%							
Ca 315.887†	499147.5	48.4332 mg/L		0.01490	48.4332 mg/L	0.01490	0.03%
QC value within limits for Ca 315.887 Recovery = 96.87%							
Fe 273.955†	9439.4	4.86083 mg/L		0.008136	4.86083 mg/L	0.008136	0.17%
QC value within limits for Fe 273.955 Recovery = 97.22%							
Mg 279.077†	96113.0	49.2756 mg/L		0.22809	49.2756 mg/L	0.22809	0.46%
QC value within limits for Mg 279.077 Recovery = 98.55%							
Mn 257.610†	28811.5	0.481716 mg/L		0.0014888	0.481716 mg/L	0.0014888	0.31%
QC value within limits for Mn 257.610 Recovery = 96.34%							
K 766.490†	67716.2	46.8494 mg/L		0.01071	46.8494 mg/L	0.01071	0.02%
QC value within limits for K 766.490 Recovery = 93.70%							
Na 589.592†	346839.7	48.6254 mg/L		0.04054	48.6254 mg/L	0.04054	0.08%
QC value within limits for Na 589.592 Recovery = 97.25%							
Ti 334.940†	24118.6	0.481024 mg/L		0.0017444	0.481024 mg/L	0.0017444	0.36%
QC value within limits for Ti 334.940 Recovery = 96.20%							

All analyte(s) passed QC.

Sequence No.: 26

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/16/2013 6:52:55 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29499.6	99.5379 %	0.55869			0.56%
Sc 361.383	80136.3	99.9 %	0.59			0.59%
Al 308.215†	300.2	0.198011 mg/L	0.0002127	0.198011 mg/L	0.0002127	0.11%
QC value within limits for Al	308.215	Recovery = 99.01%				
Ca 315.887†	50778.3	5.07591 mg/L	0.024728	5.07591 mg/L	0.024728	0.49%
QC value within limits for Ca	315.887	Recovery = 101.52%				
Fe 273.955†	575.8	0.312892 mg/L	0.0018903	0.312892 mg/L	0.0018903	0.60%
QC value within limits for Fe	273.955	Recovery = 104.30%				
Mg 279.077†	9707.2	5.11314 mg/L	0.067224	5.11314 mg/L	0.067224	1.31%
QC value within limits for Mg	279.077	Recovery = 102.26%				
Mn 257.610†	2348.5	0.0407642 mg/L	0.00054528	0.0407642 mg/L	0.00054528	1.34%
QC value within limits for Mn	257.610	Recovery = 101.91%				
K 766.490†	6652.2	5.30805 mg/L	0.020833	5.30805 mg/L	0.020833	0.39%
QC value within limits for K	766.490	Recovery = 106.16%				
Na 589.592†	35548.2	5.23610 mg/L	0.070011	5.23610 mg/L	0.070011	1.34%
QC value within limits for Na	589.592	Recovery = 104.72%				
Ti 334.940†	2239.6	0.0466608 mg/L	0.00033422	0.0466608 mg/L	0.00033422	0.72%
QC value within limits for Ti	334.940	Recovery = 93.32%				

All analyte(s) passed QC.

Sequence No.: 27
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/16/2013 6:56:08 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	29542.9	99.6840 %		0.88900			0.89%
Sc 361.383	80413.8	100 %		1.0			1.01%
Al 308.215†	-9.5	-0.0023743 mg/L		0.01547377	-0.0023743 mg/L	0.01547377	651.73%
QC value within limits for Al	308.215	Recovery = Not calculated					
Ca 315.887†	144.8	0.179657 mg/L		0.0053004	0.179657 mg/L	0.0053004	2.95%
QC value within limits for Ca	315.887	Recovery = Not calculated					
Fe 273.955†	15.7	0.0254878 mg/L		0.00219650	0.0254878 mg/L	0.00219650	8.62%
QC value within limits for Fe	273.955	Recovery = Not calculated					
Mg 279.077†	-85.1	0.108267 mg/L		0.0197968	0.108267 mg/L	0.0197968	18.29%
QC value within limits for Mg	279.077	Recovery = Not calculated					
Mn 257.610†	-4.3	0.0016361 mg/L		0.00016634	0.0016361 mg/L	0.00016634	10.17%
QC value within limits for Mn	257.610	Recovery = Not calculated					
K 766.490†	104.3	0.853611 mg/L		0.0024462	0.853611 mg/L	0.0024462	0.29%
QC value within limits for K	766.490	Recovery = Not calculated					
Na 589.592†	934.6	0.411482 mg/L		0.0366136	0.411482 mg/L	0.0366136	8.90%
QC value within limits for Na	589.592	Recovery = Not calculated					
Ti 334.940†	-57.2	0.0010633 mg/L		0.00034414	0.0010633 mg/L	0.00034414	32.36%
QC value within limits for Ti	334.940	Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 28
Sample ID: 75576-001
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 11/16/2013 6:59:17 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75576-001

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29349.2	99.0302	%	0.14978			0.15%
Sc 361.383	80276.4	100	%	0.2			0.23%
Al 308.215†	677.2	0.442021	mg/L	0.0084791	0.442021 mg/L	0.0084791	1.92%
Ca 315.887†	289181.4	28.1295	mg/L	0.04599	28.1295 mg/L	0.04599	0.16%
Fe 273.955†	1238.8	0.653100	mg/L	0.0143176	0.653100 mg/L	0.0143176	2.19%
Mg 279.077†	8673.5	4.58480	mg/L	0.025465	4.58480 mg/L	0.025465	0.56%
Mn 257.610†	348.5	0.0078850	mg/L	0.00026575	0.0078850 mg/L	0.00026575	3.37%
K 766.490†	4621.6	3.92669	mg/L	0.027380	3.92669 mg/L	0.027380	0.70%
Na 589.592†	276307.5	38.7943	mg/L	0.00318	38.7943 mg/L	0.00318	0.01%
Ti 334.940†	688.6	0.0158697	mg/L	0.00175297	0.0158697 mg/L	0.00175297	11.05%

Sequence No.: 29
 Sample ID: 75576-003
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 50
 Date Collected: 11/16/2013 7:02:01 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-003

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29587.8	99.8355	%	0.23862			0.24%
Sc 361.383	80572.2	100	%	0.7			0.69%
Al 308.215†	462.2	0.302892	mg/L	0.0147630	0.302892 mg/L	0.0147630	4.87%
Ca 315.887†	338625.7	32.9108	mg/L	0.00397	32.9108 mg/L	0.00397	0.01%
Fe 273.955†	612.7	0.331825	mg/L	0.0070155	0.331825 mg/L	0.0070155	2.11%
Mg 279.077†	8926.2	4.71398	mg/L	0.044163	4.71398 mg/L	0.044163	0.94%
Mn 257.610†	782.1	0.0148514	mg/L	0.00001018	0.0148514 mg/L	0.00001018	0.07%
K 766.490†	5145.8	4.28328	mg/L	0.031220	4.28328 mg/L	0.031220	0.73%
Na 589.592†	151928.7	21.4578	mg/L	0.01960	21.4578 mg/L	0.01960	0.09%
Ti 334.940†	396.3	0.0100663	mg/L	0.00013452	0.0100663 mg/L	0.00013452	1.34%

Sequence No.: 30
 Sample ID: 75576-005
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 51
 Date Collected: 11/16/2013 7:05:12 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-005

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	29398.9	99.1981	%	0.90359				0.91%
Sc 361.383	79705.6	99.3	%	0.49				0.50%
Al 308.215†	300.2	0.198030	mg/L	0.0119050	0.198030	mg/L	0.0119050	6.01%
Ca 315.887†	283237.5	27.5547	mg/L	0.05237	27.5547	mg/L	0.05237	0.19%
Fe 273.955†	804.7	0.430351	mg/L	0.0087095	0.430351	mg/L	0.0087095	2.02%
Mg 279.077†	7178.1	3.82053	mg/L	0.000533	3.82053	mg/L	0.000533	0.01%
Mn 257.610†	976.5	0.0181337	mg/L	0.00000806	0.0181337	mg/L	0.00000806	0.04%
K 766.490†	5448.6	4.48925	mg/L	0.020341	4.48925	mg/L	0.020341	0.45%
Na 589.592†	66455.7	9.54413	mg/L	0.009419	9.54413	mg/L	0.009419	0.10%
Ti 334.940†	182.9	0.0058288	mg/L	0.00033598	0.0058288	mg/L	0.00033598	5.76%

Sequence No.: 31
 Sample ID: 75576-007
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 52
 Date Collected: 11/16/2013 7:08:25 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-007

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Y 371.029	30819.0	103.990	%	0.6903				0.66%
Sc 361.383	80605.7	100	%	0.6				0.59%
Al 308.215†	2162.4	1.40327	mg/L	0.001992	1.40327	mg/L	0.001992	0.14%
Ca 315.887†	97586.6	9.60228	mg/L	0.003649	9.60228	mg/L	0.003649	0.04%
Fe 273.955†	3498.9	1.81274	mg/L	0.027695	1.81274	mg/L	0.027695	1.53%
Mg 279.077†	5227.9	2.82377	mg/L	0.030673	2.82377	mg/L	0.030673	1.09%
Mn 257.610†	34150.7	0.568097	mg/L	0.0039555	0.568097	mg/L	0.0039555	0.70%
K 766.490†	5974.3	4.84690	mg/L	0.051708	4.84690	mg/L	0.051708	1.07%
Na 589.592†	77634.2	11.1022	mg/L	0.02983	11.1022	mg/L	0.02983	0.27%
Ti 334.940†	1742.5	0.0367928	mg/L	0.00160948	0.0367928	mg/L	0.00160948	4.37%

Sequence No.: 32
 Sample ID: 75576-009
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 53
 Date Collected: 11/16/2013 7:11:06 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-009

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Y 371.029	29824.8	100.635	%	0.2663				0.26%
Sc 361.383	80015.6	99.7	%	0.35				0.35%
Al 308.215†	176.2	0.117757	mg/L	0.0153517	0.117757	mg/L	0.0153517	13.04%
Ca 315.887†	157497.6	15.3957	mg/L	0.04101	15.3957	mg/L	0.04101	0.27%
Fe 273.955†	224.0	0.132403	mg/L	0.0032457	0.132403	mg/L	0.0032457	2.45%
Mg 279.077†	4127.3	2.26124	mg/L	0.005884	2.26124	mg/L	0.005884	0.26%
Mn 257.610†	1889.7	0.0330538	mg/L	0.00002349	0.0330538	mg/L	0.00002349	0.07%
K 766.490†	5499.1	4.52360	mg/L	0.039642	4.52360	mg/L	0.039642	0.88%
Na 589.592†	64448.7	9.26439	mg/L	0.052329	9.26439	mg/L	0.052329	0.56%
Ti 334.940†	-62.2	0.0009645	mg/L	0.00044146	0.0009645	mg/L	0.00044146	45.77%

Sequence No.: 33
 Sample ID: 75576-011
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 54
 Date Collected: 11/16/2013 7:14:17 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-011

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29497.8	99.5319	%	0.10288			0.10%
Sc 361.383	80431.7	100	%	0.2			0.20%
Al 308.215†	174.3	0.116581	mg/L	0.0093324	0.116581 mg/L	0.0093324	8.01%
Ca 315.887†	57500.5	5.72595	mg/L	0.026255	5.72595 mg/L	0.026255	0.46%
Fe 273.955†	277.0	0.159563	mg/L	0.0058510	0.159563 mg/L	0.0058510	3.67%
Mg 279.077†	4126.5	2.26085	mg/L	0.003373	2.26085 mg/L	0.003373	0.15%
Mn 257.610†	602.7	0.0117697	mg/L	0.00002180	0.0117697 mg/L	0.00002180	0.19%
K 766.490†	2146.2	2.24270	mg/L	0.020068	2.24270 mg/L	0.020068	0.89%
Na 589.592†	52698.8	7.62664	mg/L	0.019601	7.62664 mg/L	0.019601	0.26%
Ti 334.940†	30.4	0.0028018	mg/L	0.00002613	0.0028018 mg/L	0.00002613	0.93%

Sequence No.: 34
 Sample ID: 75576-013
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 55
 Date Collected: 11/16/2013 7:17:28 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-013

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	29512.0	99.5796	%	0.94434				0.95%
Sc 361.383	80186.6	99.9	%	0.54				0.54%
Al 308.215†	134.3	0.0906833	mg/L	0.00567588	0.0906833	mg/L	0.00567588	6.26%
Ca 315.887†	194895.6	19.0121	mg/L	0.05856	19.0121	mg/L	0.05856	0.31%
Fe 273.955†	238.7	0.139932	mg/L	0.0035956	0.139932	mg/L	0.0035956	2.57%
Mg 279.077†	8099.8	4.29159	mg/L	0.042070	4.29159	mg/L	0.042070	0.98%
Mn 257.610†	73578.8	1.21958	mg/L	0.003245	1.21958	mg/L	0.003245	0.27%
K 766.490†	10647.5	8.02606	mg/L	0.105410	8.02606	mg/L	0.105410	1.31%
Na 589.592†	182024.0	25.6526	mg/L	0.09995	25.6526	mg/L	0.09995	0.39%
Ti 334.940†	24.4	0.0026830	mg/L	0.00052849	0.0026830	mg/L	0.00052849	19.70%

Autosampler Location: 6
Date Collected: 11/16/2013 7:20:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analyte	Mean Corrected		Calib	Sample		Std.Dev.	RSD
	Intensity	Conc.	Units	Std.Dev.	Conc. Units		
Y 371.029	30409.8	102.609	%	7.1829			7.00%
Sc 361.383	81663.0	102	%	5.9			5.80%
Al 308.215†	4934.0	3.19704	mg/L	2.307504	3.19704 mg/L	2.307504	72.18%
QC value	less than the lower limit for Al 308.215			Recovery =	63.94%		
Ca 315.887†	488234.7	47.3779	mg/L	1.98810	47.3779 mg/L	1.98810	4.20%
QC value	within limits for Ca 315.887			Recovery =	94.76%		
Fe 273.955†	6219.4	3.20866	mg/L	2.296104	3.20866 mg/L	2.296104	71.56%
QC value	less than the lower limit for Fe 273.955			Recovery =	64.17%		
Mg 279.077†	64265.9	32.9984	mg/L	23.61569	32.9984 mg/L	23.61569	71.57%
QC value	less than the lower limit for Mg 279.077			Recovery =	66.00%		
Mn 257.610†	19268.4	0.322693	mg/L	0.2266762	0.322693 mg/L	0.2266762	70.25%
QC value	less than the lower limit for Mn 257.610			Recovery =	64.54%		
K 766.490†	66210.6	45.8251	mg/L	2.09517	45.8251 mg/L	2.09517	4.57%
QC value	within limits for K 766.490			Recovery =	91.65%		
Na 589.592†	337031.9	47.2584	mg/L	2.22004	47.2584 mg/L	2.22004	4.70%
QC value	within limits for Na 589.592			Recovery =	94.52%		
Ti 334.940†	16232.5	0.324463	mg/L	0.2196361	0.324463 mg/L	0.2196361	67.69%
QC value	less than the lower limit for Ti 334.940			Recovery =	64.89%		
QC Failed.	Continue with analysis.						

Sequence No.: 36

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/16/2013 7:23:20 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30066.5	101.451 %		1.2506			1.23%
Sc 361.383	81678.5	102 %		1.9			1.88%
Al 308.215†	100.8	0.0690154 mg/L		0.14548120	0.0690154 mg/L	0.14548120	210.80%
QC value less than the lower limit for Al 308.215 Recovery = 34.51%							
Ca 315.887†	49990.8	4.99977 mg/L		0.180283	4.99977 mg/L	0.180283	3.61%
QC value within limits for Ca 315.887 Recovery = 100.00%							
Fe 273.955†	352.0	0.198082 mg/L		0.1465997	0.198082 mg/L	0.1465997	74.01%
QC value less than the lower limit for Fe 273.955 Recovery = 66.03%							
Mg 279.077†	6342.5	3.39343 mg/L		2.327092	3.39343 mg/L	2.327092	68.58%
QC value less than the lower limit for Mg 279.077 Recovery = 67.87%							
Mn 257.610†	1483.2	0.0263678 mg/L		0.01944474	0.0263678 mg/L	0.01944474	73.74%
QC value less than the lower limit for Mn 257.610 Recovery = 65.92%							
K 766.490†	6483.3	5.19319 mg/L		0.119058	5.19319 mg/L	0.119058	2.29%
QC value within limits for K 766.490 Recovery = 103.86%							
Na 589.592†	34527.9	5.09389 mg/L		0.197446	5.09389 mg/L	0.197446	3.88%
QC value within limits for Na 589.592 Recovery = 101.88%							
Ti 334.940†	1593.5	0.0338342 mg/L		0.01770567	0.0338342 mg/L	0.01770567	52.33%
QC value less than the lower limit for Ti 334.940 Recovery = 67.67%							
QC Failed. Continue with analysis.							

Sequence No.: 37
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/16/2013 7:26:33 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	29259.2	98.7266 %	0.80595			0.82%
Sc 361.383	79480.1	99.0 %	0.66			0.67%
Al 308.215†	-19.5	-0.0088493 mg/L	0.00172421	-0.0088493 mg/L	0.00172421	19.48%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887†	51.9	0.170676 mg/L	0.0010658	0.170676 mg/L	0.0010658	0.62%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955†	-4.3	0.0152585 mg/L	0.00495411	0.0152585 mg/L	0.00495411	32.47%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077†	-82.5	0.109598 mg/L	0.0084726	0.109598 mg/L	0.0084726	7.73%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	0.4	0.0017077 mg/L	0.00008809	0.0017077 mg/L	0.00008809	5.16%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490†	10.8	0.790000 mg/L	0.0387889	0.790000 mg/L	0.0387889	4.91%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	1058.4	0.428732 mg/L	0.0005328	0.428732 mg/L	0.0005328	0.12%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940†	-59.1	0.0010254 mg/L	0.00032507	0.0010254 mg/L	0.00032507	31.70%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

File SW15686E2

3110620 0435
Repd 15686 SW846

Method: PE 2 4300DV RADIAL

Page 1

Date: 11/16/2013 7:40:59 PM

Analyst SBL 11/18/13

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Analysis Begun

Start Time: 11/16/2013 7:38:45 PM

Plasma On Time: 11/16/2013 11:12:20 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\11.14.13.sif

Batch ID: PEICP 2

Results Data Set: SW15686E2

Results Library: C:\pe\administrator\Results\Results.mdb

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Method Loaded

Method Name: PE 2 4300DV RADIAL

Method Last Saved: 11/14/2013 5:54:55 PM

IEC File: IECrad101413.iec

MSF File:

Method Description: 200.7/6010B/6010C

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Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blk 1 V-174666

Date Collected: 11/16/2013 7:38:45 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: Calib Blk 1 V-174666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	29225.3	245.62	0.84%	100.000 %
Sc 361.383	78155.4	647.39	0.83%	100 %
Al 308.215†	477.3	8.17	1.71%	[0.00] mg/L
Ca 315.887†	2057.1	4.00	0.19%	[0.00] mg/L
Fe 273.955†	77.8	6.95	8.93%	[0.00] mg/L
Mg 279.077†	-1482.8	8.25	0.56%	[0.00] mg/L
Mn 257.610†	265.7	3.64	1.37%	[0.00] mg/L
K 766.490†	1187.8	51.58	4.34%	[0.00] mg/L
Na 589.592†	20645.0	21.90	0.11%	[0.00] mg/L
Ti 334.940†	-1004.2	1.11	0.11%	[0.00] mg/L

15686
27401

75576.001-027 Na, K reported

Sequence No.: 2

Sample ID: Calib 1 V-173273

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 11/16/2013 7:41:55 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib 1 V-173273

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	28976.2	26.68	0.09%	99.1479 %
Sc 361.383	78116.5	14.89	0.02%	100.0 %
Al 308.215†	172.9	20.86	12.06%	[0.1] mg/L
Ca 315.887†	9438.0	18.49	0.20%	[1] mg/L
Fe 273.955†	191.8	3.00	1.56%	[0.1] mg/L
Mg 279.077†	1753.4	7.07	0.40%	[1] mg/L
Mn 257.610†	584.7	9.63	1.65%	[0.01] mg/L
K 766.490†	1202.7	12.48	1.04%	[1] mg/L
Na 589.592†	6828.5	120.11	1.76%	[1] mg/L
Ti 334.940†	468.7	11.07	2.36%	[0.01] mg/L

Sequence No.: 3
Sample ID: Calib 2 V-173274
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 11/16/2013 7:45:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib 2 V-173274

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Y 371.029	28917.0	61.65	0.21%	98.9454 %
Sc 361.383	78142.2	252.14	0.32%	100.0 %
Al 308.215†	7393.9	36.64	0.50%	[5] mg/L
Ca 315.887†	491102.1	2910.17	0.59%	[50] mg/L
Fe 273.955†	9277.9	30.34	0.33%	[5] mg/L
Mg 279.077†	93641.9	49.81	0.05%	[50] mg/L
Mn 257.610†	28661.9	5.50	0.02%	[0.5] mg/L
K 766.490†	64202.2	98.69	0.15%	[50] mg/L
Na 589.592†	334974.0	1506.41	0.45%	[50] mg/L
Ti 334.940†	24007.1	132.32	0.55%	[0.5] mg/L

Sequence No.: 4
 Sample ID: Calib 3 V-174144
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 11/16/2013 7:47:51 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: Calib 3 V-174144

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	28645.3	13.97	0.05%	98.0156 %
Sc 361.383	77811.9	63.36	0.08%	99.6 %
Al 308.215†	14976.7	4.85	0.03%	[10] mg/L
Ca 315.887†	1009874.8	12249.26	1.21%	[100] mg/L
Fe 273.955†	18807.3	38.38	0.20%	[10] mg/L
Mg 279.077†	189327.7	391.32	0.21%	[100] mg/L
Mn 257.610†	58641.1	45.77	0.08%	[1.0] mg/L
K 766.490†	141480.0	632.22	0.45%	[100] mg/L
Na 589.592†	703806.2	7964.08	1.13%	[100] mg/L
Ti 334.940†	49100.9	208.24	0.42%	[1.0] mg/L

 Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Al 308.215	3	Lin, Calc Int	-6.7	1495	0.00000	0.999975	
Ca 315.887	3	Lin, Calc Int	-2818.1	10080	0.00000	0.999901	
Fe 273.955	3	Lin, Calc Int	-21.2	1878	0.00000	0.999976	
Mg 279.077	3	Lin, Calc Int	-249.5	1892	0.00000	0.999985	
Mn 257.610	3	Lin, Calc Int	-120.7	58520	0.00000	0.999932	
K 766.490	3	Lin, Calc Int	-1286.2	1404	0.00000	0.998860	
Na 589.592	3	Lin, Calc Int	-3176.3	7009	0.00000	0.999690	
Ti 334.940	3	Lin, Calc Int	-109.1	49020	0.00000	0.999936	

Sequence No.: 5
 Sample ID: ICS3 V-173274
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 11/16/2013 7:50:33 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICS3 V-173274

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28685.4	98.1528 %	1.12724			1.15%
Sc 361.383	77666.8	99.4 %	1.14			1.15%
Al 308.215†	7340.6	4.91548 mg/L	0.001666	4.91548 mg/L	0.001666	0.03%
QC value within limits for Al 308.215 Recovery = 98.31%						
Ca 315.887†	484683.4	48.3757 mg/L	0.42530	48.3757 mg/L	0.42530	0.88%
QC value within limits for Ca 315.887 Recovery = 96.75%						
Fe 273.955†	9257.8	4.94018 mg/L	0.000399	4.94018 mg/L	0.000399	0.01%
QC value within limits for Fe 273.955 Recovery = 98.80%						
Mg 279.077†	92857.7	49.2060 mg/L	0.02278	49.2060 mg/L	0.02278	0.05%
QC value within limits for Mg 279.077 Recovery = 98.41%						
Mn 257.610†	28614.6	0.494226 mg/L	0.0002412	0.494226 mg/L	0.0002412	0.05%
QC value within limits for Mn 257.610 Recovery = 98.85%						
K 766.490†	65213.9	47.3590 mg/L	0.44540	47.3590 mg/L	0.44540	0.94%
QC value within limits for K 766.490 Recovery = 94.72%						
Na 589.592†	335473.4	48.3185 mg/L	0.57324	48.3185 mg/L	0.57324	1.19%
QC value within limits for Na 589.592 Recovery = 96.64%						
Ti 334.940†	24001.5	0.491901 mg/L	0.0015994	0.491901 mg/L	0.0015994	0.33%
QC value within limits for Ti 334.940 Recovery = 98.38%						

All analyte(s) passed QC.

Sequence No.: 6
 Sample ID: ICV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 7:53:15 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICV V-173510

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28470.2	97.4163 %	0.56765			0.58%
Sc 361.383	77507.6	99.2 %	0.42			0.43%
Al 308.215†	7239.0	4.84751 mg/L	0.052612	4.84751 mg/L	0.052612	1.09%
QC value within limits for Al	308.215	Recovery = 96.95%				
Ca 315.887†	480519.0	47.9625 mg/L	0.16364	47.9625 mg/L	0.16364	0.34%
QC value within limits for Ca	315.887	Recovery = 95.92%				
Fe 273.955†	9088.8	4.85019 mg/L	0.026342	4.85019 mg/L	0.026342	0.54%
QC value within limits for Fe	273.955	Recovery = 97.00%				
Mg 279.077†	93093.0	49.3303 mg/L	0.01848	49.3303 mg/L	0.01848	0.04%
QC value within limits for Mg	279.077	Recovery = 98.66%				
Mn 257.610†	27827.1	0.480710 mg/L	0.0000328	0.480710 mg/L	0.0000328	0.01%
QC value within limits for Mn	257.610	Recovery = 96.14%				
K 766.490†	64787.2	47.0551 mg/L	0.53239	47.0551 mg/L	0.53239	1.13%
QC value within limits for K	766.490	Recovery = 94.11%				
Na 589.592†	331928.0	47.8126 mg/L	0.05900	47.8126 mg/L	0.05900	0.12%
QC value within limits for Na	589.592	Recovery = 95.63%				
Ti 334.940†	23456.7	0.480785 mg/L	0.0028692	0.480785 mg/L	0.0028692	0.60%
QC value within limits for Ti	334.940	Recovery = 96.16%				

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/16/2013 7:55:55 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29061.8	99.4405 %		0.11644			0.12%
Sc 361.383	78619.1	101 %		0.4			0.36%
Al 308.215†	263.7	0.180854 mg/L		0.0029061	0.180854 mg/L	0.0029061	1.61%
QC value within limits for Al	308.215	Recovery = 90.43%					
Ca 315.887†	48201.6	5.06279 mg/L		0.012879	5.06279 mg/L	0.012879	0.25%
QC value within limits for Ca	315.887	Recovery = 101.26%					
Fe 273.955†	542.1	0.299871 mg/L		0.0057619	0.299871 mg/L	0.0057619	1.92%
QC value within limits for Fe	273.955	Recovery = 99.96%					
Mg 279.077†	9308.3	5.05115 mg/L		0.014072	5.05115 mg/L	0.014072	0.28%
QC value within limits for Mg	279.077	Recovery = 101.02%					
Mn 257.610†	2232.9	0.0404118 mg/L		0.00011988	0.0404118 mg/L	0.00011988	0.30%
QC value within limits for Mn	257.610	Recovery = 101.03%					
K 766.490†	6294.9	5.39899 mg/L		0.038176	5.39899 mg/L	0.038176	0.71%
QC value within limits for K	766.490	Recovery = 107.98%					
Na 589.592†	32632.8	5.10922 mg/L		0.010409	5.10922 mg/L	0.010409	0.20%
QC value within limits for Na	589.592	Recovery = 102.18%					
Ti 334.940†	2257.1	0.0482745 mg/L		0.00033226	0.0482745 mg/L	0.00033226	0.69%
QC value within limits for Ti	334.940	Recovery = 96.55%					

All analyte(s) passed QC.

Sequence No.: 8
 Sample ID: ICB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 11/16/2013 7:59:08 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICB V-174666

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28795.2	98.5283 %	%	0.19360			0.20%
Sc 361.383	77165.6	98.7 %	%	0.57			0.58%
Al 308.215†	-21.3	-0.0098184 mg/L	mg/L	0.00511026	-0.0098184 mg/L	0.00511026	52.05%
QC value within limits for Al 308.215 Recovery = Not calculated							
Ca 315.887†	3.7	0.280009 mg/L	mg/L	0.0038106	0.280009 mg/L	0.0038106	1.36%
QC value within limits for Ca 315.887 Recovery = Not calculated							
Fe 273.955†	-5.0	0.0086277 mg/L	mg/L	0.00091478	0.0086277 mg/L	0.00091478	10.60%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	22.5	0.143717 mg/L	mg/L	0.0116001	0.143717 mg/L	0.0116001	8.07%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	-16.1	0.0017930 mg/L	mg/L	0.00024737	0.0017930 mg/L	0.00024737	13.80%
QC value within limits for Mn 257.610 Recovery = Not calculated							
K 766.490†	10.0	0.923121 mg/L	mg/L	0.0004696	0.923121 mg/L	0.0004696	0.05%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	-60.6	0.444541 mg/L	mg/L	0.0124499	0.444541 mg/L	0.0124499	2.80%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	19.0	0.0026122 mg/L	mg/L	0.00041635	0.0026122 mg/L	0.00041635	15.94%
QC value within limits for Ti 334.940 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 9
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/16/2013 8:02:17 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27752.5	94.9606 %	0.44990			0.47%
Sc 361.383	75866.6	97.1 %	0.42			0.44%
Al 308.215†	711449.3	475.980 mg/L	1.0139	475.980 mg/L	1.0139	0.21%
QC value within limits for Al 308.215 Recovery = 95.20%						
Ca 315.887†	4679985.0	464.684 mg/L	0.7245	464.684 mg/L	0.7245	0.16%
QC value within limits for Ca 315.887 Recovery = 92.94%						
Fe 273.955†	351578.9	187.194 mg/L	0.5040	187.194 mg/L	0.5040	0.27%
QC value within limits for Fe 273.955 Recovery = 93.60%						
Mg 279.077†	928958.6	491.075 mg/L	0.5201	491.075 mg/L	0.5201	0.11%
QC value within limits for Mg 279.077 Recovery = 98.21%						
Mn 257.610†	-6692.1	0.0097322 mg/L	0.00021141	0.0097322 mg/L	0.00021141	2.17%
QC value within limits for Mn 257.610 Recovery = 0.97%						
K 766.490†	194.8	1.05471 mg/L	0.039583	1.05471 mg/L	0.039583	3.75%
QC value within limits for K 766.490 Recovery = 105.47%						
Na 589.592†	1353.5	0.646312 mg/L	0.0007637	0.646312 mg/L	0.0007637	0.12%
QC value within limits for Na 589.592 Recovery = 64.63%						
Ti 334.940†	-1402.9	-0.0263977 mg/L	0.00196782	-0.0263977 mg/L	0.00196782	7.45%
QC value within limits for Ti 334.940 Recovery = -2.64%						

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/16/2013 8:05:55 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28034.0	95.9238 %	0.44032			0.46%
Sc 361.383	76429.7	97.8 %	0.52			0.53%
Al 308.215†	712587.0	476.741 mg/L	4.4416	476.741 mg/L	4.4416	0.93%
QC value within limits for Al 308.215 Recovery = 95.35%						
Ca 315.887†	4685909.1	465.272 mg/L	4.6648	465.272 mg/L	4.6648	1.00%
QC value within limits for Ca 315.887 Recovery = 93.05%						
Fe 273.955†	351573.6	187.191 mg/L	0.2318	187.191 mg/L	0.2318	0.12%
QC value within limits for Fe 273.955 Recovery = 93.60%						
Mg 279.077†	930955.0	492.130 mg/L	5.7886	492.130 mg/L	5.7886	1.18%
QC value within limits for Mg 279.077 Recovery = 98.43%						
Mn 257.610†	21992.9	0.499876 mg/L	0.0012387	0.499876 mg/L	0.0012387	0.25%
QC value within limits for Mn 257.610 Recovery = 99.98%						
K 766.490†	226.7	1.07744 mg/L	0.012511	1.07744 mg/L	0.012511	1.16%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	1112.2	0.611882 mg/L	0.0058824	0.611882 mg/L	0.0058824	0.96%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940†	-1414.9	-0.0266419 mg/L	0.00040406	-0.0266419 mg/L	0.00040406	1.52%
All analyte(s) passed QC.						

Sequence No.: 11
 Sample ID: 75576-001
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 49
 Date Collected: 11/16/2013 8:09:35 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30264.1	103.555	%	0.6647			0.64%
Sc 361.383	80842.0	103	%	1.3			1.24%
Al 308.215†	837.5	0.564783	mg/L	0.0275386	0.564783 mg/L	0.0275386	4.88%
Ca 315.887†	278820.3	27.9475	mg/L	0.09547	27.9475 mg/L	0.09547	0.34%
Fe 273.955†	1245.2	0.674207	mg/L	0.0258121	0.674207 mg/L	0.0258121	3.83%
Mg 279.077†	8540.6	4.64545	mg/L	0.080369	4.64545 mg/L	0.080369	1.73%
Mn 257.610†	324.1	0.0080399	mg/L	0.00055970	0.0080399 mg/L	0.00055970	6.96%
K 766.490†	4254.9	3.94618	mg/L	0.023132	3.94618 mg/L	0.023132	0.59%
Na 589.592†	263495.2	38.0486	mg/L	0.04804	38.0486 mg/L	0.04804	0.13%
Ti 334.940†	1099.0	0.0246469	mg/L	0.00298841	0.0246469 mg/L	0.00298841	12.12%

Sequence No.: 12
 Sample ID: 75576-003
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 50
 Date Collected: 11/16/2013 8:12:48 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-003

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	29655.3	101.471	%	1.4418				1.42%
Sc 361.383	80772.8	103	%	1.4				1.35%
Al 308.215†	531.6	0.360080	mg/L	0.0009252	0.360080	mg/L	0.0009252	0.26%
Ca 315.887†	320947.5	32.1279	mg/L	0.01846	32.1279	mg/L	0.01846	0.06%
Fe 273.955†	614.0	0.338173	mg/L	0.0081470	0.338173	mg/L	0.0081470	2.41%
Mg 279.077†	8615.5	4.68506	mg/L	0.055169	4.68506	mg/L	0.055169	1.18%
Mn 257.610†	723.1	0.0146378	mg/L	0.00005852	0.0146378	mg/L	0.00005852	0.40%
K 766.490†	4750.9	4.29938	mg/L	0.016513	4.29938	mg/L	0.016513	0.38%
Na 589.592†	142312.1	20.7582	mg/L	0.07075	20.7582	mg/L	0.07075	0.34%
Ti 334.940†	717.7	0.0168679	mg/L	0.00079564	0.0168679	mg/L	0.00079564	4.72%

Sequence No.: 13
 Sample ID: 75576-005
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 51
 Date Collected: 11/16/2013 8:16:00 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-005

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	30012.5	102.694	%	0.6387				0.62%
Sc 361.383	81365.0	104	%	0.7				0.68%
Al 308.215†	398.7	0.271174	mg/L	0.0158095	0.271174	mg/L	0.0158095	5.83%
Ca 315.887†	270475.3	27.1194	mg/L	0.03263	27.1194	mg/L	0.03263	0.12%
Fe 273.955†	774.5	0.423632	mg/L	0.0067304	0.423632	mg/L	0.0067304	1.59%
Mg 279.077†	6914.7	3.78617	mg/L	0.001730	3.78617	mg/L	0.001730	0.05%
Mn 257.610†	897.8	0.0176784	mg/L	0.00007626	0.0176784	mg/L	0.00007626	0.43%
K 766.490†	5141.8	4.57777	mg/L	0.006880	4.57777	mg/L	0.006880	0.15%
Na 589.592†	61569.5	9.23792	mg/L	0.059581	9.23792	mg/L	0.059581	0.64%
Ti 334.940†	610.0	0.0146694	mg/L	0.00374436	0.0146694	mg/L	0.00374436	25.52%

Sequence No.: 14
 Sample ID: 75576-007
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 52
 Date Collected: 11/16/2013 8:19:11 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-007

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30497.1	104.352 %	0.0554			0.05%
Sc 361.383	80376.9	103 %	0.8			0.78%
Al 308.215†	2595.9	1.74120 mg/L	0.078418	1.74120 mg/L	0.078418	4.50%
Ca 315.887†	93881.4	9.59568 mg/L	0.003776	9.59568 mg/L	0.003776	0.04%
Fe 273.955†	3381.2	1.81147 mg/L	0.012235	1.81147 mg/L	0.012235	0.68%
Mg 279.077†	5223.2	2.89223 mg/L	0.030787	2.89223 mg/L	0.030787	1.06%
Mn 257.610†	32788.8	0.563511 mg/L	0.0069716	0.563511 mg/L	0.0069716	1.24%
K 766.490†	5841.4	5.07603 mg/L	0.043275	5.07603 mg/L	0.043275	0.85%
Na 589.592†	73656.9	10.9625 mg/L	0.02444	10.9625 mg/L	0.02444	0.22%
Ti 334.940†	3222.7	0.0679746 mg/L	0.00751421	0.0679746 mg/L	0.00751421	11.05%

Sequence No.: 15
 Sample ID: 75576-009
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 53
 Date Collected: 11/16/2013 8:21:54 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-009

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30147.0	103.154	%	0.4040			0.39%
Sc 361.383	80877.1	103	%	0.6			0.57%
Al 308.215†	190.7	0.132057	mg/L	0.0060001	0.132057 mg/L	0.0060001	4.54%
Ca 315.887†	151897.9	15.3528	mg/L	0.03736	15.3528 mg/L	0.03736	0.24%
Fe 273.955†	237.0	0.137470	mg/L	0.0005958	0.137470 mg/L	0.0005958	0.43%
Mg 279.077†	4128.0	2.31344	mg/L	0.012039	2.31344 mg/L	0.012039	0.52%
Mn 257.610†	1809.1	0.0330649	mg/L	0.00001816	0.0330649 mg/L	0.00001816	0.05%
K 766.490†	5272.7	4.67099	mg/L	0.047006	4.67099 mg/L	0.047006	1.01%
Na 589.592†	60701.6	9.11408	mg/L	0.011215	9.11408 mg/L	0.011215	0.12%
Ti 334.940†	22.5	0.0026834	mg/L	0.00059358	0.0026834 mg/L	0.00059358	22.12%

Sequence No.: 16
 Sample ID: 75576-011
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 54
 Date Collected: 11/16/2013 8:25:05 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-011

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29636.7	101.408	%	1.5257			1.50%
Sc 361.383	80713.1	103	%	1.4			1.39%
Al 308.215†	635.0	0.429312	mg/L	0.0012374	0.429312 mg/L	0.0012374	0.29%
Ca 315.887†	55745.8	5.81141	mg/L	0.002767	5.81141 mg/L	0.002767	0.05%
Fe 273.955†	314.3	0.178619	mg/L	0.0065391	0.178619 mg/L	0.0065391	3.66%
Mg 279.077†	4113.5	2.30577	mg/L	0.024501	2.30577 mg/L	0.024501	1.06%
Mn 257.610†	587.1	0.0122103	mg/L	0.00002464	0.0122103 mg/L	0.00002464	0.20%
K 766.490†	2002.8	2.34231	mg/L	0.049502	2.34231 mg/L	0.049502	2.11%
Na 589.592†	50139.5	7.60708	mg/L	0.053873	7.60708 mg/L	0.053873	0.71%
Ti 334.940†	831.4	0.0191861	mg/L	0.00584939	0.0191861 mg/L	0.00584939	30.49%

Sequence No.: 17
 Sample ID: 75576-013
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 55
 Date Collected: 11/16/2013 8:28:16 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-013

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	29732.1	101.734	%	0.6141				0.60%
Sc 361.383	80603.0	103	%	0.5				0.53%
Al 308.215†	189.3	0.131133	mg/L	0.0079006	0.131133	mg/L	0.0079006	6.02%
Ca 315.887†	187947.1	18.9300	mg/L	0.04906	18.9300	mg/L	0.04906	0.26%
Fe 273.955†	247.2	0.142867	mg/L	0.0069903	0.142867	mg/L	0.0069903	4.89%
Mg 279.077†	7927.7	4.32155	mg/L	0.053152	4.32155	mg/L	0.053152	1.23%
Mn 257.610†	70800.6	1.21194	mg/L	0.003421	1.21194	mg/L	0.003421	0.28%
K 766.490†	10182.9	8.16790	mg/L	0.022857	8.16790	mg/L	0.022857	0.28%
Na 589.592†	173572.4	25.2185	mg/L	0.03956	25.2185	mg/L	0.03956	0.16%
Ti 334.940†	251.5	0.0073562	mg/L	0.00081757	0.0073562	mg/L	0.00081757	11.11%

Sequence No.: 18
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 8:31:28 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28686.7	98.1573 %		0.86255			0.88%
Sc 361.383	77483.1	99.1 %		0.99			1.00%
Al 308.215†	7183.9	4.81064 mg/L		0.040768	4.81064 mg/L	0.040768	0.85%
QC value within limits for Al 308.215 Recovery = 96.21%							
Ca 315.887†	485140.0	48.4210 mg/L		0.20444	48.4210 mg/L	0.20444	0.42%
QC value within limits for Ca 315.887 Recovery = 96.84%							
Fe 273.955†	9127.0	4.87054 mg/L		0.012123	4.87054 mg/L	0.012123	0.25%
QC value within limits for Fe 273.955 Recovery = 97.41%							
Mg 279.077†	93245.5	49.4109 mg/L		0.14036	49.4109 mg/L	0.14036	0.28%
QC value within limits for Mg 279.077 Recovery = 98.82%							
Mn 257.610†	27908.4	0.482113 mg/L		0.0005857	0.482113 mg/L	0.0005857	0.12%
QC value within limits for Mn 257.610 Recovery = 96.42%							
K 766.490†	65312.5	47.4292 mg/L		0.37037	47.4292 mg/L	0.37037	0.78%
QC value within limits for K 766.490 Recovery = 94.86%							
Na 589.592†	332224.3	47.8549 mg/L		0.29322	47.8549 mg/L	0.29322	0.61%
QC value within limits for Na 589.592 Recovery = 95.71%							
Ti 334.940†	23410.9	0.479850 mg/L		0.0011755	0.479850 mg/L	0.0011755	0.24%
QC value within limits for Ti 334.940 Recovery = 95.97%							

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/16/2013 8:34:08 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29093.8	99.5502 %		0.81415			0.82%
Sc 361.383	79062.9	101 %		0.7			0.67%
Al 308.215†	272.5	0.186786 mg/L		0.0012668	0.186786 mg/L	0.0012668	0.68%
QC value within limits for Al	308.215	Recovery = 93.39%					
Ca 315.887†	48561.9	5.09853 mg/L		0.001617	5.09853 mg/L	0.001617	0.03%
QC value within limits for Ca	315.887	Recovery = 101.97%					
Fe 273.955†	538.1	0.297764 mg/L		0.0104845	0.297764 mg/L	0.0104845	3.52%
QC value within limits for Fe	273.955	Recovery = 99.25%					
Mg 279.077†	9291.0	5.04203 mg/L		0.022277	5.04203 mg/L	0.022277	0.44%
QC value within limits for Mg	279.077	Recovery = 100.84%					
Mn 257.610†	2227.0	0.0403089 mg/L		0.00030061	0.0403089 mg/L	0.00030061	0.75%
QC value within limits for Mn	257.610	Recovery = 100.77%					
K 766.490†	6493.7	5.54055 mg/L		0.003375	5.54055 mg/L	0.003375	0.06%
QC value within limits for K	766.490	Recovery = 110.81%					
Na 589.592†	33057.9	5.16988 mg/L		0.039281	5.16988 mg/L	0.039281	0.76%
QC value within limits for Na	589.592	Recovery = 103.40%					
Ti 334.940†	2246.5	0.0480568 mg/L		0.00015086	0.0480568 mg/L	0.00015086	0.31%
QC value within limits for Ti	334.940	Recovery = 96.11%					

All analyte(s) passed QC.

Sequence No.: 20
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/16/2013 8:37:21 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	29073.4	99.4804 %		0.06503			0.07%
Sc 361.383	78413.6	100 %		0.1			0.08%
Al 308.215†	-29.8	-0.0154642 mg/L		0.02019908	-0.0154642 mg/L	0.02019908	130.62%
QC value within limits for Al 308.215 Recovery = Not calculated							
Ca 315.887†	-52.9	0.274396 mg/L		0.0036242	0.274396 mg/L	0.0036242	1.32%
QC value within limits for Ca 315.887 Recovery = Not calculated							
Fe 273.955†	-5.5	0.0083690 mg/L		0.00250956	0.0083690 mg/L	0.00250956	29.99%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	42.6	0.154362 mg/L		0.0027897	0.154362 mg/L	0.0027897	1.81%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	-24.6	0.0016470 mg/L		0.00038331	0.0016470 mg/L	0.00038331	23.27%
QC value within limits for Mn 257.610 Recovery = Not calculated							
K 766.490†	-6.9	0.911059 mg/L		0.0033887	0.911059 mg/L	0.0033887	0.37%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	-598.2	0.367833 mg/L		0.0252303	0.367833 mg/L	0.0252303	6.86%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	42.8	0.0030984 mg/L		0.00014351	0.0030984 mg/L	0.00014351	4.63%
QC value within limits for Ti 334.940 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 21
 Sample ID: 75576-015
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 56
 Date Collected: 11/16/2013 8:40:30 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-015

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	29901.3	102.313	%	0.7844				0.77%
Sc 361.383	81758.4	105	%	0.8				0.77%
Al 308.215†	-21.8	-0.0101303	mg/L	0.01108415	-0.0101303	mg/L	0.01108415	109.42%
Ca 315.887†	112376.8	11.4310	mg/L	0.00850	11.4310	mg/L	0.00850	0.07%
Fe 273.955†	42.6	0.0339323	mg/L	0.00558990	0.0339323	mg/L	0.00558990	16.47%
Mg 279.077†	7805.8	4.25714	mg/L	0.036417	4.25714	mg/L	0.036417	0.86%
Mn 257.610†	72.1	0.0033156	mg/L	0.00011824	0.0033156	mg/L	0.00011824	3.57%
K 766.490†	1115.3	1.71029	mg/L	0.014663	1.71029	mg/L	0.014663	0.86%
Na 589.592†	95119.1	14.0248	mg/L	0.01912	14.0248	mg/L	0.01912	0.14%
Ti 334.940†	32.1	0.0028805	mg/L	0.00025386	0.0028805	mg/L	0.00025386	8.81%

Sequence No.: 22
 Sample ID: 75576-017
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 57
 Date Collected: 11/16/2013 8:43:42 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-017

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	29522.4	101.017	%	0.7067				0.70%
Sc 361.383	80160.7	103	%	0.3				0.33%
Al 308.215†	3.2	0.0066186	mg/L	0.00028614	0.0066186	mg/L	0.00028614	4.32%
Ca 315.887†	397.2	0.319052	mg/L	0.0000330	0.319052	mg/L	0.0000330	0.01%
Fe 273.955†	17.9	0.0207866	mg/L	0.00288628	0.0207866	mg/L	0.00288628	13.89%
Mg 279.077†	17.0	0.140856	mg/L	0.0159448	0.140856	mg/L	0.0159448	11.32%
Mn 257.610†	2.1	0.0021110	mg/L	0.00002568	0.0021110	mg/L	0.00002568	1.22%
K 766.490†	-25.3	0.897946	mg/L	0.0147916	0.897946	mg/L	0.0147916	1.65%
Na 589.592†	38.6	0.458698	mg/L	0.0157701	0.458698	mg/L	0.0157701	3.44%
Ti 334.940†	32.2	0.0028810	mg/L	0.00042042	0.0028810	mg/L	0.00042042	14.59%

Sequence No.: 23
 Sample ID: 75576-019
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 58
 Date Collected: 11/16/2013 8:46:53 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-019

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	30216.8	103.393	%	0.6553				0.63%
Sc 361.383	80817.5	103	%	1.2				1.20%
Al 308.215†	1234.1	0.830074	mg/L	0.0080671	0.830074	mg/L	0.0080671	0.97%
Ca 315.887†	389602.8	38.9407	mg/L	0.00220	38.9407	mg/L	0.00220	0.01%
Fe 273.955†	1476.1	0.797161	mg/L	0.0102883	0.797161	mg/L	0.0102883	1.29%
Mg 279.077†	12145.4	6.55054	mg/L	0.016013	6.55054	mg/L	0.016013	0.24%
Mn 257.610†	301.4	0.0077309	mg/L	0.00047137	0.0077309	mg/L	0.00047137	6.10%
K 766.490†	4589.4	4.18437	mg/L	0.038403	4.18437	mg/L	0.038403	0.92%
Na 589.592†	81236.2	12.0440	mg/L	0.07710	12.0440	mg/L	0.07710	0.64%
Ti 334.940†	1482.6	0.0324719	mg/L	0.00034629	0.0324719	mg/L	0.00034629	1.07%

Sequence No.: 24
 Sample ID: 75576-021
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 59
 Date Collected: 11/16/2013 8:49:35 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-021

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	30716.5	105.103	%	0.7135				0.68%
Sc 361.383	80679.7	103	%	0.4				0.40%
Al 308.215†	7884.5	5.27938	mg/L	0.004990	5.27938	mg/L	0.004990	0.09%
Ca 315.887†	106067.9	10.8050	mg/L	0.00808	10.8050	mg/L	0.00808	0.07%
Fe 273.955†	11445.8	6.10511	mg/L	0.006899	6.10511	mg/L	0.006899	0.11%
Mg 279.077†	5707.8	3.14834	mg/L	0.033461	3.14834	mg/L	0.033461	1.06%
Mn 257.610†	16683.9	0.291122	mg/L	0.0009787	0.291122	mg/L	0.0009787	0.34%
K 766.490†	5778.3	5.03110	mg/L	0.058632	5.03110	mg/L	0.058632	1.17%
Na 589.592†	69954.8	10.4343	mg/L	0.04901	10.4343	mg/L	0.04901	0.47%
Ti 334.940†	8845.2	0.182683	mg/L	0.0023363	0.182683	mg/L	0.0023363	1.28%

Sequence No.: 25
 Sample ID: 75576-023
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 60
 Date Collected: 11/16/2013 8:52:17 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-023

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	30367.3	103.908 %	0.0518			0.05%
Sc 361.383	81175.6	104 %	0.5			0.44%
Al 308.215†	1174.8	0.790417 mg/L	0.0057291	0.790417 mg/L	0.0057291	0.72%
Ca 315.887†	393805.5	39.3577 mg/L	0.03526	39.3577 mg/L	0.03526	0.09%
Fe 273.955†	1391.0	0.751869 mg/L	0.0015572	0.751869 mg/L	0.0015572	0.21%
Mg 279.077†	12066.0	6.50860 mg/L	0.032538	6.50860 mg/L	0.032538	0.50%
Mn 257.610†	333.3	0.0082476 mg/L	0.00010527	0.0082476 mg/L	0.00010527	1.28%
K 766.490†	4622.3	4.20780 mg/L	0.024118	4.20780 mg/L	0.024118	0.57%
Na 589.592†	82468.7	12.2198 mg/L	0.03696	12.2198 mg/L	0.03696	0.30%
Ti 334.940†	1367.4	0.0301222 mg/L	0.00060868	0.0301222 mg/L	0.00060868	2.02%

Sequence No.: 26
 Sample ID: 75576-025
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 61
 Date Collected: 11/16/2013 8:55:31 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-025

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	29443.9	100.748	%	0.4922				0.49%
Sc 361.383	80483.6	103	%	0.4				0.38%
Al 308.215†	81.1	0.0587019	mg/L	0.00154543	0.0587019	mg/L	0.00154543	2.63%
Ca 315.887†	183926.3	18.5310	mg/L	0.00985	18.5310	mg/L	0.00985	0.05%
Fe 273.955†	166.3	0.0997915	mg/L	0.00026808	0.0997915	mg/L	0.00026808	0.27%
Mg 279.077†	17006.0	9.11934	mg/L	0.043157	9.11934	mg/L	0.043157	0.47%
Mn 257.610†	524.9	0.0110961	mg/L	0.00008752	0.0110961	mg/L	0.00008752	0.79%
K 766.490†	2079.4	2.39686	mg/L	0.017586	2.39686	mg/L	0.017586	0.73%
Na 589.592†	145995.7	21.2838	mg/L	0.02601	21.2838	mg/L	0.02601	0.12%
Ti 334.940†	134.7	0.0049737	mg/L	0.00004405	0.0049737	mg/L	0.00004405	0.89%

Sequence No.: 27
 Sample ID: 75576-027
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 62
 Date Collected: 11/16/2013 8:58:46 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-027

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29597.8	101.275	%	0.8987			0.89%
Sc 361.383	80423.9	103	%	0.3			0.26%
Al 308.215†	595.2	0.402674	mg/L	0.0252740	0.402674 mg/L	0.0252740	6.28%
Ca 315.887†	142462.1	14.4164	mg/L	0.05244	14.4164 mg/L	0.05244	0.36%
Fe 273.955†	1447.7	0.782045	mg/L	0.0053836	0.782045 mg/L	0.0053836	0.69%
Mg 279.077†	11770.4	6.35234	mg/L	0.026297	6.35234 mg/L	0.026297	0.41%
Mn 257.610†	6060.6	0.106131	mg/L	0.0007373	0.106131 mg/L	0.0007373	0.69%
K 766.490†	7362.2	6.15907	mg/L	0.025138	6.15907 mg/L	0.025138	0.41%
Na 589.592†	119457.6	17.4974	mg/L	0.00801	17.4974 mg/L	0.00801	0.05%
Ti 334.940†	610.0	0.0146706	mg/L	0.00086064	0.0146706 mg/L	0.00086064	5.87%

Sequence No.: 28
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/16/2013 9:01:27 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28081.1	96.0850 %	0.41760			0.43%
Sc 361.383	76589.2	98.0 %	0.18			0.18%
Al 308.215†	705882.3	472.256 mg/L	3.3398	472.256 mg/L	3.3398	0.71%
QC value within limits for Al 308.215 Recovery = 94.45%						
Ca 315.887†	4649247.7	461.634 mg/L	2.9928	461.634 mg/L	2.9928	0.65%
QC value within limits for Ca 315.887 Recovery = 92.33%						
Fe 273.955†	350321.3	186.524 mg/L	0.4062	186.524 mg/L	0.4062	0.22%
QC value within limits for Fe 273.955 Recovery = 93.26%						
Mg 279.077†	924680.6	488.814 mg/L	2.9414	488.814 mg/L	2.9414	0.60%
QC value within limits for Mg 279.077 Recovery = 97.76%						
Mn 257.610†	-6741.1	0.0084592 mg/L	0.00047476	0.0084592 mg/L	0.00047476	5.61%
QC value within limits for Mn 257.610 Recovery = 0.85%						
K 766.490†	134.4	1.01172 mg/L	0.044183	1.01172 mg/L	0.044183	4.37%
QC value within limits for K 766.490 Recovery = 101.17%						
Na 589.592†	1258.9	0.632809 mg/L	0.0164369	0.632809 mg/L	0.0164369	2.60%
QC value within limits for Na 589.592 Recovery = 63.28%						
Ti 334.940†	-1414.1	-0.0266253 mg/L	0.00064400	-0.0266253 mg/L	0.00064400	2.42%
QC value within limits for Ti 334.940 Recovery = -2.66%						

All analyte(s) passed QC.

Sequence No.: 29
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/16/2013 9:05:05 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	28226.3	96.5818 %	0.46233			0.48%
Sc 361.383	76840.1	98.3 %	0.30			0.31%
Al 308.215†	705279.5	471.852 mg/L	2.6969	471.852 mg/L	2.6969	0.57%
QC value within limits for Al 308.215 Recovery = 94.37%						
Ca 315.887†	4634972.2	460.217 mg/L	1.8912	460.217 mg/L	1.8912	0.41%
QC value within limits for Ca 315.887 Recovery = 92.04%						
Fe 273.955†	352371.7	187.616 mg/L	0.5669	187.616 mg/L	0.5669	0.30%
QC value within limits for Fe 273.955 Recovery = 93.81%						
Mg 279.077†	920504.6	486.607 mg/L	1.7045	486.607 mg/L	1.7045	0.35%
QC value within limits for Mg 279.077 Recovery = 97.32%						
Mn 257.610†	21998.9	0.500256 mg/L	0.0022580	0.500256 mg/L	0.0022580	0.45%
QC value within limits for Mn 257.610 Recovery = 100.05%						
K 766.490†	73.1	0.968018 mg/L	0.0847272	0.968018 mg/L	0.0847272	8.75%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	841.8	0.573295 mg/L	0.0183381	0.573295 mg/L	0.0183381	3.20%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940†	-1323.8	-0.0247827 mg/L	0.00027250	-0.0247827 mg/L	0.00027250	1.10%

All analyte(s) passed QC.

Sequence No.: 30
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 9:08:45 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29068.2	99.4625 %	1.25796			1.26%
Sc 361.383	78585.6	101 %	1.4			1.42%
Al 308.215†	7236.8	4.84603 mg/L	0.003393	4.84603 mg/L	0.003393	0.07%
QC value within limits for Al 308.215 Recovery = 96.92%						
Ca 315.887†	481738.1	48.0835 mg/L	0.89533	48.0835 mg/L	0.89533	1.86%
QC value within limits for Ca 315.887 Recovery = 96.17%						
Fe 273.955†	9146.3	4.88080 mg/L	0.016165	4.88080 mg/L	0.016165	0.33%
QC value within limits for Fe 273.955 Recovery = 97.62%						
Mg 279.077†	93546.9	49.5702 mg/L	0.08972	49.5702 mg/L	0.08972	0.18%
QC value within limits for Mg 279.077 Recovery = 99.14%						
Mn 257.610†	27898.7	0.481954 mg/L	0.0004818	0.481954 mg/L	0.0004818	0.10%
QC value within limits for Mn 257.610 Recovery = 96.39%						
K 766.490†	64848.8	47.0990 mg/L	0.53950	47.0990 mg/L	0.53950	1.15%
QC value within limits for K 766.490 Recovery = 94.20%						
Na 589.592†	332494.6	47.8935 mg/L	0.80324	47.8935 mg/L	0.80324	1.68%
QC value within limits for Na 589.592 Recovery = 95.79%						
Ti 334.940†	23381.1	0.479242 mg/L	0.0022884	0.479242 mg/L	0.0022884	0.48%
QC value within limits for Ti 334.940 Recovery = 95.85%						

All analyte(s) passed QC.

Sequence No.: 31

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/16/2013 9:11:25 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	29221.7	99.9877 %		1.43681			1.44%
Sc 361.383	79032.2	101 %		0.9			0.86%
Al 308.215†	300.9	0.205750 mg/L		0.0048465	0.205750 mg/L	0.0048465	2.36%
QC value within limits for Al 308.215 Recovery = 102.88%							
Ca 315.887†	48521.6	5.09453 mg/L		0.012204	5.09453 mg/L	0.012204	0.24%
QC value within limits for Ca 315.887 Recovery = 101.89%							
Fe 273.955†	560.0	0.309409 mg/L		0.0032127	0.309409 mg/L	0.0032127	1.04%
QC value within limits for Fe 273.955 Recovery = 103.14%							
Mg 279.077†	9325.7	5.06035 mg/L		0.030621	5.06035 mg/L	0.030621	0.61%
QC value within limits for Mg 279.077 Recovery = 101.21%							
Mn 257.610†	2219.6	0.0401898 mg/L		0.00025255	0.0401898 mg/L	0.00025255	0.63%
QC value within limits for Mn 257.610 Recovery = 100.47%							
K 766.490†	6330.9	5.42463 mg/L		0.052699	5.42463 mg/L	0.052699	0.97%
QC value within limits for K 766.490 Recovery = 108.49%							
Na 589.592†	32808.5	5.13430 mg/L		0.015307	5.13430 mg/L	0.015307	0.30%
QC value within limits for Na 589.592 Recovery = 102.69%							
Ti 334.940†	2266.3	0.0484614 mg/L		0.00057128	0.0484614 mg/L	0.00057128	1.18%
QC value within limits for Ti 334.940 Recovery = 96.92%							

All analyte(s) passed QC.

Sequence No.: 32
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/16/2013 9:14:38 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	29137.3	99.6990 %		1.26343			1.27%
Sc 361.383	78514.1	100 %		0.8			0.79%
Al 308.215†	-5.3	0.0009089 mg/L		0.01612700	0.0009089 mg/L	0.01612700	>999.9%
QC value within limits for Al 308.215 Recovery = Not calculated							
Ca 315.887†	22.6	0.281883 mg/L		0.0039577	0.281883 mg/L	0.0039577	1.40%
QC value within limits for Ca 315.887 Recovery = Not calculated							
Fe 273.955†	7.8	0.0154567 mg/L		0.00015851	0.0154567 mg/L	0.00015851	1.03%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	69.9	0.168768 mg/L		0.0019053	0.168768 mg/L	0.0019053	1.13%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	-18.0	0.0017645 mg/L		0.00021002	0.0017645 mg/L	0.00021002	11.90%
QC value within limits for Mn 257.610 Recovery = Not calculated							
K 766.490†	-59.2	0.873860 mg/L		0.0067289	0.873860 mg/L	0.0067289	0.77%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	-664.8	0.358338 mg/L		0.0046910	0.358338 mg/L	0.0046910	1.31%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	44.2	0.0031274 mg/L		0.00014046	0.0031274 mg/L	0.00014046	4.49%
QC value within limits for Ti 334.940 Recovery = Not calculated							

All analyte(s) passed QC.

File H15686SW

Method: HgCV1 SWH20 (7470A)

Page 1

Date: 11/14/2013 12:35:26 PM

Analysis Begun

Logged In Analyst: johns

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\H15686SW.sif

Batch ID: H15686SW

Results Data Set: H15686SW

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: 11/14/2013 12:30:31 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	0.0011	0.0002	12:31:20	Yes
2		[0.00]	-0.0000	-0.0015	-0.0000	12:31:53	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0002				
%RSD:		0.00	163.97				

Auto-zero performed.

Sequence No.: 2

Sample ID: .2 PPB

Analyst:

Autosampler Location: 2

Date Collected: 11/14/2013 12:31:55 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	0.0046	0.0013	12:32:42	Yes
2		[0.2]	0.0010	0.0030	0.0011	12:33:15	Yes
Mean:		[0.2]	0.0011				
SD:		0.0	0.0001				
%RSD:		0.0	11.41				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.00569 Intercept: 0.00000

Sequence No.: 3

Sample ID: .5 PPB

Analyst:

Autosampler Location: 3

Date Collected: 11/14/2013 12:33:16 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]	0.0029	0.0093	0.0030	12:34:03	Yes
2		[0.5]	0.0028	0.0095	0.0029	12:34:36	Yes
Mean:		[0.5]	0.0029				
SD:		0.0	0.0000				
%RSD:		0.0	0.54				

Standard number 2 applied. [0.5]
Correlation Coef.: 1.000000 Slope: 0.00570 Intercept: -0.00000

Sequence No.: 4

Sample ID: 1 PPB

Analyst:

Autosampler Location: 4

Date Collected: 11/14/2013 12:34:38 PM

Data Type: Original

Replicate Data: 1 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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Method: HgCV1 SWH20 (7470A)

Page 2

Date: 11/14/2013 12:41:25 PM

1	[1]	0.0059	0.0190	0.0060	12:35:24	Yes
2	[1]	0.0058	0.0194	0.0059	12:35:58	Yes
Mean:	[1]	0.0058				
SD:	0	0.0001				
%RSD:	0	1.30				

Standard number 3 applied. [1]
Correlation Coef.: 0.999939 Slope: 0.00582 Intercept: -0.00002

Sequence No.: 5 Autosampler Location: 5
Sample ID: 2 PPB Date Collected: 11/14/2013 12:35:59 PM
Analyst: 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]	0.0116	0.0367	0.0117	12:36:46	Yes
2		[2]	0.0114	0.0362	0.0115	12:37:19	Yes
Mean:		[2]	0.0115				
SD:		0	0.0002				
%RSD:		0	1.42				

Standard number 4 applied. [2]
Correlation Coef.: 0.999972 Slope: 0.00577 Intercept: -0.00000

Sequence No.: 6 Autosampler Location: 6
Sample ID: 5 PPB Date Collected: 11/14/2013 12:37:21 PM
Analyst: 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]	0.0293	0.0956	0.0294	12:38:07	Yes
2		[5]	0.0290	0.0916	0.0291	12:38:41	Yes
Mean:		[5]	0.0291				
SD:		0	0.0002				
%RSD:		0	0.73				

Standard number 5 applied. [5]
Correlation Coef.: 0.999987 Slope: 0.00583 Intercept: -0.00004

Sequence No.: 7 Autosampler Location: 7
Sample ID: 10 PPB Date Collected: 11/14/2013 12:38:42 PM
Analyst: 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]	0.0584	0.1827	0.0585	12:39:29	Yes
2		[10]	0.0581	0.1788	0.0582	12:40:02	Yes
Mean:		[10]	0.0582				
SD:		0	0.0002				
%RSD:		0	0.42				

Standard number 6 applied. [10]
Correlation Coef.: 0.999997 Slope: 0.00583 Intercept: -0.00004

Sequence No.: 8 Autosampler Location: 8
Sample ID: 25 PPB Date Collected: 11/14/2013 12:40:04 PM
Analyst: 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]	0.1475	0.4560	0.1476	12:40:50	Yes
2		[25]	0.1470	0.4548	0.1471	12:41:24	Yes
Mean:		[25]	0.1473				
SD:		0	0.0004				
%RSD:		0	0.25				

Standard number 7 applied. [25]
Correlation Coef.: 0.999990 Slope: 0.00589 Intercept: -0.00017

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	0.029	0.00	164.0
.2 PPB	0.0011	0.2	0.223	0.00	11.4
.5 PPB	0.0029	0.5	0.514	0.00	0.5
1 PPB	0.0058	1.0	1.018	0.00	1.3
2 PPB	0.0115	2.0	1.984	0.00	1.4
5 PPB	0.0291	5.0	4.975	0.00	0.7
10 PPB	0.0582	10.0	9.920	0.00	0.4
25 PPB	0.1473	25.0	25.037	0.00	0.2

Correlation Coef.: 0.999990 Slope: 0.00589 Intercept: -0.00017

Sequence No.: 9
 Sample ID: ICV (2)
 Analyst:

Autosampler Location: 10
 Date Collected: 11/14/2013 12:41:26 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	18.90	18.90	0.1111	0.3418	0.1112	12:42:15	Yes
2	18.85	18.85	0.1109	0.3400	0.1110	12:42:48	Yes
Mean:	18.88	18.88	0.1110				
SD:	0.032	0.032	0.0002				
%RSD:	0.170	0.170	0.17				

QC value within limits for Hg 253.7 Recovery = 94.38%
 All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICB
 Analyst:

Autosampler Location: 1
 Date Collected: 11/14/2013 12:42:50 PM
 Data Type: Original

Replicate Data: ICB

Repl	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
#							
1	0.051	0.051	0.0001	0.0001	0.0002	12:43:37	Yes
2	0.050	0.050	0.0001	0.0017	0.0002	12:44:10	Yes
Mean:	0.051	0.051	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.484	0.484	1.16				

QC value within limits for Hg 253.7 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: MB 27401 (1)
 Analyst:

Autosampler Location: 11
 Date Collected: 11/14/2013 12:44:12 PM
 Data Type: Original

Replicate Data: MB 27401 (1)

Repl	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
#							
1	0.018	0.018	-0.0001	-0.0005	0.0000	12:44:59	Yes
2	0.000	0.000	-0.0002	-0.0027	-0.0001	12:45:33	Yes
Mean:	0.009	0.009	-0.0001				
SD:	0.013	0.013	0.0001				
%RSD:	137.9	137.9	62.91				

Sequence No.: 12
 Sample ID: LCSW 27401
 Analyst:

Autosampler Location: 12
 Date Collected: 11/14/2013 12:45:34 PM
 Data Type: Original

Replicate Data: LCSW 27401

Repl	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
#							
1	9.275	9.275	0.0544	0.1722	0.0545	12:46:21	Yes
2	9.381	9.381	0.0551	0.1708	0.0552	12:46:54	Yes
Mean:	9.328	9.328	0.0548				

SD: 0.075 0.075 0.0004
%RSD: 0.805 0.805 0.81

Sequence No.: 13
Sample ID: LCSW MR 27401
Analyst:

Autosampler Location: 13
Date Collected: 11/14/2013 12:46:56 PM
Data Type: Original

Replicate Data: LCSW MR 27401

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.550	9.550	0.0561	0.1748	0.0562	12:47:42	Yes
2	9.542	9.542	0.0560	0.1721	0.0561	12:48:15	Yes
Mean:	9.546	9.546	0.0560				
SD:	0.005	0.005	0.0000				
%RSD:	0.058	0.058	0.06				

Sequence No.: 14
Sample ID: 75576-029
Analyst:

Autosampler Location: 14
Date Collected: 11/14/2013 12:48:17 PM
Data Type: Original

Replicate Data: 75576-029

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.038	0.038	0.0001	0.0007	0.0002	12:49:03	Yes
2	0.037	0.037	0.0000	0.0010	0.0001	12:49:37	Yes
Mean:	0.037	0.037	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.908	2.908	13.75				

Sequence No.: 15
Sample ID: 75576-029 MR
Analyst:

Autosampler Location: 15
Date Collected: 11/14/2013 12:49:38 PM
Data Type: Original

Replicate Data: 75576-029 MR

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.037	0.037	0.0000	0.0004	0.0001	12:50:25	Yes
2	0.035	0.035	0.0000	-0.0001	0.0001	12:50:58	Yes
Mean:	0.036	0.036	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	3.558	3.558	18.67				

Sequence No.: 16
Sample ID: 75576-031 MS1
Analyst:

Autosampler Location: 16
Date Collected: 11/14/2013 12:50:59 PM
Data Type: Original

Replicate Data: 75576-031 MS1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.359	9.359	0.0549	0.1702	0.0550	12:51:46	Yes
2	9.349	9.349	0.0549	0.1706	0.0550	12:52:19	Yes
Mean:	9.354	9.354	0.0549				
SD:	0.007	0.007	0.0000				
%RSD:	0.073	0.073	0.07				

Sequence No.: 17
Sample ID: 75576-033 MS2
Analyst:

Autosampler Location: 17
Date Collected: 11/14/2013 12:52:20 PM
Data Type: Original

Replicate Data: 75576-033 MS2

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.178	9.178	0.0539	0.1665	0.0540	12:53:07	Yes
2	9.108	9.108	0.0535	0.1643	0.0536	12:53:40	Yes
Mean:	9.143	9.143	0.0537				
SD:	0.050	0.050	0.0003				

%RSD: 0.542 0.542 0.54

Sequence No.: 18

Sample ID: 75576-001

Analyst:

Autosampler Location: 18

Date Collected: 11/14/2013 12:53:42 PM

Data Type: Original

Replicate Data: 75576-001

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.015	0.015	-0.0001	-0.0010	0.0000	12:54:28	Yes
2	0.029	0.029	-0.0000	-0.0002	0.0001	12:55:01	Yes
Mean:	0.022	0.022	-0.0000				
SD:	0.010	0.010	0.0001				
%RSD:	45.39	45.39	136.93				

Sequence No.: 19

Sample ID: 75576-003

Analyst:

Autosampler Location: 19

Date Collected: 11/14/2013 12:55:03 PM

Data Type: Original

Replicate Data: 75576-003

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.044	0.044	0.0001	0.0016	0.0002	12:55:53	Yes
2	0.024	0.024	-0.0000	-0.0004	0.0001	12:56:26	Yes
Mean:	0.034	0.034	0.0000				
SD:	0.014	0.014	0.0001				
%RSD:	41.55	41.55	296.31				

Sequence No.: 20

Sample ID: 75576-005

Analyst:

Autosampler Location: 20

Date Collected: 11/14/2013 12:56:28 PM

Data Type: Original

Replicate Data: 75576-005

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.034	0.034	0.0000	0.0002	0.0001	12:57:14	Yes
2	0.067	0.067	0.0002	0.0032	0.0003	12:57:47	Yes
Mean:	0.050	0.050	0.0001				
SD:	0.023	0.023	0.0001				
%RSD:	45.46	45.46	109.26				

Sequence No.: 21

Sample ID: CCV

Analyst:

Autosampler Location: 9

Date Collected: 11/14/2013 12:57:49 PM

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.422	9.422	0.0553	0.1718	0.0554	12:58:36	Yes
2	9.225	9.225	0.0542	0.1718	0.0543	12:59:09	Yes
Mean:	9.324	9.324	0.0547				
SD:	0.139	0.139	0.0008				
%RSD:	1.495	1.495	1.50				

QC value within limits for Hg 253.7 Recovery = 93.24%

All analyte(s) passed QC.

Sequence No.: 22

Sample ID: CCB

Analyst:

Autosampler Location: 1

Date Collected: 11/14/2013 12:59:11 PM

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.079	0.079	0.0003	0.0042	0.0004	12:59:58	Yes
2	0.040	0.040	0.0001	0.0007	0.0002	13:00:31	Yes
Mean:	0.060	0.060	0.0002				

Method: HgCV1 SWH20 (7470A)

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Date: 11/14/2013 1:07:20 PM

SD: 0.028 0.028 0.0002
 %RSD: 46.09 46.09 90.73

QC value within limits for Hg 253.7 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 23
 Sample ID: 75576-007
 Analyst:

Autosampler Location: 21
 Date Collected: 11/14/2013 1:00:33 PM
 Data Type: Original

Replicate Data: 75576-007

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.025	0.025	-0.0000	0.0000	0.0001	13:01:21	Yes
2	0.015	0.015	-0.0001	-0.0013	0.0000	13:01:54	Yes
Mean:	0.020	0.020	-0.0001				
SD:	0.007	0.007	0.0000				
%RSD:	36.05	36.05	77.66				

Sequence No.: 24
 Sample ID: 75576-009
 Analyst:

Autosampler Location: 22
 Date Collected: 11/14/2013 1:01:55 PM
 Data Type: Original

Replicate Data: 75576-009

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.040	0.040	0.0001	0.0009	0.0002	13:02:42	Yes
2	0.005	0.005	-0.0001	-0.0028	-0.0000	13:03:15	Yes
Mean:	0.023	0.023	-0.0000				
SD:	0.025	0.025	0.0001				
%RSD:	110.0	110.0	359.78				

Sequence No.: 25
 Sample ID: 75576-011
 Analyst:

Autosampler Location: 23
 Date Collected: 11/14/2013 1:03:17 PM
 Data Type: Original

Replicate Data: 75576-011

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.053	0.053	0.0001	0.0024	0.0002	13:04:03	Yes
2	0.058	0.058	0.0002	0.0025	0.0003	13:04:36	Yes
Mean:	0.056	0.056	0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	6.400	6.400	13.59				

Sequence No.: 26
 Sample ID: 75576-013
 Analyst:

Autosampler Location: 24
 Date Collected: 11/14/2013 1:04:38 PM
 Data Type: Original

Replicate Data: 75576-013

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.028	0.028	-0.0000	0.0000	0.0001	13:05:24	Yes
2	0.025	0.025	-0.0000	-0.0009	0.0001	13:05:58	Yes
Mean:	0.026	0.026	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	8.563	8.563	73.19				

Sequence No.: 27
 Sample ID: 75576-015
 Analyst:

Autosampler Location: 25
 Date Collected: 11/14/2013 1:05:59 PM
 Data Type: Original

Replicate Data: 75576-015

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.049	0.049	0.0001	0.0017	0.0002	13:06:46	Yes
2	0.033	0.033	0.0000	-0.0003	0.0001	13:07:19	Yes

Method: HgCV1 SWH2O (7470A)

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Date: 11/14/2013 1:14:10 PM

Mean: 0.041 0.041 0.0001
 SD: 0.011 0.011 0.0001
 %RSD: 27.32 27.32 98.42

Sequence No.: 28
 Sample ID: 75576-017
 Analyst:

Autosampler Location: 26
 Date Collected: 11/14/2013 1:07:21 PM
 Data Type: Original

Replicate Data: 75576-017

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.041	0.041	0.0001	0.0010	0.0002	13:08:07	Yes
2	0.038	0.038	0.0001	0.0008	0.0002	13:08:40	Yes
Mean:	0.040	0.040	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	4.481	4.481	17.31				

Sequence No.: 29
 Sample ID: 75576-019
 Analyst:

Autosampler Location: 27
 Date Collected: 11/14/2013 1:08:42 PM
 Data Type: Original

Replicate Data: 75576-019

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.040	0.040	0.0001	0.0000	0.0002	13:09:28	Yes
2	0.022	0.022	-0.0000	-0.0016	0.0001	13:10:02	Yes
Mean:	0.031	0.031	0.0000				
SD:	0.013	0.013	0.0001				
%RSD:	41.91	41.91	773.16				

Sequence No.: 30
 Sample ID: 75576-021
 Analyst:

Autosampler Location: 28
 Date Collected: 11/14/2013 1:10:03 PM
 Data Type: Original

Replicate Data: 75576-021

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.068	0.068	0.0002	0.0001	0.0003	13:10:53	Yes
2	0.098	0.098	0.0004	0.0030	0.0005	13:11:26	Yes
Mean:	0.083	0.083	0.0003				
SD:	0.021	0.021	0.0001				
%RSD:	25.09	25.09	38.92				

Sequence No.: 31
 Sample ID: 75576-023
 Analyst:

Autosampler Location: 29
 Date Collected: 11/14/2013 1:11:28 PM
 Data Type: Original

Replicate Data: 75576-023

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.060	0.060	0.0002	0.0023	0.0003	13:12:14	Yes
2	0.058	0.058	0.0002	0.0016	0.0003	13:12:48	Yes
Mean:	0.059	0.059	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	2.902	2.902	5.80				

Sequence No.: 32
 Sample ID: 75576-025
 Analyst:

Autosampler Location: 30
 Date Collected: 11/14/2013 1:12:49 PM
 Data Type: Original

Replicate Data: 75576-025

Repl #	SampleConc ug/L	StndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.021	0.021	-0.0001	-0.0019	0.0000	13:13:36	Yes
2	0.035	0.035	0.0000	0.0006	0.0001	13:14:09	Yes
Mean:	0.028	0.028	-0.0000				

Method: HgCV1 SWH20 (7470A)

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Date: 11/14/2013 1:20:29 PM

SD: 0.010 0.010 0.0001
 %RSD: 35.75 35.75 548.28

Sequence No.: 33
 Sample ID: CCV
 Analyst:

Autosampler Location: 9
 Date Collected: 11/14/2013 1:14:11 PM
 Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.799	9.799	0.0575	0.1792	0.0576	13:14:59	Yes
2	9.788	9.788	0.0575	0.1800	0.0576	13:15:32	Yes
Mean:	9.794	9.794	0.0575				
SD:	0.008	0.008	0.0000				
%RSD:	0.079	0.079	0.08				

QC value within limits for Hg 253.7 Recovery = 97.94%
 All analyte(s) passed QC.

Sequence No.: 34
 Sample ID: CCB
 Analyst:

Autosampler Location: 1
 Date Collected: 11/14/2013 1:15:34 PM
 Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.029	0.029	-0.0000	-0.0003	0.0001	13:16:21	Yes
2	0.002	0.002	-0.0002	-0.0035	-0.0001	13:16:54	Yes
Mean:	0.015	0.015	-0.0001				
SD:	0.019	0.019	0.0001				
%RSD:	123.1	123.1	132.14				

QC value within limits for Hg 253.7 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 35
 Sample ID: 75576-027
 Analyst:

Autosampler Location: 31
 Date Collected: 11/14/2013 1:16:56 PM
 Data Type: Original

Replicate Data: 75576-027

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.051	0.051	0.0001	0.0007	0.0002	13:17:45	Yes
2	0.049	0.049	0.0001	0.0013	0.0002	13:18:18	Yes
Mean:	0.050	0.050	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	3.773	3.773	9.23				

Sequence No.: 36
 Sample ID: 75676-001
 Analyst:

Autosampler Location: 32
 Date Collected: 11/14/2013 1:18:20 PM
 Data Type: Original

Replicate Data: 75676-001

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.051	0.051	0.0001	0.0020	0.0002	13:19:06	Yes
2	0.025	0.025	-0.0000	0.0004	0.0001	13:19:40	Yes
Mean:	0.038	0.038	0.0001				
SD:	0.019	0.019	0.0001				
%RSD:	49.20	49.20	217.66				

Sequence No.: 37
 Sample ID: 75677-004
 Analyst:

Autosampler Location: 33
 Date Collected: 11/14/2013 1:19:41 PM
 Data Type: Original

Replicate Data: 75677-004

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored

Method: HgCV1 SWH2O (7470A)

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Date: 11/14/2013 1:23:56 PM

1	0.056	0.056	0.0002	0.0002	0.0003	13:20:28	Yes
2	0.047	0.047	0.0001	-0.0005	0.0002	13:21:01	Yes
Mean:	0.051	0.051	0.0001				
SD:	0.006	0.006	0.0000				
%RSD:	11.42	11.42	26.71				

Sequence No.: 38

Autosampler Location: 9

Sample ID: CCV

Date Collected: 11/14/2013 1:21:03 PM

Analyst:

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.599	9.599	0.0564	0.1738	0.0565	13:21:52	Yes
2	9.564	9.564	0.0561	0.1730	0.0562	13:22:25	Yes
Mean:	9.582	9.582	0.0563				
SD:	0.025	0.025	0.0001				
%RSD:	0.263	0.263	0.26				

QC value within limits for Hg 253.7 Recovery = 95.82%

All analyte(s) passed QC.

Sequence No.: 39

Autosampler Location: 1

Sample ID: CCB

Date Collected: 11/14/2013 1:22:27 PM

Analyst:

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.060	0.060	0.0002	0.0019	0.0003	13:23:14	Yes
2	0.047	0.047	0.0001	0.0011	0.0002	13:23:47	Yes
Mean:	0.054	0.054	0.0001				
SD:	0.009	0.009	0.0001				
%RSD:	17.16	17.16	37.82				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

C:\ICPCHEM\1\DATA\S111913B.b\001CALB.D\001CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\001CALB.D\001CALB.D#
 Date Acquired: Nov 19 2013 03:43 pm
 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: Nov 19 2013 03:47 pm
 Sample Type: CalBlk

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	76	19.89
23	Na	45	1	131528	1.23
24	Mg	45	1	2573	15.70
27	Al	45	1	2350	18.43
39	K	45	1	59437	2.64
44	Ca	45	1	616	15.08
51	V	45	1	145	13.16
52	Cr	45	1	747	5.04
55	Mn	45	1	1493	19.74
56	Fe	45	1	93886	17.85
59	Co	45	1	211	16.03
60	Ni	45	1	91	24.78
65	Cu	45	1	1015	7.89
66	Zn	45	1	746	3.95
75	As	115	1	18	26.61
78	Se	115	1	180	3.74
83	Kr	115	2	573	2.10
95	Mo	115	2	70	4.76
107	Ag	115	2	149	20.80
111	Cd	115	2	47	8.58
121	Sb	115	2	132	26.96
137	Ba	159	2	508	8.96
205	Tl	165	2	413	14.06
206	(Pb)	165	2	2825	6.28
207	(Pb)	165	2	2225	7.43
208	Pb	165	2	10848	5.36

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
45	Sc	1	96346	3.23
45	Sc	2	1450255	1.82
115	In	1	539809	4.85
115	In	2	1681789	1.41
159	Tb	1	1159964	1.06
159	Tb	2	2138875	1.85
165	Ho	1	1133193	1.53
165	Ho	2	2086411	1.07

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\

15686
(27401)

Be, As, Sb, Tl,
Co, Pb, Se, Cd
reported.

J. Y. Galin
11.20.13

8 ——— 11/20/13

C:\ICPCHEM\1\DATA\S111913B.b\002CALB.D\002CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\002CALB.D\002CALB.D#
 Date Acquired: Nov 19 2013 03:49 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalBlk V-176961
 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: Nov 19 2013 03:47 pm
 Sample Type: CalBlk

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	80	33.07
23	Na	45	1	138683	0.86
24	Mg	45	1	2198	19.33
27	Al	45	1	2071	19.34
39	K	45	1	63841	0.95
44	Ca	45	1	588	13.03
51	V	45	1	134	24.68
52	Cr	45	1	754	4.30
55	Mn	45	1	1311	18.94
56	Fe	45	1	79903	17.87
59	Co	45	1	190	10.19
60	Ni	45	1	86	23.82
65	Cu	45	1	925	11.93
66	Zn	45	1	715	9.26
75	As	115	1	19	15.57
78	Se	115	1	211	2.24
83	Kr	115	2	569	8.70
95	Mo	115	2	79	8.80
107	Ag	115	2	136	16.37
111	Cd	115	2	53	14.99
121	Sb	115	2	116	26.80
137	Ba	159	2	471	12.20
205	Tl	165	2	413	11.72
206	(Pb)	165	2	2400	5.28
207	(Pb)	165	2	2047	7.05
208	Pb	165	2	9450	2.61

Internal Standard Elements

Element	Tune	CPS Mean	RSD(%)	
45	Sc	1	103581	1.33
45	Sc	2	1500578	0.60
115	In	1	593101	1.40
115	In	2	1675692	0.73
159	Tb	1	1237356	1.58
159	Tb	2	2165061	2.62
165	Ho	1	1192048	1.09
165	Ho	2	2108329	1.72

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\S111913B.b\003CALI.D\003CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\003CALI.D\003CALI.D#
 Date Acquired: Nov 19 2013 03:55 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd1 V-176962
 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: Nov 19 2013 03:53 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	3325	2.64
23	Na	45	1	192993	0.19
24	Mg	45	1	34814	0.47
27	Al	45	1	7606	6.51
39	K	45	1	94802	0.48
44	Ca	45	1	2216	3.36
51	V	45	1	2491	1.91
52	Cr	45	1	3560	2.73
55	Mn	45	1	3501	5.80
56	Fe	45	1	349668	4.14
59	Co	45	1	4524	0.89
60	Ni	45	1	1206	2.16
65	Cu	45	1	2090	3.65
66	Zn	45	1	1356	2.31
75	As	115	1	375	3.53
78	Se	115	1	394	2.61
83	Kr	115	2	544	13.83
95	Mo	115	2	2718	6.91
107	Ag	115	2	7288	3.67
111	Cd	115	2	1623	5.32
121	Sb	115	2	5335	0.76
137	Ba	159	2	2746	5.77
205	Tl	165	2	12945	1.20
206	(Pb)	165	2	7288	7.14
207	(Pb)	165	2	5894	9.43
208	Pb	165	2	27840	8.70

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	101091	0.96	103581	97.6	80 - 120
45	Sc	2	1449292	2.30	1500578	96.6	80 - 120
115	In	1	578127	1.12	593101	97.5	80 - 120
115	In	2	1676032	2.93	1675692	100.0	80 - 120
159	Tb	1	1205932	1.63	1237356	97.5	80 - 120
159	Tb	2	2159967	2.15	2165061	99.8	80 - 120
165	Ho	1	1173446	1.92	1192048	98.4	80 - 120
165	Ho	2	2087372	1.82	2108329	99.0	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\S111913B.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S111913B.b\004CALI.D\004CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\004CALI.D\004CALI.D#
 Date Acquired: Nov 19 2013 04:01 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd2 V-176963
 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: Nov 19 2013 03:59 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	33478	1.46
23	Na	45	1	760779	1.58
24	Mg	45	1	344048	0.66
27	Al	45	1	59556	1.11
39	K	45	1	393475	0.52
44	Ca	45	1	18238	0.66
51	V	45	1	25355	1.43
52	Cr	45	1	30573	0.53
55	Mn	45	1	23957	1.76
56	Fe	45	1	2854498	0.67
59	Co	45	1	46350	1.61
60	Ni	45	1	11930	1.89
65	Cu	45	1	16236	1.76
66	Zn	45	1	6809	1.80
75	As	115	1	3971	0.94
78	Se	115	1	2288	3.40
83	Kr	115	2	603	10.08
95	Mo	115	2	29269	0.88
107	Ag	115	2	78308	2.06
111	Cd	115	2	16534	1.98
121	Sb	115	2	56949	2.42
137	Ba	159	2	23554	1.38
205	Tl	165	2	132767	2.19
206	(Pb)	165	2	46546	3.16
207	(Pb)	165	2	39020	0.85
208	Pb	165	2	181475	2.42

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	104910	3.24	103581	101.3	80 - 120
45	Sc	2	1526820	2.37	1500578	101.7	80 - 120
115	In	1	611284	4.01	593101	103.1	80 - 120
115	In	2	1734689	1.26	1675692	103.5	80 - 120
159	Tb	1	1259355	1.69	1237356	101.8	80 - 120
159	Tb	2	2265261	1.82	2165061	104.6	80 - 120
165	Ho	1	1250961	1.98	1192048	104.9	80 - 120
165	Ho	2	2178046	2.09	2108329	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\S111913B.b\002CALB.D\002CALB.D#

0 : Element Failures 0
 0 : ISTD Failures 0

C:\ICPCHEM\1\DATA\S111913B.b\005CALI.D\005CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\005CALI.D\005CALI.D#
 Date Acquired: Nov 19 2013 04:07 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd3 V-176964
 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: Nov 19 2013 04:05 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	63630	1.11
23	Na	45	1	1335022	1.00
24	Mg	45	1	677398	1.75
27	Al	45	1	112215	2.56
39	K	45	1	744422	2.67
44	Ca	45	1	34856	1.52
51	V	45	1	50110	1.40
52	Cr	45	1	59581	2.26
55	Mn	45	1	45963	2.18
56	Fe	45	1	5536796	1.88
59	Co	45	1	92762	1.58
60	Ni	45	1	23769	1.10
65	Cu	45	1	31638	1.50
66	Zn	45	1	13072	0.62
75	As	115	1	7775	0.89
78	Se	115	1	4303	2.41
83	Kr	115	2	581	3.16
95	Mo	115	2	55181	1.23
107	Aq	115	2	147430	3.76
111	Cd	115	2	31122	0.67
121	Sb	115	2	109462	1.63
137	Ba	159	2	42566	0.18
205	Tl	165	2	253912	1.65
206	(Pb)	165	2	86857	1.76
207	(Pb)	165	2	70944	2.75
208	Pb	165	2	333710	1.90

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	106930	4.29	103581	103.2	80 - 120
45	Sc	2	1457979	0.88	1500578	97.2	80 - 120
115	In	1	609919	3.28	593101	102.8	80 - 120
115	In	2	1689431	2.00	1675692	100.8	80 - 120
159	Tb	1	1276554	2.10	1237356	103.2	80 - 120
159	Tb	2	2151091	0.17	2165061	99.4	80 - 120
165	Ho	1	1233917	2.78	1192048	103.5	80 - 120
165	Ho	2	2086988	0.78	2108329	99.0	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\S111913B.b\002CALB.D\002CALB.D#

0 : Element Failures 0
 0 : ISTD Failures 0

C:\ICPCHEM\1\DATA\S111913B.b\006CALI.D\006CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\006CALI.D\006CALI.D#
 Date Acquired: Nov 19 2013 04:13 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd4 V-176965
 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: Nov 19 2013 04:11 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	325481	1.29
23	Na	45	1	5755624	1.14
24	Mg	45	1	3197073	0.32
27	Al	45	1	542748	0.65
39	K	45	1	3249133	1.58
44	Ca	45	1	168400	1.68
51	V	45	1	247818	0.98
52	Cr	45	1	289220	1.22
55	Mn	45	1	224082	1.32
56	Fe	45	1	26947860	1.87
59	Co	45	1	454343	0.74
60	Ni	45	1	114541	1.61
65	Cu	45	1	151714	2.39
66	Zn	45	1	61559	1.04
75	As	115	1	38372	0.53
78	Se	115	1	20220	1.43
83	Kr	115	2	572	5.09
95	Mo	115	2	278097	0.98
107	Ag	115	2	741571	0.98
111	Cd	115	2	157127	0.61
121	Sb	115	2	544915	1.26
137	Ba	159	2	214171	2.70
205	Tl	165	2	1369296	1.61
206	(Pb)	165	2	432812	1.19
207	(Pb)	165	2	356511	2.71
208	Pb	165	2	1725177	2.49

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flaq
45	Sc	1	103355	0.66	103581	99.8	80 - 120
45	Sc	2	1456744	1.17	1500578	97.1	80 - 120
115	In	1	598011	0.75	593101	100.8	80 - 120
115	In	2	1674797	0.20	1675692	99.9	80 - 120
159	Tb	1	1245122	0.53	1237356	100.6	80 - 120
159	Tb	2	2148659	1.95	2165061	99.2	80 - 120
165	Ho	1	1217991	1.70	1192048	102.2	80 - 120
165	Ho	2	2089095	2.12	2108329	99.1	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\S111913B.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S111913B.b\007CALI.D\007CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\007CALI.D\007CALI.D#
 Date Acquired: Nov 19 2013 04:19 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd5 V-176966
 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: Nov 19 2013 04:17 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	656404	0.24
23	Na	45	1	11327220	0.67
24	Mg	45	1	6301381	0.91
27	Al	45	1	1098740	2.31
39	K	45	1	6351260	0.62
44	Ca	45	1	334964	0.43
51	V	45	1	492747	0.07
52	Cr	45	1	574242	0.97
55	Mn	45	1	444015	0.55
56	Fe	45	1	52091980	1.70
59	Co	45	1	917911	1.91
60	Ni	45	1	229242	0.46
65	Cu	45	1	300937	0.64
66	Zn	45	1	117707	1.52
75	As	115	1	75985	1.59
78	Se	115	1	39974	0.80
83	Kr	115	2	588	11.90
95	Mo	115	2	558622	1.58
107	Ag	115	2	1532610	1.97
111	Cd	115	2	309263	0.98
121	Sb	115	2	1122152	0.78
137	Ba	159	2	428575	0.75
205	Tl	165	2	2704188	1.03
206	(Pb)	165	2	862028	1.02
207	(Pb)	165	2	716490	0.82
208	Pb	165	2	3453159	0.81

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	103359	1.25	103581	99.8	80 - 120
45	Sc	2	1463176	0.85	1500578	97.5	80 - 120
115	In	1	588695	1.77	593101	99.3	80 - 120
115	In	2	1662640	1.06	1675692	99.2	80 - 120
159	Tb	1	1240713	2.06	1237356	100.3	80 - 120
159	Tb	2	2144010	0.66	2165061	99.0	80 - 120
165	Ho	1	1200439	1.00	1192048	100.7	80 - 120
165	Ho	2	2081382	1.49	2108329	98.7	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\S111913B.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S111913B.b\008_ICV.D\008_ICV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\008_ICV.D\008_ICV.D#
 Date Acquired: Nov 19 2013 04:24 pm
 Operator: GK
 Sample Name: ICV V-176967
 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: Nov 19 2013 04:23 pm
 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	48.33	ppb	1.42	323281	50	96.7	90 - 110	
23 Na	45	1	5033.00	ppb	0.94	5835670	5000	100.7	90 - 110	
24 Mg	45	1	5017.00	ppb	0.74	3205052	5000	100.3	90 - 110	
27 Al	45	1	4838.00	ppb	0.99	1783406	5000	96.8	90 - 110	
39 K	45	1	5002.00	ppb	2.13	3250398	5000	100.0	90 - 110	
44 Ca	45	1	4768.00	ppb	0.27	161760	5000	95.4	90 - 110	
51 V	45	1	49.59	ppb	0.23	247135	50	99.2	90 - 110	
52 Cr	45	1	48.85	ppb	0.54	284130	50	97.7	90 - 110	
55 Mn	45	1	49.26	ppb	0.57	221871	50	98.5	90 - 110	
56 Fe	45	1	4996.00	ppb	0.84	26508350	5000	99.9	90 - 110	
59 Co	45	1	46.81	ppb	1.02	433140	50	93.6	90 - 110	
60 Ni	45	1	49.27	ppb	0.56	114111	50	98.5	90 - 110	
65 Cu	45	1	48.80	ppb	0.68	148971	50	97.6	90 - 110	
66 Zn	45	1	49.89	ppb	0.33	60168	50	99.8	90 - 110	
75 As	115	1	48.93	ppb	0.50	37848	50	97.9	90 - 110	
78 Se	115	1	49.33	ppb	1.68	4218	50	98.7	90 - 110	
83 Kr	115	2	-----	ppb	-----	577	50	#VALUE!	#####	
95 Mo	115	2	48.76	ppb	1.45	275073	50	97.5	90 - 110	
107 Ag	115	2	9.81	ppb	1.67	151011	10	98.1	90 - 110	
111 Cd	115	2	50.03	ppb	1.64	156918	50	100.1	90 - 110	
121 Sb	115	2	46.62	ppb	2.45	525577	50	93.2	90 - 110	
137 Ba	159	2	49.56	ppb	1.90	214479	50	99.1	90 - 110	
205 Tl	165	2	48.36	ppb	0.54	1313981	50	96.7	90 - 110	
206 (Pb)	165	2	49.06	ppb	1.42	425194	50	98.1	90 - 110	
207 (Pb)	165	2	50.87	ppb	2.53	365638	50	101.7	90 - 110	
208 Pb	165	2	49.57	ppb	2.14	1718617	50	99.1	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	104408	1.10	103581	100.8	80 - 120	
45 Sc	2	1492507	1.40	1500578	99.5	80 - 120	
115 In	1	599827	1.32	593101	101.1	80 - 120	
115 In	2	1683308	1.87	1675692	100.5	80 - 120	
159 Tb	1	1263975	0.59	1237356	102.2	80 - 120	
159 Tb	2	2164634	1.49	2165061	100.0	80 - 120	
165 Ho	1	1234041	1.57	1192048	103.5	80 - 120	
165 Ho	2	2088467	2.44	2108329	99.1	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\S111913B.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\S111913B.b\009_CCV.D\009_CCV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\009_CCV.D\009_CCV.D#
 Date Acquired: Nov 19 2013 04:30 pm
 Operator: GK
 Sample Name: LLICV V-176972
 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: Nov 19 2013 04:23 pm
 Sample Type: LL-ICV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.50	ppb	2.79	1	100.4	70 - 130	
23 Na	45	1	250.50	ppb	0.80	250	100.2	70 - 130	
24 Mg	45	1	264.60	ppb	1.10	250	105.8	70 - 130	
27 Al	45	1	99.59	ppb	1.00	100	99.6	70 - 130	
39 K	45	1	254.40	ppb	1.42	250	101.8	70 - 130	
44 Ca	45	1	240.70	ppb	1.40	250	96.3	70 - 130	
51 V	45	1	1.00	ppb	1.95	1	100.2	70 - 130	
52 Cr	45	1	0.99	ppb	1.15	1	99.1	70 - 130	
55 Mn	45	1	2.82	ppb	1.66	3	94.0	70 - 130	
56 Fe	45	1	155.80	ppb	0.70	150	103.9	70 - 130	
59 Co	45	1	1.01	ppb	0.77	1	100.5	70 - 130	
60 Ni	45	1	1.50	ppb	2.66	2	100.2	70 - 130	
65 Cu	45	1	4.85	ppb	1.52	5	96.9	70 - 130	
66 Zn	45	1	9.81	ppb	0.95	10	98.1	70 - 130	
75 As	115	1	1.03	ppb	4.35	1	103.2	70 - 130	
78 Se	115	1	4.80	ppb	3.85	5	96.0	70 - 130	
83 Kr	115	2	-----	ppb	-----	1	#VALUE!	##### - #####	
95 Mo	115	2	0.99	ppb	5.96	1	98.9	70 - 130	
107 Ag	115	2	0.50	ppb	1.70	1	100.3	70 - 130	
111 Cd	115	2	1.03	ppb	2.20	1	102.5	70 - 130	
121 Sb	115	2	1.12	ppb	1.99	1	112.3	70 - 130	
137 Ba	159	2	2.45	ppb	3.80	3	98.2	70 - 130	
205 Tl	165	2	0.96	ppb	1.31	1	95.6	70 - 130	
206 (Pb)	165	2	1.36	ppb	3.73	2	90.9	70 - 130	
207 (Pb)	165	2	1.41	ppb	2.72	2	93.8	70 - 130	
208 Pb	165	2	1.33	ppb	3.50	2	88.9	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	103401	1.35	103581	99.8	80 - 120	
45 Sc	2	1485116	1.21	1500578	99.0	80 - 120	
115 In	1	596766	1.08	593101	100.6	80 - 120	
115 In	2	1714753	0.56	1675692	102.3	80 - 120	
159 Tb	1	1249115	1.08	1237356	101.0	80 - 120	
159 Tb	2	2190631	0.80	2165061	101.2	80 - 120	
165 Ho	1	1203224	1.69	1192048	100.9	80 - 120	
165 Ho	2	2122570	0.84	2108329	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\S111913B.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\S111913B.b\010_ICB.D\010_ICB.D#

Initial Calibration Blank (ICB) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\010_ICB.D\010_ICB.D#
 Date Acquired: Nov 19 2013 04:36 pm
 Operator: GK
 Sample Name: ICB V-176968
 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: Nov 19 2013 04:23 pm
 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	0.02	ppb	15.49	231	0.50	
23 Na	45	1	5.30	ppb	43.65	145364	250.00	
24 Mg	45	1	3.14	ppb	50.37	4206	250.00	
27 Al	45	1	24.08	ppb	6.12	10920	100.00	
39 K	45	1	7.65	ppb	31.08	69019	250.00	
44 Ca	45	1	50.91	ppb	5.98	2307	250.00	
51 V	45	1	0.03	ppb	50.54	302	1.00	
52 Cr	45	1	0.05	ppb	22.08	1072	1.00	
55 Mn	45	1	-0.07	ppb	87.63	989	3.00	
56 Fe	45	1	-0.67	ppb	517.79	76780	150.00	
59 Co	45	1	0.03	ppb	36.56	433	1.00	
60 Ni	45	1	0.03	ppb	51.28	160	1.50	
65 Cu	45	1	0.23	ppb	1.57	1558	5.00	
66 Zn	45	1	0.51	ppb	5.99	1322	10.00	
75 As	115	1	0.03	ppb	37.43	45	1.00	
78 Se	115	1	-0.25	ppb	94.35	212	5.00	
83 Kr	115	2	-----	ppb	-----	552	1.00	
95 Mo	115	2	0.03	ppb	9.67	231	1.00	
107 Ag	115	2	0.01	ppb	24.71	368	0.50	
111 Cd	115	2	0.02	ppb	23.78	109	1.00	
121 Sb	115	2	0.07	ppb	8.81	970	1.00	
137 Ba	159	2	0.03	ppb	32.18	588	2.50	
205 Tl	165	2	0.02	ppb	9.72	1050	1.00	
206 (Pb)	165	2	-0.07	ppb	9.70	1784	1.50	
207 (Pb)	165	2	-0.09	ppb	21.48	1461	1.50	
208 Pb	165	2	-0.08	ppb	3.80	6893	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	104090	0.20	103581	100.5	80 - 120	
45 Sc	2	1479686	0.84	1500578	98.6	80 - 120	
115 In	1	602123	1.14	593101	101.5	80 - 120	
115 In	2	1715192	2.16	1675692	102.4	80 - 120	
159 Tb	1	1262276	0.66	1237356	102.0	80 - 120	
159 Tb	2	2192693	0.99	2165061	101.3	80 - 120	
165 Ho	1	1227452	3.40	1192048	103.0	80 - 120	
165 Ho	2	2149927	0.99	2108329	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\S111913B.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\S111913B.b\011ICSA.D\011ICSA.D#

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\011ICSA.D\011ICSA.D#
 Date Acquired: Nov 19 2013 04:42 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: ICSA V-176969
 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: Nov 19 2013 04:23 pm
 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	0.03 ppb	13.77	0.50	
23 Na	45	1	120700.00 ppb	0.53	250.00	
24 Mg	45	1	47740.00 ppb	0.23	250.00	
27 Al	45	1	46040.00 ppb	1.65	100.00	
39 K	45	1	47680.00 ppb	0.68	250.00	
44 Ca	45	1	141800.00 ppb	0.89	250.00	
51 V	45	1	0.06 ppb	17.96	1.00	
52 Cr	45	1	0.76 ppb	2.43	1.00	
55 Mn	45	1	4.31 ppb	1.97	3.00	**
56 Fe	45	1	116800.00 ppb	0.73	150.00	
59 Co	45	1	1.75 ppb	1.93	1.00	**
60 Ni	45	1	3.15 ppb	1.97	1.50	**
65 Cu	45	1	1.23 ppb	1.34	5.00	
66 Zn	45	1	1.22 ppb	4.61	10.00	
75 As	115	1	0.26 ppb	7.17	1.00	
78 Se	115	1	-0.16 ppb	70.17	5.00	
83 Kr	115	2	----- ppb	-----	1.00	
95 Mo	115	2	1003.00 ppb	0.59	1.00	
107 Ag	115	2	0.04 ppb	5.17	0.50	
111 Cd	115	2	1.14 ppb	1.33	1.00	**
121 Sb	115	2	0.29 ppb	6.23	1.00	
137 Ba	159	2	0.90 ppb	5.03	2.50	
205 Tl	165	2	0.04 ppb	5.59	1.00	
206 (Pb)	165	2	0.05 ppb	39.18	1.50	
207 (Pb)	165	2	0.04 ppb	23.07	1.50	
208 Pb	165	2	0.04 ppb	16.79	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	103276	0.62	103581	99.7	70 - 150	
45 Sc	2	1466257	1.32	1500578	97.7	70 - 150	
115 In	1	565315	0.30	593101	95.3	70 - 150	
115 In	2	1608617	1.53	1675692	96.0	70 - 150	
159 Tb	1	1266699	2.12	1237356	102.4	70 - 150	
159 Tb	2	2190803	0.47	2165061	101.2	70 - 150	
165 Ho	1	1232466	1.69	1192048	103.4	70 - 150	
165 Ho	2	2127423	0.52	2108329	100.9	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\S111913B.b\002CALB.D\002CALB.D#

4 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Nnumber of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S111913B.b\012ICSB.D\012ICSB.D#

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\012ICSB.D\012ICSB.D#
 Date Acquired: Nov 19 2013 04:48 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: ICSAB V-176970
 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: Nov 19 2013 04:23 pm
 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		0.02	23.76	---		-	
23 Na	45	1		120700.00	0.67	---		-	
24 Mg	45	1		47210.00	1.67	---		-	
27 Al	45	1		46350.00	1.31	---		-	
39 K	45	1		47980.00	2.12	---		-	
44 Ca	45	1		141800.00	1.78	---		-	
51 V	45	1		204.40	0.95	200	102.2	80 - 120	
52 Cr	45	1		194.50	1.00	200	97.3	80 - 120	
55 Mn	45	1		202.70	2.06	200	101.4	80 - 120	
56 Fe	45	1		116800.00	1.00	---		-	
59 Co	45	1		187.00	1.55	200	93.5	80 - 120	
60 Ni	45	1		181.20	1.57	200	90.6	80 - 120	
65 Cu	45	1		180.20	0.35	---		-	
66 Zn	45	1		89.75	0.72	100	89.8	80 - 120	
75 As	115	1		100.90	0.16	100	100.9	80 - 120	
78 Se	115	1		94.85	1.14	100	94.9	80 - 120	
83 Kr	115	2		-----		---		-	
95 Mo	115	2		980.70	1.59	---		-	
107 Ag	115	2		45.00	0.58	50	90.0	80 - 120	
111 Cd	115	2		95.76	1.10	100	95.8	80 - 120	
121 Sb	115	2		0.27	2.78	---		-	
137 Ba	159	2		0.97	2.56	---		-	
205 Tl	165	2		0.03	16.88	---		-	
206 (Pb)	165	2		0.08	43.41	---		-	
207 (Pb)	165	2		0.06	15.20	---		-	
208 Pb	165	2		0.06	37.50	---		-	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	100286	1.49	103581	96.8	70 - 150	
45 Sc	2	1423828	0.50	1500578	94.9	70 - 150	
115 In	1	553954	0.84	593101	93.4	70 - 150	
115 In	2	1565562	0.60	1675692	93.4	70 - 150	
159 Tb	1	1236953	2.44	1237356	100.0	70 - 150	
159 Tb	2	2089392	1.20	2165061	96.5	70 - 150	
165 Ho	1	1192259	1.81	1192048	100.0	70 - 150	
165 Ho	2	2014776	0.32	2108329	95.6	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\S111913B.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\S111913B.b\013_ccv.D\013_ccv.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\013_ccv.D\013_ccv.D#
 Date Acquired: Nov 19 2013 04:54 pm
 Operator: GK
 Sample Name: CCV V-176971
 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: Nov 19 2013 04:23 pm
 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	48.59	ppb	2.60	326891	50	97.2	90 - 110	
23 Na	45	1	5204.00	ppb	1.29	6020910	5000	104.1	90 - 110	
24 Mg	45	1	5150.00	ppb	1.85	3285992	5000	103.0	90 - 110	
27 Al	45	1	1518.00	ppb	1.22	560133	1500	101.2	90 - 110	
39 K	45	1	5117.00	ppb	0.79	3320086	5000	102.3	90 - 110	
44 Ca	45	1	5107.00	ppb	1.56	172994	5000	102.1	90 - 110	
51 V	45	1	50.63	ppb	1.65	251990	50	101.3	90 - 110	
52 Cr	45	1	50.43	ppb	1.88	292872	50	100.9	90 - 110	
55 Mn	45	1	51.43	ppb	1.27	231282	50	102.9	90 - 110	
56 Fe	45	1	5182.00	ppb	1.08	27460160	5000	103.6	90 - 110	
59 Co	45	1	49.76	ppb	1.68	459893	50	99.5	90 - 110	
60 Ni	45	1	51.18	ppb	1.03	118390	50	102.4	90 - 110	
65 Cu	45	1	50.83	ppb	1.17	154932	50	101.7	90 - 110	
66 Zn	45	1	51.63	ppb	2.21	62166	50	103.3	90 - 110	
75 As	115	1	50.22	ppb	0.97	39147	50	100.4	90 - 110	
78 Se	115	1	249.20	ppb	1.49	20533	250	99.7	90 - 110	
83 Kr	115	2	-----	ppb	-----	642	50	#VALUE!	#####	
95 Mo	115	2	50.84	ppb	1.20	289244	50	101.7	90 - 110	
107 Ag	115	2	50.00	ppb	0.78	775985	50	100.0	90 - 110	
111 Cd	115	2	51.14	ppb	0.65	161766	50	102.3	90 - 110	
121 Sb	115	2	49.85	ppb	1.52	566804	50	99.7	90 - 110	
137 Ba	159	2	50.33	ppb	3.05	222250	50	100.7	90 - 110	
205 Tl	165	2	49.62	ppb	2.71	1374188	50	99.2	90 - 110	
206 (Pb)	165	2	49.11	ppb	2.51	433964	50	98.2	90 - 110	
207 (Pb)	165	2	49.91	ppb	1.54	365967	50	99.8	90 - 110	
208 Pb	165	2	50.48	ppb	1.91	1784373	50	101.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	104276	0.75	103581	100.7	80 - 120	
45 Sc	2	1501529	1.66	1500578	100.1	80 - 120	
115 In	1	604474	1.96	593101	101.9	80 - 120	
115 In	2	1697457	0.80	1675692	101.3	80 - 120	
159 Tb	1	1281014	0.87	1237356	103.5	80 - 120	
159 Tb	2	2209260	1.81	2165061	102.0	80 - 120	
165 Ho	1	1257390	0.83	1192048	105.5	80 - 120	
165 Ho	2	2129568	2.10	2108329	101.0	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\S111913B.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\S111913B.b\014_CCV.D\014_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\014_CCV.D\014_CCV.D#
 Date Acquired: Nov 19 2013 04:59 pm
 Operator: GK
 Sample Name: LLCCV V-176972
 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: Nov 19 2013 04:23 pm
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.46	ppb	2.71	1	92.3	70 - 130	
23 Na	45	1	286.70	ppb	2.57	250	114.7	70 - 130	
24 Mg	45	1	278.30	ppb	1.04	250	111.3	70 - 130	
27 Al	45	1	112.00	ppb	3.15	100	112.0	70 - 130	
39 K	45	1	265.40	ppb	0.45	250	106.2	70 - 130	
44 Ca	45	1	283.00	ppb	2.36	250	113.2	70 - 130	
51 V	45	1	1.03	ppb	1.13	1	102.5	70 - 130	
52 Cr	45	1	1.03	ppb	2.36	1	103.4	70 - 130	
55 Mn	45	1	2.75	ppb	1.93	3	91.7	70 - 130	
56 Fe	45	1	193.60	ppb	4.40	150	129.1	70 - 130	
59 Co	45	1	1.00	ppb	0.57	1	100.0	70 - 130	
60 Ni	45	1	1.52	ppb	2.45	2	101.6	70 - 130	
65 Cu	45	1	4.84	ppb	0.72	5	96.8	70 - 130	
66 Zn	45	1	9.67	ppb	0.74	10	96.7	70 - 130	
75 As	115	1	1.03	ppb	1.72	1	102.6	70 - 130	
78 Se	115	1	4.67	ppb	11.57	5	93.5	70 - 130	
83 Kr	115	2	-----	ppb	-----	1	#VALUE!	##### - #####	
95 Mo	115	2	1.22	ppb	2.25	1	122.3	70 - 130	
107 Ag	115	2	0.49	ppb	1.39	1	98.4	70 - 130	
111 Cd	115	2	1.00	ppb	1.44	1	99.6	70 - 130	
121 Sb	115	2	0.97	ppb	1.24	1	96.9	70 - 130	
137 Ba	159	2	2.35	ppb	0.95	3	94.0	70 - 130	
205 Tl	165	2	0.95	ppb	0.60	1	94.8	70 - 130	
206 (Pb)	165	2	1.30	ppb	1.76	2	86.7	70 - 130	
207 (Pb)	165	2	1.31	ppb	2.56	2	87.1	70 - 130	
208 Pb	165	2	1.25	ppb	1.26	2	83.3	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	106605	0.73	103581	102.9	80 - 120	
45 Sc	2	1527190	0.30	1500578	101.8	80 - 120	
115 In	1	606735	1.20	593101	102.3	80 - 120	
115 In	2	1733505	1.77	1675692	103.5	80 - 120	
159 Tb	1	1277198	0.35	1237356	103.2	80 - 120	
159 Tb	2	2234923	2.07	2165061	103.2	80 - 120	
165 Ho	1	1240231	1.05	1192048	104.0	80 - 120	
165 Ho	2	2159731	1.79	2108329	102.4	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\S111913B.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\S111913B.b\015_CCB.D\015_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\015_CCB.D\015_CCB.D#
 Date Acquired: Nov 19 2013 05:05 pm
 Operator: GK
 Sample Name: CCB V-176968
 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: Nov 19 2013 04:23 pm
 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	42.27	158	0.50	
23 Na	45	1	29.600	ppb	13.01	176666	250.00	
24 Mg	45	1	11.050	ppb	19.04	9451	250.00	
27 Al	45	1	31.570	ppb	5.92	13977	100.00	
39 K	45	1	15.790	ppb	10.87	75859	250.00	
44 Ca	45	1	75.470	ppb	5.44	3205	250.00	
51 V	45	1	0.043	ppb	10.46	359	1.00	
52 Cr	45	1	0.064	ppb	10.70	1155	1.00	
55 Mn	45	1	-0.105	ppb	23.65	867	3.00	
56 Fe	45	1	20.460	ppb	24.49	192512	150.00	
59 Co	45	1	0.031	ppb	29.67	483	1.00	
60 Ni	45	1	0.037	ppb	19.52	176	1.50	
65 Cu	45	1	0.194	ppb	13.59	1488	5.00	
66 Zn	45	1	0.529	ppb	4.76	1378	10.00	
75 As	115	1	0.033	ppb	6.82	46	1.00	
78 Se	115	1	-0.352	ppb	57.35	207	5.00	
83 Kr	115	2	-----	ppb	-----	626	1.00	
95 Mo	115	2	0.188	ppb	4.52	1160	1.00	
107 Ag	115	2	0.015	ppb	1.71	372	0.50	
111 Cd	115	2	0.022	ppb	15.56	125	1.00	
121 Sb	115	2	0.021	ppb	7.88	361	1.00	
137 Ba	159	2	0.030	ppb	42.44	611	2.50	
205 Tl	165	2	0.013	ppb	6.06	781	1.00	
206 (Pb)	165	2	-0.063	ppb	29.00	1869	1.50	
207 (Pb)	165	2	-0.059	ppb	5.57	1638	1.50	
208 Pb	165	2	-0.059	ppb	12.32	7471	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range (%)	Flag
45 Sc	1	106429	0.84	103581	102.7	80 - 120	
45 Sc	2	1506300	0.74	1500578	100.4	80 - 120	
115 In	1	613117	1.29	593101	103.4	80 - 120	
115 In	2	1710391	1.04	1675692	102.1	80 - 120	
159 Tb	1	1284415	0.72	1237356	103.8	80 - 120	
159 Tb	2	2198907	1.69	2165061	101.6	80 - 120	
165 Ho	1	1248628	0.82	1192048	104.7	80 - 120	
165 Ho	2	2130679	1.99	2108329	101.1	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\S111913B.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\S111913B.b\016SMPL.D\016SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\016SMPL.D\016SMPL.D#
 Date Acquired: Nov 19 2013 05:11 pm
 Acq. Method: 6020AQ.M
 Operator: GK *27401* *KK 11/20*
 Sample Name: MB *27435*
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1501
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	20.49	89	2700	
23 Na	45	1		134.50	134.50	ppb	2.35	267913	225000	
24 Mg	45	1		9.08	9.08	ppb	21.78	7359	225000	
27 Al	45	1		13.09	13.09	ppb	14.23	6341	67500	
39 K	45	1		30.58	30.58	ppb	1.63	76921	225000	
44 Ca	45	1		40.77	40.77	ppb	8.13	1809	225000	
51 V	45	1		0.15	0.15	ppb	7.83	803	2700	
52 Cr	45	1		0.43	0.43	ppb	4.31	2960	2700	
55 Mn	45	1		0.49	0.49	ppb	12.08	3207	2700	
56 Fe	45	1		38.44	38.44	ppb	10.67	260564	202500	
59 Co	45	1		0.03	0.03	ppb	14.51	431	2700	
60 Ni	45	1		0.14	0.14	ppb	3.31	373	2700	
65 Cu	45	1		3.96	3.96	ppb	4.65	11822	2700	
66 Zn	45	1		2.36	2.36	ppb	5.83	3242	2700	
75 As	115	1		0.15	0.15	ppb	1.18	123	2250	
78 Se	115	1		-0.12	-0.12	ppb	64.20	203	2700	
83 Kr	115	2		----	-----	ppb	-----	611	2700	
95 Mo	115	2		0.11	0.11	ppb	4.67	662	2700	
107 Ag	115	2		0.13	0.13	ppb	0.39	1926	900	
111 Cd	115	2		0.01	0.01	ppb	23.48	77	2700	
121 Sb	115	2		0.12	0.12	ppb	9.90	1372	1125	
137 Ba	159	2		0.14	0.14	ppb	9.28	1003	1350	
205 Tl	165	2		0.03	0.03	ppb	10.31	1159	900	
206 (Pb)	165	2		0.04	0.04	ppb	35.08	2558	2700	
207 (Pb)	165	2		0.02	0.02	ppb	78.19	2051	2700	
208 Pb	165	2		0.03	0.03	ppb	37.91	9715	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	95787	1.00	103581	92.5	70 - 150	
45 Sc	2	1391309	1.01	1500578	92.7	70 - 150	
115 In	1	550297	0.85	593101	92.8	70 - 150	
115 In	2	1561030	1.01	1675692	93.2	70 - 150	
159 Tb	1	1179505	1.38	1237356	95.3	70 - 150	
159 Tb	2	2031664	3.29	2165061	93.8	70 - 150	
165 Ho	1	1148646	1.35	1192048	96.4	70 - 150	
165 Ho	2	1978921	1.32	2108329	93.9	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\S111913B.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\S111913B.b\017SMPL.D\017SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\017SMPL.D\017SMPL.D#
 Date Acquired: Nov 19 2013 05:17 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW 27435 *ok 11/20*
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1502
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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		254.90	254.90	ppb	1.51	1647732	2700	
23 Na	45	1		25,550.00	25550.00	ppb	2.44	26809690	225000	
24 Mg	45	1		24,990.00	24990.00	ppb	1.56	14726260	225000	
27 Al	45	1		2,485.00	2485.00	ppb	2.61	846259	67500	
39 K	45	1		24,530.00	24530.00	ppb	1.17	14482950	225000	
44 Ca	45	1		25,010.00	25010.00	ppb	1.24	780990	225000	
51 V	45	1		258.00	258.00	ppb	2.47	1186647	2700	
52 Cr	45	1		250.30	250.30	ppb	1.80	1341098	2700	
55 Mn	45	1		252.10	252.10	ppb	2.03	1042878	2700	
56 Fe	45	1		2,496.00	2496.00	ppb	1.88	12262000	202500	
59 Co	45	1		243.70	243.70	ppb	1.91	2081382	2700	
60 Ni	45	1		249.00	249.00	ppb	2.31	532154	2700	
65 Cu	45	1		251.30	251.30	ppb	2.04	704911	2700	
66 Zn	45	1		245.80	245.80	ppb	1.28	271049	2700	
75 As	115	1		248.00	248.00	ppb	1.66	177452	2250	
78 Se	115	1		239.60	239.60	ppb	1.10	18137	2700	
83 Kr	115	2		----	-----	ppb	-----	626	2700	
95 Mo	115	2		260.60	260.60	ppb	1.85	1390190	2700	
107 Ag	115	2		46.56	46.56	ppb	1.25	677630	900	
111 Cd	115	2		250.50	250.50	ppb	1.70	742781	2700	
121 Sb	115	2		256.00	256.00	ppb	2.06	2729151	1125	
137 Ba	159	2		252.00	252.00	ppb	0.68	1072979	1350	
205 Tl	165	2		234.50	234.50	ppb	1.12	6268187	900	
206 (Pb)	165	2		252.70	252.70	ppb	0.28	2146001	2700	
207 (Pb)	165	2		255.30	255.30	ppb	0.70	1798497	2700	
208 Pb	165	2		242.40	242.40	ppb	0.33	8236432	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	96379	2.55	103581	93.0	70 - 150	
45 Sc	2	1442822	2.66	1500578	96.2	70 - 150	
115 In	1	554990	1.53	593101	93.6	70 - 150	
115 In	2	1591763	0.87	1675692	95.0	70 - 150	
159 Tb	1	1207602	1.69	1237356	97.6	70 - 150	
159 Tb	2	2133384	2.69	2165061	98.5	70 - 150	
165 Ho	1	1186127	2.02	1192048	99.5	70 - 150	
165 Ho	2	2055168	1.98	2108329	97.5	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\S111913B.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\S111913B.b\018SMPL.D\018SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\018SMPL.D\018SMPL.D#
 Date Acquired: Nov 19 2013 05:23 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW MR 27425 *9/20/12*
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1503
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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		248.90	248.90	ppb	0.94	1530827	2700	
23 Na	45	1		24,520.00	24520.00	ppb	1.82	26748950	225000	
24 Mg	45	1		24,020.00	24020.00	ppb	2.34	14712440	225000	
27 Al	45	1		2,374.00	2374.00	ppb	2.36	840484	67500	
39 K	45	1		23,350.00	23350.00	ppb	1.83	14329140	225000	
44 Ca	45	1		23,800.00	23800.00	ppb	1.36	772083	225000	
51 V	45	1		245.80	245.80	ppb	1.58	1174223	2700	
52 Cr	45	1		240.00	240.00	ppb	2.99	1336037	2700	
55 Mn	45	1		249.00	249.00	ppb	1.83	1070263	2700	
56 Fe	45	1		2,458.00	2458.00	ppb	2.49	12549010	202500	
59 Co	45	1		239.60	239.60	ppb	1.33	2125511	2700	
60 Ni	45	1		239.70	239.70	ppb	1.82	532145	2700	
65 Cu	45	1		242.60	242.60	ppb	1.01	707045	2700	
66 Zn	45	1		240.10	240.10	ppb	1.76	275049	2700	
75 As	115	1		242.50	242.50	ppb	0.87	177857	2250	
78 Se	115	1		236.30	236.30	ppb	0.84	18338	2700	
83 Kr	115	2		----	-----	ppb	-----	604	2700	
95 Mo	115	2		252.80	252.80	ppb	2.52	1276106	2700	
107 Ag	115	2		45.78	45.78	ppb	2.04	630573	900	
111 Cd	115	2		244.90	244.90	ppb	1.52	687457	2700	
121 Sb	115	2		245.80	245.80	ppb	1.98	2479760	1125	
137 Ba	159	2		244.90	244.90	ppb	0.43	978515	1350	
205 Tl	165	2		231.70	231.70	ppb	0.42	5893959	900	
206 (Pb)	165	2		252.30	252.30	ppb	1.09	2039541	2700	
207 (Pb)	165	2		255.00	255.00	ppb	1.25	1710144	2700	
208 Pb	165	2		241.90	241.90	ppb	0.99	7821679	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	100143	0.39	103581	96.7	70 - 150	
45 Sc	2	1372779	1.82	1500578	91.5	70 - 150	
115 In	1	569013	0.38	593101	95.9	70 - 150	
115 In	2	1506674	1.64	1675692	89.9	70 - 150	
159 Tb	1	1274812	1.37	1237356	103.0	70 - 150	
159 Tb	2	2001995	0.95	2165061	92.5	70 - 150	
165 Ho	1	1249143	2.28	1192048	104.8	70 - 150	
165 Ho	2	1956027	1.07	2108329	92.8	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\S111913B.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\S111913B.b\019SMPL.D\019SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\019SMPL.D\019SMPL.D#
 Date Acquired: Nov 19 2013 05:29 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-029
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1504
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	31.10	699	2700	
23 Na	45	1	8,348.00	8348.00	ppb	8.20	8214121	225000	
24 Mg	45	1	2,222.00	2222.00	ppb	8.20	1217164	225000	
27 Al	45	1	60.80	60.80	ppb	7.66	20984	67500	
39 K	45	1	1,426.00	1426.00	ppb	9.99	832866	225000	
44 Ca	45	1	15,450.00	15450.00	ppb	9.27	447738	225000	
51 V	45	1	0.35	0.35	ppb	9.00	1616	2700	
52 Cr	45	1	33.03	33.03	ppb	9.59	164690	2700	
55 Mn	45	1	2.40	2.40	ppb	6.05	10351	2700	
56 Fe	45	1	46.01	46.01	ppb	6.19	278333	202500	
59 Co	45	1	0.18	0.18	ppb	10.02	1572	2700	
60 Ni	45	1	0.84	0.84	ppb	8.33	1744	2700	
65 Cu	45	1	3.02	3.02	ppb	4.78	8614	2700	
66 Zn	45	1	6.77	6.77	ppb	8.89	7528	2700	
75 As	115	1	0.31	0.31	ppb	7.29	232	2250	
78 Se	115	1	-0.08	-0.08	ppb	431.39	199	2700	
83 Kr	115	2	----	-----	ppb	-----	616	2700	
95 Mo	115	2	1.88	1.88	ppb	7.23	9582	2700	
107 Ag	115	2	0.09	0.09	ppb	13.39	1329	900	
111 Cd	115	2	0.76	0.76	ppb	6.25	2176	2700	
121 Sb	115	2	0.23	0.23	ppb	10.12	2389	1125	
137 Ba	159	2	15.75	15.75	ppb	3.90	61870	1350	
205 Tl	165	2	0.32	0.32	ppb	12.96	8267	900	
206 (Pb)	165	2	0.84	0.84	ppb	7.15	8673	2700	
207 (Pb)	165	2	0.82	0.82	ppb	4.59	7141	2700	
208 Pb	165	2	0.80	0.80	ppb	5.72	33389	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89850	8.09	103581	86.7	70 - 150	
45 Sc	2	1334320	3.94	1500578	88.9	70 - 150	
115 In	1	535381	8.07	593101	90.3	70 - 150	
115 In	2	1509224	2.53	1675692	90.1	70 - 150	
159 Tb	1	1185939	8.21	1237356	95.8	70 - 150	
159 Tb	2	1956882	2.75	2165061	90.4	70 - 150	
165 Ho	1	1170605	8.88	1192048	98.2	70 - 150	
165 Ho	2	1892887	3.18	2108329	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\S111913B.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\S111913B.b\020SMPL.D\020SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\020SMPL.D\020SMPL.D#
 Date Acquired: Nov 19 2013 05:34 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-029 MR
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1505
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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		0.07	0.07	ppb	1.60	471	2700	
23 Na	45	1		8,582.00	8582.00	ppb	0.68	8432800	225000	
24 Mg	45	1		2,302.00	2302.00	ppb	0.92	1260056	225000	
27 Al	45	1		69.20	69.20	ppb	3.21	23588	67500	
39 K	45	1		1,434.00	1434.00	ppb	2.45	836737	225000	
44 Ca	45	1		15,870.00	15870.00	ppb	2.00	459630	225000	
51 V	45	1		0.34	0.34	ppb	3.87	1559	2700	
52 Cr	45	1		34.00	34.00	ppb	1.43	169448	2700	
55 Mn	45	1		2.58	2.58	ppb	4.13	10999	2700	
56 Fe	45	1		55.22	55.22	ppb	5.52	318894	202500	
59 Co	45	1		0.15	0.15	ppb	5.13	1363	2700	
60 Ni	45	1		1.65	1.65	ppb	2.46	3338	2700	
65 Cu	45	1		2.67	2.67	ppb	1.84	7687	2700	
66 Zn	45	1		6.71	6.71	ppb	2.25	7458	2700	
75 As	115	1		0.26	0.26	ppb	6.12	201	2250	
78 Se	115	1		-0.10	-0.10	ppb	119.94	200	2700	
83 Kr	115	2		----	-----	ppb	-----	521	2700	
95 Mo	115	2		1.87	1.87	ppb	3.38	9634	2700	
107 Ag	115	2		0.07	0.07	ppb	0.23	1108	900	
111 Cd	115	2		0.73	0.73	ppb	1.83	2118	2700	
121 Sb	115	2		0.15	0.15	ppb	9.07	1689	1125	
137 Ba	159	2		15.68	15.68	ppb	1.38	62575	1350	
205 Tl	165	2		0.13	0.13	ppb	3.87	3534	900	
206 (Pb)	165	2		0.78	0.78	ppb	1.74	8369	2700	
207 (Pb)	165	2		0.74	0.74	ppb	2.98	6752	2700	
208 Pb	165	2		0.74	0.74	ppb	0.24	32201	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89363	1.02	103581	86.3	70 - 150	
45 Sc	2	1342910	2.61	1500578	89.5	70 - 150	
115 In	1	538717	0.17	593101	90.8	70 - 150	
115 In	2	1527219	1.92	1675692	91.1	70 - 150	
159 Tb	1	1196064	1.63	1237356	96.7	70 - 150	
159 Tb	2	1986506	0.85	2165061	91.8	70 - 150	
165 Ho	1	1165551	0.95	1192048	97.8	70 - 150	
165 Ho	2	1926809	0.98	2108329	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\S111913B.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\S111913B.b\021SMPL.D\021SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\021SMPL.D\021SMPL.D#
 Date Acquired: Nov 19 2013 05:40 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-029 SD
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1509
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	6.09	441	2700	
23 Na	45	1	1,651.00	1651.00	ppb	1.36	1911294	225000	
24 Mg	45	1	418.90	418.90	ppb	0.96	256727	225000	
27 Al	45	1	11.62	11.62	ppb	2.88	6061	67500	
39 K	45	1	293.70	293.70	ppb	0.52	239369	225000	
44 Ca	45	1	2,897.00	2897.00	ppb	1.52	93783	225000	
51 V	45	1	0.11	0.11	ppb	3.42	643	2700	
52 Cr	45	1	6.16	6.16	ppb	0.79	34711	2700	
55 Mn	45	1	0.69	0.69	ppb	3.65	4187	2700	
56 Fe	45	1	6.98	6.98	ppb	6.61	111869	202500	
59 Co	45	1	0.08	0.08	ppb	8.75	905	2700	
60 Ni	45	1	0.42	0.42	ppb	3.87	998	2700	
65 Cu	45	1	1.40	1.40	ppb	3.59	4881	2700	
66 Zn	45	1	5.58	5.58	ppb	0.31	7010	2700	
75 As	115	1	0.12	0.12	ppb	7.24	114	2250	
78 Se	115	1	-0.45	-0.45	ppb	27.83	194	2700	
83 Kr	115	2	-----	-----	ppb	-----	590	2700	
95 Mo	115	2	2.06	2.06	ppb	3.11	11652	2700	
107 Ag	115	2	0.02	0.02	ppb	17.87	461	900	
111 Cd	115	2	0.18	0.18	ppb	4.04	615	2700	
121 Sb	115	2	0.08	0.08	ppb	7.17	1043	1125	
137 Ba	159	2	2.96	2.96	ppb	1.04	13439	1350	
205 Tl	165	2	0.09	0.09	ppb	2.31	2889	900	
206 (Pb)	165	2	0.37	0.37	ppb	4.69	5647	2700	
207 (Pb)	165	2	0.35	0.35	ppb	2.36	4626	2700	
208 Pb	165	2	0.36	0.36	ppb	3.28	21967	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	99395	0.90	103581	96.0	70 - 150	
45 Sc	2	1457492	0.64	1500578	97.1	70 - 150	
115 In	1	597967	1.30	593101	100.8	70 - 150	
115 In	2	1674595	2.50	1675692	99.9	70 - 150	
159 Tb	1	1309205	0.79	1237356	105.8	70 - 150	
159 Tb	2	2195174	0.90	2165061	101.4	70 - 150	
165 Ho	1	1263736	1.02	1192048	106.0	70 - 150	
165 Ho	2	2118112	2.04	2108329	100.5	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\S111913B.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\S111913B.b\022SMPL.D\022SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\022SMPL.D\022SMPL.D#
 Date Acquired: Nov 19 2013 05:46 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-031 MS 1
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1506
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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		275.40	275.40	ppb	0.32	1642442	2700	
23 Na	45	1		36,100.00	36100.00	ppb	1.80	34999728	225000	
24 Mg	45	1		28,850.00	28850.00	ppb	1.57	15727190	225000	
27 Al	45	1		2,703.00	2703.00	ppb	0.80	851536	67500	
39 K	45	1		26,870.00	26870.00	ppb	1.74	14672660	225000	
44 Ca	45	1		42,290.00	42290.00	ppb	1.34	1221162	225000	
51 V	45	1		274.70	274.70	ppb	1.01	1168087	2700	
52 Cr	45	1		298.10	298.10	ppb	0.80	1476757	2700	
55 Mn	45	1		275.60	275.60	ppb	1.19	1054753	2700	
56 Fe	45	1		2,797.00	2797.00	ppb	2.17	12701480	202500	
59 Co	45	1		263.30	263.30	ppb	1.77	2079432	2700	
60 Ni	45	1		267.90	267.90	ppb	1.50	529430	2700	
65 Cu	45	1		271.20	271.20	ppb	1.13	703332	2700	
66 Zn	45	1		265.60	265.60	ppb	0.99	270774	2700	
75 As	115	1		260.90	260.90	ppb	1.01	174916	2250	
78 Se	115	1		251.10	251.10	ppb	1.67	17805	2700	
83 Kr	115	2		----	-----	ppb	-----	644	2700	
95 Mo	115	2		279.40	279.40	ppb	1.08	1372477	2700	
107 Ag	115	2		49.24	49.24	ppb	2.26	659844	900	
111 Cd	115	2		264.80	264.80	ppb	0.49	723306	2700	
121 Sb	115	2		267.70	267.70	ppb	2.11	2628138	1125	
137 Ba	159	2		281.40	281.40	ppb	0.77	1108689	1350	
205 Tl	165	2		253.60	253.60	ppb	1.45	6354857	900	
206 (Pb)	165	2		277.90	277.90	ppb	1.10	2212066	2700	
207 (Pb)	165	2		281.20	281.20	ppb	0.78	1857002	2700	
208 Pb	165	2		267.80	267.80	ppb	0.81	8528283	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89140	0.48	103581	86.1	70 - 150	
45 Sc	2	1331103	1.23	1500578	88.7	70 - 150	
115 In	1	520193	1.60	593101	87.7	70 - 150	
115 In	2	1465955	1.26	1675692	87.5	70 - 150	
159 Tb	1	1203429	1.32	1237356	97.3	70 - 150	
159 Tb	2	1973893	0.99	2165061	91.2	70 - 150	
165 Ho	1	1187497	1.18	1192048	99.6	70 - 150	
165 Ho	2	1926598	0.64	2108329	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\S111913B.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\S111913B.b\023SMPL.D\023SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\023SMPL.D\023SMPL.D#
 Date Acquired: Nov 19 2013 05:52 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-033 MS 2
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1507
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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		240.80	240.80	ppb	1.15	1473350	2700	
23 Na	45	1		30,560.00	30560.00	ppb	1.93	30636800	225000	
24 Mg	45	1		24,430.00	24430.00	ppb	1.53	13762720	225000	
27 Al	45	1		2,293.00	2293.00	ppb	1.90	746855	67500	
39 K	45	1		23,280.00	23280.00	ppb	1.67	13143910	225000	
44 Ca	45	1		36,260.00	36260.00	ppb	1.80	1081988	225000	
51 V	45	1		242.70	242.70	ppb	1.08	1066739	2700	
52 Cr	45	1		261.90	261.90	ppb	0.50	1341177	2700	
55 Mn	45	1		240.60	240.60	ppb	0.29	951579	2700	
56 Fe	45	1		2,433.00	2433.00	ppb	0.83	11428540	202500	
59 Co	45	1		228.20	228.20	ppb	0.87	1862442	2700	
60 Ni	45	1		231.20	231.20	ppb	1.35	472144	2700	
65 Cu	45	1		236.30	236.30	ppb	3.42	633394	2700	
66 Zn	45	1		234.10	234.10	ppb	1.73	246706	2700	
75 As	115	1		229.70	229.70	ppb	0.51	159142	2250	
78 Se	115	1		221.00	221.00	ppb	1.02	16214	2700	
83 Kr	115	2		----	-----	ppb	-----	554	2700	
95 Mo	115	2		241.80	241.80	ppb	1.37	1208114	2700	
107 Ag	115	2		42.76	42.76	ppb	0.93	582932	900	
111 Cd	115	2		231.30	231.30	ppb	0.24	642588	2700	
121 Sb	115	2		236.90	236.90	ppb	2.19	2366024	1125	
137 Ba	159	2		242.40	242.40	ppb	0.20	972147	1350	
205 Tl	165	2		220.40	220.40	ppb	1.86	5617725	900	
206 (Pb)	165	2		242.90	242.90	ppb	1.94	1967225	2700	
207 (Pb)	165	2		248.70	248.70	ppb	2.22	1670990	2700	
208 Pb	165	2		235.50	235.50	ppb	1.75	7630884	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	92132	1.36	103581	88.9	70 - 150	
45 Sc	2	1365262	0.70	1500578	91.0	70 - 150	
115 In	1	537415	0.49	593101	90.6	70 - 150	
115 In	2	1490929	1.10	1675692	89.0	70 - 150	
159 Tb	1	1245866	0.90	1237356	100.7	70 - 150	
159 Tb	2	2009247	1.64	2165061	92.8	70 - 150	
165 Ho	1	1227836	1.04	1192048	103.0	70 - 150	
165 Ho	2	1960112	1.44	2108329	93.0	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\S111913B.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\S111913B.b\024SMPL.D\024SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\024SMPL.D\024SMPL.D#
 Date Acquired: Nov 19 2013 05:58 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-029 PS
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1508
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	50.59	50.59	ppb	2.57	314798	2700	
23 Na	45	1	13,050.00	13050.00	ppb	0.86	13022130	225000	
24 Mg	45	1	7,193.00	7193.00	ppb	1.22	4012927	225000	
27 Al	45	1	1,510.00	1510.00	ppb	1.01	487266	67500	
39 K	45	1	6,130.00	6130.00	ppb	0.11	3467643	225000	
44 Ca	45	1	19,440.00	19440.00	ppb	1.20	574444	225000	
51 V	45	1	51.08	51.08	ppb	1.28	222348	2700	
52 Cr	45	1	82.46	82.46	ppb	1.13	418434	2700	
55 Mn	45	1	52.75	52.75	ppb	0.61	207448	2700	
56 Fe	45	1	5,208.00	5208.00	ppb	1.59	24135770	202500	
59 Co	45	1	51.12	51.12	ppb	1.55	413213	2700	
60 Ni	45	1	52.77	52.77	ppb	1.77	106752	2700	
65 Cu	45	1	55.89	55.89	ppb	1.40	148894	2700	
66 Zn	45	1	56.57	56.57	ppb	0.50	59504	2700	
75 As	115	1	49.25	49.25	ppb	0.90	34526	2250	
78 Se	115	1	232.60	232.60	ppb	1.33	17249	2700	
83 Kr	115	2	----	-----	ppb	-----	553	2700	
95 Mo	115	2	51.66	51.66	ppb	2.96	268034	2700	
107 Ag	115	2	48.22	48.22	ppb	4.22	682353	900	
111 Cd	115	2	50.08	50.08	ppb	3.32	144437	2700	
121 Sb	115	2	48.95	48.95	ppb	2.80	507644	1125	
137 Ba	159	2	62.84	62.84	ppb	2.53	260715	1350	
205 Tl	165	2	50.32	50.32	ppb	1.54	1342540	900	
206 (Pb)	165	2	49.54	49.54	ppb	2.23	421690	2700	
207 (Pb)	165	2	49.09	49.09	ppb	2.00	346730	2700	
208 Pb	165	2	47.96	47.96	ppb	2.40	1633329	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	91201	1.03	103581	88.0	70 - 150	
45 Sc	2	1388770	1.85	1500578	92.5	70 - 150	
115 In	1	543665	0.88	593101	91.7	70 - 150	
115 In	2	1548874	3.19	1675692	92.4	70 - 150	
159 Tb	1	1241835	1.98	1237356	100.4	70 - 150	
159 Tb	2	2076772	2.46	2165061	95.9	70 - 150	
165 Ho	1	1226837	1.09	1192048	102.9	70 - 150	
165 Ho	2	2051437	2.22	2108329	97.3	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\S111913B.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\S111913B.b\025SMPL.D\025SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\025SMPL.D\025SMPL.D#
 Date Acquired: Nov 19 2013 06:04 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: Nov 19 2013 04:23 pm
 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		0.84	0.84	ppb	1.82	6173	2700	
23 Na	45	1		241.20	241.20	ppb	1.48	425633	225000	
24 Mg	45	1		169.40	169.40	ppb	1.74	113802	225000	
27 Al	45	1		119.90	119.90	ppb	0.52	47670	67500	
39 K	45	1		134.00	134.00	ppb	1.41	154412	225000	
44 Ca	45	1		351.40	351.40	ppb	0.94	12862	225000	
51 V	45	1		1.20	1.20	ppb	2.87	6320	2700	
52 Cr	45	1		1.23	1.23	ppb	2.94	8128	2700	
55 Mn	45	1		4.36	4.36	ppb	1.01	21472	2700	
56 Fe	45	1		355.90	355.90	ppb	0.90	2024430	202500	
59 Co	45	1		0.98	0.98	ppb	3.03	9552	2700	
60 Ni	45	1		1.08	1.08	ppb	1.60	2675	2700	
65 Cu	45	1		1.63	1.63	ppb	4.71	6008	2700	
66 Zn	45	1		3.20	3.20	ppb	1.27	4681	2700	
75 As	115	1		0.90	0.90	ppb	3.42	774	2250	
78 Se	115	1		0.70	0.70	ppb	15.42	312	2700	
83 Kr	115	2		----	-----	ppb	-----	587	2700	
95 Mo	115	2		1.94	1.94	ppb	1.92	12177	2700	
107 Ag	115	2		0.41	0.41	ppb	0.37	7059	900	
111 Cd	115	2		1.29	1.29	ppb	1.40	4535	2700	
121 Sb	115	2		0.84	0.84	ppb	3.40	10540	1125	
137 Ba	159	2		1.61	1.61	ppb	3.15	8394	1350	
205 Tl	165	2		1.00	1.00	ppb	0.95	31618	900	
206 (Pb)	165	2		2.25	2.25	ppb	2.50	24911	2700	
207 (Pb)	165	2		2.22	2.22	ppb	5.43	20485	2700	
208 Pb	165	2		2.17	2.17	ppb	3.15	96389	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	107672	0.70	103581	103.9	70 - 150	
45 Sc	2	1620926	1.58	1500578	108.0	70 - 150	
115 In	1	651323	0.46	593101	109.8	70 - 150	
115 In	2	1861694	0.84	1675692	111.1	70 - 150	
159 Tb	1	1454399	0.38	1237356	117.5	70 - 150	
159 Tb	2	2451557	1.38	2165061	113.2	70 - 150	
165 Ho	1	1430373	0.97	1192048	120.0	70 - 150	
165 Ho	2	2389593	1.28	2108329	113.3	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\S111913B.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\S111913B.b\026_CCV.D\026_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\026_CCV.D\026_CCV.D#
 Date Acquired: Nov 19 2013 06:10 pm
 Operator: GK
 Sample Name: CCV V-176971
 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: Nov 19 2013 04:23 pm
 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	49.70	ppb	1.21	347356	50	99.4	90 - 110	
23 Na	45	1	5091.00	ppb	0.66	5930886	5000	101.8	90 - 110	
24 Mg	45	1	5081.00	ppb	0.21	3262632	5000	101.6	90 - 110	
27 Al	45	1	1479.00	ppb	0.47	549518	1500	98.6	90 - 110	
39 K	45	1	4918.00	ppb	1.68	3214190	5000	98.4	90 - 110	
44 Ca	45	1	4920.00	ppb	1.58	167787	5000	98.4	90 - 110	
51 V	45	1	50.47	ppb	1.49	252834	50	100.9	90 - 110	
52 Cr	45	1	50.93	ppb	0.86	297698	50	101.9	90 - 110	
55 Mn	45	1	50.85	ppb	0.91	230163	50	101.7	90 - 110	
56 Fe	45	1	5173.00	ppb	1.63	27585120	5000	103.5	90 - 110	
59 Co	45	1	50.85	ppb	0.77	473023	50	101.7	90 - 110	
60 Ni	45	1	52.23	ppb	0.45	121585	50	104.5	90 - 110	
65 Cu	45	1	52.18	ppb	0.66	160052	50	104.4	90 - 110	
66 Zn	45	1	51.61	ppb	0.95	62538	50	103.2	90 - 110	
75 As	115	1	48.21	ppb	0.75	39184	50	96.4	90 - 110	
78 Se	115	1	235.90	ppb	1.64	20280	250	94.4	90 - 110	
83 Kr	115	2	-----	ppb	-----	578	50	#VALUE!	##### - #####	
95 Mo	115	2	50.01	ppb	2.49	300917	50	100.0	90 - 110	
107 Ag	115	2	49.07	ppb	1.33	805674	50	98.1	90 - 110	
111 Cd	115	2	49.89	ppb	1.97	166908	50	99.8	90 - 110	
121 Sb	115	2	48.75	ppb	1.97	586215	50	97.5	90 - 110	
137 Ba	159	2	48.62	ppb	0.58	230541	50	97.2	90 - 110	
205 Tl	165	2	51.77	ppb	0.77	1573990	50	103.5	90 - 110	
206 (Pb)	165	2	50.99	ppb	1.09	494523	50	102.0	90 - 110	
207 (Pb)	165	2	50.17	ppb	0.73	403788	50	100.3	90 - 110	
208 Pb	165	2	50.69	ppb	1.03	1966657	50	101.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	104949	0.96	103581	101.3	80 - 120	
45 Sc	2	1559384	1.13	1500578	103.9	80 - 120	
115 In	1	630331	1.50	593101	106.3	80 - 120	
115 In	2	1795483	1.83	1675692	107.1	80 - 120	
159 Tb	1	1404570	1.49	1237356	113.5	80 - 120	
159 Tb	2	2371129	0.78	2165061	109.5	80 - 120	
165 Ho	1	1374242	1.43	1192048	115.3	80 - 120	
165 Ho	2	2337202	1.22	2108329	110.9	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\S111913B.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\S111913B.b\027_CCV.D\027_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\027_CCV.D\027_CCV.D#
 Date Acquired: Nov 19 2013 06:15 pm
 Operator: GK
 Sample Name: LLCCV V-176972
 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: Nov 19 2013 04:23 pm
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.53	ppb	2.43	1	106.2	70 - 130	
23 Na	45	1	243.10	ppb	0.71	250	97.2	70 - 130	
24 Mg	45	1	265.60	ppb	0.97	250	106.2	70 - 130	
27 Al	45	1	96.04	ppb	1.20	100	96.0	70 - 130	
39 K	45	1	238.20	ppb	0.45	250	95.3	70 - 130	
44 Ca	45	1	240.80	ppb	0.79	250	96.3	70 - 130	
51 V	45	1	1.00	ppb	2.64	1	99.6	70 - 130	
52 Cr	45	1	1.03	ppb	1.42	1	103.0	70 - 130	
55 Mn	45	1	2.74	ppb	1.90	3	91.4	70 - 130	
56 Fe	45	1	154.70	ppb	0.31	150	103.1	70 - 130	
59 Co	45	1	1.03	ppb	1.84	1	102.5	70 - 130	
60 Ni	45	1	1.55	ppb	1.92	2	103.4	70 - 130	
65 Cu	45	1	4.91	ppb	2.21	5	98.3	70 - 130	
66 Zn	45	1	9.82	ppb	1.28	10	98.2	70 - 130	
75 As	115	1	0.97	ppb	3.58	1	96.5	70 - 130	
78 Se	115	1	3.91	ppb	9.71	5	78.3	70 - 130	
83 Kr	115	2	-----	ppb	-----	1	#VALUE!	##### - #####	
95 Mo	115	2	1.02	ppb	2.86	1	101.8	70 - 130	
107 Ag	115	2	0.48	ppb	5.10	1	96.5	70 - 130	
111 Cd	115	2	1.00	ppb	1.85	1	100.1	70 - 130	
121 Sb	115	2	0.99	ppb	2.69	1	99.5	70 - 130	
137 Ba	159	2	2.34	ppb	0.72	3	93.7	70 - 130	
205 Tl	165	2	1.02	ppb	2.42	1	101.8	70 - 130	
206 (Pb)	165	2	1.34	ppb	2.60	2	89.5	70 - 130	
207 (Pb)	165	2	1.40	ppb	3.31	2	93.3	70 - 130	
208 Pb	165	2	1.32	ppb	2.67	2	88.2	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	106100	0.26	103581	102.4	80 - 120	
45 Sc	2	1559114	0.60	1500578	103.9	80 - 120	
115 In	1	640733	0.72	593101	108.0	80 - 120	
115 In	2	1818322	1.64	1675692	108.5	80 - 120	
159 Tb	1	1409422	0.26	1237356	113.9	80 - 120	
159 Tb	2	2379462	0.53	2165061	109.9	80 - 120	
165 Ho	1	1371223	0.28	1192048	115.0	80 - 120	
165 Ho	2	2318154	1.23	2108329	110.0	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\S111913B.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\S111913B.b\028_CCB.D\028_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\028_CCB.D\028_CCB.D#
 Date Acquired: Nov 19 2013 06:21 pm
 Operator: GK
 Sample Name: CCB V-176968
 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: Nov 19 2013 04:23 pm
 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	0.039	ppb	13.81	349	0.50	
23 Na	45	1	1.351	ppb	55.92	140579	250.00	
24 Mg	45	1	5.429	ppb	17.57	5652	250.00	
27 Al	45	1	22.600	ppb	1.43	10353	100.00	
39 K	45	1	3.029	ppb	17.74	65931	250.00	
44 Ca	45	1	54.620	ppb	3.03	2426	250.00	
51 V	45	1	0.043	ppb	14.91	350	1.00	
52 Cr	45	1	0.082	ppb	18.61	1226	1.00	
55 Mn	45	1	-0.133	ppb	4.16	721	3.00	
56 Fe	45	1	-3.546	ppb	23.54	61490	150.00	
59 Co	45	1	0.047	ppb	20.95	620	1.00	
60 Ni	45	1	0.047	ppb	15.77	195	1.50	
65 Cu	45	1	0.233	ppb	13.39	1569	5.00	
66 Zn	45	1	0.489	ppb	8.06	1297	10.00	
75 As	115	1	0.035	ppb	14.51	48	1.00	
78 Se	115	1	-0.685	ppb	16.92	184	5.00	
83 Kr	115	2	-----	ppb	-----	568	1.00	
95 Mo	115	2	0.065	ppb	13.79	482	1.00	
107 Ag	115	2	0.015	ppb	11.48	391	0.50	
111 Cd	115	2	0.037	ppb	13.49	181	1.00	
121 Sb	115	2	0.051	ppb	15.81	750	1.00	
137 Ba	159	2	0.034	ppb	40.81	680	2.50	
205 Tl	165	2	0.074	ppb	6.92	2670	1.00	
206 (Pb)	165	2	-0.056	ppb	11.41	2097	1.50	
207 (Pb)	165	2	-0.051	ppb	34.11	1837	1.50	
208 Pb	165	2	-0.054	ppb	10.98	8315	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	103845	0.48	103581	100.3	80 - 120	
45 Sc	2	1535135	1.38	1500578	102.3	80 - 120	
115 In	1	630345	0.78	593101	106.3	80 - 120	
115 In	2	1815500	1.80	1675692	108.3	80 - 120	
159 Tb	1	1374201	0.65	1237356	111.1	80 - 120	
159 Tb	2	2374379	1.14	2165061	109.7	80 - 120	
165 Ho	1	1346433	1.67	1192048	113.0	80 - 120	
165 Ho	2	2309766	0.81	2108329	109.6	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\S111913B.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\S111913B.b\029SMPL.D\029SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\029SMPL.D\029SMPL.D#
 Date Acquired: Nov 19 2013 06:27 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-001
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1510
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	21.52	358	2700	
23 Na	45	1		21,590.00	21590.00	ppb	0.54	22382710	225000	
24 Mg	45	1		2,490.00	2490.00	ppb	0.67	1449566	225000	
27 Al	45	1		251.90	251.90	ppb	0.43	86365	67500	
39 K	45	1		1,857.00	1857.00	ppb	0.93	1136050	225000	
44 Ca	45	1		14,530.00	14530.00	ppb	1.43	447836	225000	
51 V	45	1		0.90	0.90	ppb	2.37	4217	2700	
52 Cr	45	1		74.12	74.12	ppb	0.70	392261	2700	
55 Mn	45	1		3.40	3.40	ppb	2.71	15084	2700	
56 Fe	45	1		375.40	375.40	ppb	1.46	1882042	202500	
59 Co	45	1		0.40	0.40	ppb	0.46	3560	2700	
60 Ni	45	1		2.58	2.58	ppb	1.00	5518	2700	
65 Cu	45	1		10.73	10.73	ppb	2.27	30457	2700	
66 Zn	45	1		18.99	18.99	ppb	1.50	21266	2700	
75 As	115	1		0.38	0.38	ppb	6.61	300	2250	
78 Se	115	1		-0.30	-0.30	ppb	30.00	199	2700	
83 Kr	115	2		-----	-----	ppb	-----	572	2700	
95 Mo	115	2		8.55	8.55	ppb	1.61	46641	2700	
107 Ag	115	2		0.06	0.06	ppb	7.03	971	900	
111 Cd	115	2		2.33	2.33	ppb	1.22	7117	2700	
121 Sb	115	2		0.16	0.16	ppb	6.58	1899	1125	
137 Ba	159	2		18.85	18.85	ppb	1.39	82920	1350	
205 Tl	165	2		0.06	0.06	ppb	7.34	1934	900	
206 (Pb)	165	2		4.40	4.40	ppb	1.87	40742	2700	
207 (Pb)	165	2		4.47	4.47	ppb	2.69	34335	2700	
208 Pb	165	2		4.27	4.27	ppb	2.16	158235	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	95092	0.60	103581	91.8	70 - 150	
45 Sc	2	1439582	1.28	1500578	95.9	70 - 150	
115 In	1	576251	0.54	593101	97.2	70 - 150	
115 In	2	1625550	1.28	1675692	97.0	70 - 150	
159 Tb	1	1312909	1.15	1237356	106.1	70 - 150	
159 Tb	2	2192409	1.13	2165061	101.3	70 - 150	
165 Ho	1	1286276	0.90	1192048	107.9	70 - 150	
165 Ho	2	2110935	1.04	2108329	100.1	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\S111913B.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\S111913B.b\030SMPL.D\030SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\030SMPL.D\030SMPL.D#
 Date Acquired: Nov 19 2013 06:33 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-003
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2101
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	14.89	252	2700	
23 Na	45	1		11,740.00	11740.00	ppb	1.41	12314020	225000	
24 Mg	45	1		2,541.00	2541.00	ppb	1.65	1489876	225000	
27 Al	45	1		167.20	167.20	ppb	1.90	58382	67500	
39 K	45	1		2,034.00	2034.00	ppb	1.43	1247148	225000	
44 Ca	45	1		17,080.00	17080.00	ppb	1.44	530165	225000	
51 V	45	1		0.81	0.81	ppb	1.42	3805	2700	
52 Cr	45	1		13.64	13.64	ppb	0.37	73270	2700	
55 Mn	45	1		7.04	7.04	ppb	2.57	30129	2700	
56 Fe	45	1		179.50	179.50	ppb	5.53	944424	202500	
59 Co	45	1		0.28	0.28	ppb	5.24	2515	2700	
60 Ni	45	1		3.84	3.84	ppb	0.73	8219	2700	
65 Cu	45	1		12.10	12.10	ppb	0.63	34456	2700	
66 Zn	45	1		88.05	88.05	ppb	0.69	96876	2700	
75 As	115	1		0.42	0.42	ppb	7.40	334	2250	
78 Se	115	1		-0.39	-0.39	ppb	8.17	195	2700	
83 Kr	115	2		----	-----	ppb	-----	563	2700	
95 Mo	115	2		0.49	0.49	ppb	3.76	2816	2700	
107 Ag	115	2		0.06	0.06	ppb	6.31	1060	900	
111 Cd	115	2		13.10	13.10	ppb	0.70	40350	2700	
121 Sb	115	2		0.29	0.29	ppb	1.85	3275	1125	
137 Ba	159	2		15.12	15.12	ppb	0.50	66557	1350	
205 Tl	165	2		0.04	0.04	ppb	8.18	1588	900	
206 (Pb)	165	2		1.54	1.54	ppb	1.68	15956	2700	
207 (Pb)	165	2		1.54	1.54	ppb	2.06	13265	2700	
208 Pb	165	2		1.47	1.47	ppb	0.82	61063	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	95748	0.30	103581	92.4	70 - 150	
45 Sc	2	1448933	0.74	1500578	96.6	70 - 150	
115 In	1	587286	0.19	593101	99.0	70 - 150	
115 In	2	1651459	0.70	1675692	98.6	70 - 150	
159 Tb	1	1359826	0.54	1237356	109.9	70 - 150	
159 Tb	2	2190600	1.17	2165061	101.2	70 - 150	
165 Ho	1	1314716	1.12	1192048	110.3	70 - 150	
165 Ho	2	2126568	0.42	2108329	100.9	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\S111913B.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\S111913B.b\031SMPL.D\031SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\031SMPL.D\031SMPL.D#
 Date Acquired: Nov 19 2013 06:39 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-005
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2102
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	33.54	362	2700	
23 Na	45	1	4,808.00	4808.00	ppb	0.47	4802733	225000	
24 Mg	45	1	1,898.00	1898.00	ppb	1.50	1044644	225000	
27 Al	45	1	112.40	112.40	ppb	2.31	37416	67500	
39 K	45	1	1,998.00	1998.00	ppb	1.10	1150629	225000	
44 Ca	45	1	13,170.00	13170.00	ppb	0.12	383569	225000	
51 V	45	1	0.41	0.41	ppb	3.62	1881	2700	
52 Cr	45	1	67.52	67.52	ppb	0.39	337674	2700	
55 Mn	45	1	9.44	9.44	ppb	0.41	37494	2700	
56 Fe	45	1	229.20	229.20	ppb	1.33	1112687	202500	
59 Co	45	1	0.29	0.29	ppb	5.51	2501	2700	
60 Ni	45	1	2.67	2.67	ppb	0.60	5390	2700	
65 Cu	45	1	0.89	0.89	ppb	8.54	3066	2700	
66 Zn	45	1	3.25	3.25	ppb	2.86	3954	2700	
75 As	115	1	0.22	0.22	ppb	1.60	177	2250	
78 Se	115	1	-0.23	-0.23	ppb	40.47	196	2700	
83 Kr	115	2	----	-----	ppb	-----	556	2700	
95 Mo	115	2	1.31	1.31	ppb	5.35	6908	2700	
107 Ag	115	2	0.04	0.04	ppb	19.59	640	900	
111 Cd	115	2	24.55	24.55	ppb	1.68	71444	2700	
121 Sb	115	2	0.13	0.13	ppb	13.50	1461	1125	
137 Ba	159	2	11.71	11.71	ppb	1.35	48519	1350	
205 Tl	165	2	0.08	0.08	ppb	19.14	2530	900	
206 (Pb)	165	2	1.27	1.27	ppb	6.10	12850	2700	
207 (Pb)	165	2	1.25	1.25	ppb	5.17	10592	2700	
208 Pb	165	2	1.21	1.21	ppb	3.05	49529	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89855	0.54	103581	86.7	70 - 150	
45 Sc	2	1351898	0.57	1500578	90.1	70 - 150	
115 In	1	552380	0.63	593101	93.1	70 - 150	
115 In	2	1561130	1.53	1675692	93.2	70 - 150	
159 Tb	1	1267531	0.93	1237356	102.4	70 - 150	
159 Tb	2	2056639	1.13	2165061	95.0	70 - 150	
165 Ho	1	1245166	1.12	1192048	104.5	70 - 150	
165 Ho	2	2018976	0.32	2108329	95.8	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\S111913B.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\S111913B.b\032SMPL.D\032SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\032SMPL.D\032SMPL.D#
 Date Acquired: Nov 19 2013 06:45 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-007
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2103
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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		0.74	0.74	ppb	4.25	4633	2700	
23 Na	45	1		6,264.00	6264.00	ppb	1.73	6179921	225000	
24 Mg	45	1		1,565.00	1565.00	ppb	1.79	856134	225000	
27 Al	45	1		718.40	718.40	ppb	2.44	227893	67500	
39 K	45	1		2,435.00	2435.00	ppb	1.32	1381451	225000	
44 Ca	45	1		5,080.00	5080.00	ppb	1.67	147308	225000	
51 V	45	1		1.51	1.51	ppb	1.64	6540	2700	
52 Cr	45	1		4.88	4.88	ppb	0.49	24829	2700	
55 Mn	45	1		324.10	324.10	ppb	2.23	1241620	2700	
56 Fe	45	1		1,016.00	1016.00	ppb	2.17	4665969	202500	
59 Co	45	1		0.55	0.55	ppb	2.29	4474	2700	
60 Ni	45	1		7.15	7.15	ppb	1.94	14216	2700	
65 Cu	45	1		8.49	8.49	ppb	3.27	22759	2700	
66 Zn	45	1		16.84	16.84	ppb	2.13	17772	2700	
75 As	115	1		0.58	0.58	ppb	2.01	427	2250	
78 Se	115	1		-0.28	-0.28	ppb	21.45	191	2700	
83 Kr	115	2		----	-----	ppb	-----	593	2700	
95 Mo	115	2		0.22	0.22	ppb	8.16	1199	2700	
107 Ag	115	2		0.08	0.08	ppb	2.19	1258	900	
111 Cd	115	2		2.20	2.20	ppb	1.61	6396	2700	
121 Sb	115	2		0.10	0.10	ppb	5.94	1189	1125	
137 Ba	159	2		120.00	120.00	ppb	1.22	499352	1350	
205 Tl	165	2		0.05	0.05	ppb	3.37	1614	900	
206 (Pb)	165	2		0.47	0.47	ppb	2.55	6278	2700	
207 (Pb)	165	2		0.43	0.43	ppb	9.06	4992	2700	
208 Pb	165	2		0.43	0.43	ppb	3.89	23745	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89271	1.32	103581	86.2	70 - 150	
45 Sc	2	1375324	1.39	1500578	91.7	70 - 150	
115 In	1	551815	0.86	593101	93.0	70 - 150	
115 In	2	1545975	1.78	1675692	92.3	70 - 150	
159 Tb	1	1265747	1.82	1237356	102.3	70 - 150	
159 Tb	2	2083002	1.65	2165061	96.2	70 - 150	
165 Ho	1	1248714	0.86	1192048	104.8	70 - 150	
165 Ho	2	2039891	1.41	2108329	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\S111913B.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\S111913B.b\033SMPL.D\033SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\033SMPL.D\033SMPL.D#
 Date Acquired: Nov 19 2013 06:51 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-009
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2104
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	5.35	431	2700	
23 Na	45	1		4,530.00	4530.00	ppb	1.07	4517452	225000	
24 Mg	45	1		1,051.00	1051.00	ppb	1.59	577258	225000	
27 Al	45	1		77.72	77.72	ppb	0.85	26337	67500	
39 K	45	1		1,971.00	1971.00	ppb	0.42	1132207	225000	
44 Ca	45	1		7,164.00	7164.00	ppb	1.36	208226	225000	
51 V	45	1		0.15	0.15	ppb	5.88	755	2700	
52 Cr	45	1		1.95	1.95	ppb	0.85	10348	2700	
55 Mn	45	1		15.45	15.45	ppb	1.36	60480	2700	
56 Fe	45	1		57.55	57.55	ppb	2.00	330272	202500	
59 Co	45	1		0.08	0.08	ppb	5.73	778	2700	
60 Ni	45	1		0.83	0.83	ppb	2.54	1725	2700	
65 Cu	45	1		1.29	1.29	ppb	8.83	4104	2700	
66 Zn	45	1		7.37	7.37	ppb	2.78	8147	2700	
75 As	115	1		0.16	0.16	ppb	9.42	134	2250	
78 Se	115	1		-0.72	-0.72	ppb	20.86	160	2700	
83 Kr	115	2		----	-----	ppb	-----	528	2700	
95 Mo	115	2		0.03	0.03	ppb	20.54	261	2700	
107 Ag	115	2		0.02	0.02	ppb	18.47	468	900	
111 Cd	115	2		0.12	0.12	ppb	12.66	409	2700	
121 Sb	115	2		0.07	0.07	ppb	4.83	907	1125	
137 Ba	159	2		15.26	15.26	ppb	1.77	65159	1350	
205 Tl	165	2		0.02	0.02	ppb	17.29	993	900	
206 (Pb)	165	2		-0.01	-0.01	ppb	62.33	2266	2700	
207 (Pb)	165	2		-0.01	-0.01	ppb	61.91	1927	2700	
208 Pb	165	2		-0.01	-0.01	ppb	34.02	8831	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89563	1.14	103581	86.5	70 - 150	
45 Sc	2	1399478	1.22	1500578	93.3	70 - 150	
115 In	1	557212	1.61	593101	93.9	70 - 150	
115 In	2	1596005	0.27	1675692	95.2	70 - 150	
159 Tb	1	1283269	0.79	1237356	103.7	70 - 150	
159 Tb	2	2124828	1.94	2165061	98.1	70 - 150	
165 Ho	1	1257834	0.58	1192048	105.5	70 - 150	
165 Ho	2	2045628	0.43	2108329	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\S111913B.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\S111913B.b\034SMPL.D\034SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\034SMPL.D\034SMPL.D#
 Date Acquired: Nov 19 2013 06:57 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-011
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2105
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	23.44	252	2700	
23 Na	45	1		4,185.00	4185.00	ppb	1.78	4433831	225000	
24 Mg	45	1		1,208.00	1208.00	ppb	3.11	703394	225000	
27 Al	45	1		98.54	98.54	ppb	11.83	34820	67500	
39 K	45	1		851.60	851.60	ppb	0.49	551811	225000	
44 Ca	45	1		2,943.00	2943.00	ppb	1.27	91024	225000	
51 V	45	1		0.36	0.36	ppb	6.43	1770	2700	
52 Cr	45	1		1.07	1.07	ppb	2.37	6358	2700	
55 Mn	45	1		5.67	5.67	ppb	2.24	24304	2700	
56 Fe	45	1		77.34	77.34	ppb	4.57	445559	202500	
59 Co	45	1		0.50	0.50	ppb	2.97	4383	2700	
60 Ni	45	1		1.68	1.68	ppb	1.98	3616	2700	
65 Cu	45	1		2.65	2.65	ppb	3.24	8093	2700	
66 Zn	45	1		5.07	5.07	ppb	1.58	6152	2700	
75 As	115	1		0.19	0.19	ppb	3.65	160	2250	
78 Se	115	1		-0.75	-0.75	ppb	16.31	166	2700	
83 Kr	115	2		----	-----	ppb	-----	560	2700	
95 Mo	115	2		0.20	0.20	ppb	6.69	1199	2700	
107 Ag	115	2		0.12	0.12	ppb	1.49	1892	900	
111 Cd	115	2		0.06	0.06	ppb	2.78	238	2700	
121 Sb	115	2		0.07	0.07	ppb	6.76	937	1125	
137 Ba	159	2		4.78	4.78	ppb	0.69	21748	1350	
205 Tl	165	2		0.02	0.02	ppb	17.43	938	900	
206 (Pb)	165	2		0.08	0.08	ppb	20.68	3160	2700	
207 (Pb)	165	2		0.08	0.08	ppb	17.90	2726	2700	
208 Pb	165	2		0.08	0.08	ppb	5.49	12658	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	94932	2.55	103581	91.6	70 - 150	
45 Sc	2	1451155	1.73	1500578	96.7	70 - 150	
115 In	1	583145	3.26	593101	98.3	70 - 150	
115 In	2	1659294	1.48	1675692	99.0	70 - 150	
159 Tb	1	1348076	2.31	1237356	108.9	70 - 150	
159 Tb	2	2230681	1.88	2165061	103.0	70 - 150	
165 Ho	1	1306477	3.41	1192048	109.6	70 - 150	
165 Ho	2	2164740	1.06	2108329	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\S111913B.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\S111913B.b\035SMPL.D\035SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\035SMPL.D\035SMPL.D#
 Date Acquired: Nov 19 2013 07:02 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-013
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2106
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	24.96	241	2700	
23 Na	45	1		13,580.00	13580.00	ppb	0.82	14245670	225000	
24 Mg	45	1		2,211.00	2211.00	ppb	0.58	1299190	225000	
27 Al	45	1		72.22	72.22	ppb	21.27	26405	67500	
39 K	45	1		3,940.00	3940.00	ppb	1.65	2365029	225000	
44 Ca	45	1		9,476.00	9476.00	ppb	0.47	294872	225000	
51 V	45	1		0.24	0.24	ppb	3.91	1239	2700	
52 Cr	45	1		1.76	1.76	ppb	4.06	10060	2700	
55 Mn	45	1		629.70	629.70	ppb	1.09	2592030	2700	
56 Fe	45	1		58.46	58.46	ppb	0.72	358232	202500	
59 Co	45	1		0.25	0.25	ppb	1.88	2299	2700	
60 Ni	45	1		1.01	1.01	ppb	1.42	2235	2700	
65 Cu	45	1		0.79	0.79	ppb	3.28	2994	2700	
66 Zn	45	1		4.12	4.12	ppb	13.91	5169	2700	
75 As	115	1		0.15	0.15	ppb	6.37	130	2250	
78 Se	115	1		-0.72	-0.72	ppb	20.93	170	2700	
83 Kr	115	2		----	-----	ppb	-----	540	2700	
95 Mo	115	2		0.47	0.47	ppb	2.38	2713	2700	
107 Ag	115	2		0.03	0.03	ppb	16.11	534	900	
111 Cd	115	2		0.12	0.12	ppb	5.12	431	2700	
121 Sb	115	2		0.06	0.06	ppb	12.89	825	1125	
137 Ba	159	2		29.64	29.64	ppb	0.56	131556	1350	
205 Tl	165	2		0.01	0.01	ppb	16.65	668	900	
206 (Pb)	165	2		-0.06	-0.06	ppb	17.35	1986	2700	
207 (Pb)	165	2		-0.07	-0.07	ppb	4.43	1590	2700	
208 Pb	165	2		-0.06	-0.06	ppb	7.69	7672	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	95937	1.71	103581	92.6	70 - 150	
45 Sc	2	1465616	1.40	1500578	97.7	70 - 150	
115 In	1	591071	1.79	593101	99.7	70 - 150	
115 In	2	1671317	1.85	1675692	99.7	70 - 150	
159 Tb	1	1367887	0.86	1237356	110.5	70 - 150	
159 Tb	2	2216514	2.19	2165061	102.4	70 - 150	
165 Ho	1	1339364	2.21	1192048	112.4	70 - 150	
165 Ho	2	2185725	0.86	2108329	103.7	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\S111913B.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\S111913B.b\036SMPL.D\036SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\036SMPL.D\036SMPL.D#
 Date Acquired: Nov 19 2013 07:08 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-015
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2107
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	34.99	231	2700	
23 Na	45	1		7,852.00	7852.00	ppb	1.58	8347368	225000	
24 Mg	45	1		2,288.00	2288.00	ppb	2.34	1352782	225000	
27 Al	45	1		4.02	4.02	ppb	4.31	3300	67500	
39 K	45	1		484.90	484.90	ppb	1.47	345270	225000	
44 Ca	45	1		5,745.00	5745.00	ppb	1.74	180143	225000	
51 V	45	1		0.15	0.15	ppb	9.69	805	2700	
52 Cr	45	1		0.53	0.53	ppb	1.47	3523	2700	
55 Mn	45	1		1.13	1.13	ppb	1.41	5902	2700	
56 Fe	45	1		11.28	11.28	ppb	7.85	129670	202500	
59 Co	45	1		0.14	0.14	ppb	3.98	1350	2700	
60 Ni	45	1		0.49	0.49	ppb	3.66	1125	2700	
65 Cu	45	1		3.15	3.15	ppb	3.88	9640	2700	
66 Zn	45	1		7.61	7.61	ppb	1.43	9058	2700	
75 As	115	1		0.15	0.15	ppb	13.14	136	2250	
78 Se	115	1		-0.54	-0.54	ppb	21.26	185	2700	
83 Kr	115	2		----	-----	ppb	-----	564	2700	
95 Mo	115	2		0.09	0.09	ppb	9.82	573	2700	
107 Ag	115	2		0.04	0.04	ppb	15.63	703	900	
111 Cd	115	2		0.04	0.04	ppb	10.07	173	2700	
121 Sb	115	2		0.14	0.14	ppb	3.25	1618	1125	
137 Ba	159	2		5.61	5.61	ppb	1.52	24610	1350	
205 Tl	165	2		0.01	0.01	ppb	26.26	715	900	
206 (Pb)	165	2		-0.02	-0.02	ppb	112.16	2263	2700	
207 (Pb)	165	2		-0.04	-0.04	ppb	33.28	1787	2700	
208 Pb	165	2		-0.03	-0.03	ppb	30.72	8524	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	96583	1.94	103581	93.2	70 - 150	
45 Sc	2	1462966	0.83	1500578	97.5	70 - 150	
115 In	1	593647	2.15	593101	100.1	70 - 150	
115 In	2	1658937	2.53	1675692	99.0	70 - 150	
159 Tb	1	1364269	2.15	1237356	110.3	70 - 150	
159 Tb	2	2158431	2.83	2165061	99.7	70 - 150	
165 Ho	1	1344461	1.13	1192048	112.8	70 - 150	
165 Ho	2	2114242	1.07	2108329	100.3	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\S111913B.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\S111913B.b\037SMPL.D\037SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\037SMPL.D\037SMPL.D#
 Date Acquired: Nov 19 2013 07:14 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-017
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2108
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	203.73	61	2700	
23 Na	45	1		83.00	83.00	ppb	7.57	200018	225000	
24 Mg	45	1		4.47	4.47	ppb	23.34	4341	225000	
27 Al	45	1		18.47	18.47	ppb	3.45	7608	67500	
39 K	45	1		18.19	18.19	ppb	9.03	64976	225000	
44 Ca	45	1		51.53	51.53	ppb	8.64	1998	225000	
51 V	45	1		0.16	0.16	ppb	4.50	793	2700	
52 Cr	45	1		0.22	0.22	ppb	1.20	1766	2700	
55 Mn	45	1		0.48	0.48	ppb	11.90	2952	2700	
56 Fe	45	1		0.86	0.86	ppb	96.62	72856	202500	
59 Co	45	1		0.01	0.01	ppb	29.97	281	2700	
60 Ni	45	1		0.12	0.12	ppb	12.83	313	2700	
65 Cu	45	1		1.83	1.83	ppb	3.85	5487	2700	
66 Zn	45	1		3.27	3.27	ppb	2.46	3950	2700	
75 As	115	1		0.13	0.13	ppb	16.49	111	2250	
78 Se	115	1		-0.57	-0.57	ppb	44.21	168	2700	
83 Kr	115	2		-----	-----	ppb	-----	567	2700	
95 Mo	115	2		0.01	0.01	ppb	57.70	113	2700	
107 Ag	115	2		0.02	0.02	ppb	21.67	354	900	
111 Cd	115	2		0.00	0.00	ppb	119.36	45	2700	
121 Sb	115	2		0.09	0.09	ppb	10.07	1052	1125	
137 Ba	159	2		0.34	0.34	ppb	4.64	1877	1350	
205 Tl	165	2		0.00	0.00	ppb	13.43	459	900	
206 (Pb)	165	2		-0.10	-0.10	ppb	7.23	1468	2700	
207 (Pb)	165	2		-0.11	-0.11	ppb	12.18	1192	2700	
208 Pb	165	2		-0.10	-0.10	ppb	4.15	5776	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89332	0.91	103581	86.2	70 - 150	
45 Sc	2	1386772	2.23	1500578	92.4	70 - 150	
115 In	1	543652	1.90	593101	91.7	70 - 150	
115 In	2	1574819	0.97	1675692	94.0	70 - 150	
159 Tb	1	1260140	2.24	1237356	101.8	70 - 150	
159 Tb	2	2085955	1.94	2165061	96.3	70 - 150	
165 Ho	1	1241988	0.58	1192048	104.2	70 - 150	
165 Ho	2	2024520	0.48	2108329	96.0	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\S111913B.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\S111913B.b\038SMPL.D\038SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\038SMPL.D\038SMPL.D#
 Date Acquired: Nov 19 2013 07:20 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: Nov 19 2013 04:23 pm
 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	0.53	0.53	ppb	2.85	3674	2700	
23 Na	45	1	208.20	208.20	ppb	2.55	355499	225000	
24 Mg	45	1	129.50	129.50	ppb	0.85	80400	225000	
27 Al	45	1	92.89	92.89	ppb	0.56	34363	67500	
39 K	45	1	106.20	106.20	ppb	2.72	125008	225000	
44 Ca	45	1	274.50	274.50	ppb	1.57	9348	225000	
51 V	45	1	0.86	0.86	ppb	2.31	4195	2700	
52 Cr	45	1	0.92	0.92	ppb	3.30	5774	2700	
55 Mn	45	1	3.82	3.82	ppb	2.25	17429	2700	
56 Fe	45	1	286.40	286.40	ppb	2.80	1510859	202500	
59 Co	45	1	0.71	0.71	ppb	0.69	6407	2700	
60 Ni	45	1	0.82	0.82	ppb	2.52	1885	2700	
65 Cu	45	1	1.16	1.16	ppb	7.72	4165	2700	
66 Zn	45	1	2.45	2.45	ppb	1.34	3441	2700	
75 As	115	1	0.65	0.65	ppb	4.63	526	2250	
78 Se	115	1	0.48	0.48	ppb	40.28	272	2700	
83 Kr	115	2	----	-----	ppb	-----	516	2700	
95 Mo	115	2	1.37	1.37	ppb	0.76	8112	2700	
107 Ag	115	2	0.26	0.26	ppb	3.23	4369	900	
111 Cd	115	2	0.86	0.86	ppb	3.44	2865	2700	
121 Sb	115	2	0.50	0.50	ppb	4.55	5936	1125	
137 Ba	159	2	1.12	1.12	ppb	4.20	5682	1350	
205 Tl	165	2	0.56	0.56	ppb	0.54	16759	900	
206 (Pb)	165	2	1.57	1.57	ppb	3.51	17162	2700	
207 (Pb)	165	2	1.50	1.50	ppb	3.20	13727	2700	
208 Pb	165	2	1.48	1.48	ppb	1.11	65176	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	98873	0.90	103581	95.5	70 - 150	
45 Sc	2	1502663	0.89	1500578	100.1	70 - 150	
115 In	1	604808	0.31	593101	102.0	70 - 150	
115 In	2	1753151	0.81	1675692	104.6	70 - 150	
159 Tb	1	1361008	0.90	1237356	110.0	70 - 150	
159 Tb	2	2322577	1.82	2165061	107.3	70 - 150	
165 Ho	1	1336893	1.62	1192048	112.2	70 - 150	
165 Ho	2	2247716	0.59	2108329	106.6	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\S111913B.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\S111913B.b\039_CCV.D\039_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\039_CCV.D\039_CCV.D#
 Date Acquired: Nov 19 2013 07:26 pm
 Operator: GK
 Sample Name: CCV V-176971
 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: Nov 19 2013 04:23 pm
 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	50.34 ppb	2.93	330193	50	100.7	90 - 110	
23 Na	45	1	5069.00 ppb	1.65	5486598	5000	101.4	90 - 110	
24 Mg	45	1	5074.00 ppb	1.18	3026157	5000	101.5	90 - 110	
27 Al	45	1	1484.00 ppb	0.93	512040	1500	98.9	90 - 110	
39 K	45	1	4890.00 ppb	1.11	2968767	5000	97.8	90 - 110	
44 Ca	45	1	4825.00 ppb	1.12	152840	5000	96.5	90 - 110	
51 V	45	1	50.38 ppb	0.44	234410	50	100.8	90 - 110	
52 Cr	45	1	50.22 ppb	1.91	272686	50	100.4	90 - 110	
55 Mn	45	1	50.44 ppb	0.58	212069	50	100.9	90 - 110	
56 Fe	45	1	5176.00 ppb	1.55	25638820	5000	103.5	90 - 110	
59 Co	45	1	50.55 ppb	1.18	436796	50	101.1	90 - 110	
60 Ni	45	1	52.31 ppb	1.52	113122	50	104.6	90 - 110	
65 Cu	45	1	52.30 ppb	1.75	148987	50	104.6	90 - 110	
66 Zn	45	1	51.76 ppb	1.50	58260	50	103.5	90 - 110	
75 As	115	1	47.33 ppb	0.16	35893	50	94.7	90 - 110	
78 Se	115	1	234.70 ppb	0.55	18826	250	93.9	90 - 110	
83 Kr	115	2	----- ppb	-----	549	50	#VALUE!	##### - #####	
95 Mo	115	2	48.96 ppb	1.03	276709	50	97.9	90 - 110	
107 Ag	115	2	49.05 ppb	1.04	756336	50	98.1	90 - 110	
111 Cd	115	2	49.76 ppb	2.74	156284	50	99.5	90 - 110	
121 Sb	115	2	48.48 ppb	1.98	547437	50	97.0	90 - 110	
137 Ba	159	2	47.85 ppb	0.94	216246	50	95.7	90 - 110	
205 Tl	165	2	51.66 ppb	3.67	1471696	50	103.3	90 - 110	
206 (Pb)	165	2	50.28 ppb	1.94	457125	50	100.6	90 - 110	
207 (Pb)	165	2	49.69 ppb	0.77	374896	50	99.4	90 - 110	
208 Pb	165	2	50.01 ppb	1.37	1819289	50	100.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97482	0.94	103581	94.1	80 - 120	
45 Sc	2	1464527	3.25	1500578	97.6	80 - 120	
115 In	1	588038	0.45	593101	99.1	80 - 120	
115 In	2	1686343	3.27	1675692	100.6	80 - 120	
159 Tb	1	1346654	2.17	1237356	108.8	80 - 120	
159 Tb	2	2260595	3.12	2165061	104.4	80 - 120	
165 Ho	1	1335393	2.25	1192048	112.0	80 - 120	
165 Ho	2	2191220	2.48	2108329	103.9	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\S111913B.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\S111913B.b\040_CCV.D\040_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\040_CCV.D\040_CCV.D#
 Date Acquired: Nov 19 2013 07:32 pm
 Operator: GK
 Sample Name: LLCCV V-176972
 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: Nov 19 2013 04:23 pm
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.49	ppb	1.87	1	97.8	70 - 130	
23 Na	45	1	237.30	ppb	1.39	250	94.9	70 - 130	
24 Mg	45	1	258.80	ppb	0.48	250	103.5	70 - 130	
27 Al	45	1	95.13	ppb	0.40	100	95.1	70 - 130	
39 K	45	1	234.10	ppb	1.37	250	93.6	70 - 130	
44 Ca	45	1	231.20	ppb	1.25	250	92.5	70 - 130	
51 V	45	1	0.97	ppb	1.21	1	96.6	70 - 130	
52 Cr	45	1	1.00	ppb	1.54	1	100.3	70 - 130	
55 Mn	45	1	2.75	ppb	2.03	3	91.8	70 - 130	
56 Fe	45	1	153.30	ppb	1.94	150	102.2	70 - 130	
59 Co	45	1	0.98	ppb	2.12	1	98.4	70 - 130	
60 Ni	45	1	1.54	ppb	4.24	2	102.6	70 - 130	
65 Cu	45	1	4.94	ppb	1.88	5	98.7	70 - 130	
66 Zn	45	1	9.84	ppb	2.43	10	98.4	70 - 130	
75 As	115	1	0.91	ppb	3.02	1	91.5	70 - 130	
78 Se	115	1	3.88	ppb	7.88	5	77.6	70 - 130	
83 Kr	115	2	-----	ppb	-----	1	#VALUE! #####	70 - 130	
95 Mo	115	2	0.96	ppb	0.88	1	96.2	70 - 130	
107 Ag	115	2	0.47	ppb	4.04	1	93.8	70 - 130	
111 Cd	115	2	0.94	ppb	2.12	1	94.0	70 - 130	
121 Sb	115	2	0.93	ppb	1.78	1	92.8	70 - 130	
137 Ba	159	2	2.31	ppb	0.48	3	92.6	70 - 130	
205 Tl	165	2	0.94	ppb	3.55	1	93.8	70 - 130	
206 (Pb)	165	2	1.21	ppb	2.70	2	80.7	70 - 130	
207 (Pb)	165	2	1.29	ppb	2.92	2	85.8	70 - 130	
208 Pb	165	2	1.19	ppb	1.52	2	79.4	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	103301	1.91	103581	99.7	80 - 120	
45 Sc	2	1592706	2.34	1500578	106.1	80 - 120	
115 In	1	625679	2.21	593101	105.5	80 - 120	
115 In	2	1850973	2.54	1675692	110.5	80 - 120	
159 Tb	1	1409746	1.68	1237356	113.9	80 - 120	
159 Tb	2	2399648	3.09	2165061	110.8	80 - 120	
165 Ho	1	1385047	1.28	1192048	116.2	80 - 120	
165 Ho	2	2347724	1.69	2108329	111.4	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\S111913B.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\S111913B.b\041_CCB.D\041_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\041_CCB.D\041_CCB.D#
 Date Acquired: Nov 19 2013 07:38 pm
 Operator: GK
 Sample Name: CCB V-176968
 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: Nov 19 2013 04:23 pm
 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	0.010	ppb	49.52	151	0.50	
23 Na	45	1	-3.356	ppb	56.68	133994	250.00	
24 Mg	45	1	1.269	ppb	49.87	2980	250.00	
27 Al	45	1	21.730	ppb	1.06	9940	100.00	
39 K	45	1	-0.389	ppb	397.58	63157	250.00	
44 Ca	45	1	47.660	ppb	5.46	2171	250.00	
51 V	45	1	0.019	ppb	13.75	225	1.00	
52 Cr	45	1	0.038	ppb	6.50	968	1.00	
55 Mn	45	1	-0.145	ppb	9.68	662	3.00	
56 Fe	45	1	-5.784	ppb	12.45	49225	150.00	
59 Co	45	1	0.008	ppb	54.66	260	1.00	
60 Ni	45	1	0.007	ppb	75.50	101	1.50	
65 Cu	45	1	0.196	ppb	6.78	1446	5.00	
66 Zn	45	1	0.443	ppb	10.41	1230	10.00	
75 As	115	1	0.016	ppb	72.11	33	1.00	
78 Se	115	1	-0.808	ppb	33.61	172	5.00	
83 Kr	115	2	-----	ppb	-----	570	1.00	
95 Mo	115	2	0.021	ppb	18.97	212	1.00	
107 Ag	115	2	0.005	ppb	19.25	234	0.50	
111 Cd	115	2	0.007	ppb	80.65	80	1.00	
121 Sb	115	2	0.012	ppb	8.43	273	1.00	
137 Ba	159	2	0.010	ppb	142.42	569	2.50	
205 Tl	165	2	0.016	ppb	10.42	947	1.00	
206 (Pb)	165	2	-0.134	ppb	6.82	1362	1.50	
207 (Pb)	165	2	-0.138	ppb	5.56	1162	1.50	
208 Pb	165	2	-0.131	ppb	3.27	5380	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	102865	0.95	103581	99.3	80 - 120	
45 Sc	2	1528465	0.26	1500578	101.9	80 - 120	
115 In	1	625250	1.09	593101	105.4	80 - 120	
115 In	2	1806500	1.64	1675692	107.8	80 - 120	
159 Tb	1	1403878	1.09	1237356	113.5	80 - 120	
159 Tb	2	2397398	1.14	2165061	110.7	80 - 120	
165 Ho	1	1380455	0.83	1192048	115.8	80 - 120	
165 Ho	2	2326307	1.41	2108329	110.3	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\S111913B.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\S111913B.b\042SMPL.D\042SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\042SMPL.D\042SMPL.D#
 Date Acquired: Nov 19 2013 07:44 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-019
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2109
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	12.57	272	2700	
23 Na	45	1	6,314.00	6314.00	ppb	0.80	6799574	225000	
24 Mg	45	1	3,312.00	3312.00	ppb	1.00	1975308	225000	
27 Al	45	1	421.40	421.40	ppb	0.97	146761	67500	
39 K	45	1	1,839.00	1839.00	ppb	0.48	1153732	225000	
44 Ca	45	1	19,040.00	19040.00	ppb	2.02	601385	225000	
51 V	45	1	1.58	1.58	ppb	1.65	7467	2700	
52 Cr	45	1	3.47	3.47	ppb	1.22	19475	2700	
55 Mn	45	1	2.99	2.99	ppb	3.60	13726	2700	
56 Fe	45	1	415.70	415.70	ppb	3.43	2127166	202500	
59 Co	45	1	0.22	0.22	ppb	2.77	2056	2700	
60 Ni	45	1	0.90	0.90	ppb	1.04	2027	2700	
65 Cu	45	1	4.67	4.67	ppb	4.08	14041	2700	
66 Zn	45	1	16.15	16.15	ppb	0.30	18631	2700	
75 As	115	1	0.37	0.37	ppb	3.16	301	2250	
78 Se	115	1	-0.51	-0.51	ppb	22.27	187	2700	
83 Kr	115	2	----	-----	ppb	-----	593	2700	
95 Mo	115	2	0.15	0.15	ppb	4.84	937	2700	
107 Ag	115	2	0.03	0.03	ppb	12.09	623	900	
111 Cd	115	2	1.58	1.58	ppb	1.81	5090	2700	
121 Sb	115	2	0.28	0.28	ppb	2.02	3275	1125	
137 Ba	159	2	22.34	22.34	ppb	1.30	99746	1350	
205 Tl	165	2	0.02	0.02	ppb	5.11	1089	900	
206 (Pb)	165	2	5.69	5.69	ppb	2.43	54190	2700	
207 (Pb)	165	2	5.68	5.68	ppb	1.36	44886	2700	
208 Pb	165	2	5.46	5.46	ppb	1.11	208199	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97453	0.68	103581	94.1	70 - 150	
45 Sc	2	1464766	0.62	1500578	97.6	70 - 150	
115 In	1	591294	0.86	593101	99.7	70 - 150	
115 In	2	1713068	0.62	1675692	102.2	70 - 150	
159 Tb	1	1359186	0.81	1237356	109.8	70 - 150	
159 Tb	2	2227515	1.05	2165061	102.9	70 - 150	
165 Ho	1	1329491	0.39	1192048	111.5	70 - 150	
165 Ho	2	2200052	1.99	2108329	104.4	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\S111913B.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\S111913B.b\043SMPL.D\043SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\043SMPL.D\043SMPL.D#
 Date Acquired: Nov 19 2013 07:50 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-021
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 2110
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 19 2013 04:23 pm
 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	10.24	813	2700	
23 Na	45	1		5,633.00	5633.00	ppb	0.50	5765575	225000	
24 Mg	45	1		1,662.00	1662.00	ppb	1.01	941119	225000	
27 Al	45	1		2,838.00	2838.00	ppb	1.09	926526	67500	
39 K	45	1		2,293.00	2293.00	ppb	1.21	1349979	225000	
44 Ca	45	1		5,428.00	5428.00	ppb	1.90	162922	225000	
51 V	45	1		7.57	7.57	ppb	2.30	33507	2700	
52 Cr	45	1		87.90	87.90	ppb	1.58	451878	2700	
55 Mn	45	1		153.90	153.90	ppb	1.68	610967	2700	
56 Fe	45	1		3,350.00	3350.00	ppb	3.28	15754090	202500	
59 Co	45	1		0.94	0.94	ppb	1.61	7870	2700	
60 Ni	45	1		6.01	6.01	ppb	3.52	12377	2700	
65 Cu	45	1		15.98	15.98	ppb	2.20	43685	2700	
66 Zn	45	1		53.79	53.79	ppb	1.61	57366	2700	
75 As	115	1		1.61	1.61	ppb	2.17	1186	2250	
78 Se	115	1		-0.30	-0.30	ppb	21.89	194	2700	
83 Kr	115	2		----	-----	ppb	-----	581	2700	
95 Mo	115	2		0.44	0.44	ppb	4.19	2408	2700	
107 Ag	115	2		0.09	0.09	ppb	3.54	1467	900	
111 Cd	115	2		3.28	3.28	ppb	1.65	9776	2700	
121 Sb	115	2		1.10	1.10	ppb	3.28	11774	1125	
137 Ba	159	2		28.88	28.88	ppb	1.97	124499	1350	
205 Tl	165	2		0.04	0.04	ppb	2.88	1395	900	
206 (Pb)	165	2		27.62	27.62	ppb	2.58	241711	2700	
207 (Pb)	165	2		27.45	27.45	ppb	3.06	199316	2700	
208 Pb	165	2		26.58	26.58	ppb	1.39	931015	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	92412	1.01	103581	89.2	70 - 150	
45 Sc	2	1430386	1.06	1500578	95.3	70 - 150	
115 In	1	562576	1.28	593101	94.9	70 - 150	
115 In	2	1590426	0.53	1675692	94.9	70 - 150	
159 Tb	1	1291214	0.56	1237356	104.4	70 - 150	
159 Tb	2	2152892	0.55	2165061	99.4	70 - 150	
165 Ho	1	1292000	0.91	1192048	108.4	70 - 150	
165 Ho	2	2099568	1.28	2108329	99.6	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\S111913B.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\S111913B.b\044SMPL.D\044SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\044SMPL.D\044SMPL.D#
 Date Acquired: Nov 19 2013 07:56 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-023
 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: Nov 19 2013 04:23 pm
 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	8.59	231	2700	
23 Na	45	1		6,694.00	6694.00	ppb	1.92	6843935	225000	
24 Mg	45	1		3,477.00	3477.00	ppb	1.89	1971263	225000	
27 Al	45	1		425.10	425.10	ppb	1.85	140666	67500	
39 K	45	1		1,940.00	1940.00	ppb	1.28	1153709	225000	
44 Ca	45	1		20,150.00	20150.00	ppb	0.81	604890	225000	
51 V	45	1		1.56	1.56	ppb	1.83	7013	2700	
52 Cr	45	1		3.24	3.24	ppb	1.66	17363	2700	
55 Mn	45	1		3.60	3.60	ppb	2.69	15465	2700	
56 Fe	45	1		412.70	412.70	ppb	2.72	2007800	202500	
59 Co	45	1		0.25	0.25	ppb	0.60	2228	2700	
60 Ni	45	1		0.92	0.92	ppb	0.76	1974	2700	
65 Cu	45	1		4.87	4.87	ppb	2.29	13869	2700	
66 Zn	45	1		18.23	18.23	ppb	2.03	19911	2700	
75 As	115	1		0.35	0.35	ppb	12.27	271	2250	
78 Se	115	1		-0.29	-0.29	ppb	67.97	195	2700	
83 Kr	115	2		----	-----	ppb	-----	543	2700	
95 Mo	115	2		0.14	0.14	ppb	3.99	859	2700	
107 Ag	115	2		0.03	0.03	ppb	10.85	516	900	
111 Cd	115	2		1.46	1.46	ppb	2.56	4506	2700	
121 Sb	115	2		0.24	0.24	ppb	1.45	2729	1125	
137 Ba	159	2		23.72	23.72	ppb	0.97	103940	1350	
205 Tl	165	2		0.02	0.02	ppb	15.57	898	900	
206 (Pb)	165	2		5.19	5.19	ppb	2.09	47751	2700	
207 (Pb)	165	2		5.15	5.15	ppb	1.15	39344	2700	
208 Pb	165	2		4.96	4.96	ppb	0.90	182632	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	92618	0.58	103581	89.4	70 - 150	
45 Sc	2	1427445	0.55	1500578	95.1	70 - 150	
115 In	1	564534	0.73	593101	95.2	70 - 150	
115 In	2	1637281	1.32	1675692	97.7	70 - 150	
159 Tb	1	1331211	1.65	1237356	107.6	70 - 150	
159 Tb	2	2186548	1.09	2165061	101.0	70 - 150	
165 Ho	1	1307681	1.78	1192048	109.7	70 - 150	
165 Ho	2	2115973	0.88	2108329	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\S111913B.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\S111913B.b\045SMPL.D\045SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\045SMPL.D\045SMPL.D#
 Date Acquired: Nov 19 2013 08:01 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-025
 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: Nov 19 2013 04:23 pm
 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	35.81	131	2700	
23 Na	45	1		12,180.00	12180.00	ppb	0.32	11948760	225000	
24 Mg	45	1		5,044.00	5044.00	ppb	1.20	2765662	225000	
27 Al	45	1		39.63	39.63	ppb	4.67	14319	67500	
39 K	45	1		917.40	917.40	ppb	1.59	556827	225000	
44 Ca	45	1		10,130.00	10130.00	ppb	1.29	294487	225000	
51 V	45	1		0.26	0.26	ppb	1.70	1231	2700	
52 Cr	45	1		0.80	0.80	ppb	1.48	4630	2700	
55 Mn	45	1		5.36	5.36	ppb	2.32	21715	2700	
56 Fe	45	1		45.74	45.74	ppb	0.87	276823	202500	
59 Co	45	1		0.09	0.09	ppb	5.63	843	2700	
60 Ni	45	1		0.48	0.48	ppb	0.82	1020	2700	
65 Cu	45	1		0.64	0.64	ppb	7.60	2411	2700	
66 Zn	45	1		3.04	3.04	ppb	2.91	3731	2700	
75 As	115	1		0.15	0.15	ppb	13.61	126	2250	
78 Se	115	1		-0.47	-0.47	ppb	35.31	179	2700	
83 Kr	115	2		----	-----	ppb	-----	577	2700	
95 Mo	115	2		0.03	0.03	ppb	13.22	211	2700	
107 Ag	115	2		0.02	0.02	ppb	15.70	370	900	
111 Cd	115	2		0.01	0.01	ppb	27.78	91	2700	
121 Sb	115	2		0.06	0.06	ppb	10.25	721	1125	
137 Ba	159	2		21.89	21.89	ppb	1.29	91096	1350	
205 Tl	165	2		0.00	0.00	ppb	343.06	417	900	
206 (Pb)	165	2		-0.02	-0.02	ppb	45.70	2131	2700	
207 (Pb)	165	2		-0.04	-0.04	ppb	11.90	1695	2700	
208 Pb	165	2		-0.03	-0.03	ppb	33.55	8096	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89611	0.97	103581	86.5	70 - 150	
45 Sc	2	1380395	1.79	1500578	92.0	70 - 150	
115 In	1	558529	1.13	593101	94.2	70 - 150	
115 In	2	1571403	4.01	1675692	93.8	70 - 150	
159 Tb	1	1285076	2.34	1237356	103.9	70 - 150	
159 Tb	2	2075232	1.55	2165061	95.9	70 - 150	
165 Ho	1	1268576	0.87	1192048	106.4	70 - 150	
165 Ho	2	2010424	2.02	2108329	95.4	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\S111913B.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\S111913B.b\046SMPL.D\046SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\046SMPL.D\046SMPL.D#
 Date Acquired: Nov 19 2013 08:07 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-027
 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: Nov 19 2013 04:23 pm
 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	8.06	219	2700	
23 Na	45		1	8,498.00	8498.00	ppb	1.36	8615664	225000	
24 Mg	45		1	2,959.00	2959.00	ppb	0.26	1669964	225000	
27 Al	45		1	202.30	202.30	ppb	4.62	67612	67500	
39 K	45		1	2,583.00	2583.00	ppb	0.34	1510086	225000	
44 Ca	45		1	6,694.00	6694.00	ppb	0.99	200359	225000	
51 V	45		1	0.63	0.63	ppb	1.72	2872	2700	
52 Cr	45		1	7.79	7.79	ppb	1.11	40570	2700	
55 Mn	45		1	47.65	47.65	ppb	1.11	189554	2700	
56 Fe	45		1	370.10	370.10	ppb	0.70	1800206	202500	
59 Co	45		1	0.22	0.22	ppb	1.69	1981	2700	
60 Ni	45		1	0.71	0.71	ppb	4.84	1532	2700	
65 Cu	45		1	1.25	1.25	ppb	1.56	4115	2700	
66 Zn	45		1	5.66	5.66	ppb	0.21	6597	2700	
75 As	115		1	0.23	0.23	ppb	8.71	184	2250	
78 Se	115		1	-0.58	-0.58	ppb	30.64	175	2700	
83 Kr	115		2	----	-----	ppb	-----	600	2700	
95 Mo	115		2	0.09	0.09	ppb	6.73	558	2700	
107 Ag	115		2	0.06	0.06	ppb	2.15	1117	900	
111 Cd	115		2	0.05	0.05	ppb	16.99	210	2700	
121 Sb	115		2	0.09	0.09	ppb	7.29	1126	1125	
137 Ba	159		2	29.51	29.51	ppb	2.45	128658	1350	
205 Tl	165		2	0.01	0.01	ppb	7.65	609	900	
206 (Pb)	165		2	0.30	0.30	ppb	11.28	5134	2700	
207 (Pb)	165		2	0.29	0.29	ppb	3.40	4271	2700	
208 Pb	165		2	0.28	0.28	ppb	2.87	19654	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	92205	0.66	103581	89.0	70 - 150	
45 Sc	2	1433325	1.00	1500578	95.5	70 - 150	
115 In	1	570081	1.21	593101	96.1	70 - 150	
115 In	2	1663446	0.37	1675692	99.3	70 - 150	
159 Tb	1	1337097	1.51	1237356	108.1	70 - 150	
159 Tb	2	2177596	3.08	2165061	100.6	70 - 150	
165 Ho	1	1316095	2.37	1192048	110.4	70 - 150	
165 Ho	2	2159432	0.70	2108329	102.4	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\S111913B.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\S111913B.b\047SMPL.D\047SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\047SMPL.D\047SMPL.D#
 Date Acquired: Nov 19 2013 08:13 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75677-004
 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: Nov 19 2013 04:23 pm
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Fail
 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	15.42	173	2700	
23 Na	45	1	350,700.00	350700.00	ppb	0.95	311108420	225000	>LDR
24 Mg	45	1	211.50	211.50	ppb	0.79	107538	225000	
27 Al	45	1	360.30	360.30	ppb	1.69	105617	67500	
39 K	45	1	287,000.00	287000.00	ppb	1.54	143350400	225000	>LDR
44 Ca	45	1	832.60	832.60	ppb	1.24	22518	225000	
51 V	45	1	3.19	3.19	ppb	1.25	12560	2700	
52 Cr	45	1	2.39	2.39	ppb	1.22	11451	2700	
55 Mn	45	1	27.17	27.17	ppb	1.78	96372	2700	
56 Fe	45	1	581.50	581.50	ppb	1.97	2473600	202500	
59 Co	45	1	0.23	0.23	ppb	4.20	1848	2700	
60 Ni	45	1	3.28	3.28	ppb	2.10	6022	2700	
65 Cu	45	1	150.30	150.30	ppb	0.52	358104	2700	
66 Zn	45	1	184.50	184.50	ppb	0.98	172826	2700	
75 As	115	1	4.88	4.88	ppb	1.73	3082	2250	
78 Se	115	1	7.80	7.80	ppb	9.22	701	2700	
83 Kr	115	2	----	-----	ppb	-----	570	2700	
95 Mo	115	2	17,110.00	17110.00	ppb	0.99	91543992	2700	>LDR
107 Ag	115	2	0.05	0.05	ppb	4.14	810	900	
111 Cd	115	2	8.98	8.98	ppb	1.27	26766	2700	
121 Sb	115	2	34.43	34.43	ppb	0.32	368426	1125	
137 Ba	159	2	14.23	14.23	ppb	1.68	61036	1350	
205 Tl	165	2	0.09	0.09	ppb	4.07	2856	900	
206 (Pb)	165	2	158.60	158.60	ppb	3.21	1368792	2700	
207 (Pb)	165	2	161.60	161.60	ppb	3.11	1156811	2700	
208 Pb	165	2	153.10	153.10	ppb	2.88	5284946	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	81826	1.82	103581	79.0	70 - 150	
45 Sc	2	1513507	1.85	1500578	100.9	70 - 150	
115 In	1	488078	1.80	593101	82.3	70 - 150	
115 In	2	1597077	1.77	1675692	95.3	70 - 150	
159 Tb	1	1248023	3.43	1237356	100.9	70 - 150	
159 Tb	2	2133217	0.31	2165061	98.5	70 - 150	
165 Ho	1	1231191	2.78	1192048	103.3	70 - 150	
165 Ho	2	2087189	1.13	2108329	99.0	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\S111913B.b\002CALB.D\002CALB.D#

3 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S111913B.b\048SMPL.D\048SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\048SMPL.D\048SMPL.D#
 Date Acquired: Nov 19 2013 08:19 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: Nov 19 2013 04:23 pm
 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	0.54	0.54	ppb	2.25	4057	2700	
23 Na	45	1	551.90	551.90	ppb	4.94	799242	225000	
24 Mg	45	1	134.20	134.20	ppb	0.46	91923	225000	
27 Al	45	1	94.13	94.13	ppb	0.73	38414	67500	
39 K	45	1	374.80	374.80	ppb	6.85	316995	225000	
44 Ca	45	1	291.10	291.10	ppb	1.34	10907	225000	
51 V	45	1	0.86	0.86	ppb	2.17	4630	2700	
52 Cr	45	1	0.97	0.97	ppb	1.87	6671	2700	
55 Mn	45	1	3.74	3.74	ppb	1.20	18879	2700	
56 Fe	45	1	284.60	284.60	ppb	0.70	1658320	202500	
59 Co	45	1	0.70	0.70	ppb	1.47	7008	2700	
60 Ni	45	1	0.84	0.84	ppb	2.26	2125	2700	
65 Cu	45	1	1.34	1.34	ppb	3.09	5176	2700	
66 Zn	45	1	2.62	2.62	ppb	4.53	4020	2700	
75 As	115	1	0.67	0.67	ppb	3.03	592	2250	
78 Se	115	1	1.01	1.01	ppb	33.00	343	2700	
83 Kr	115	2	----	-----	ppb	-----	537	2700	
95 Mo	115	2	19.54	19.54	ppb	1.29	124156	2700	
107 Ag	115	2	0.26	0.26	ppb	2.44	4723	900	
111 Cd	115	2	0.88	0.88	ppb	0.70	3164	2700	
121 Sb	115	2	0.60	0.60	ppb	1.97	7786	1125	
137 Ba	159	2	1.20	1.20	ppb	2.80	6378	1350	
205 Tl	165	2	0.54	0.54	ppb	1.59	17100	900	
206 (Pb)	165	2	1.68	1.68	ppb	1.88	19301	2700	
207 (Pb)	165	2	1.67	1.67	ppb	3.77	15968	2700	
208 Pb	165	2	1.63	1.63	ppb	2.58	75056	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	109158	0.41	103581	105.4	70 - 150	
45 Sc	2	1638353	1.26	1500578	109.2	70 - 150	
115 In	1	658941	0.80	593101	111.1	70 - 150	
115 In	2	1894898	1.11	1675692	113.1	70 - 150	
159 Tb	1	1490616	1.24	1237356	120.5	70 - 150	
159 Tb	2	2446667	0.36	2165061	113.0	70 - 150	
165 Ho	1	1459121	1.30	1192048	122.4	70 - 150	
165 Ho	2	2386619	1.22	2108329	113.2	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\S111913B.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\S111913B.b\049_CCV.D\049_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\049_CCV.D\049_CCV.D#
 Date Acquired: Nov 19 2013 08:25 pm
 Operator: GK
 Sample Name: CCV V-176971
 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: Nov 19 2013 04:23 pm
 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	49.38 ppb	1.41	339090	50	98.8	90 - 110	
23 Na	45	1	5233.00 ppb	1.23	6190823	5000	104.7	90 - 110	
24 Mg	45	1	5174.00 ppb	1.35	3375637	5000	103.5	90 - 110	
27 Al	45	1	1485.00 ppb	0.42	560536	1500	99.0	90 - 110	
39 K	45	1	4910.00 ppb	1.18	3260216	5000	98.2	90 - 110	
44 Ca	45	1	4929.00 ppb	2.19	170768	5000	98.6	90 - 110	
51 V	45	1	49.94 ppb	0.76	254181	50	99.9	90 - 110	
52 Cr	45	1	51.10 ppb	1.60	303493	50	102.2	90 - 110	
55 Mn	45	1	50.44 ppb	2.10	231972	50	100.9	90 - 110	
56 Fe	45	1	5149.00 ppb	0.72	27896630	5000	103.0	90 - 110	
59 Co	45	1	50.75 ppb	0.40	479657	50	101.5	90 - 110	
60 Ni	45	1	51.73 ppb	1.48	122362	50	103.5	90 - 110	
65 Cu	45	1	52.27 ppb	1.95	162875	50	104.5	90 - 110	
66 Zn	45	1	51.51 ppb	1.05	63419	50	103.0	90 - 110	
75 As	115	1	48.39 ppb	0.88	39985	50	96.8	90 - 110	
78 Se	115	1	229.90 ppb	0.45	20096	250	92.0	90 - 110	
83 Kr	115	2	----- ppb	-----	646	50	#VALUE!	##### - #####	
95 Mo	115	2	52.33 ppb	2.32	302780	50	104.7	90 - 110	
107 Ag	115	2	48.64 ppb	5.37	767595	50	97.3	90 - 110	
111 Cd	115	2	49.15 ppb	0.53	158091	50	98.3	90 - 110	
121 Sb	115	2	48.00 ppb	2.09	554991	50	96.0	90 - 110	
137 Ba	159	2	48.17 ppb	1.07	219992	50	96.3	90 - 110	
205 Tl	165	2	50.37 ppb	1.25	1444459	50	100.7	90 - 110	
206 (Pb)	165	2	49.18 ppb	0.53	449996	50	98.4	90 - 110	
207 (Pb)	165	2	49.38 ppb	0.85	374902	50	98.8	90 - 110	
208 Pb	165	2	49.93 ppb	0.60	1827466	50	99.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	106625	0.70	103581	102.9	80 - 120	
45 Sc	2	1532249	0.69	1500578	102.1	80 - 120	
115 In	1	640659	1.44	593101	108.0	80 - 120	
115 In	2	1726245	1.03	1675692	103.0	80 - 120	
159 Tb	1	1439293	2.22	1237356	116.3	80 - 120	
159 Tb	2	2283801	0.21	2165061	105.5	80 - 120	
165 Ho	1	1407288	1.04	1192048	118.1	80 - 120	
165 Ho	2	2204514	0.70	2108329	104.6	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\S111913B.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\S111913B.b\050_CCV.D\050_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\050_CCV.D\050_CCV.D#
 Date Acquired: Nov 19 2013 08:31 pm
 Operator: GK
 Sample Name: LLCCV V-176972
 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: Nov 19 2013 04:23 pm
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.49 ppb	2.98	1	97.9	70 - 130	
23 Na	45	1	316.40 ppb	2.17	250	126.6	70 - 130	
24 Mg	45	1	265.70 ppb	2.23	250	106.3	70 - 130	
27 Al	45	1	97.76 ppb	0.85	100	97.8	70 - 130	
39 K	45	1	293.70 ppb	1.73	250	117.5	70 - 130	
44 Ca	45	1	238.00 ppb	2.06	250	95.2	70 - 130	
51 V	45	1	0.98 ppb	0.98	1	98.0	70 - 130	
52 Cr	45	1	1.03 ppb	1.63	1	103.3	70 - 130	
55 Mn	45	1	2.77 ppb	1.86	3	92.2	70 - 130	
56 Fe	45	1	156.40 ppb	0.87	150	104.3	70 - 130	
59 Co	45	1	1.01 ppb	0.40	1	101.0	70 - 130	
60 Ni	45	1	1.56 ppb	3.99	2	103.7	70 - 130	
65 Cu	45	1	5.20 ppb	2.85	5	103.9	70 - 130	
66 Zn	45	1	10.03 ppb	0.58	10	100.3	70 - 130	
75 As	115	1	0.95 ppb	3.75	1	95.4	70 - 130	
78 Se	115	1	4.34 ppb	1.65	5	86.9	70 - 130	
83 Kr	115	2	----- ppb -----	-----	1	#VALUE!	##### - #####	
95 Mo	115	2	3.26 ppb	5.05	1	325.6	70 - 130	FAIL
107 Ag	115	2	0.47 ppb	0.91	1	93.4	70 - 130	
111 Cd	115	2	0.97 ppb	3.35	1	97.3	70 - 130	
121 Sb	115	2	0.93 ppb	2.07	1	92.9	70 - 130	
137 Ba	159	2	2.28 ppb	0.46	3	91.0	70 - 130	
205 Tl	165	2	0.93 ppb	0.86	1	93.5	70 - 130	
206 (Pb)	165	2	1.22 ppb	5.44	2	81.5	70 - 130	
207 (Pb)	165	2	1.29 ppb	3.81	2	86.3	70 - 130	
208 Pb	165	2	1.23 ppb	3.69	2	81.9	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	99839	0.11	103581	96.4	80 - 120	
45 Sc	2	1500223	1.81	1500578	100.0	80 - 120	
115 In	1	606317	1.41	593101	102.2	80 - 120	
115 In	2	1749114	1.07	1675692	104.4	80 - 120	
159 Tb	1	1367801	2.20	1237356	110.5	80 - 120	
159 Tb	2	2262809	2.31	2165061	104.5	80 - 120	
165 Ho	1	1328202	1.82	1192048	111.4	80 - 120	
165 Ho	2	2193592	2.27	2108329	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\S111913B.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\S111913B.b\051_CCB.D\051_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913B.b\051_CCB.D\051_CCB.D#
 Date Acquired: Nov 19 2013 08:37 pm
 Operator: GK
 Sample Name: CCB V-176968
 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: Nov 19 2013 04:23 pm
 Sample Type: 6-CCB
 Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.015	ppb	17.14	180	0.50	
23 Na	45	1	56.750	ppb	17.18	194002	250.00	
24 Mg	45	1	3.219	ppb	23.42	4063	250.00	
27 Al	45	1	22.630	ppb	3.01	9908	100.00	
39 K	45	1	45.950	ppb	18.72	89028	250.00	
44 Ca	45	1	54.570	ppb	3.30	2317	250.00	
51 V	45	1	0.024	ppb	29.65	243	1.00	
52 Cr	45	1	0.058	ppb	3.25	1040	1.00	
55 Mn	45	1	-0.115	ppb	23.97	769	3.00	
56 Fe	45	1	-2.772	ppb	32.77	62687	150.00	
59 Co	45	1	0.013	ppb	45.01	293	1.00	
60 Ni	45	1	0.023	ppb	34.43	133	1.50	
65 Cu	45	1	0.225	ppb	8.24	1478	5.00	
66 Zn	45	1	0.501	ppb	3.33	1253	10.00	
75 As	115	1	0.028	ppb	30.75	40	1.00	
78 Se	115	1	-0.197	ppb	85.44	214	5.00	
83 Kr	115	2	-----	ppb	-----	542	1.00	
95 Mo	115	2	1.605	ppb	11.31	9465	1.00	Fail
107 Ag	115	2	0.011	ppb	18.76	317	0.50	
111 Cd	115	2	0.015	ppb	16.98	103	1.00	
121 Sb	115	2	0.020	ppb	22.31	357	1.00	
137 Ba	159	2	0.020	ppb	35.11	588	2.50	
205 Tl	165	2	0.012	ppb	1.98	786	1.00	
206 (Pb)	165	2	-0.116	ppb	5.33	1458	1.50	
207 (Pb)	165	2	-0.125	ppb	6.33	1200	1.50	
208 Pb	165	2	-0.115	ppb	1.64	5710	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	99273	0.41	103581	95.8	80 - 120	
45 Sc	2	1474714	1.27	1500578	98.3	80 - 120	
115 In	1	597293	1.27	593101	100.7	80 - 120	
115 In	2	1745609	1.06	1675692	104.2	80 - 120	
159 Tb	1	1360697	0.32	1237356	110.0	80 - 120	
159 Tb	2	2282558	1.15	2165061	105.4	80 - 120	
165 Ho	1	1334899	0.14	1192048	112.0	80 - 120	
165 Ho	2	2206568	0.41	2108329	104.7	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\

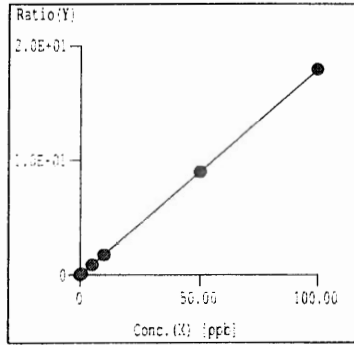
ISTD Ref File : C:\ICPCHEM\1\DATA\S111913B.b\002CALB.D\002CALB.D#

1 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

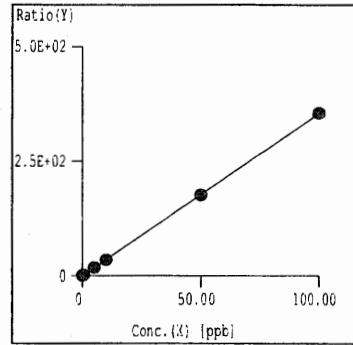
=== Graph Detail ===

Step Mass Element ISTD Unit
(2) 9 Be 45 ppb



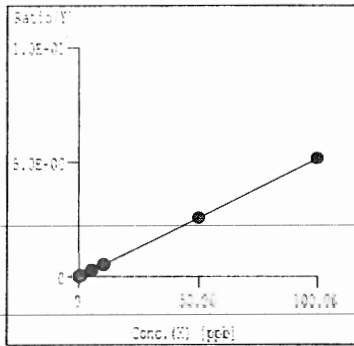
Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 1.792E-001 \cdot X + 2.130E-003$
 $X = 5.579E+000 \cdot Y - 1.188E-002$
 $DL = 1.158E-02 \text{ ppb}$
 $BEC = 1.188E-02 \text{ ppb}$

Step Mass Element ISTD Unit
(1) 59 Co 45 ppb



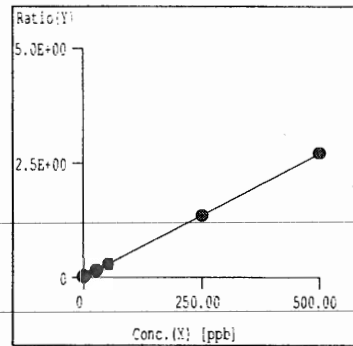
Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 3.544E+000 \cdot X + 7.330E-002$
 $X = 2.822E-001 \cdot Y - 2.069E-002$
 $DL = 7.082E-03 \text{ ppb}$
 $BEC = 2.069E-02 \text{ ppb}$

Step Mass Element ISTD Unit
(1) 75 As 115 ppb



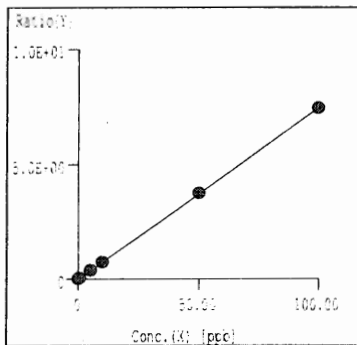
Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 5.156E-002 \cdot X + 1.257E-003$
 $X = 1.940E+001 \cdot Y - 2.439E-002$
 $DL = 1.031E-02 \text{ ppb}$
 $BEC = 2.439E-02 \text{ ppb}$

Step Mass Element ISTD Unit
(1) 78 Se 115 ppb



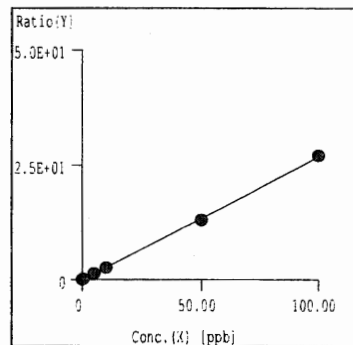
Curve Fit: $Y=aX+b$
 $r = 1.0000$
 $Y = 5.391E-003 \cdot X + 1.539E-002$
 $X = 1.855E+002 \cdot Y - 2.854E+000$
 $DL = 2.717E-01 \text{ ppb}$
 $BEC = 2.854 \text{ ppb}$

Step Mass Element ISTD Unit
(2) 111 Cd 115 ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 7.452E-002 \cdot X + 1.255E-003$
 $X = 1.342E+001 \cdot Y - 1.684E-002$
 $DL = 7.385E-03 \text{ ppb}$
 $BEC = 1.684E-02 \text{ ppb}$

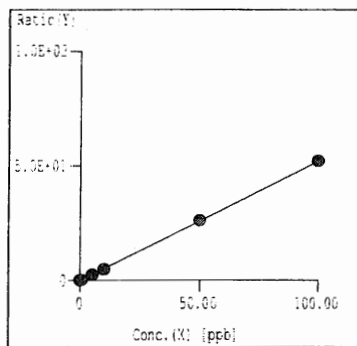
Step Mass Element ISTD Unit
(2) 121 Sb 115 ppb



Curve Fit: $Y=aX+[blank]$
 $r = 0.9999$
 $Y = 2.679E-001 \cdot X + 2.759E-003$
 $X = 3.733E+000 \cdot Y - 1.030E-002$
 $DL = 8.295E-03 \text{ ppb}$
 $BEC = 1.030E-02 \text{ ppb}$

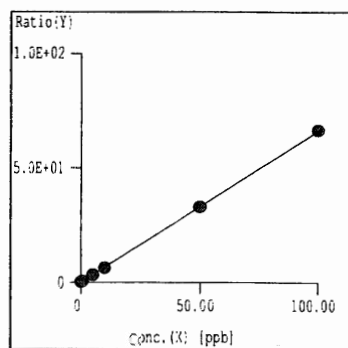
=== Graph Detail ===

Step Mass Element ISTD Unit
(2) 205 Tl 165 ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 5.202E-001 * X + 7.853E-003$
 $X = 1.922E+000 * Y - 1.510E-002$
 $DL = 5.947E-03 \text{ ppb}$
 $BEC = 1.510E-02 \text{ ppb}$

Step Mass Element ISTD Unit
(2) 208 Pb 165 ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 6.605E-001 * X + 1.794E-001$
 $X = 1.514E+000 * Y - 2.715E-001$
 $DL = 3.251E-02 \text{ ppb}$
 $BEC = 2.715E-01 \text{ ppb}$

File

SW15687A2

3110620 0529
Batch 15687 SW846

Method: PE2 4300DV AXIAL

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Date: 11/14/2013 9:36:23 PM

Analyst JBL 11/15/13

Method Loaded

Method Name: PE2 4300DV AXIAL

IEC File: IECax092613.iec

Method Description: 200.7/6010B/6010C

Method Last Saved: 11/14/2013 5:55:16 PM

MSF File:

Sequence No.: 1

Sample ID: Calib Blk 1 V-174666

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 11/14/2013 9:33:58 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib Blk 1 V-174666

Mean Corrected				Calib	
Analyte	Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	1159236.9	3758.12	0.32%	100	%
Y 371.029	413622.7	3022.97	0.73%	100	%
Ag 328.068†	2592.3	41.20	1.59%	[0.00]	mg/L
Al 308.215†	9510.7	74.40	0.78%	[0.00]	mg/L
As 188.979†	-26.8	4.38	16.37%	[0.00]	mg/L
Ba 233.527†	-1957.5	3.95	0.20%	[0.00]	mg/L
Be 313.107†	-4407.0	24.36	0.55%	[0.00]	mg/L
Ca 315.887†	-8318.0	349.99	4.21%	[0.00]	mg/L
Cd 228.802†	853.7	3.30	0.39%	[0.00]	mg/L
Co 228.616†	79.9	2.50	3.13%	[0.00]	mg/L
Cr 267.716†	140.0	8.69	6.21%	[0.00]	mg/L
Cu 327.393†	-6903.6	86.64	1.26%	[0.00]	mg/L
Fe 273.955†	75.7	7.09	9.37%	[0.00]	mg/L
K 404.721†	-12788.6	244.48	1.91%	[0.00]	mg/L
Mg 279.077†	-3882.0	9.90	0.25%	[0.00]	mg/L
Mn 257.610†	662.5	14.71	2.22%	[0.00]	mg/L
Mo 202.031†	62.7	16.19	25.82%	[0.00]	mg/L
Na 330.237†	57.4	9.09	15.83%	[0.00]	mg/L
Ni 231.604†	754.0	21.39	2.84%	[0.00]	mg/L
Pb 220.353†	-220.7	1.02	0.46%	[0.00]	mg/L
Sb 206.836†	-38.6	2.57	6.65%	[0.00]	mg/L
Se 196.026†	-44.1	2.30	5.22%	[0.00]	mg/L
Sn 189.927†	-16.2	0.31	1.89%	[0.00]	mg/L
Ti 334.940†	-4216.7	24.80	0.59%	[0.00]	mg/L
Tl 190.801†	-22.1	4.89	22.10%	[0.00]	mg/L
V 290.880†	4621.4	0.97	0.02%	[0.00]	mg/L
Zn 206.200†	26.4	0.24	0.93%	[0.00]	mg/L

15687
27402all elements reported
except Ni, K

75576-002-028 not reported

Sequence No.: 2
Sample ID: Calib 1 V-173067
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 11/14/2013 9:37:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib 1 V-173067

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1175689.8	14046.37	1.19%	101	%
Y 371.029	413771.1	5443.04	1.32%	100	%
As 188.979†	14.2	3.50	24.73%	[0.005]	mg/L
Be 313.107†	6678.7	26.97	0.40%	[0.003]	mg/L
Cd 228.802†	134.6	19.97	14.84%	[0.003]	mg/L
Pb 220.353†	62.6	16.14	25.79%	[0.004]	mg/L
Tl 190.801†	6.7	5.32	79.54%	[0.005]	mg/L

Sequence No.: 3
 Sample ID: Calib 2 V-173273
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 9
 Date Collected: 11/14/2013 9:41:13 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: Calib 2 V-173273

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Sc 361.383	1166641.9	2812.07	0.24%	101 %
Y 371.029	411848.8	2290.02	0.56%	99.6 %
Ag 328.068†	346.0	34.15	9.87%	[0.002] mg/L
Al 308.215†	2323.1	19.84	0.85%	[0.10] mg/L
As 188.979†	14.9	6.66	44.64%	[0.010] mg/L
Ba 233.527†	945.6	29.83	3.15%	[0.010] mg/L
Be 313.107†	20773.0	184.54	0.89%	[0.010] mg/L
Ca 315.887†	82513.6	1255.04	1.52%	[1.0] mg/L
Cd 228.802†	446.6	5.02	1.13%	[0.010] mg/L
Co 228.616†	354.0	5.07	1.43%	[0.010] mg/L
Cr 267.716†	606.6	2.41	0.40%	[0.010] mg/L
Cu 327.393†	1056.0	61.17	5.79%	[0.010] mg/L
Fe 273.955†	1765.0	19.81	1.12%	[0.10] mg/L
K 404.721†	-182.7	20.97	11.48%	[1.0] mg/L
No calibration curve because standard intensity and concentration values are not in the same order.				
Mg 279.077†	14141.6	57.44	0.41%	[1.0] mg/L
Mn 257.610†	6448.8	24.10	0.37%	[0.010] mg/L
Mo 202.031†	160.6	5.61	3.49%	[0.010] mg/L
Na 330.237†	820.4	38.83	4.73%	[1.0] mg/L
Ni 231.604†	494.3	7.06	1.43%	[0.010] mg/L
Pb 220.353†	113.7	12.85	11.30%	[0.010] mg/L
Sb 206.836†	18.3	0.55	3.02%	[0.010] mg/L
Se 196.026†	8.5	4.64	54.37%	[0.010] mg/L
Sn 189.927†	31.9	0.45	1.40%	[0.010] mg/L
Ti 334.940†	4951.8	155.69	3.14%	[0.010] mg/L
Tl 190.801†	13.1	0.61	4.67%	[0.010] mg/L
V 290.880†	1049.1	120.11	11.45%	[0.010] mg/L
Zn 206.200†	620.0	4.98	0.80%	[0.010] mg/L

Sequence No.: 4
 Sample ID: Calib 3 V-173274
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 11/14/2013 9:44:49 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: Calib 3 V-173274

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Sc 361.383	1121552.5	4179.69	0.37%	96.7 %
Y 371.029	391208.2	1695.39	0.43%	94.6 %
Ag 328.068†	15046.0	3.62	0.02%	[0.10] mg/L
Al 308.215†	108271.5	670.75	0.62%	[5.0] mg/L
As 188.979†	609.7	10.30	1.69%	[0.50] mg/L
Ba 233.527†	47935.4	105.47	0.22%	[0.50] mg/L
Be 313.107†	1089223.0	10870.00	1.00%	[0.50] mg/L
Ca 315.887†	4273560.2	44288.09	1.04%	[50] mg/L
Cd 228.802†	24062.0	181.51	0.75%	[0.50] mg/L
Co 228.616†	17906.7	77.12	0.43%	[0.50] mg/L
Cr 267.716†	30728.8	33.22	0.11%	[0.50] mg/L
Cu 327.393†	51076.4	529.61	1.04%	[0.50] mg/L
Fe 273.955†	85139.6	460.39	0.54%	[5.0] mg/L
K 404.721†	2809.3	273.14	9.72%	[50] mg/L
No calibration curve because standard intensity and concentration values are not in the same order.				
Mg 279.077†	749207.9	6524.63	0.87%	[50] mg/L
Mn 257.610†	305323.5	1306.98	0.43%	[0.50] mg/L
Mo 202.031†	8159.2	107.38	1.32%	[0.50] mg/L
Na 330.237†	45698.7	185.58	0.41%	[50] mg/L
Ni 231.604†	22911.4	113.72	0.50%	[0.50] mg/L
Pb 220.353†	5699.4	60.97	1.07%	[0.50] mg/L
Sb 206.836†	876.5	17.38	1.98%	[0.50] mg/L
Se 196.026†	492.3	6.14	1.25%	[0.50] mg/L
Sn 189.927†	1524.1	3.53	0.23%	[0.50] mg/L
Ti 334.940†	257936.4	1903.91	0.74%	[0.50] mg/L
Tl 190.801†	666.5	14.00	2.10%	[0.50] mg/L
V 290.880†	58028.0	291.84	0.50%	[0.50] mg/L
Zn 206.200†	23188.5	133.55	0.58%	[0.50] mg/L

Sequence No.: 5

Sample ID: Calib 4 V-174144

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 11/14/2013 9:48:36 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib 4 V-174144

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Sc 361.383	1104517.1	4077.58	0.37%	95.3 %
Y 371.029	384541.7	1377.87	0.36%	93.0 %
Ag 328.068†	30603.2	46.09	0.15%	[0.20] mg/L
Al 308.215†	217712.3	961.78	0.44%	[10] mg/L
As 188.979†	1280.1	0.66	0.05%	[1.0] mg/L
Ba 233.527†	97193.0	703.65	0.72%	[1.0] mg/L
Be 313.107†	2256901.9	8031.00	0.36%	[1.0] mg/L
Ca 315.887†	8712298.1	90173.86	1.04%	[100] mg/L
Cd 228.802†	49088.0	361.50	0.74%	[1.0] mg/L
Co 228.616†	36125.4	50.51	0.14%	[1.0] mg/L
Cr 267.716†	62261.3	181.44	0.29%	[1.0] mg/L
Cu 327.393†	103717.6	463.38	0.45%	[1.0] mg/L
Fe 273.955†	171233.7	251.37	0.15%	[10] mg/L
K 404.721†	7310.5	246.38	3.37%	[100] mg/L
No calibration curve because standard intensity and concentration values are not in the same order.				
Mg 279.077†	1535736.4	7767.02	0.51%	[100] mg/L
Mn 257.610†	618611.7	2491.50	0.40%	[1.0] mg/L
Mo 202.031†	16889.8	5.04	0.03%	[1.0] mg/L
Na 330.237†	98421.0	102.53	0.10%	[100] mg/L
Ni 231.604†	46309.2	169.28	0.37%	[1.0] mg/L
Pb 220.353†	11781.8	26.86	0.23%	[1.0] mg/L
Sb 206.836†	1812.7	7.45	0.41%	[1.0] mg/L
Se 196.026†	1013.9	1.30	0.13%	[1.0] mg/L
Sn 189.927†	3175.8	28.89	0.91%	[1.0] mg/L
Ti 334.940†	527538.9	2356.37	0.45%	[1.0] mg/L
Tl 190.801†	1372.8	0.83	0.06%	[1.0] mg/L
V 290.880†	117442.6	586.53	0.50%	[1.0] mg/L
Zn 206.200†	46909.6	469.61	1.00%	[1.0] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-28.4	152700	0.00000	0.999959	
Al 308.215	3	Lin, Calc Int	-40.1	21750	0.00000	0.999995	
As 188.979	4	Lin, Calc Int	-0.7	1269	0.00000	0.999686	
Ba 233.527	3	Lin, Calc Int	-132.3	97090	0.00000	0.999976	
Be 313.107	4	Lin, Calc Int	-5476.9	2248000	0.00000	0.999858	
Ca 315.887	3	Lin, Calc Int	-17124.0	87000	0.00000	0.999953	
Cd 228.802	4	Lin, Calc Int	-77.9	48990	0.00000	0.999956	
Co 228.616	3	Lin, Calc Int	-31.7	36100	0.00000	0.999990	
Cr 267.716	3	Lin, Calc Int	-80.4	62200	0.00000	0.999978	
Cu 327.393	3	Lin, Calc Int	-133.9	103600	0.00000	0.999969	
Fe 273.955	3	Lin, Calc Int	-62.9	17110	0.00000	0.999996	
Mg 279.077	3	Lin, Calc Int	-3948.1	15330	0.00000	0.999923	
Mn 257.610	3	Lin, Calc Int	-605.5	617800	0.00000	0.999977	
Mo 202.031	3	Lin, Calc Int	-55.8	16840	0.00000	0.999848	
Na 330.237	3	Lin, Calc Int	-713.5	978.8	0.00000	0.999327	
Ni 231.604	3	Lin, Calc Int	-30.1	46250	0.00000	0.999984	
Pb 220.353	4	Lin, Calc Int	-20.3	11730	0.00000	0.999870	
Sb 206.836	3	Lin, Calc Int	-5.4	1807	0.00000	0.999854	
Se 196.026	3	Lin, Calc Int	-3.4	1012	0.00000	0.999893	
Sn 189.927	3	Lin, Calc Int	-11.5	3164	0.00000	0.999782	
Ti 334.940	3	Lin, Calc Int	-1208.5	526700	0.00000	0.999936	
Tl 190.801	4	Lin, Calc Int	-2.7	1368	0.00000	0.999901	
V 290.880	3	Lin, Calc Int	-183.1	117400	0.00000	0.999983	
Zn 206.200	3	Lin, Calc Int	20.0	46780	0.00000	0.999973	

Sequence No.: 6
 Sample ID: ICS3 V-173274
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 11/14/2013 9:53:34 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICS3 V-173274

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1128440.6	97.3 %		0.52			0.53%
Y 371.029	385531.5	93.2 %		0.77			0.82%
Ag 328.068†	14694.7	0.0968527 mg/L		0.00009005	0.0968527 mg/L	0.00009005	0.09%
QC value within limits for Ag		328.068 Recovery = 96.85%					
Al 308.215†	105531.8	4.84516 mg/L		0.030735	4.84516 mg/L	0.030735	0.63%
QC value within limits for Al		308.215 Recovery = 96.90%					
As 188.979†	605.0	0.478517 mg/L		0.0042077	0.478517 mg/L	0.0042077	0.88%
QC value within limits for As		188.979 Recovery = 95.70%					
Ba 233.527†	46733.2	0.482528 mg/L		0.0019159	0.482528 mg/L	0.0019159	0.40%
QC value within limits for Ba		233.527 Recovery = 96.51%					
Be 313.107†	1087452.1	0.486043 mg/L		0.0049849	0.486043 mg/L	0.0049849	1.03%
QC value within limits for Be		313.107 Recovery = 97.21%					
Ca 315.887†	4258923.8	49.1375 mg/L		0.45044	49.1375 mg/L	0.45044	0.92%
QC value within limits for Ca		315.887 Recovery = 98.27%					
Cd 228.802†	23324.1	0.477370 mg/L		0.0018886	0.477370 mg/L	0.0018886	0.40%
QC value within limits for Cd		228.802 Recovery = 95.47%					
Co 228.616†	17425.1	0.483923 mg/L		0.0028322	0.483923 mg/L	0.0028322	0.59%
QC value within limits for Co		228.616 Recovery = 96.78%					
Cr 267.716†	30051.1	0.486909 mg/L		0.0024971	0.486909 mg/L	0.0024971	0.51%
QC value within limits for Cr		267.716 Recovery = 97.38%					
Cu 327.393†	49549.0	0.478784 mg/L		0.0018220	0.478784 mg/L	0.0018220	0.38%
QC value within limits for Cu		327.393 Recovery = 95.76%					
Fe 273.955†	82732.9	4.83849 mg/L		0.057307	4.83849 mg/L	0.057307	1.18%
QC value within limits for Fe		273.955 Recovery = 96.77%					
K 404.721†	3034.7					228.02	7.51%
Unable to evaluate QC.							
Mg 279.077†	748365.6	49.0786 mg/L		0.50318	49.0786 mg/L	0.50318	1.03%
QC value within limits for Mg		279.077 Recovery = 98.16%					
Mn 257.610†	296915.6	0.479948 mg/L		0.0028041	0.479948 mg/L	0.0028041	0.58%
QC value within limits for Mn		257.610 Recovery = 95.99%					
Mo 202.031†	8200.3	0.488234 mg/L		0.0026315	0.488234 mg/L	0.0026315	0.54%
QC value within limits for Mo		202.031 Recovery = 97.65%					
Na 330.237†	44580.3	46.2763 mg/L		0.30109	46.2763 mg/L	0.30109	0.65%
QC value within limits for Na		330.237 Recovery = 92.55%					
Ni 231.604†	22291.7	0.483462 mg/L		0.0026510	0.483462 mg/L	0.0026510	0.55%
QC value within limits for Ni		231.604 Recovery = 96.69%					
Pb 220.353†	5710.5	0.489327 mg/L		0.0025861	0.489327 mg/L	0.0025861	0.53%
QC value within limits for Pb		220.353 Recovery = 97.87%					
Sb 206.836†	876.9	0.488573 mg/L		0.0033696	0.488573 mg/L	0.0033696	0.69%
QC value within limits for Sb		206.836 Recovery = 97.71%					
Se 196.026†	482.9	0.483302 mg/L		0.0075918	0.483302 mg/L	0.0075918	1.57%
QC value within limits for Se		196.026 Recovery = 96.66%					
Sn 189.927†	1550.1	0.494289 mg/L		0.0067209	0.494289 mg/L	0.0067209	1.36%
QC value within limits for Sn		189.927 Recovery = 98.86%					
Ti 334.940†	251622.3	0.480062 mg/L		0.0019689	0.480062 mg/L	0.0019689	0.41%
QC value within limits for Ti		334.940 Recovery = 96.01%					
Tl 190.801†	672.6	0.497850 mg/L		0.0036104	0.497850 mg/L	0.0036104	0.73%
QC value within limits for Tl		190.801 Recovery = 99.57%					
V 290.880†	56527.4	0.481823 mg/L		0.0051085	0.481823 mg/L	0.0051085	1.06%
QC value within limits for V		290.880 Recovery = 96.36%					
Zn 206.200†	22508.0	0.480313 mg/L		0.0023720	0.480313 mg/L	0.0023720	0.49%
QC value within limits for Zn		206.200 Recovery = 96.06%					

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 7
 Sample ID: ICV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/14/2013 9:57:24 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1122451.7	96.8 %	0.23			0.23%
Y 371.029	390841.9	94.5 %	0.43			0.46%
Ag 328.068†	14890.5	0.0981471 mg/L	0.00243299	0.0981471 mg/L	0.00243299	2.48%
QC value within limits for Ag		Recovery = 98.15%				
Al 308.215†	108033.3	4.96009 mg/L	0.069560	4.96009 mg/L	0.069560	1.40%
QC value within limits for Al		Recovery = 99.20%				
As 188.979†	613.5	0.485282 mg/L	0.0111176	0.485282 mg/L	0.0111176	2.29%
QC value within limits for As		Recovery = 97.06%				
Ba 233.527†	47765.1	0.493151 mg/L	0.0047613	0.493151 mg/L	0.0047613	0.97%
QC value within limits for Ba		Recovery = 98.63%				
Be 313.107†	1087469.2	0.486048 mg/L	0.0062958	0.486048 mg/L	0.0062958	1.30%
QC value within limits for Be		Recovery = 97.21%				
Ca 315.887†	4318400.8	49.8209 mg/L	0.49561	49.8209 mg/L	0.49561	0.99%
QC value within limits for Ca		Recovery = 99.64%				
Cd 228.802†	23919.6	0.489520 mg/L	0.0056551	0.489520 mg/L	0.0056551	1.16%
QC value within limits for Cd		Recovery = 97.90%				
Co 228.616†	17720.3	0.492096 mg/L	0.0088544	0.492096 mg/L	0.0088544	1.80%
QC value within limits for Co		Recovery = 98.42%				
Cr 267.716†	30725.3	0.497771 mg/L	0.0130902	0.497771 mg/L	0.0130902	2.63%
QC value within limits for Cr		Recovery = 99.55%				
Cu 327.393†	50624.4	0.489153 mg/L	0.0045011	0.489153 mg/L	0.0045011	0.92%
QC value within limits for Cu		Recovery = 97.83%				
Fe 273.955†	85103.1	4.97700 mg/L	0.099398	4.97700 mg/L	0.099398	2.00%
QC value within limits for Fe		Recovery = 99.54%				
K 404.721†	3055.3				99.40	3.25%
Unable to evaluate QC.						
Mg 279.077†	762814.9	50.0211 mg/L	0.52274	50.0211 mg/L	0.52274	1.05%
QC value within limits for Mg		Recovery = 100.04%				
Mn 257.610†	302383.0	0.488765 mg/L	0.0070399	0.488765 mg/L	0.0070399	1.44%
QC value within limits for Mn		Recovery = 97.75%				
Mo 202.031†	8269.9	0.492334 mg/L	0.0063261	0.492334 mg/L	0.0063261	1.28%
QC value within limits for Mo		Recovery = 98.47%				
Na 330.237†	45864.0	47.5878 mg/L	0.58611	47.5878 mg/L	0.58611	1.23%
QC value within limits for Na		Recovery = 95.18%				
Ni 231.604†	22754.5	0.493477 mg/L	0.0125728	0.493477 mg/L	0.0125728	2.55%
QC value within limits for Ni		Recovery = 98.70%				
Pb 220.353†	5759.5	0.493516 mg/L	0.0060160	0.493516 mg/L	0.0060160	1.22%
QC value within limits for Pb		Recovery = 98.70%				
Sb 206.836†	889.3	0.495482 mg/L	0.0071881	0.495482 mg/L	0.0071881	1.45%
QC value within limits for Sb		Recovery = 99.10%				
Se 196.026†	491.4	0.491717 mg/L	0.0083344	0.491717 mg/L	0.0083344	1.69%
QC value within limits for Se		Recovery = 98.34%				
Sn 189.927†	1571.1	0.500935 mg/L	0.0030590	0.500935 mg/L	0.0030590	0.61%
QC value within limits for Sn		Recovery = 100.19%				
Ti 334.940†	255566.6	0.487551 mg/L	0.0069562	0.487551 mg/L	0.0069562	1.43%
QC value within limits for Ti		Recovery = 97.51%				
Tl 190.801†	681.2	0.504195 mg/L	0.0082295	0.504195 mg/L	0.0082295	1.63%
QC value within limits for Tl		Recovery = 100.84%				
V 290.880†	57520.3	0.490247 mg/L	0.0080459	0.490247 mg/L	0.0080459	1.64%
QC value within limits for V		Recovery = 98.05%				
Zn 206.200†	22907.8	0.488851 mg/L	0.0087025	0.488851 mg/L	0.0087025	1.78%
QC value within limits for Zn		Recovery = 97.77%				

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 8
 Sample ID: LLICV V-176606 [aq]
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 11/14/2013 10:01:11 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LLICV V-176606 [aq]

Analyte		Mean Corrected Intensity		Conc. Units		Calib	Std.Dev.	Sample Conc. Units		Std.Dev.	RSD
Sc	361.383		1164381.3		100	%	0.0				0.01%
Y	371.029		411439.3		99.5	%	0.04				0.04%
Ag	328.068†		2952.3	0.0195478	mg/L		0.00015010	0.0195478	mg/L	0.00015010	0.77%
	QC value	within limits	for Ag	328.068	Recovery	=	97.74%				
Al	308.215†		4035.4	0.186969	mg/L		0.0005245	0.186969	mg/L	0.0005245	0.28%
	QC value	within limits	for Al	308.215	Recovery	=	93.48%				
As	188.979†		25.2	0.0204822	mg/L		0.00095904	0.0204822	mg/L	0.00095904	4.68%
	QC value	within limits	for As	188.979	Recovery	=	102.41%				
Ba	233.527†		4744.8	0.0502231	mg/L		0.00010948	0.0502231	mg/L	0.00010948	0.22%
	QC value	within limits	for Ba	233.527	Recovery	=	100.45%				
Be	313.107†		25295.2	0.0136726	mg/L		0.00007956	0.0136726	mg/L	0.00007956	0.58%
	QC value	within limits	for Be	313.107	Recovery	=	113.94%				
Ca	315.887†		426633.6	5.09994	mg/L		0.036871	5.09994	mg/L	0.036871	0.72%
	QC value	within limits	for Ca	315.887	Recovery	=	102.00%				
Cd	228.802†		554.5	0.0128815	mg/L		0.00008354	0.0128815	mg/L	0.00008354	0.65%
	QC value	within limits	for Cd	228.802	Recovery	=	107.35%				
Co	228.616†		703.2	0.0203252	mg/L		0.00002655	0.0203252	mg/L	0.00002655	0.13%
	QC value	within limits	for Co	228.616	Recovery	=	101.63%				
Cr	267.716†		2966.3	0.0491076	mg/L		0.00024824	0.0491076	mg/L	0.00024824	0.51%
	QC value	within limits	for Cr	267.716	Recovery	=	98.22%				
Cu	327.393†		5125.6	0.0506912	mg/L		0.00191561	0.0506912	mg/L	0.00191561	3.78%
	QC value	within limits	for Cu	327.393	Recovery	=	101.38%				
Fe	273.955†		4935.0	0.292073	mg/L		0.0000395	0.292073	mg/L	0.0000395	0.01%
	QC value	within limits	for Fe	273.955	Recovery	=	97.36%				
K	404.721†		259.1							185.62	71.63%
	Unable to evaluate QC.										
Mg	279.077†		75674.9	5.19412	mg/L		0.044136	5.19412	mg/L	0.044136	0.85%
	QC value	within limits	for Mg	279.077	Recovery	=	103.88%				
Mn	257.610†		23436.7	0.0387334	mg/L		0.00024331	0.0387334	mg/L	0.00024331	0.63%
	QC value	within limits	for Mn	257.610	Recovery	=	96.83%				
Mo	202.031†		340.0	0.0233004	mg/L		0.00049861	0.0233004	mg/L	0.00049861	2.14%
	QC value	within limits	for Mo	202.031	Recovery	=	116.50%				
Na	330.237†		4058.2	4.87522	mg/L		0.054427	4.87522	mg/L	0.054427	1.12%
	QC value	within limits	for Na	330.237	Recovery	=	97.50%				
Ni	231.604†		2237.8	0.0490770	mg/L		0.00056754	0.0490770	mg/L	0.00056754	1.16%
	QC value	within limits	for Ni	231.604	Recovery	=	98.15%				
Pb	220.353†		125.5	0.0124320	mg/L		0.00075076	0.0124320	mg/L	0.00075076	6.04%
	QC value	within limits	for Pb	220.353	Recovery	=	103.60%				
Sb	206.836†		34.6	0.0221204	mg/L		0.00276359	0.0221204	mg/L	0.00276359	12.49%
	QC value	within limits	for Sb	206.836	Recovery	=	110.60%				
Se	196.026†		40.3	0.0433567	mg/L		0.00520012	0.0433567	mg/L	0.00520012	11.99%
	QC value	within limits	for Se	196.026	Recovery	=	108.39%				
Sn	189.927†		138.1	0.0473891	mg/L		0.00013532	0.0473891	mg/L	0.00013532	0.29%
	QC value	within limits	for Sn	189.927	Recovery	=	94.78%				
Ti	334.940†		23837.8	0.0475566	mg/L		0.00042246	0.0475566	mg/L	0.00042246	0.89%
	QC value	within limits	for Ti	334.940	Recovery	=	95.11%				
Tl	190.801†		31.0	0.0250072	mg/L		0.00140391	0.0250072	mg/L	0.00140391	5.61%
	QC value	within limits	for Tl	190.801	Recovery	=	125.04%				
V	290.880†		5601.9	0.0491038	mg/L		0.00032330	0.0491038	mg/L	0.00032330	0.66%
	QC value	within limits	for V	290.880	Recovery	=	98.21%				
Zn	206.200†		2237.1	0.0473723	mg/L		0.00012992	0.0473723	mg/L	0.00012992	0.27%
	QC value	within limits	for Zn	206.200	Recovery	=	94.74%				

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 9
 Sample ID: ICB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 11/14/2013 10:04:49 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICB V-174666

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1156340.7	99.8 %		0.18			0.18%
Y 371.029	416787.2	101 %		0.9			0.87%
Ag 328.068†	69.7	0.0006426 mg/L		0.00017021	0.0006426 mg/L	0.00017021	26.49%
QC value within limits for Ag	328.068	Recovery = Not calculated					
Al 308.215†	18.3	0.0026251 mg/L		0.00066783	0.0026251 mg/L	0.00066783	25.44%
QC value within limits for Al	308.215	Recovery = Not calculated					
As 188.979†	1.9	0.0020361 mg/L		0.00158929	0.0020361 mg/L	0.00158929	78.06%
QC value within limits for As	188.979	Recovery = Not calculated					
Ba 233.527†	12.0	0.0014856 mg/L		0.00007222	0.0014856 mg/L	0.00007222	4.86%
QC value within limits for Ba	233.527	Recovery = Not calculated					
Be 313.107†	97.7	0.0024792 mg/L		0.00004845	0.0024792 mg/L	0.00004845	1.95%
QC value within limits for Be	313.107	Recovery = Not calculated					
Ca 315.887†	337.0	0.200669 mg/L		0.0043351	0.200669 mg/L	0.0043351	2.16%
QC value within limits for Ca	315.887	Recovery = Not calculated					
Cd 228.802†	2.4	0.0016365 mg/L		0.00015017	0.0016365 mg/L	0.00015017	9.18%
QC value within limits for Cd	228.802	Recovery = Not calculated					
Co 228.616†	7.9	0.0011032 mg/L		0.00017085	0.0011032 mg/L	0.00017085	15.49%
QC value within limits for Co	228.616	Recovery = Not calculated					
Cr 267.716†	-11.9	0.0011194 mg/L		0.00026476	0.0011194 mg/L	0.00026476	23.65%
QC value within limits for Cr	267.716	Recovery = Not calculated					
Cu 327.393†	149.3	0.0027300 mg/L		0.00185216	0.0027300 mg/L	0.00185216	67.85%
QC value within limits for Cu	327.393	Recovery = Not calculated					
Fe 273.955†	-24.5	0.0022480 mg/L		0.00085856	0.0022480 mg/L	0.00085856	38.19%
QC value within limits for Fe	273.955	Recovery = Not calculated					
K 404.721†	-401.6					301.34	75.03%
Unable to evaluate QC.							
Mg 279.077†	-41.7	0.254864 mg/L		0.0043435	0.254864 mg/L	0.0043435	1.70%
QC value within limits for Mg	279.077	Recovery = Not calculated					
Mn 257.610†	-13.3	0.0009503 mg/L		0.00000078	0.0009503 mg/L	0.00000078	0.08%
QC value within limits for Mn	257.610	Recovery = Not calculated					
Mo 202.031†	6.0	0.0036620 mg/L		0.00018769	0.0036620 mg/L	0.00018769	5.13%
QC value within limits for Mo	202.031	Recovery = Not calculated					
Na 330.237†	-5.2	0.723685 mg/L		0.0089122	0.723685 mg/L	0.0089122	1.23%
QC value within limits for Na	330.237	Recovery = Not calculated					
Ni 231.604†	13.5	0.0009487 mg/L		0.00026949	0.0009487 mg/L	0.00026949	28.41%
QC value within limits for Ni	231.604	Recovery = Not calculated					
Pb 220.353†	10.7	0.0026400 mg/L		0.00145151	0.0026400 mg/L	0.00145151	54.98%
QC value within limits for Pb	220.353	Recovery = Not calculated					
Sb 206.836†	-1.1	0.0023343 mg/L		0.00036348	0.0023343 mg/L	0.00036348	15.57%
QC value within limits for Sb	206.836	Recovery = Not calculated					
Se 196.026†	-1.4	0.0020049 mg/L		0.00361665	0.0020049 mg/L	0.00361665	180.39%
QC value within limits for Se	196.026	Recovery = Not calculated					
Sn 189.927†	1.7	0.0041966 mg/L		0.00176502	0.0041966 mg/L	0.00176502	42.06%
QC value within limits for Sn	189.927	Recovery = Not calculated					
Ti 334.940†	-82.5	0.0021380 mg/L		0.00027376	0.0021380 mg/L	0.00027376	12.80%
QC value within limits for Ti	334.940	Recovery = Not calculated					
Tl 190.801†	2.4	0.0037373 mg/L		0.00167470	0.0037373 mg/L	0.00167470	44.81%
QC value within limits for Tl	190.801	Recovery = Not calculated					
V 290.880†	9.4	0.0016349 mg/L		0.00023280	0.0016349 mg/L	0.00023280	14.24%
QC value within limits for V	290.880	Recovery = Not calculated					
Zn 206.200†	13.6	-0.0001383 mg/L		0.00002707	-0.0001383 mg/L	0.00002707	19.57%
QC value within limits for Zn	206.200	Recovery = Not calculated					

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 10
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/14/2013 10:08:23 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1044468.1	90.1 %		0.00			0.00%
Y 371.029	365964.5	88.5 %		0.36			0.41%
Ag 238.068†	-1835.2	0.0039145 mg/L		0.00005439	0.0039145 mg/L	0.00005439	1.39%
Al 308.215†	10219998.7	469.826 mg/L		4.9278	469.826 mg/L	4.9278	1.05%
QC value within limits for Al 308.215 Recovery = 93.97%							
As 188.979†	-34.1	0.0040775 mg/L		0.00007162	0.0040775 mg/L	0.00007162	1.76%
Ba 233.527†	611.3	0.0007849 mg/L		0.00006360	0.0007849 mg/L	0.00006360	8.10%
Be 313.107†	-1378.6	0.0018222 mg/L		0.00000984	0.0018222 mg/L	0.00000984	0.54%
Ca 315.887†	40209797.4	462.054 mg/L		4.3001	462.054 mg/L	4.3001	0.93%
QC value within limits for Ca 315.887 Recovery = 92.41%							
Cd 228.802†	201.5	0.0001092 mg/L		0.00036883	0.0001092 mg/L	0.00036883	337.82%
Co 228.616†	-55.5	-0.0005871 mg/L		0.00001787	-0.0005871 mg/L	0.00001787	3.04%
Cr 267.716†	-183.0	-0.0015191 mg/L		0.00034811	-0.0015191 mg/L	0.00034811	22.92%
Cu 327.393†	1480.8	0.0035735 mg/L		0.00236531	0.0035735 mg/L	0.00236531	66.19%
Fe 273.955†	3102152.8	181.290 mg/L		0.1102	181.290 mg/L	0.1102	0.06%
QC value within limits for Fe 273.955 Recovery = 90.64%							
K 404.721†	-2377.1					11.64	0.49%
Mg 279.077†	7472774.1	487.582 mg/L		0.6456	487.582 mg/L	0.6456	0.13%
QC value within limits for Mg 279.077 Recovery = 97.52%							
Mn 257.610†	1185.1	-0.0151840 mg/L		0.00016275	-0.0151840 mg/L	0.00016275	1.07%
Mo 202.031†	413.6	0.0032551 mg/L		0.00074714	0.0032551 mg/L	0.00074714	22.95%
Na 330.237†	135.3	0.867277 mg/L		0.0953226	0.867277 mg/L	0.0953226	10.99%
Ni 231.604†	75.2	0.0023236 mg/L		0.00029614	0.0023236 mg/L	0.00029614	12.75%
Pb 220.353†	-912.5	0.0063994 mg/L		0.00134591	0.0063994 mg/L	0.00134591	21.03%
Sb 206.836†	-75.9	0.0029984 mg/L		0.00323544	0.0029984 mg/L	0.00323544	107.90%
Se 196.026†	-95.9	0.0155448 mg/L		0.01283630	0.0155448 mg/L	0.01283630	82.58%
Sn 189.927†	5.4	0.0015809 mg/L		0.00078335	0.0015809 mg/L	0.00078335	49.55%
Ti 334.940†	270.9	0.0028091 mg/L		0.00012836	0.0028091 mg/L	0.00012836	4.57%
Tl 190.801†	4.5	-0.0017991 mg/L		0.00562022	-0.0017991 mg/L	0.00562022	312.39%
V 290.880†	3329.9	0.0029111 mg/L		0.00033068	0.0029111 mg/L	0.00033068	11.36%
Zn 206.200†	546.6	-0.0038534 mg/L		0.00006798	-0.0038534 mg/L	0.00006798	1.76%

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/14/2013 10:13:34 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1042596.9	89.9 %		0.05			0.06%
Y 371.029	363107.3	87.8 %		0.19			0.21%
Ag 328.068†	153237.0	1.01959 mg/L		0.006494	1.01959 mg/L	0.006494	0.64%
QC value within limits for Ag		328.068	Recovery = 101.96%				
Al 308.215†	10214512.7	469.573 mg/L		0.1834	469.573 mg/L	0.1834	0.04%
QC value within limits for Al		308.215	Recovery = 93.91%				
As 188.979†	1242.1	1.00983 mg/L		0.002918	1.00983 mg/L	0.002918	0.29%
QC value within limits for As		188.979	Recovery = 100.98%				
Ba 233.527†	48469.8	0.493726 mg/L		0.0031216	0.493726 mg/L	0.0031216	0.63%
QC value within limits for Ba		233.527	Recovery = 98.75%				
Be 313.107†	1110799.7	0.496602 mg/L		0.0031573	0.496602 mg/L	0.0031573	0.64%
QC value within limits for Be		313.107	Recovery = 99.32%				
Ca 315.887†	40224017.5	462.215 mg/L		1.3167	462.215 mg/L	1.3167	0.28%
QC value within limits for Ca		315.887	Recovery = 92.44%				
Cd 228.802†	49422.4	1.00484 mg/L		0.002870	1.00484 mg/L	0.002870	0.29%
QC value within limits for Cd		228.802	Recovery = 100.48%				
Co 228.616†	17225.5	0.478092 mg/L		0.0018123	0.478092 mg/L	0.0018123	0.38%
QC value within limits for Co		228.616	Recovery = 95.62%				
Cr 267.716†	29430.2	0.474771 mg/L		0.0036684	0.474771 mg/L	0.0036684	0.77%
QC value within limits for Cr		267.716	Recovery = 94.95%				
Cu 327.393†	54366.2	0.514216 mg/L		0.0009868	0.514216 mg/L	0.0009868	0.19%
QC value within limits for Cu		327.393	Recovery = 102.84%				
Fe 273.955†	3101213.9	181.235 mg/L		1.6147	181.235 mg/L	1.6147	0.89%
QC value within limits for Fe		273.955	Recovery = 90.62%				
K 404.721†	-2198.2					72.46	3.30%
Mg 279.077†	7443435.3	485.671 mg/L		2.4584	485.671 mg/L	2.4584	0.51%
QC value within limits for Mg		279.077	Recovery = 97.13%				
Mn 257.610†	300141.5	0.468829 mg/L		0.0014230	0.468829 mg/L	0.0014230	0.30%
QC value within limits for Mn		257.610	Recovery = 93.77%				
Mo 202.031†	402.8	0.0026116 mg/L		0.00132446	0.0026116 mg/L	0.00132446	50.72%
Na 330.237†	1156.9	1.91101 mg/L		0.030467	1.91101 mg/L	0.030467	1.59%
Ni 231.604†	42686.0	0.923667 mg/L		0.0019206	0.923667 mg/L	0.0019206	0.21%
QC value within limits for Ni		231.604	Recovery = 92.37%				
Pb 220.353†	10229.2	0.956229 mg/L		0.0021167	0.956229 mg/L	0.0021167	0.22%
QC value within limits for Pb		220.353	Recovery = 95.62%				
Sb 206.836†	1722.7	0.998214 mg/L		0.0018331	0.998214 mg/L	0.0018331	0.18%
QC value within limits for Sb		206.836	Recovery = 99.82%				
Se 196.026†	904.6	1.00366 mg/L		0.016097	1.00366 mg/L	0.016097	1.60%
QC value within limits for Se		196.026	Recovery = 100.37%				
Sn 189.927†	5.9	0.0017522 mg/L		0.00117172	0.0017522 mg/L	0.00117172	66.87%
Ti 334.940†	341.3	0.0029426 mg/L		0.00009800	0.0029426 mg/L	0.00009800	3.33%
Tl 190.801†	1294.3	0.940451 mg/L		0.0068664	0.940451 mg/L	0.0068664	0.73%
QC value within limits for Tl		190.801	Recovery = 94.05%				
V 290.880†	60036.3	0.486209 mg/L		0.0003017	0.486209 mg/L	0.0003017	0.06%
QC value within limits for V		290.880	Recovery = 97.24%				
Zn 206.200†	44136.8	0.927964 mg/L		0.0004876	0.927964 mg/L	0.0004876	0.05%
QC value within limits for Zn		206.200	Recovery = 92.80%				

All analyte(s) passed QC.

Sequence No.: 12
 Sample ID: MB 27402 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 63
 Date Collected: 11/14/2013 10:18:48 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 27402 (1)

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1181409.1	102	%	0.4			0.44%
Y 371.029	421731.1	102	%	1.0			0.94%
Ag 328.068†	-84.7	-0.0003679	mg/L	0.00014485	-0.0003679	mg/L	0.00014485 39.37%
Al 308.215†	388.4	0.0196419	mg/L	0.00201266	0.0196419	mg/L	0.00201266 10.25%
As 188.979†	3.3	0.0031217	mg/L	0.00425140	0.0031217	mg/L	0.00425140 136.19%
Ba 233.527†	81.9	0.0022061	mg/L	0.00008636	0.0022061	mg/L	0.00008636 3.91%
Be 313.107†	268.1	0.0025549	mg/L	0.00000209	0.0025549	mg/L	0.00000209 0.08%
Ca 315.887†	2962.3	0.230835	mg/L	0.0107103	0.230835	mg/L	0.0107103 4.64%
Cd 228.802†	-21.9	0.0011411	mg/L	0.00010336	0.0011411	mg/L	0.00010336 9.06%
Co 228.616†	5.6	0.0010368	mg/L	0.00016036	0.0010368	mg/L	0.00016036 15.47%
Cr 267.716†	-8.5	0.0011734	mg/L	0.00008865	0.0011734	mg/L	0.00008865 7.55%
Cu 327.393†	-10.2	0.0011895	mg/L	0.00059412	0.0011895	mg/L	0.00059412 49.95%
Fe 273.955†	78.4	0.0082602	mg/L	0.00072005	0.0082602	mg/L	0.00072005 8.72%
K 404.721†	8.7						98.82 >999.9%
Mg 279.077†	288.1	0.276371	mg/L	0.0017048	0.276371	mg/L	0.0017048 0.62%
Mn 257.610†	87.1	0.0011121	mg/L	0.00000170	0.0011121	mg/L	0.00000170 0.15%
Mo 202.031†	3.5	0.0035116	mg/L	0.00014433	0.0035116	mg/L	0.00014433 4.11%
Na 330.237†	13.7	0.743040	mg/L	0.0790703	0.743040	mg/L	0.0790703 10.64%
Ni 231.604†	-29.1	0.0000268	mg/L	0.00040882	0.0000268	mg/L	0.00040882 >999.9%
Pb 220.353†	2.8	0.0019715	mg/L	0.00086352	0.0019715	mg/L	0.00086352 43.80%
Sb 206.836†	3.5	0.0048854	mg/L	0.00009768	0.0048854	mg/L	0.00009768 2.00%
Se 196.026†	1.7	0.0050096	mg/L	0.00598606	0.0050096	mg/L	0.00598606 119.49%
Sn 189.927†	-0.7	0.0034283	mg/L	0.00167375	0.0034283	mg/L	0.00167375 48.82%
Ti 334.940†	107.7	0.0024992	mg/L	0.00013685	0.0024992	mg/L	0.00013685 5.48%
Tl 190.801†	-1.5	0.0009540	mg/L	0.00215174	0.0009540	mg/L	0.00215174 225.54%
V 290.880†	-23.9	0.0013503	mg/L	0.00068797	0.0013503	mg/L	0.00068797 50.95%
Zn 206.200†	160.9	0.0030087	mg/L	0.00019377	0.0030087	mg/L	0.00019377 6.44%

Sequence No.: 13
 Sample ID: LCSW 27402
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 64
 Date Collected: 11/14/2013 10:22:24 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW 27402

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1141052.4	98.4 %	%	0.87			0.89%
Y 371.029	396214.4	95.8 %	%	0.12			0.12%
Ag 328.068†	13666.0	0.0901019 mg/L	mg/L	0.00118419	0.0901019 mg/L	0.00118419	1.31%
Al 308.215†	103460.0	4.75008 mg/L	mg/L	0.074720	4.75008 mg/L	0.074720	1.57%
As 188.979†	596.8	0.472057 mg/L	mg/L	0.0117117	0.472057 mg/L	0.0117117	2.48%
Ba 233.527†	46382.3	0.478919 mg/L	mg/L	0.0073024	0.478919 mg/L	0.0073024	1.52%
Be 313.107†	1057481.0	0.472716 mg/L	mg/L	0.0051354	0.472716 mg/L	0.0051354	1.09%
Ca 315.887†	4156210.6	47.9572 mg/L	mg/L	0.49620	47.9572 mg/L	0.49620	1.03%
Cd 228.802†	22880.7	0.468326 mg/L	mg/L	0.0071723	0.468326 mg/L	0.0071723	1.53%
Co 228.616†	17139.3	0.476013 mg/L	mg/L	0.0073594	0.476013 mg/L	0.0073594	1.55%
Cr 267.716†	28866.6	0.467815 mg/L	mg/L	0.0080096	0.467815 mg/L	0.0080096	1.71%
Cu 327.393†	49429.7	0.477656 mg/L	mg/L	0.0045858	0.477656 mg/L	0.0045858	0.96%
Fe 273.955†	80171.2	4.68879 mg/L	mg/L	0.075895	4.68879 mg/L	0.075895	1.62%
K 404.721†	3011.8					233.66	7.76%
Mg 279.077†	720599.7	47.2673 mg/L	mg/L	0.46853	47.2673 mg/L	0.46853	0.99%
Mn 257.610†	289300.7	0.467685 mg/L	mg/L	0.0072073	0.467685 mg/L	0.0072073	1.54%
Mo 202.031†	8036.5	0.478555 mg/L	mg/L	0.0076962	0.478555 mg/L	0.0076962	1.61%
Na 330.237†	43589.1	45.2636 mg/L	mg/L	0.43910	45.2636 mg/L	0.43910	0.97%
Ni 231.604†	21591.3	0.468302 mg/L	mg/L	0.0073560	0.468302 mg/L	0.0073560	1.57%
Pb 220.353†	5626.1	0.482124 mg/L	mg/L	0.0055121	0.482124 mg/L	0.0055121	1.14%
Sb 206.836†	842.0	0.469241 mg/L	mg/L	0.0056832	0.469241 mg/L	0.0056832	1.21%
Se 196.026†	489.8	0.490023 mg/L	mg/L	0.0137268	0.490023 mg/L	0.0137268	2.80%
Sn 189.927†	1466.2	0.467757 mg/L	mg/L	0.0087404	0.467757 mg/L	0.0087404	1.87%
Ti 334.940†	242676.9	0.463077 mg/L	mg/L	0.0069242	0.463077 mg/L	0.0069242	1.50%
Tl 190.801†	669.8	0.495677 mg/L	mg/L	0.0103976	0.495677 mg/L	0.0103976	2.10%
V 290.880†	55501.9	0.473149 mg/L	mg/L	0.0075586	0.473149 mg/L	0.0075586	1.60%
Zn 206.200†	22262.4	0.475073 mg/L	mg/L	0.0085334	0.475073 mg/L	0.0085334	1.80%

Sequence No.: 14
 Sample ID: LCSW MR 27402
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 65
 Date Collected: 11/14/2013 10:26:14 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW MR 27402

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1144082.8	98.7 %		0.26			0.27%
Y 371.029	401143.9	97.0 %		0.12			0.13%
Ag 328.068†	13628.3	0.0898538 mg/L		0.00048172	0.0898538 mg/L	0.00048172	0.54%
Al 308.215†	102960.5	4.72715 mg/L		0.014158	4.72715 mg/L	0.014158	0.30%
As 188.979†	588.9	0.465776 mg/L		0.0043632	0.465776 mg/L	0.0043632	0.94%
Ba 233.527†	46209.2	0.477136 mg/L		0.0025583	0.477136 mg/L	0.0025583	0.54%
Be 313.107†	1053692.4	0.471030 mg/L		0.0040935	0.471030 mg/L	0.0040935	0.87%
Ca 315.887†	4141452.3	47.7876 mg/L		0.43511	47.7876 mg/L	0.43511	0.91%
Cd 228.802†	22890.6	0.468528 mg/L		0.0030207	0.468528 mg/L	0.0030207	0.64%
Co 228.616†	17088.5	0.474599 mg/L		0.0002990	0.474599 mg/L	0.0002990	0.06%
Cr 267.716†	28826.2	0.467157 mg/L		0.0011663	0.467157 mg/L	0.0011663	0.25%
Cu 327.393†	49129.5	0.474760 mg/L		0.0020214	0.474760 mg/L	0.0020214	0.43%
Fe 273.955†	79902.0	4.67306 mg/L		0.017853	4.67306 mg/L	0.017853	0.38%
K 404.721†	2993.6					33.76	1.13%
Mg 279.077†	718832.1	47.1520 mg/L		0.47706	47.1520 mg/L	0.47706	1.01%
Mn 257.610†	288451.5	0.466314 mg/L		0.0013985	0.466314 mg/L	0.0013985	0.30%
Mo 202.031†	8007.4	0.476835 mg/L		0.0033897	0.476835 mg/L	0.0033897	0.71%
Na 330.237†	43262.1	44.9296 mg/L		0.12407	44.9296 mg/L	0.12407	0.28%
Ni 231.604†	21525.1	0.466868 mg/L		0.0003039	0.466868 mg/L	0.0003039	0.07%
Pb 220.353†	5553.9	0.475967 mg/L		0.0047119	0.475967 mg/L	0.0047119	0.99%
Sb 206.836†	841.9	0.469193 mg/L		0.0011944	0.469193 mg/L	0.0011944	0.25%
Se 196.026†	481.7	0.482014 mg/L		0.0018962	0.482014 mg/L	0.0018962	0.39%
Sn 189.927†	1451.4	0.463073 mg/L		0.0057481	0.463073 mg/L	0.0057481	1.24%
Ti 334.940†	243204.8	0.464079 mg/L		0.0009508	0.464079 mg/L	0.0009508	0.20%
Tl 190.801†	667.8	0.494203 mg/L		0.0024776	0.494203 mg/L	0.0024776	0.50%
V 290.880†	55464.7	0.472835 mg/L		0.0014284	0.472835 mg/L	0.0014284	0.30%
Zn 206.200†	22291.0	0.475685 mg/L		0.0030996	0.475685 mg/L	0.0030996	0.65%

Sequence No.: 15
 Sample ID: 75576-030
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 66
 Date Collected: 11/14/2013 10:30:05 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-030

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1175560.4	101 %		0.8			0.75%
Y 371.029	417380.7	101 %		1.2			1.20%
Ag 328.068†	-23.7	0.0000324 mg/L		0.00009227	0.0000324 mg/L	0.00009227	284.47%
Al 308.215†	755.5	0.0363958 mg/L		0.00379288	0.0363958 mg/L	0.00379288	10.42%
As 188.979†	0.6	0.0006240 mg/L		0.00100482	0.0006240 mg/L	0.00100482	161.02%
Ba 233.527†	2961.3	0.0318631 mg/L		0.00007296	0.0318631 mg/L	0.00007296	0.23%
Be 313.107†	259.0	0.0025509 mg/L		0.00004378	0.0025509 mg/L	0.00004378	1.72%
Ca 315.887†	2534673.2	29.3312 mg/L		0.28398	29.3312 mg/L	0.28398	0.97%
Cd 228.802†	37.0	0.0022207 mg/L		0.00007531	0.0022207 mg/L	0.00007531	3.39%
Co 228.616†	11.5	0.0012215 mg/L		0.00062426	0.0012215 mg/L	0.00062426	51.10%
Cr 267.716†	3567.2	0.0586970 mg/L		0.00030992	0.0586970 mg/L	0.00030992	0.53%
Cu 327.393†	780.5	0.0084253 mg/L		0.00138782	0.0084253 mg/L	0.00138782	16.47%
Fe 273.955†	221.4	0.0166168 mg/L		0.00045283	0.0166168 mg/L	0.00045283	2.73%
K 404.721†	-59.7					5.75	9.63%
Mg 279.077†	59930.8	4.16696 mg/L		0.055444	4.16696 mg/L	0.055444	1.33%
Mn 257.610†	691.9	0.0019490 mg/L		0.00000130	0.0019490 mg/L	0.00000130	0.07%
Mo 202.031†	128.4	0.0099101 mg/L		0.00009019	0.0099101 mg/L	0.00009019	0.91%
Na 330.237†	12608.9	13.6114 mg/L		0.25777	13.6114 mg/L	0.25777	1.89%
Ni 231.604†	51.0	0.0017710 mg/L		0.00021938	0.0017710 mg/L	0.00021938	12.39%
Pb 220.353†	13.0	0.0028520 mg/L		0.00006353	0.0028520 mg/L	0.00006353	2.23%
Sb 206.836†	-0.4	0.0027036 mg/L		0.00175204	0.0027036 mg/L	0.00175204	64.80%
Se 196.026†	1.8	0.0045176 mg/L		0.00210237	0.0045176 mg/L	0.00210237	46.54%
Sn 189.927†	10.0	0.0071841 mg/L		0.00106355	0.0071841 mg/L	0.00106355	14.80%
Ti 334.940†	-39.6	0.0022194 mg/L		0.00016847	0.0022194 mg/L	0.00016847	7.59%
Tl 190.801†	0.1	0.0022303 mg/L		0.00217714	0.0022303 mg/L	0.00217714	97.62%
V 290.880†	-12.8	0.0012949 mg/L		0.00007482	0.0012949 mg/L	0.00007482	5.78%
Zn 206.200†	488.7	0.0100141 mg/L		0.00005322	0.0100141 mg/L	0.00005322	0.53%

Sequence No.: 16
 Sample ID: 75576-030 MR
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 67
 Date Collected: 11/14/2013 10:33:51 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-030 MR

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1172142.4	101 %		0.6			0.56%
Y 371.029	413713.7	100 %		0.8			0.79%
Ag 328.068†	-79.2	-0.0003292 mg/L		0.00008589	-0.0003292 mg/L	0.00008589	26.09%
Al 308.215†	1124.3	0.0533516 mg/L		0.00306900	0.0533516 mg/L	0.00306900	5.75%
As 188.979†	4.0	0.0033213 mg/L		0.00237835	0.0033213 mg/L	0.00237835	71.61%
Ba 233.527†	2896.3	0.0311922 mg/L		0.00022740	0.0311922 mg/L	0.00022740	0.73%
Be 313.107†	271.4	0.0025564 mg/L		0.00002656	0.0025564 mg/L	0.00002656	1.04%
Ca 315.887†	2463046.5	28.5078 mg/L		0.33813	28.5078 mg/L	0.33813	1.19%
Cd 228.802†	36.3	0.0022083 mg/L		0.00042244	0.0022083 mg/L	0.00042244	19.13%
Co 228.616†	7.1	0.0010986 mg/L		0.00023715	0.0010986 mg/L	0.00023715	21.59%
Cr 267.716†	3499.4	0.0576068 mg/L		0.00016622	0.0576068 mg/L	0.00016622	0.29%
Cu 327.393†	655.2	0.0072266 mg/L		0.00119047	0.0072266 mg/L	0.00119047	16.47%
Fe 273.955†	656.1	0.0420193 mg/L		0.00036376	0.0420193 mg/L	0.00036376	0.87%
K 404.721†	6.2					92.78	>999.9%
Mg 279.077†	58998.2	4.10611 mg/L		0.065569	4.10611 mg/L	0.065569	1.60%
Mn 257.610†	528.5	0.0016866 mg/L		0.00000976	0.0016866 mg/L	0.00000976	0.58%
Mo 202.031†	124.6	0.0097106 mg/L		0.00018282	0.0097106 mg/L	0.00018282	1.88%
Na 330.237†	12540.8	13.5418 mg/L		0.19721	13.5418 mg/L	0.19721	1.46%
Ni 231.604†	58.1	0.0019256 mg/L		0.00032127	0.0019256 mg/L	0.00032127	16.68%
Pb 220.353†	21.3	0.0035615 mg/L		0.00091461	0.0035615 mg/L	0.00091461	25.68%
Sb 206.836†	6.3	0.0064246 mg/L		0.00007193	0.0064246 mg/L	0.00007193	1.12%
Se 196.026†	12.0	0.0146357 mg/L		0.00459716	0.0146357 mg/L	0.00459716	31.41%
Sn 189.927†	9.1	0.0068694 mg/L		0.00135677	0.0068694 mg/L	0.00135677	19.75%
Ti 334.940†	-15.1	0.0022660 mg/L		0.00033188	0.0022660 mg/L	0.00033188	14.65%
Tl 190.801†	-2.0	0.0006776 mg/L		0.00427082	0.0006776 mg/L	0.00427082	630.33%
V 290.880†	-20.9	0.0012272 mg/L		0.00001624	0.0012272 mg/L	0.00001624	1.32%
Zn 206.200†	576.4	0.0118878 mg/L		0.00000622	0.0118878 mg/L	0.00000622	0.05%

Sequence No.: 17
 Sample ID: 75576-032 MS 1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 68
 Date Collected: 11/14/2013 10:37:37 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-032 MS 1

Mean Corrected		Calib	Sample				
Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD	
Sc 361.383	1121107.1	96.7 %	0.29			0.30%	
Y 371.029	395129.7	95.5 %	0.32			0.33%	
Ag 328.068†	13843.7	0.0912692 mg/L	0.00093509	0.0912692 mg/L	0.00093509	1.02%	
Al 308.215†	104173.5	4.78274 mg/L	0.038686	4.78274 mg/L	0.038686	0.81%	
As 188.979†	597.9	0.472530 mg/L	0.0100999	0.472530 mg/L	0.0100999	2.14%	
Ba 233.527†	49646.3	0.512536 mg/L	0.0044068	0.512536 mg/L	0.0044068	0.86%	
Be 313.107†	1058069.0	0.472975 mg/L	0.0125740	0.472975 mg/L	0.0125740	2.66%	
Ca 315.887†	6742908.0	77.6895 mg/L	1.78030	77.6895 mg/L	1.78030	2.29%	
Cd 228.802†	23140.4	0.473500 mg/L	0.0051118	0.473500 mg/L	0.0051118	1.08%	
Co 228.616†	17197.0	0.477626 mg/L	0.0055517	0.477626 mg/L	0.0055517	1.16%	
Cr 267.716†	32491.6	0.526139 mg/L	0.0052731	0.526139 mg/L	0.0052731	1.00%	
Cu 327.393†	49792.4	0.480749 mg/L	0.0037325	0.480749 mg/L	0.0037325	0.78%	
Fe 273.955†	80861.4	4.72912 mg/L	0.042411	4.72912 mg/L	0.042411	0.90%	
K 404.721†	3140.5				89.18	2.84%	
Mg 279.077†	779930.0	51.1376 mg/L	1.31934	51.1376 mg/L	1.31934	2.58%	
Mn 257.610†	291735.4	0.471486 mg/L	0.0045851	0.471486 mg/L	0.0045851	0.97%	
Mo 202.031†	8179.8	0.486026 mg/L	0.0040626	0.486026 mg/L	0.0040626	0.84%	
Na 330.237†	59259.3	61.2737 mg/L	0.38770	61.2737 mg/L	0.38770	0.63%	
Ni 231.604†	21693.7	0.470532 mg/L	0.0046623	0.470532 mg/L	0.0046623	0.99%	
Pb 220.353†	5591.6	0.479198 mg/L	0.0048671	0.479198 mg/L	0.0048671	1.02%	
Sb 206.836†	854.1	0.475907 mg/L	0.0015885	0.475907 mg/L	0.0015885	0.33%	
Se 196.026†	495.8	0.495308 mg/L	0.0041220	0.495308 mg/L	0.0041220	0.83%	
Sn 189.927†	1464.2	0.467495 mg/L	0.0065160	0.467495 mg/L	0.0065160	1.39%	
Ti 334.940†	245382.4	0.468214 mg/L	0.0040111	0.468214 mg/L	0.0040111	0.86%	
Tl 190.801†	665.5	0.492754 mg/L	0.0058073	0.492754 mg/L	0.0058073	1.18%	
V 290.880†	56002.4	0.477265 mg/L	0.0036556	0.477265 mg/L	0.0036556	0.77%	
Zn 206.200†	22826.2	0.487121 mg/L	0.0053779	0.487121 mg/L	0.0053779	1.10%	

Sequence No.: 18
 Sample ID: 75576-034 MS 2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 69
 Date Collected: 11/14/2013 10:41:28 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-034 MS 2

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1127081.5	97.2 %		0.39			0.40%
Y 371.029	397178.2	96.0 %		0.34			0.36%
Ag 328.068†	13735.5	0.0905546 mg/L		0.00044873	0.0905546 mg/L	0.00044873	0.50%
Al 308.215†	102952.1	4.72665 mg/L		0.022476	4.72665 mg/L	0.022476	0.48%
As 188.979†	596.9	0.471712 mg/L		0.0047432	0.471712 mg/L	0.0047432	1.01%
Ba 233.527†	49296.5	0.508936 mg/L		0.0048657	0.508936 mg/L	0.0048657	0.96%
Be 313.107†	1049575.9	0.469197 mg/L		0.0047700	0.469197 mg/L	0.0047700	1.02%
Ca 315.887†	6650925.4	76.6324 mg/L		0.69799	76.6324 mg/L	0.69799	0.91%
Cd 228.802†	22948.0	0.469579 mg/L		0.0045776	0.469579 mg/L	0.0045776	0.97%
Co 228.616†	17046.4	0.473445 mg/L		0.0029783	0.473445 mg/L	0.0029783	0.63%
Cr 267.716†	32177.1	0.521064 mg/L		0.0028912	0.521064 mg/L	0.0028912	0.55%
Cu 327.393†	49605.7	0.478961 mg/L		0.0008858	0.478961 mg/L	0.0008858	0.18%
Fe 273.955†	79692.7	4.66082 mg/L		0.010136	4.66082 mg/L	0.010136	0.22%
K 404.721†	3268.1					104.10	3.19%
Mg 279.077†	773253.6	50.7020 mg/L		0.51021	50.7020 mg/L	0.51021	1.01%
Mn 257.610†	289190.4	0.467381 mg/L		0.0021561	0.467381 mg/L	0.0021561	0.46%
Mo 202.031†	8119.8	0.482500 mg/L		0.0006621	0.482500 mg/L	0.0006621	0.14%
Na 330.237†	58547.6	60.5466 mg/L		0.43027	60.5466 mg/L	0.43027	0.71%
Ni 231.604†	21499.5	0.466325 mg/L		0.0010325	0.466325 mg/L	0.0010325	0.22%
Pb 220.353†	5533.5	0.474231 mg/L		0.0028855	0.474231 mg/L	0.0028855	0.61%
Sb 206.836†	839.1	0.467636 mg/L		0.0011680	0.467636 mg/L	0.0011680	0.25%
Se 196.026†	490.2	0.489740 mg/L		0.0037241	0.489740 mg/L	0.0037241	0.76%
Sn 189.927†	1462.0	0.466783 mg/L		0.0007317	0.466783 mg/L	0.0007317	0.16%
Ti 334.940†	244771.6	0.467054 mg/L		0.0023967	0.467054 mg/L	0.0023967	0.51%
Tl 190.801†	659.0	0.487977 mg/L		0.0032095	0.487977 mg/L	0.0032095	0.66%
V 290.880†	55626.2	0.474074 mg/L		0.0036070	0.474074 mg/L	0.0036070	0.76%
Zn 206.200†	22454.0	0.479168 mg/L		0.0030684	0.479168 mg/L	0.0030684	0.64%

Sequence No.: 19
 Sample ID: 75576-030 PS
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 70
 Date Collected: 11/14/2013 10:45:19 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-030 PS

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1128836.6	97.4	%	1.23				1.26%
Y 371.029	398810.5	96.4	%	1.38				1.44%
Ag 328.068†	12874.9	0.0849434	mg/L	0.00264224	0.0849434	mg/L	0.00264224	3.11%
Al 308.215†	108803.8	4.99609	mg/L	0.166057	4.99609	mg/L	0.166057	3.32%
As 188.979†	616.2	0.486996	mg/L	0.0075217	0.486996	mg/L	0.0075217	1.54%
Ba 233.527†	51124.9	0.527758	mg/L	0.0148644	0.527758	mg/L	0.0148644	2.82%
Be 313.107†	1089300.2	0.486875	mg/L	0.0022461	0.486875	mg/L	0.0022461	0.46%
Ca 315.887†	6798255.3	78.3255	mg/L	0.52594	78.3255	mg/L	0.52594	0.67%
Cd 228.802†	24182.8	0.494776	mg/L	0.0165060	0.494776	mg/L	0.0165060	3.34%
Co 228.616†	17588.5	0.488419	mg/L	0.0185891	0.488419	mg/L	0.0185891	3.81%
Cr 267.716†	33743.7	0.546140	mg/L	0.0192327	0.546140	mg/L	0.0192327	3.52%
Cu 327.393†	51545.3	0.497669	mg/L	0.0147485	0.497669	mg/L	0.0147485	2.96%
Fe 273.955†	84640.6	4.94997	mg/L	0.186332	4.94997	mg/L	0.186332	3.76%
K 404.721†	3614.3						315.94	8.74%
Mg 279.077†	819754.4	53.7349	mg/L	0.31869	53.7349	mg/L	0.31869	0.59%
Mn 257.610†	302337.6	0.488543	mg/L	0.0162251	0.488543	mg/L	0.0162251	3.32%
Mo 202.031†	7688.1	0.456807	mg/L	0.0080343	0.456807	mg/L	0.0080343	1.76%
Na 330.237†	60478.0	62.5189	mg/L	1.85080	62.5189	mg/L	1.85080	2.96%
Ni 231.604†	22446.1	0.486751	mg/L	0.0179439	0.486751	mg/L	0.0179439	3.69%
Pb 220.353†	5724.2	0.490486	mg/L	0.0082119	0.490486	mg/L	0.0082119	1.67%
Sb 206.836†	828.3	0.461693	mg/L	0.0079068	0.461693	mg/L	0.0079068	1.71%
Se 196.026†	502.8	0.502425	mg/L	0.0168320	0.502425	mg/L	0.0168320	3.35%
Sn 189.927†	1421.4	0.453963	mg/L	0.0056238	0.453963	mg/L	0.0056238	1.24%
Ti 334.940†	237302.0	0.452871	mg/L	0.0130282	0.452871	mg/L	0.0130282	2.88%
Tl 190.801†	684.9	0.506694	mg/L	0.0087398	0.506694	mg/L	0.0087398	1.72%
V 290.880†	57348.2	0.488571	mg/L	0.0157701	0.488571	mg/L	0.0157701	3.23%
Zn 206.200†	23249.2	0.496159	mg/L	0.0193972	0.496159	mg/L	0.0193972	3.91%

Sequence No.: 20
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/14/2013 10:49:10 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1125520.1	97.1 %		0.11			0.11%
Y 371.029	393568.0	95.2 %		0.03			0.03%
Ag 328.068†	14675.6	0.0967299 mg/L	0.00003758	0.0967299 mg/L	0.00003758	0.04%	
QC value within limits for Ag		328.068 Recovery = 96.73%					
Al 308.215†	106817.4	4.90432 mg/L	0.014996	4.90432 mg/L	0.014996	0.31%	
QC value within limits for Al		308.215 Recovery = 98.09%					
As 188.979†	607.2	0.480252 mg/L	0.0017848	0.480252 mg/L	0.0017848	0.37%	
QC value within limits for As		188.979 Recovery = 96.05%					
Ba 233.527†	47513.2	0.490561 mg/L	0.0012587	0.490561 mg/L	0.0012587	0.26%	
QC value within limits for Ba		233.527 Recovery = 98.11%					
Be 313.107†	1081441.0	0.483367 mg/L	0.0043241	0.483367 mg/L	0.0043241	0.89%	
QC value within limits for Be		313.107 Recovery = 96.67%					
Ca 315.887†	4279776.9	49.3771 mg/L	0.35561	49.3771 mg/L	0.35561	0.72%	
QC value within limits for Ca		315.887 Recovery = 98.75%					
Cd 228.802†	23710.9	0.485264 mg/L	0.0014782	0.485264 mg/L	0.0014782	0.30%	
QC value within limits for Cd		228.802 Recovery = 97.05%					
Co 228.616†	17443.0	0.484396 mg/L	0.0017794	0.484396 mg/L	0.0017794	0.37%	
QC value within limits for Co		228.616 Recovery = 96.88%					
Cr 267.716†	30271.3	0.490435 mg/L	0.0048307	0.490435 mg/L	0.0048307	0.98%	
QC value within limits for Cr		267.716 Recovery = 98.09%					
Cu 327.393†	50473.9	0.487707 mg/L	0.0002864	0.487707 mg/L	0.0002864	0.06%	
QC value within limits for Cu		327.393 Recovery = 97.54%					
Fe 273.955†	83175.0	4.86432 mg/L	0.038359	4.86432 mg/L	0.038359	0.79%	
QC value within limits for Fe		273.955 Recovery = 97.29%					
K 404.721†	3498.5					316.52	9.05%
Unable to evaluate QC.							
Mg 279.077†	752229.2	49.3306 mg/L	0.40785	49.3306 mg/L	0.40785	0.83%	
QC value within limits for Mg		279.077 Recovery = 98.66%					
Mn 257.610†	298705.5	0.482835 mg/L	0.0018458	0.482835 mg/L	0.0018458	0.38%	
QC value within limits for Mn		257.610 Recovery = 96.57%					
Mo 202.031†	8143.7	0.484863 mg/L	0.0043540	0.484863 mg/L	0.0043540	0.90%	
QC value within limits for Mo		202.031 Recovery = 96.97%					
Na 330.237†	45267.8	46.9788 mg/L	0.02739	46.9788 mg/L	0.02739	0.06%	
QC value within limits for Na		330.237 Recovery = 93.96%					
Ni 231.604†	22478.2	0.487489 mg/L	0.0016579	0.487489 mg/L	0.0016579	0.34%	
QC value within limits for Ni		231.604 Recovery = 97.50%					
Pb 220.353†	5663.5	0.485326 mg/L	0.0022834	0.485326 mg/L	0.0022834	0.47%	
QC value within limits for Pb		220.353 Recovery = 97.07%					
Sb 206.836†	881.9	0.491324 mg/L	0.0030675	0.491324 mg/L	0.0030675	0.62%	
QC value within limits for Sb		206.836 Recovery = 98.26%					
Se 196.026†	488.4	0.488787 mg/L	0.0015174	0.488787 mg/L	0.0015174	0.31%	
QC value within limits for Se		196.026 Recovery = 97.76%					
Sn 189.927†	1511.3	0.482040 mg/L	0.0038700	0.482040 mg/L	0.0038700	0.80%	
QC value within limits for Sn		189.927 Recovery = 96.41%					
Ti 334.940†	254719.5	0.485943 mg/L	0.0015208	0.485943 mg/L	0.0015208	0.31%	
QC value within limits for Ti		334.940 Recovery = 97.19%					
Tl 190.801†	668.7	0.495048 mg/L	0.0074965	0.495048 mg/L	0.0074965	1.51%	
QC value within limits for Tl		190.801 Recovery = 99.01%					
V 290.880†	56876.1	0.484778 mg/L	0.0018479	0.484778 mg/L	0.0018479	0.38%	
QC value within limits for V		290.880 Recovery = 96.96%					
Zn 206.200†	22634.0	0.483006 mg/L	0.0025822	0.483006 mg/L	0.0025822	0.53%	
QC value within limits for Zn		206.200 Recovery = 96.60%					

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 21

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/14/2013 10:52:59 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1146447.3	98.9 %	0.39			0.40%
Y 371.029	407437.7	98.5 %	0.31			0.32%
Ag 328.068†	2811.1	0.0186233 mg/L	0.00014492	0.0186233 mg/L	0.00014492	0.78%
QC value within limits for Ag 328.068 Recovery = 93.12%						
Al 308.215†	3944.9	0.182804 mg/L	0.0023427	0.182804 mg/L	0.0023427	1.28%
QC value within limits for Al 308.215 Recovery = 91.40%						
As 188.979†	25.7	0.0208836 mg/L	0.00416430	0.0208836 mg/L	0.00416430	19.94%
QC value within limits for As 188.979 Recovery = 104.42%						
Ba 233.527†	4763.9	0.0504196 mg/L	0.00017829	0.0504196 mg/L	0.00017829	0.35%
QC value within limits for Ba 233.527 Recovery = 100.84%						
Be 313.107†	25307.4	0.0136782 mg/L	0.00016067	0.0136782 mg/L	0.00016067	1.17%
QC value within limits for Be 313.107 Recovery = 113.98%						
Ca 315.887†	422309.4	5.05024 mg/L	0.048980	5.05024 mg/L	0.048980	0.97%
QC value within limits for Ca 315.887 Recovery = 101.00%						
Cd 228.802†	560.2	0.0129961 mg/L	0.00056485	0.0129961 mg/L	0.00056485	4.35%
QC value within limits for Cd 228.802 Recovery = 108.30%						
Co 228.616†	718.2	0.0207427 mg/L	0.00025669	0.0207427 mg/L	0.00025669	1.24%
QC value within limits for Co 228.616 Recovery = 103.71%						
Cr 267.716†	2969.0	0.0491535 mg/L	0.00029807	0.0491535 mg/L	0.00029807	0.61%
QC value within limits for Cr 267.716 Recovery = 98.31%						
Cu 327.393†	5198.0	0.0513911 mg/L	0.00103096	0.0513911 mg/L	0.00103096	2.01%
QC value within limits for Cu 327.393 Recovery = 102.78%						
Fe 273.955†	4942.4	0.292507 mg/L	0.0000129	0.292507 mg/L	0.0000129	0.00%
QC value within limits for Fe 273.955 Recovery = 97.50%						
K 404.721†	638.3				289.95	45.42%
Unable to evaluate QC.						
Mg 279.077†	74578.5	5.12260 mg/L	0.063801	5.12260 mg/L	0.063801	1.25%
QC value within limits for Mg 279.077 Recovery = 102.45%						
Mn 257.610†	23200.3	0.0383534 mg/L	0.00047307	0.0383534 mg/L	0.00047307	1.23%
QC value within limits for Mn 257.610 Recovery = 95.88%						
Mo 202.031†	344.7	0.0235841 mg/L	0.00072680	0.0235841 mg/L	0.00072680	3.08%
QC value within limits for Mo 202.031 Recovery = 117.92%						
Na 330.237†	4025.2	4.84157 mg/L	0.070273	4.84157 mg/L	0.070273	1.45%
QC value within limits for Na 330.237 Recovery = 96.83%						
Ni 231.604†	2255.9	0.0494691 mg/L	0.00023252	0.0494691 mg/L	0.00023252	0.47%
QC value within limits for Ni 231.604 Recovery = 98.94%						
Pb 220.353†	133.2	0.0130925 mg/L	0.00150763	0.0130925 mg/L	0.00150763	11.52%
QC value within limits for Pb 220.353 Recovery = 109.10%						
Sb 206.836†	39.4	0.0247924 mg/L	0.00116935	0.0247924 mg/L	0.00116935	4.72%
QC value within limits for Sb 206.836 Recovery = 123.96%						
Se 196.026†	35.8	0.0389431 mg/L	0.00354964	0.0389431 mg/L	0.00354964	9.11%
QC value within limits for Se 196.026 Recovery = 97.36%						
Sn 189.927†	133.2	0.0458400 mg/L	0.00070941	0.0458400 mg/L	0.00070941	1.55%
QC value within limits for Sn 189.927 Recovery = 91.68%						
Ti 334.940†	23600.5	0.0471060 mg/L	0.00044105	0.0471060 mg/L	0.00044105	0.94%
QC value within limits for Ti 334.940 Recovery = 94.21%						
Tl 190.801†	26.4	0.0216670 mg/L	0.00117260	0.0216670 mg/L	0.00117260	5.41%
QC value within limits for Tl 190.801 Recovery = 108.34%						
V 290.880†	5455.3	0.0478583 mg/L	0.00117307	0.0478583 mg/L	0.00117307	2.45%
QC value within limits for V 290.880 Recovery = 95.72%						
Zn 206.200†	2238.4	0.0473998 mg/L	0.00062555	0.0473998 mg/L	0.00062555	1.32%
QC value within limits for Zn 206.200 Recovery = 94.80%						

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 22
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/14/2013 10:56:37 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		1150565.0		99.3 %	0.17			0.17%	
Y 371.029		415396.6		100 %	0.3			0.29%	
Ag 328.068†		-28.2	0.0000016	mg/L	0.00014187	0.0000016	mg/L	0.00014187	>999.9%
QC value	within limits	for Ag	328.068	Recovery	= Not calculated				
Al 308.215†		-136.0	-0.0044641	mg/L	0.00477615	-0.0044641	mg/L	0.00477615	106.99%
QC value	within limits	for Al	308.215	Recovery	= Not calculated				
As 188.979†		5.3	0.0047264	mg/L	0.00021281	0.0047264	mg/L	0.00021281	4.50%
QC value	within limits	for As	188.979	Recovery	= Not calculated				
Ba 233.527†		56.4	0.0019438	mg/L	0.00011267	0.0019438	mg/L	0.00011267	5.80%
QC value	within limits	for Ba	233.527	Recovery	= Not calculated				
Be 313.107†		280.8	0.0025606	mg/L	0.00001277	0.0025606	mg/L	0.00001277	0.50%
QC value	within limits	for Be	313.107	Recovery	= Not calculated				
Ca 315.887†		1404.9	0.212946	mg/L	0.0042672	0.212946	mg/L	0.0042672	2.00%
QC value	within limits	for Ca	315.887	Recovery	= Not calculated				
Cd 228.802†		6.6	0.0017222	mg/L	0.00003051	0.0017222	mg/L	0.00003051	1.77%
QC value	within limits	for Cd	228.802	Recovery	= Not calculated				
Co 228.616†		15.9	0.0013236	mg/L	0.00011480	0.0013236	mg/L	0.00011480	8.67%
QC value	within limits	for Co	228.616	Recovery	= Not calculated				
Cr 267.716†		-23.3	0.0009348	mg/L	0.00009347	0.0009348	mg/L	0.00009347	10.00%
QC value	within limits	for Cr	267.716	Recovery	= Not calculated				
Cu 327.393†		305.9	0.0042428	mg/L	0.00264503	0.0042428	mg/L	0.00264503	62.34%
QC value	within limits	for Cu	327.393	Recovery	= Not calculated				
Fe 273.955†		-21.2	0.0024374	mg/L	0.00042711	0.0024374	mg/L	0.00042711	17.52%
QC value	within limits	for Fe	273.955	Recovery	= Not calculated				
K 404.721†		76.4						7.95	10.40%
Unable to evaluate QC.									
Mg 279.077†		63.8	0.261741	mg/L	0.0038405	0.261741	mg/L	0.0038405	1.47%
QC value	within limits	for Mg	279.077	Recovery	= Not calculated				
Mn 257.610†		-24.4	0.0009321	mg/L	0.00002648	0.0009321	mg/L	0.00002648	2.84%
QC value	within limits	for Mn	257.610	Recovery	= Not calculated				
Mo 202.031†		3.0	0.0034795	mg/L	0.00029431	0.0034795	mg/L	0.00029431	8.46%
QC value	within limits	for Mo	202.031	Recovery	= Not calculated				
Na 330.237†		-21.8	0.706690	mg/L	0.0601733	0.706690	mg/L	0.0601733	8.51%
QC value	within limits	for Na	330.237	Recovery	= Not calculated				
Ni 231.604†		15.4	0.0009893	mg/L	0.00036856	0.0009893	mg/L	0.00036856	37.25%
QC value	within limits	for Ni	231.604	Recovery	= Not calculated				
Pb 220.353†		-5.0	0.0012991	mg/L	0.00057113	0.0012991	mg/L	0.00057113	43.96%
QC value	within limits	for Pb	220.353	Recovery	= Not calculated				
Sb 206.836†		3.1	0.0046575	mg/L	0.00270732	0.0046575	mg/L	0.00270732	58.13%
QC value	within limits	for Sb	206.836	Recovery	= Not calculated				
Se 196.026†		0.8	0.0041477	mg/L	0.00316915	0.0041477	mg/L	0.00316915	76.41%
QC value	within limits	for Se	196.026	Recovery	= Not calculated				
Sn 189.927†		2.5	0.0044454	mg/L	0.00138583	0.0044454	mg/L	0.00138583	31.17%
QC value	within limits	for Sn	189.927	Recovery	= Not calculated				
Ti 334.940†		44.1	0.0023783	mg/L	0.00009625	0.0023783	mg/L	0.00009625	4.05%
QC value	within limits	for Ti	334.940	Recovery	= Not calculated				
Tl 190.801†		2.9	0.0041185	mg/L	0.00026431	0.0041185	mg/L	0.00026431	6.42%
QC value	within limits	for Tl	190.801	Recovery	= Not calculated				
V 290.880†		-42.8	0.0011904	mg/L	0.00021767	0.0011904	mg/L	0.00021767	18.29%
QC value	within limits	for V	290.880	Recovery	= Not calculated				
Zn 206.200†		7.0	-0.0002801	mg/L	0.00008887	-0.0002801	mg/L	0.00008887	31.73%
QC value	within limits	for Zn	206.200	Recovery	= Not calculated				
All analyte(s) passed QC. One or more analytes were not evaluated.									

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 23
 Sample ID: 75576-030 SD
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 71
 Date Collected: 11/14/2013 11:00:12 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-030 SD

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1158829.3	100.0	%	0.38			0.38%
Y 371.029	409853.2	99.1	%	0.01			0.01%
Ag 328.068†	-44.2	-0.0001029	mg/L	0.00012883	-0.0001029 mg/L	0.00012883	125.26%
Al 308.215†	3.4	0.0019243	mg/L	0.00266693	0.0019243 mg/L	0.00266693	138.59%
As 188.979†	3.3	0.0030565	mg/L	0.00164086	0.0030565 mg/L	0.00164086	53.68%
Ba 233.527†	684.0	0.0084074	mg/L	0.00013187	0.0084074 mg/L	0.00013187	1.57%
Be 313.107†	325.7	0.0025805	mg/L	0.00000211	0.0025805 mg/L	0.00000211	0.08%
Ca 315.887†	533929.3	6.33396	mg/L	0.064120	6.33396 mg/L	0.064120	1.01%
Cd 228.802†	-15.8	0.0012398	mg/L	0.00001465	0.0012398 mg/L	0.00001465	1.18%
Co 228.616†	7.7	0.0010999	mg/L	0.00014285	0.0010999 mg/L	0.00014285	12.99%
Cr 267.716†	756.8	0.0134826	mg/L	0.00017070	0.0134826 mg/L	0.00017070	1.27%
Cu 327.393†	286.2	0.0039679	mg/L	0.00096271	0.0039679 mg/L	0.00096271	24.26%
Fe 273.955†	89.5	0.0089108	mg/L	0.00023149	0.0089108 mg/L	0.00023149	2.60%
K 404.721†	316.5					53.49	16.90%
Mg 279.077†	12776.5	1.09100	mg/L	0.011869	1.09100 mg/L	0.011869	1.09%
Mn 257.610†	234.6	0.0013209	mg/L	0.00001246	0.0013209 mg/L	0.00001246	0.94%
Mo 202.031†	22.5	0.0044232	mg/L	0.00037924	0.0044232 mg/L	0.00037924	8.57%
Na 330.237†	2458.6	3.24095	mg/L	0.055318	3.24095 mg/L	0.055318	1.71%
Ni 231.604†	4.0	0.0007453	mg/L	0.00038752	0.0007453 mg/L	0.00038752	52.00%
Pb 220.353†	8.9	0.0024925	mg/L	0.00044393	0.0024925 mg/L	0.00044393	17.81%
Sb 206.836†	-1.9	0.0019329	mg/L	0.00048070	0.0019329 mg/L	0.00048070	24.87%
Se 196.026†	0.5	0.0037632	mg/L	0.00711487	0.0037632 mg/L	0.00711487	189.07%
Sn 189.927†	4.7	0.0052021	mg/L	0.00007297	0.0052021 mg/L	0.00007297	1.40%
Ti 334.940†	76.0	0.0024390	mg/L	0.00015872	0.0024390 mg/L	0.00015872	6.51%
Tl 190.801†	2.0	0.0034833	mg/L	0.00059665	0.0034833 mg/L	0.00059665	17.13%
V 290.880†	-185.9	-0.0000621	mg/L	0.00048762	-0.0000621 mg/L	0.00048762	785.51%
Zn 206.200†	160.1	0.0029934	mg/L	0.00004594	0.0029934 mg/L	0.00004594	1.53%

Sequence No.: 24
 Sample ID: 75670-001
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 72
 Date Collected: 11/14/2013 11:03:48 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75670-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1137169.1	98.1	%	0.88			0.90%
Y 371.029	396675.8	95.9	%	0.27			0.28%
Ag 328.068†	-17.3	0.0000815	mg/L	0.00094065	0.0000815 mg/L	0.00094065	>999.9%
Al 308.215†	2061.5	0.0964037	mg/L	0.00651617	0.0964037 mg/L	0.00651617	6.76%
As 188.979†	10.8	0.0086585	mg/L	0.00250834	0.0086585 mg/L	0.00250834	28.97%
Ba 233.527†	1231.2	0.0140397	mg/L	0.00019786	0.0140397 mg/L	0.00019786	1.41%
Be 313.107†	113.9	0.0024864	mg/L	0.00001513	0.0024864 mg/L	0.00001513	0.61%
Ca 315.887†	2847811.3	32.9304	mg/L	0.35837	32.9304 mg/L	0.35837	1.09%
Cd 228.802†	9.0	0.0016328	mg/L	0.00032413	0.0016328 mg/L	0.00032413	19.85%
Co 228.616†	-5.9	0.0007456	mg/L	0.00029508	0.0007456 mg/L	0.00029508	39.57%
Cr 267.716†	10.3	0.0015192	mg/L	0.00002724	0.0015192 mg/L	0.00002724	1.79%
Cu 327.393†	953.1	0.0100416	mg/L	0.00006957	0.0100416 mg/L	0.00006957	0.69%
Fe 273.955†	1698.0	0.102907	mg/L	0.0016081	0.102907 mg/L	0.0016081	1.56%
K 404.721†	876.6					114.08	13.01%
Mg 279.077†	156528.7	10.4680	mg/L	0.00887	10.4680 mg/L	0.00887	0.08%
Mn 257.610†	2712.4	0.0049865	mg/L	0.00004352	0.0049865 mg/L	0.00004352	0.87%
Mo 202.031†	157.7	0.0115216	mg/L	0.00053969	0.0115216 mg/L	0.00053969	4.68%
Na 330.237†	151720.5	155.741	mg/L	0.8033	155.741 mg/L	0.8033	0.52%
Ni 231.604†	60.5	0.0019796	mg/L	0.00037949	0.0019796 mg/L	0.00037949	19.17%
Pb 220.353†	19.7	0.0033970	mg/L	0.00156619	0.0033970 mg/L	0.00156619	46.11%
Sb 206.836†	4.6	0.0054600	mg/L	0.00408259	0.0054600 mg/L	0.00408259	74.77%
Se 196.026†	2.3	0.0052473	mg/L	0.00453647	0.0052473 mg/L	0.00453647	86.45%
Sn 189.927†	14.1	0.0085120	mg/L	0.00088609	0.0085120 mg/L	0.00088609	10.41%
Ti 334.940†	-32.9	0.0022323	mg/L	0.00030771	0.0022323 mg/L	0.00030771	13.78%
Tl 190.801†	0.9	0.0027249	mg/L	0.00021625	0.0027249 mg/L	0.00021625	7.94%
V 290.880†	1223.0	0.0115606	mg/L	0.00016459	0.0115606 mg/L	0.00016459	1.42%
Zn 206.200†	224.3	0.0043577	mg/L	0.00003988	0.0043577 mg/L	0.00003988	0.92%

Sequence No.: 25
 Sample ID: 75670-002
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 73
 Date Collected: 11/14/2013 11:07:36 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75670-002

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1091075.7	94.1 %		0.13			0.14%
Y 371.029	380857.8	92.1 %		0.34			0.37%
Ag 328.068†	-41.1	-0.0000757 mg/L		0.00053218	-0.0000757 mg/L	0.00053218	703.42%
Al 308.215†	23302.3	1.07224 mg/L		0.001646	1.07224 mg/L	0.001646	0.15%
As 188.979†	15.9	0.0094945 mg/L		0.00052740	0.0094945 mg/L	0.00052740	5.55%
Ba 233.527†	25386.5	0.262838 mg/L		0.0010810	0.262838 mg/L	0.0010810	0.41%
Be 313.107†	-364.3	0.0022741 mg/L		0.00005765	0.0022741 mg/L	0.00005765	2.54%
Ca 315.887†	20506330.0	235.903 mg/L		3.9912	235.903 mg/L	3.9912	1.69%
Cd 228.802†	27.8	0.0011550 mg/L		0.00024684	0.0011550 mg/L	0.00024684	21.37%
Co 228.616†	18.1	0.0015192 mg/L		0.00023885	0.0015192 mg/L	0.00023885	15.72%
Cr 267.716†	854.0	0.0152617 mg/L		0.00011645	0.0152617 mg/L	0.00011645	0.76%
Cu 327.393†	8209.9	0.0773156 mg/L		0.00034890	0.0773156 mg/L	0.00034890	0.45%
Fe 273.955†	1460.5	0.0890256 mg/L		0.00195639	0.0890256 mg/L	0.00195639	2.20%
K 404.721†	10217.3					201.89	1.98%
Mg 279.077†	827.4	0.312039 mg/L		0.0021570	0.312039 mg/L	0.0021570	0.69%
Mn 257.610†	230.6	0.0013575 mg/L		0.00002580	0.0013575 mg/L	0.00002580	1.90%
Mo 202.031†	802.1	0.0426848 mg/L		0.00036431	0.0426848 mg/L	0.00036431	0.85%
Na 330.237†	370609.5	379.378 mg/L		0.2960	379.378 mg/L	0.2960	0.08%
Ni 231.604†	964.4	0.0215885 mg/L		0.00021462	0.0215885 mg/L	0.00021462	0.99%
Pb 220.353†	56.5	0.0069663 mg/L		0.00162269	0.0069663 mg/L	0.00162269	23.29%
Sb 206.836†	5.1	0.0058269 mg/L		0.00154740	0.0058269 mg/L	0.00154740	26.56%
Se 196.026†	16.9	0.0140495 mg/L		0.00851863	0.0140495 mg/L	0.00851863	60.63%
Sn 189.927†	41.8	0.0197811 mg/L		0.00123347	0.0197811 mg/L	0.00123347	6.24%
Ti 334.940†	-739.0	0.0008915 mg/L		0.00013631	0.0008915 mg/L	0.00013631	15.29%
Tl 190.801†	-3.3	0.0009899 mg/L		0.00028694	0.0009899 mg/L	0.00028694	28.99%
V 290.880†	600.0	0.0067379 mg/L		0.00021223	0.0067379 mg/L	0.00021223	3.15%
Zn 206.200†	329.5	0.0065792 mg/L		0.00023441	0.0065792 mg/L	0.00023441	3.56%

Sequence No.: 26
 Sample ID: 75670-003
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 74
 Date Collected: 11/14/2013 11:11:32 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75670-003

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1146385.0	98.9 %	%	0.77			0.78%
Y 371.029	395689.9	95.7 %	%	0.28			0.29%
Ag 328.068†	-76.5	-0.0003097	mg/L	0.00060432	-0.0003097	mg/L	0.00060432 195.13%
Al 308.215†	2057.2	0.0959649	mg/L	0.00651518	0.0959649	mg/L	0.00651518 6.79%
As 188.979†	12.5	0.0098374	mg/L	0.00024847	0.0098374	mg/L	0.00024847 2.53%
Ba 233.527†	5204.6	0.0549667	mg/L	0.00066252	0.0549667	mg/L	0.00066252 1.21%
Be 313.107†	112.2	0.0024854	mg/L	0.00000494	0.0024854	mg/L	0.00000494 0.20%
Ca 315.887†	3786579.2	43.7208	mg/L	0.41731	43.7208	mg/L	0.41731 0.95%
Cd 228.802†	-10.9	0.0011797	mg/L	0.00026832	0.0011797	mg/L	0.00026832 22.75%
Co 228.616†	3.2	0.0010360	mg/L	0.00003214	0.0010360	mg/L	0.00003214 3.10%
Cr 267.716†	1252.2	0.0215554	mg/L	0.00019856	0.0215554	mg/L	0.00019856 0.92%
Cu 327.393†	827.8	0.0086838	mg/L	0.00152693	0.0086838	mg/L	0.00152693 17.58%
Fe 273.955†	1059.2	0.0655754	mg/L	0.00054403	0.0655754	mg/L	0.00054403 0.83%
K 404.721†	826.3						152.40 18.44%
Mg 279.077†	142595.6	9.55938	mg/L	0.159279	9.55938	mg/L	0.159279 1.67%
Mn 257.610†	2949.1	0.0054079	mg/L	0.00004115	0.0054079	mg/L	0.00004115 0.76%
Mo 202.031†	407.1	0.0259539	mg/L	0.00128486	0.0259539	mg/L	0.00128486 4.95%
Na 330.237†	97273.6	100.113	mg/L	1.6793	100.113	mg/L	1.6793 1.68%
Ni 231.604†	64.6	0.0020935	mg/L	0.00020550	0.0020935	mg/L	0.00020550 9.82%
Pb 220.353†	10.3	0.0026260	mg/L	0.00068115	0.0026260	mg/L	0.00068115 25.94%
Sb 206.836†	5.7	0.0060881	mg/L	0.00032859	0.0060881	mg/L	0.00032859 5.40%
Se 196.026†	0.7	0.0033165	mg/L	0.00589430	0.0033165	mg/L	0.00589430 177.73%
Sn 189.927†	17.1	0.0095919	mg/L	0.00057150	0.0095919	mg/L	0.00057150 5.96%
Ti 334.940†	220.6	0.0027135	mg/L	0.00018402	0.0027135	mg/L	0.00018402 6.78%
Tl 190.801†	-1.3	0.0012383	mg/L	0.00114037	0.0012383	mg/L	0.00114037 92.09%
V 290.880†	1907.6	0.0174560	mg/L	0.00134301	0.0174560	mg/L	0.00134301 7.69%
Zn 206.200†	182.7	0.0034660	mg/L	0.00023482	0.0034660	mg/L	0.00023482 6.78%

Sequence No.: 27
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/14/2013 11:15:18 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1030851.7	88.9 %		0.16			0.18%
Y 371.029	357205.6	86.4 %		0.48			0.56%
Ag 328.068†	-1891.5	0.0032632 mg/L		0.00010133	0.0032632 mg/L	0.00010133	3.11%
Al 308.215†	10221114.9	469.877 mg/L		3.0964	469.877 mg/L	3.0964	0.66%
QC value within limits for Al 308.215 Recovery = 93.98%							
As 188.979†	-36.4	0.0016639 mg/L		0.00380980	0.0016639 mg/L	0.00380980	228.97%
Ba 233.527†	639.3	0.0011966 mg/L		0.00000543	0.0011966 mg/L	0.00000543	0.45%
Be 313.107†	-1242.7	0.0018826 mg/L		0.00005745	0.0018826 mg/L	0.00005745	3.05%
Ca 315.887†	39989298.8	459.524 mg/L		2.6956	459.524 mg/L	2.6956	0.59%
QC value within limits for Ca 315.887 Recovery = 91.90%							
Cd 228.802†	188.4	-0.0001175 mg/L		0.00032352	-0.0001175 mg/L	0.00032352	275.23%
Co 228.616†	-59.2	-0.0006916 mg/L		0.00015298	-0.0006916 mg/L	0.00015298	22.12%
Cr 267.716†	-183.4	-0.0015278 mg/L		0.00002175	-0.0015278 mg/L	0.00002175	1.42%
Cu 327.393†	1860.6	0.0072743 mg/L		0.00156706	0.0072743 mg/L	0.00156706	21.54%
Fe 273.955†	3046547.1	178.040 mg/L		0.2611	178.040 mg/L	0.2611	0.15%
QC value within limits for Fe 273.955 Recovery = 89.02%							
K 404.721†	-1719.4					20.32	1.18%
Mg 279.077†	7322903.9	477.808 mg/L		0.9376	477.808 mg/L	0.9376	0.20%
QC value within limits for Mg 279.077 Recovery = 95.56%							
Mn 257.610†	1007.9	-0.0151083 mg/L		0.00004253	-0.0151083 mg/L	0.00004253	0.28%
Mo 202.031†	403.4	0.0027336 mg/L		0.00070213	0.0027336 mg/L	0.00070213	25.69%
Na 330.237†	158.4	0.890857 mg/L		0.0016304	0.890857 mg/L	0.0016304	0.18%
Ni 231.604†	84.5	0.0025221 mg/L		0.00029966	0.0025221 mg/L	0.00029966	11.88%
Pb 220.353†	-908.9	0.0070855 mg/L		0.00181211	0.0070855 mg/L	0.00181211	25.57%
Sb 206.836†	-72.2	0.0047264 mg/L		0.00186727	0.0047264 mg/L	0.00186727	39.51%
Se 196.026†	-104.4	0.0057467 mg/L		0.00617623	0.0057467 mg/L	0.00617623	107.47%
Sn 189.927†	10.6	0.0032144 mg/L		0.00096053	0.0032144 mg/L	0.00096053	29.88%
Ti 334.940†	315.6	0.0028938 mg/L		0.00004356	0.0028938 mg/L	0.00004356	1.51%
Tl 190.801†	4.9	-0.0015207 mg/L		0.00011548	-0.0015207 mg/L	0.00011548	7.59%
V 290.880†	3230.3	0.0025897 mg/L		0.00187421	0.0025897 mg/L	0.00187421	72.37%
Zn 206.200†	522.8	-0.0042353 mg/L		0.00004839	-0.0042353 mg/L	0.00004839	1.14%

All analyte(s) passed QC.

Sequence No.: 28
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/14/2013 11:20:30 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1035887.5	89.4 %		0.01			0.01%
Y 371.029	359220.1	86.8 %		1.47			1.70%
Ag 328.068†	152900.0	1.01716 mg/L		0.014056	1.01716 mg/L	0.014056	1.38%
QC value within limits for Ag		328.068	Recovery =	101.72%			
Al 308.215†	10197026.6	468.770 mg/L		3.4893	468.770 mg/L	3.4893	0.74%
QC value within limits for Al		308.215	Recovery =	93.75%			
As 188.979†	1232.6	1.00189 mg/L		0.010084	1.00189 mg/L	0.010084	1.01%
QC value within limits for As		188.979	Recovery =	100.19%			
Ba 233.527†	48111.5	0.490135 mg/L		0.0078074	0.490135 mg/L	0.0078074	1.59%
QC value within limits for Ba		233.527	Recovery =	98.03%			
Be 313.107†	1103059.9	0.493159 mg/L		0.014473	0.493159 mg/L	0.0021473	0.44%
QC value within limits for Be		313.107	Recovery =	98.63%			
Ca 315.887†	39869161.5	458.140 mg/L		2.7943	458.140 mg/L	2.7943	0.61%
QC value within limits for Ca		315.887	Recovery =	91.63%			
Cd 228.802†	49058.0	0.997450 mg/L		0.0144945	0.997450 mg/L	0.0144945	1.45%
QC value within limits for Cd		228.802	Recovery =	99.74%			
Co 228.616†	17002.3	0.471909 mg/L		0.0031193	0.471909 mg/L	0.0031193	0.66%
QC value within limits for Co		228.616	Recovery =	94.38%			
Cr 267.716†	29227.7	0.471513 mg/L		0.0069268	0.471513 mg/L	0.0069268	1.47%
QC value within limits for Cr		267.716	Recovery =	94.30%			
Cu 327.393†	54629.1	0.516820 mg/L		0.0067912	0.516820 mg/L	0.0067912	1.31%
QC value within limits for Cu		327.393	Recovery =	103.36%			
Fe 273.955†	3056341.8	178.613 mg/L		1.5754	178.613 mg/L	1.5754	0.88%
QC value within limits for Fe		273.955	Recovery =	89.31%			
K 404.721†	-1779.7					87.70	4.93%
Mg 279.077†	7353616.4	479.814 mg/L		2.0728	479.814 mg/L	2.0728	0.43%
QC value within limits for Mg		279.077	Recovery =	95.96%			
Mn 257.610†	297924.8	0.465458 mg/L		0.0051190	0.465458 mg/L	0.0051190	1.10%
QC value within limits for Mn		257.610	Recovery =	93.09%			
Mo 202.031†	403.5	0.0028112 mg/L		0.00076434	0.0028112 mg/L	0.00076434	27.19%
Na 330.237†	1223.1	1.97862 mg/L		0.013507	1.97862 mg/L	0.013507	0.68%
Ni 231.604†	42289.2	0.915087 mg/L		0.0120382	0.915087 mg/L	0.0120382	1.32%
QC value within limits for Ni		231.604	Recovery =	91.51%			
Pb 220.353†	10165.3	0.950883 mg/L		0.0069526	0.950883 mg/L	0.0069526	0.73%
QC value within limits for Pb		220.353	Recovery =	95.09%			
Sb 206.836†	1718.3	0.995453 mg/L		0.0012340	0.995453 mg/L	0.0012340	0.12%
QC value within limits for Sb		206.836	Recovery =	99.55%			
Se 196.026†	908.6	1.00663 mg/L		0.009902	1.00663 mg/L	0.009902	0.98%
QC value within limits for Se		196.026	Recovery =	100.66%			
Sn 189.927†	7.1	0.0020952 mg/L		0.00048607	0.0020952 mg/L	0.00048607	23.20%
Ti 334.940†	228.9	0.0027293 mg/L		0.00005931	0.0027293 mg/L	0.00005931	2.17%
Tl 190.801†	1289.8	0.937117 mg/L		0.0065680	0.937117 mg/L	0.0065680	0.70%
QC value within limits for Tl		190.801	Recovery =	93.71%			
V 290.880†	59638.8	0.483164 mg/L		0.0055386	0.483164 mg/L	0.0055386	1.15%
QC value within limits for V		290.880	Recovery =	96.63%			
Zn 206.200†	43737.4	0.919542 mg/L		0.0082292	0.919542 mg/L	0.0082292	0.89%
QC value within limits for Zn		206.200	Recovery =	91.95%			

All analyte(s) passed QC.

Sequence No.: 29
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/14/2013 11:25:44 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1117147.3	96.4 %	0.43			0.45%
Y 371.029	390808.6	94.5 %	0.05			0.06%
Ag 328.068†	14533.4	0.0957949 mg/L	0.00168682	0.0957949 mg/L	0.00168682	1.76%
QC value within limits for Ag 328.068 Recovery = 95.79%						
Al 308.215†	107003.1	4.91280 mg/L	0.037688	4.91280 mg/L	0.037688	0.77%
QC value within limits for Al 308.215 Recovery = 98.26%						
As 188.979†	616.5	0.487645 mg/L	0.0020632	0.487645 mg/L	0.0020632	0.42%
QC value within limits for As 188.979 Recovery = 97.53%						
Ba 233.527†	47634.1	0.491807 mg/L	0.0026025	0.491807 mg/L	0.0026025	0.53%
QC value within limits for Ba 233.527 Recovery = 98.36%						
Be 313.107†	1075411.6	0.480684 mg/L	0.0029980	0.480684 mg/L	0.0029980	0.62%
QC value within limits for Be 313.107 Recovery = 96.14%						
Ca 315.887†	4266360.3	49.2229 mg/L	0.28410	49.2229 mg/L	0.28410	0.58%
QC value within limits for Ca 315.887 Recovery = 98.45%						
Cd 228.802†	23668.0	0.484388 mg/L	0.0019752	0.484388 mg/L	0.0019752	0.41%
QC value within limits for Cd 228.802 Recovery = 96.88%						
Co 228.616†	17259.9	0.479333 mg/L	0.0047884	0.479333 mg/L	0.0047884	1.00%
QC value within limits for Co 228.616 Recovery = 95.87%						
Cr 267.716†	29709.4	0.481419 mg/L	0.0117289	0.481419 mg/L	0.0117289	2.44%
QC value within limits for Cr 267.716 Recovery = 96.28%						
Cu 327.393†	51014.9	0.492933 mg/L	0.0018465	0.492933 mg/L	0.0018465	0.37%
QC value within limits for Cu 327.393 Recovery = 98.59%						
Fe 273.955†	82482.3	4.82384 mg/L	0.059840	4.82384 mg/L	0.059840	1.24%
QC value within limits for Fe 273.955 Recovery = 96.48%						
K 404.721†	3352.8				180.63	5.39%
Unable to evaluate QC.						
Mg 279.077†	747041.7	48.9922 mg/L	0.27781	48.9922 mg/L	0.27781	0.57%
QC value within limits for Mg 279.077 Recovery = 97.98%						
Mn 257.610†	297528.4	0.480943 mg/L	0.0037881	0.480943 mg/L	0.0037881	0.79%
QC value within limits for Mn 257.610 Recovery = 96.19%						
Mo 202.031†	8209.1	0.488745 mg/L	0.0062957	0.488745 mg/L	0.0062957	1.29%
QC value within limits for Mo 202.031 Recovery = 97.75%						
Na 330.237†	45034.0	46.7399 mg/L	0.22644	46.7399 mg/L	0.22644	0.48%
QC value within limits for Na 330.237 Recovery = 93.48%						
Ni 231.604†	22118.8	0.479726 mg/L	0.0094444	0.479726 mg/L	0.0094444	1.97%
QC value within limits for Ni 231.604 Recovery = 95.95%						
Pb 220.353†	5702.6	0.488672 mg/L	0.0011212	0.488672 mg/L	0.0011212	0.23%
QC value within limits for Pb 220.353 Recovery = 97.73%						
Sb 206.836†	879.1	0.489800 mg/L	0.0031714	0.489800 mg/L	0.0031714	0.65%
QC value within limits for Sb 206.836 Recovery = 97.96%						
Se 196.026†	509.7	0.509722 mg/L	0.0136973	0.509722 mg/L	0.0136973	2.69%
QC value within limits for Se 196.026 Recovery = 101.94%						
Sn 189.927†	1493.7	0.476472 mg/L	0.0117020	0.476472 mg/L	0.0117020	2.46%
QC value within limits for Sn 189.927 Recovery = 95.29%						
Ti 334.940†	255286.3	0.487019 mg/L	0.0033089	0.487019 mg/L	0.0033089	0.68%
QC value within limits for Ti 334.940 Recovery = 97.40%						
Tl 190.801†	677.7	0.501667 mg/L	0.0005408	0.501667 mg/L	0.0005408	0.11%
QC value within limits for Tl 190.801 Recovery = 100.33%						
V 290.880†	56590.9	0.482369 mg/L	0.0055415	0.482369 mg/L	0.0055415	1.15%
QC value within limits for V 290.880 Recovery = 96.47%						
Zn 206.200†	22416.5	0.478357 mg/L	0.0037485	0.478357 mg/L	0.0037485	0.78%
QC value within limits for Zn 206.200 Recovery = 95.67%						

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 30
 Sample ID: LLCCV V-176606 [aq]
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 11/14/2013 11:29:31 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1148490.6	99.1 %		0.07			0.07%
Y 371.029	406599.1	98.3 %		0.63			0.64%
Ag 328.068†	2734.8	0.0181231 mg/L		0.00004767	0.0181231 mg/L	0.00004767	0.26%
QC value within limits for Ag		328.068	Recovery = 90.62%				
Al 308.215†	3895.7	0.180548 mg/L		0.0010027	0.180548 mg/L	0.0010027	0.56%
QC value within limits for Al		308.215	Recovery = 90.27%				
As 188.979†	28.3	0.0229442 mg/L		0.00310874	0.0229442 mg/L	0.00310874	13.55%
QC value within limits for As		188.979	Recovery = 114.72%				
Ba 233.527†	4794.4	0.0507334 mg/L		0.00006441	0.0507334 mg/L	0.00006441	0.13%
QC value within limits for Ba		233.527	Recovery = 101.47%				
Be 313.107†	25050.1	0.0135636 mg/L		0.00004026	0.0135636 mg/L	0.00004026	0.30%
QC value within limits for Be		313.107	Recovery = 113.03%				
Ca 315.887†	421055.8	5.03584 mg/L		0.066899	5.03584 mg/L	0.066899	1.33%
QC value within limits for Ca		315.887	Recovery = 100.72%				
Cd 228.802†	537.7	0.0125371 mg/L		0.00008447	0.0125371 mg/L	0.00008447	0.67%
QC value within limits for Cd		228.802	Recovery = 104.48%				
Co 228.616†	703.7	0.0203382 mg/L		0.00015671	0.0203382 mg/L	0.00015671	0.77%
QC value within limits for Co		228.616	Recovery = 101.69%				
Cr 267.716†	2921.8	0.0483916 mg/L		0.00002087	0.0483916 mg/L	0.00002087	0.04%
QC value within limits for Cr		267.716	Recovery = 96.78%				
Cu 327.393†	5606.8	0.0553386 mg/L		0.00357619	0.0553386 mg/L	0.00357619	6.46%
QC value within limits for Cu		327.393	Recovery = 110.68%				
Fe 273.955†	4889.4	0.289408 mg/L		0.0013591	0.289408 mg/L	0.0013591	0.47%
QC value within limits for Fe		273.955	Recovery = 96.47%				
K 404.721†	533.3					272.74	51.14%
Unable to evaluate QC.							
Mg 279.077†	73855.0	5.07540 mg/L		0.060406	5.07540 mg/L	0.060406	1.19%
QC value within limits for Mg		279.077	Recovery = 101.51%				
Mn 257.610†	23038.3	0.0380928 mg/L		0.00029109	0.0380928 mg/L	0.00029109	0.76%
QC value within limits for Mn		257.610	Recovery = 95.23%				
Mo 202.031†	337.5	0.0231550 mg/L		0.00005938	0.0231550 mg/L	0.00005938	0.26%
QC value within limits for Mo		202.031	Recovery = 115.77%				
Na 330.237†	3873.8	4.68682 mg/L		0.038204	4.68682 mg/L	0.038204	0.82%
QC value within limits for Na		330.237	Recovery = 93.74%				
Ni 231.604†	2213.7	0.0485551 mg/L		0.00013299	0.0485551 mg/L	0.00013299	0.27%
QC value within limits for Ni		231.604	Recovery = 97.11%				
Pb 220.353†	130.9	0.0128893 mg/L		0.00057132	0.0128893 mg/L	0.00057132	4.43%
QC value within limits for Pb		220.353	Recovery = 107.41%				
Sb 206.836†	33.4	0.0214370 mg/L		0.00114929	0.0214370 mg/L	0.00114929	5.36%
QC value within limits for Sb		206.836	Recovery = 107.18%				
Se 196.026†	38.5	0.0415758 mg/L		0.00807799	0.0415758 mg/L	0.00807799	19.43%
QC value within limits for Se		196.026	Recovery = 103.94%				
Sn 189.927†	136.5	0.0468804 mg/L		0.00106587	0.0468804 mg/L	0.00106587	2.27%
QC value within limits for Sn		189.927	Recovery = 93.76%				
Ti 334.940†	23688.2	0.0472726 mg/L		0.00055947	0.0472726 mg/L	0.00055947	1.18%
QC value within limits for Ti		334.940	Recovery = 94.55%				
Tl 190.801†	30.5	0.0246370 mg/L		0.00188511	0.0246370 mg/L	0.00188511	7.65%
QC value within limits for Tl		190.801	Recovery = 123.19%				
V 290.880†	5449.6	0.0478113 mg/L		0.00022504	0.0478113 mg/L	0.00022504	0.47%
QC value within limits for V		290.880	Recovery = 95.62%				
Zn 206.200†	2210.8	0.0468114 mg/L		0.00014180	0.0468114 mg/L	0.00014180	0.30%
QC value within limits for Zn		206.200	Recovery = 93.62%				

All analyte(s) passed QC. One or more analytes were not evaluated.

Autosampler Location: 2
Date Collected: 11/14/2013 11:33:10 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			1144565.8	98.7	%	0.25				0.25%
Y 371.029			410126.2	99.2	%	0.61				0.62%
Ag 328.068†			-4.0	0.0001604	mg/L	0.00044163	0.0001604	mg/L	0.00044163	275.39%
QC value	within	limits	for Ag	328.068	Recovery	=	Not calculated			
Al 308.215†			-44.0	-0.0002426	mg/L	0.00147310	-0.0002426	mg/L	0.00147310	607.23%
QC value	within	limits	for Al	308.215	Recovery	=	Not calculated			
As 188.979†			7.1	0.0061377	mg/L	0.00502771	0.0061377	mg/L	0.00502771	81.91%
QC value	within	limits	for As	188.979	Recovery	=	Not calculated			
Ba 233.527†			49.2	0.0018694	mg/L	0.00005951	0.0018694	mg/L	0.00005951	3.18%
QC value	within	limits	for Ba	233.527	Recovery	=	Not calculated			
Be 313.107†			193.7	0.0025219	mg/L	0.00005992	0.0025219	mg/L	0.00005992	2.38%
QC value	within	limits	for Be	313.107	Recovery	=	Not calculated			
Ca 315.887†			1581.0	0.214967	mg/L	0.0086481	0.214967	mg/L	0.0086481	4.02%
QC value	within	limits	for Ca	315.887	Recovery	=	Not calculated			
Cd 228.802†			-1.9	0.0015493	mg/L	0.00013203	0.0015493	mg/L	0.00013203	8.52%
QC value	within	limits	for Cd	228.802	Recovery	=	Not calculated			
Co 228.616†			12.9	0.0012406	mg/L	0.00006749	0.0012406	mg/L	0.00006749	5.44%
QC value	within	limits	for Co	228.616	Recovery	=	Not calculated			
Cr 267.716†			-14.0	0.0010862	mg/L	0.00029726	0.0010862	mg/L	0.00029726	27.37%
QC value	within	limits	for Cr	267.716	Recovery	=	Not calculated			
Cu 327.393†			141.2	0.0026521	mg/L	0.00150865	0.0026521	mg/L	0.00150865	56.88%
QC value	within	limits	for Cu	327.393	Recovery	=	Not calculated			
Fe 273.955†			-0.6	0.0036427	mg/L	0.00079242	0.0036427	mg/L	0.00079242	21.75%
QC value	within	limits	for Fe	273.955	Recovery	=	Not calculated			
K 404.721†			182.6						32.58	17.84%
	Unable to evaluate QC.									
Mg 279.077†			135.4	0.266414	mg/L	0.0033483	0.266414	mg/L	0.0033483	1.26%
QC value	within	limits	for Mg	279.077	Recovery	=	Not calculated			
Mn 257.610†			-39.8	0.0009071	mg/L	0.00002285	0.0009071	mg/L	0.00002285	2.52%
QC value	within	limits	for Mn	257.610	Recovery	=	Not calculated			
Mo 202.031†			8.2	0.0037886	mg/L	0.00061818	0.0037886	mg/L	0.00061818	16.32%
QC value	within	limits	for Mo	202.031	Recovery	=	Not calculated			
Na 330.237†			-64.1	0.663484	mg/L	0.0417695	0.663484	mg/L	0.0417695	6.30%
QC value	within	limits	for Na	330.237	Recovery	=	Not calculated			
Ni 231.604†			13.2	0.0009423	mg/L	0.00021011	0.0009423	mg/L	0.00021011	22.30%
QC value	within	limits	for Ni	231.604	Recovery	=	Not calculated			
Pb 220.353†			4.3	0.0020936	mg/L	0.00056712	0.0020936	mg/L	0.00056712	27.09%
QC value	within	limits	for Pb	220.353	Recovery	=	Not calculated			
Sb 206.836†			3.2	0.0047500	mg/L	0.00509234	0.0047500	mg/L	0.00509234	107.21%
QC value	within	limits	for Sb	206.836	Recovery	=	Not calculated			
Se 196.026†			8.3	0.0115614	mg/L	0.00383503	0.0115614	mg/L	0.00383503	33.17%
QC value	within	limits	for Se	196.026	Recovery	=	Not calculated			
Sn 189.927†			1.2	0.0040198	mg/L	0.00069271	0.0040198	mg/L	0.00069271	17.23%
QC value	within	limits	for Sn	189.927	Recovery	=	Not calculated			
Ti 334.940†			10.6	0.0023148	mg/L	0.00005212	0.0023148	mg/L	0.00005212	2.25%
QC value	within	limits	for Ti	334.940	Recovery	=	Not calculated			
Tl 190.801†			2.8	0.0040769	mg/L	0.00313058	0.0040769	mg/L	0.00313058	76.79%
QC value	within	limits	for Tl	190.801	Recovery	=	Not calculated			
V 290.880†			-70.8	0.0009521	mg/L	0.00053255	0.0009521	mg/L	0.00053255	55.93%
QC value	within	limits	for V	290.880	Recovery	=	Not calculated			
Zn 206.200†			-1.3	-0.0004564	mg/L	0.00002211	-0.0004564	mg/L	0.00002211	4.84%
QC value	within	limits	for Zn	206.200	Recovery	=	Not calculated			
All analyte(s) passed QC. One or more analytes were not evaluated.										

Sequence No.: 32
 Sample ID: 75576-002
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 75
 Date Collected: 11/14/2013 11:36:45 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-002

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1151337.5	99.3 %		0.18			0.18%
Y 371.029	409079.8	98.9 %		0.22			0.22%
Ag 328.068†	-38.9	-0.0000654 mg/L		0.00019630	-0.0000654 mg/L	0.00019630	300.02%
Al 308.215†	1176.8	0.0555848 mg/L		0.00206437	0.0555848 mg/L	0.00206437	3.71%
As 188.979†	3.9	0.0033112 mg/L		0.00181893	0.0033112 mg/L	0.00181893	54.93%
Ba 233.527†	2983.8	0.0320943 mg/L		0.00010151	0.0320943 mg/L	0.00010151	0.32%
Be 313.107†	273.6	0.0025572 mg/L		0.00000210	0.0025572 mg/L	0.00000210	0.08%
Ca 315.887†	2166790.6	25.1025 mg/L		0.26857	25.1025 mg/L	0.26857	1.07%
Cd 228.802†	156.6	0.0046775 mg/L		0.00005791	0.0046775 mg/L	0.00005791	1.24%
Co 228.616†	13.7	0.0013115 mg/L		0.00034601	0.0013115 mg/L	0.00034601	26.38%
Cr 267.716†	5376.9	0.0878438 mg/L		0.00202149	0.0878438 mg/L	0.00202149	2.30%
Cu 327.393†	1212.6	0.0126546 mg/L		0.00160054	0.0126546 mg/L	0.00160054	12.65%
Fe 273.955†	596.6	0.0385443 mg/L		0.00068340	0.0385443 mg/L	0.00068340	1.77%
K 404.721†	206.2					226.41	109.81%
Mg 279.077†	58889.6	4.09916 mg/L		0.045401	4.09916 mg/L	0.045401	1.11%
Mn 257.610†	1346.6	0.0030147 mg/L		0.00000587	0.0030147 mg/L	0.00000587	0.19%
Mo 202.031†	310.9	0.0208912 mg/L		0.00001381	0.0208912 mg/L	0.00001381	0.07%
Na 330.237†	30112.5	31.4947 mg/L		0.30976	31.4947 mg/L	0.30976	0.98%
Ni 231.604†	124.0	0.0033692 mg/L		0.00012945	0.0033692 mg/L	0.00012945	3.84%
Pb 220.353†	23.8	0.0037832 mg/L		0.00036987	0.0037832 mg/L	0.00036987	9.78%
Sb 206.836†	2.0	0.0040243 mg/L		0.00430245	0.0040243 mg/L	0.00430245	106.91%
Se 196.026†	5.0	0.0078457 mg/L		0.00020644	0.0078457 mg/L	0.00020644	2.63%
Sn 189.927†	6.1	0.0058745 mg/L		0.00023187	0.0058745 mg/L	0.00023187	3.95%
Ti 334.940†	348.8	0.0029570 mg/L		0.00004680	0.0029570 mg/L	0.00004680	1.58%
Tl 190.801†	-1.6	0.0009952 mg/L		0.00025654	0.0009952 mg/L	0.00025654	25.78%
V 290.880†	80.9	0.0021126 mg/L		0.00015567	0.0021126 mg/L	0.00015567	7.37%
Zn 206.200†	1147.7	0.0240967 mg/L		0.00005000	0.0240967 mg/L	0.00005000	0.21%

Sequence No.: 33
 Sample ID: 75576-004
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 76
 Date Collected: 11/14/2013 11:40:30 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-004

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1171907.0	101	%	1.0				1.03%
Y 371.029	411705.1	99.5	%	1.49				1.49%
Ag 328.068†	-166.3	-0.0008984	mg/L	0.00040611	-0.0008984	mg/L	0.00040611	45.20%
Al 308.215†	257.1	0.0135377	mg/L	0.00343087	0.0135377	mg/L	0.00343087	25.34%
As 188.979†	9.6	0.0077320	mg/L	0.00153073	0.0077320	mg/L	0.00153073	19.80%
Ba 233.527†	2788.6	0.0300827	mg/L	0.00018632	0.0300827	mg/L	0.00018632	0.62%
Be 313.107†	305.8	0.0025716	mg/L	0.00001488	0.0025716	mg/L	0.00001488	0.58%
Ca 315.887†	2421233.5	28.0272	mg/L	0.34195	28.0272	mg/L	0.34195	1.22%
Cd 228.802†	866.0	0.0191484	mg/L	0.00050102	0.0191484	mg/L	0.00050102	2.62%
Co 228.616†	10.2	0.0011781	mg/L	0.00016769	0.0011781	mg/L	0.00016769	14.23%
Cr 267.716†	999.6	0.0174047	mg/L	0.00022023	0.0174047	mg/L	0.00022023	1.27%
Cu 327.393†	1371.4	0.0141490	mg/L	0.00032361	0.0141490	mg/L	0.00032361	2.29%
Fe 273.955†	905.6	0.0565984	mg/L	0.00006190	0.0565984	mg/L	0.00006190	0.11%
K 404.721†	754.4						105.38	13.97%
Mg 279.077†	61624.1	4.27740	mg/L	0.016277	4.27740	mg/L	0.016277	0.38%
Mn 257.610†	5836.6	0.0102720	mg/L	0.00003162	0.0102720	mg/L	0.00003162	0.31%
Mo 202.031†	75.0	0.0067840	mg/L	0.00008553	0.0067840	mg/L	0.00008553	1.26%
Na 330.237†	17602.9	18.7137	mg/L	0.09960	18.7137	mg/L	0.09960	0.53%
Ni 231.604†	177.2	0.0044949	mg/L	0.00006366	0.0044949	mg/L	0.00006366	1.42%
Pb 220.353†	28.1	0.0041264	mg/L	0.00113536	0.0041264	mg/L	0.00113536	27.51%
Sb 206.836†	4.7	0.0055635	mg/L	0.00385688	0.0055635	mg/L	0.00385688	69.32%
Se 196.026†	6.5	0.0092395	mg/L	0.00356544	0.0092395	mg/L	0.00356544	38.59%
Sn 189.927†	10.1	0.0071874	mg/L	0.00240142	0.0071874	mg/L	0.00240142	33.41%
Ti 334.940†	204.8	0.0026835	mg/L	0.00004171	0.0026835	mg/L	0.00004171	1.55%
Tl 190.801†	0.1	0.0021638	mg/L	0.00062875	0.0021638	mg/L	0.00062875	29.06%
V 290.880†	58.8	0.0018963	mg/L	0.00019310	0.0018963	mg/L	0.00019310	10.18%
Zn 206.200†	5558.4	0.118386	mg/L	0.0004134	0.118386	mg/L	0.0004134	0.35%

Sequence No.: 34
 Sample ID: 75576-006
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 77
 Date Collected: 11/14/2013 11:44:17 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-006

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1167297.6	101	%	0.0			0.05%
Y 371.029	411361.7	99.5	%	0.07			0.07%
Ag 328.068†	-107.6	-0.0005177	mg/L	0.00024438	-0.0005177 mg/L	0.00024438	47.21%
Al 308.215†	216.3	0.0116300	mg/L	0.00162260	0.0116300 mg/L	0.00162260	13.95%
As 188.979†	7.4	0.0059870	mg/L	0.00187904	0.0059870 mg/L	0.00187904	31.39%
Ba 233.527†	2112.0	0.0231152	mg/L	0.00002455	0.0231152 mg/L	0.00002455	0.11%
Be 313.107†	256.2	0.0025496	mg/L	0.00000331	0.0025496 mg/L	0.00000331	0.13%
Ca 315.887†	2285575.8	26.4680	mg/L	0.23146	26.4680 mg/L	0.23146	0.87%
Cd 228.802†	2167.3	0.0457170	mg/L	0.00013650	0.0457170 mg/L	0.00013650	0.30%
Co 228.616†	5.9	0.0010637	mg/L	0.00035518	0.0010637 mg/L	0.00035518	33.39%
Cr 267.716†	7777.8	0.126389	mg/L	0.0011029	0.126389 mg/L	0.0011029	0.87%
Cu 327.393†	535.8	0.0061017	mg/L	0.00037847	0.0061017 mg/L	0.00037847	6.20%
Fe 273.955†	171.5	0.0136992	mg/L	0.00013998	0.0136992 mg/L	0.00013998	1.02%
K 404.721†	510.3					293.29	57.47%
Mg 279.077†	53362.9	3.73853	mg/L	0.027585	3.73853 mg/L	0.027585	0.74%
Mn 257.610†	891.8	0.0022881	mg/L	0.00001960	0.0022881 mg/L	0.00001960	0.86%
Mo 202.031†	106.4	0.0087035	mg/L	0.00033668	0.0087035 mg/L	0.00033668	3.87%
Na 330.237†	7500.4	8.39211	mg/L	0.163828	8.39211 mg/L	0.163828	1.95%
Ni 231.604†	185.4	0.0046746	mg/L	0.00020168	0.0046746 mg/L	0.00020168	4.31%
Pb 220.353†	17.2	0.0032026	mg/L	0.00128017	0.0032026 mg/L	0.00128017	39.97%
Sb 206.836†	5.7	0.0061253	mg/L	0.00113723	0.0061253 mg/L	0.00113723	18.57%
Se 196.026†	6.2	0.0089799	mg/L	0.00138637	0.0089799 mg/L	0.00138637	15.44%
Sn 189.927†	15.2	0.0087674	mg/L	0.00005120	0.0087674 mg/L	0.00005120	0.58%
Ti 334.940†	42.2	0.0023748	mg/L	0.00023978	0.0023748 mg/L	0.00023978	10.10%
Tl 190.801†	-3.3	-0.0002501	mg/L	0.00432329	-0.0002501 mg/L	0.00432329	>999.9%
V 290.880†	-47.6	0.0010141	mg/L	0.00014194	0.0010141 mg/L	0.00014194	14.00%
Zn 206.200†	204.4	0.0039385	mg/L	0.00008681	0.0039385 mg/L	0.00008681	2.20%

Sequence No.: 35
 Sample ID: 75576-008
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 78
 Date Collected: 11/14/2013 11:48:04 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-008

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1170214.5	101	%	1.6			1.57%
Y 371.029	427676.1	103	%	1.6			1.53%
Ag 328.068†	-71.2	-0.0002791	mg/L	0.00046439	-0.0002791	mg/L	0.00046439 166.40%
Al 308.215†	8247.9	0.380931	mg/L	0.0046872	0.380931	mg/L	0.0046872 1.23%
As 188.979†	6.5	0.0055675	mg/L	0.00122855	0.0055675	mg/L	0.00122855 22.07%
Ba 233.527†	20945.3	0.217097	mg/L	0.0015752	0.217097	mg/L	0.0015752 0.73%
Be 313.107†	2950.4	0.0037481	mg/L	0.00002501	0.0037481	mg/L	0.00002501 0.67%
Ca 315.887†	802102.1	9.41387	mg/L	0.062252	9.41387	mg/L	0.062252 0.66%
Cd 228.802†	145.2	0.0045109	mg/L	0.00016150	0.0045109	mg/L	0.00016150 3.58%
Co 228.616†	5.6	0.0010419	mg/L	0.00018316	0.0010419	mg/L	0.00018316 17.58%
Cr 267.716†	172.5	0.0042651	mg/L	0.00029318	0.0042651	mg/L	0.00029318 6.87%
Cu 327.393†	1152.1	0.0122821	mg/L	0.00079812	0.0122821	mg/L	0.00079812 6.50%
Fe 273.955†	180.6	0.0142297	mg/L	0.00013463	0.0142297	mg/L	0.00013463 0.95%
K 404.721†	646.9					144.12	22.28%
Mg 279.077†	38752.0	2.78817	mg/L	0.015012	2.78817	mg/L	0.015012 0.54%
Mn 257.610†	296339.6	0.480585	mg/L	0.0036564	0.480585	mg/L	0.0036564 0.76%
Mo 202.031†	26.4	0.0045424	mg/L	0.00025325	0.0045424	mg/L	0.00025325 5.58%
Na 330.237†	8766.6	9.68576	mg/L	0.009623	9.68576	mg/L	0.009623 0.10%
Ni 231.604†	427.0	0.0098924	mg/L	0.00023204	0.0098924	mg/L	0.00023204 2.35%
Pb 220.353†	21.4	0.0036311	mg/L	0.00024970	0.0036311	mg/L	0.00024970 6.88%
Sb 206.836†	3.6	0.0049849	mg/L	0.00179168	0.0049849	mg/L	0.00179168 35.94%
Se 196.026†	1.2	0.0042003	mg/L	0.00089839	0.0042003	mg/L	0.00089839 21.39%
Sn 189.927†	4.6	0.0052021	mg/L	0.00009577	0.0052021	mg/L	0.00009577 1.84%
Ti 334.940†	273.0	0.0028129	mg/L	0.00016511	0.0028129	mg/L	0.00016511 5.87%
Tl 190.801†	-0.8	0.0008934	mg/L	0.00221696	0.0008934	mg/L	0.00221696 248.14%
V 290.880†	-158.2	0.0002410	mg/L	0.00040644	0.0002410	mg/L	0.00040644 168.67%
Zn 206.200†	1091.2	0.0228906	mg/L	0.00021867	0.0228906	mg/L	0.00021867 0.96%

Sequence No.: 36
 Sample ID: 75576-010
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 79
 Date Collected: 11/14/2013 11:51:41 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-010

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1166211.3	101 %	0.3			0.34%
Y 371.029	412369.6	99.7 %	0.28			0.29%
Ag 328.068†	-121.3	-0.0005997 mg/L	0.00043750	-0.0005997 mg/L	0.00043750	72.96%
Al 308.215†	514.7	0.0254081 mg/L	0.00184781	0.0254081 mg/L	0.00184781	7.27%
As 188.979†	7.4	0.0061860 mg/L	0.00031986	0.0061860 mg/L	0.00031986	5.17%
Ba 233.527†	3730.3	0.0397804 mg/L	0.00009353	0.0397804 mg/L	0.00009353	0.24%
Be 313.107†	422.2	0.0026235 mg/L	0.00002352	0.0026235 mg/L	0.00002352	0.90%
Ca 315.887†	1466961.5	17.0583 mg/L	0.13825	17.0583 mg/L	0.13825	0.81%
Cd 228.802†	-20.9	0.0010892 mg/L	0.00006939	0.0010892 mg/L	0.00006939	6.37%
Co 228.616†	10.5	0.0011805 mg/L	0.00035826	0.0011805 mg/L	0.00035826	30.35%
Cr 267.716†	53.7	0.0021963 mg/L	0.00007063	0.0021963 mg/L	0.00007063	3.22%
Cu 327.393†	378.6	0.0047130 mg/L	0.00323620	0.0047130 mg/L	0.00323620	68.67%
Fe 273.955†	1723.5	0.104400 mg/L	0.0006343	0.104400 mg/L	0.0006343	0.61%
K 404.721†	575.8				75.05	13.03%
Mg 279.077†	36569.7	2.64318 mg/L	0.024140	2.64318 mg/L	0.024140	0.91%
Mn 257.610†	20347.3	0.0338216 mg/L	0.00019985	0.0338216 mg/L	0.00019985	0.59%
Mo 202.031†	42.7	0.0052485 mg/L	0.00017533	0.0052485 mg/L	0.00017533	3.34%
Na 330.237†	8552.7	9.46720 mg/L	0.026910	9.46720 mg/L	0.026910	0.28%
Ni 231.604†	35.0	0.0014165 mg/L	0.00013474	0.0014165 mg/L	0.00013474	9.51%
Pb 220.353†	25.7	0.0039203 mg/L	0.00096795	0.0039203 mg/L	0.00096795	24.69%
Sb 206.836†	5.0	0.0057128 mg/L	0.00091421	0.0057128 mg/L	0.00091421	16.00%
Se 196.026†	6.1	0.0091131 mg/L	0.00128470	0.0091131 mg/L	0.00128470	14.10%
Sn 189.927†	6.2	0.0058052 mg/L	0.00009787	0.0058052 mg/L	0.00009787	1.69%
Ti 334.940†	77.6	0.0024420 mg/L	0.00016387	0.0024420 mg/L	0.00016387	6.71%
Tl 190.801†	2.8	0.0040698 mg/L	0.00139629	0.0040698 mg/L	0.00139629	34.31%
V 290.880†	-18.2	0.0013097 mg/L	0.00024600	0.0013097 mg/L	0.00024600	18.78%
Zn 206.200†	320.0	0.0064062 mg/L	0.00003707	0.0064062 mg/L	0.00003707	0.58%

Sequence No.: 37
 Sample ID: 75576-012
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 80
 Date Collected: 11/14/2013 11:55:18 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-012

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1166411.3	101 %		0.7			0.72%
Y 371.029	410095.5	99.1 %		0.47			0.48%
Ag 328.068†	-143.0	-0.0007483 mg/L		0.00000959	-0.0007483 mg/L	0.00000959	1.28%
Al 308.215†	583.8	0.0286057 mg/L		0.00043164	0.0286057 mg/L	0.00043164	1.51%
As 188.979†	5.0	0.0044186 mg/L		0.00062647	0.0044186 mg/L	0.00062647	14.18%
Ba 233.527†	932.1	0.0109618 mg/L		0.00013222	0.0109618 mg/L	0.00013222	1.21%
Be 313.107†	417.0	0.0026211 mg/L		0.00002351	0.0026211 mg/L	0.00002351	0.90%
Ca 315.887†	486527.6	5.78907 mg/L		0.046624	5.78907 mg/L	0.046624	0.81%
Cd 228.802†	-24.4	0.0010663 mg/L		0.00052930	0.0010663 mg/L	0.00052930	49.64%
Co 228.616†	-0.3	0.0008771 mg/L		0.00005503	0.0008771 mg/L	0.00005503	6.27%
Cr 267.716†	23.6	0.0016942 mg/L		0.00005994	0.0016942 mg/L	0.00005994	3.54%
Cu 327.393†	513.2	0.0061673 mg/L		0.00064573	0.0061673 mg/L	0.00064573	10.47%
Fe 273.955†	395.9	0.0268146 mg/L		0.00028232	0.0268146 mg/L	0.00028232	1.05%
K 404.721†	616.9					183.10	29.68%
Mg 279.077†	32072.0	2.34965 mg/L		0.015223	2.34965 mg/L	0.015223	0.65%
Mn 257.610†	1201.8	0.0028399 mg/L		0.00001194	0.0028399 mg/L	0.00001194	0.42%
Mo 202.031†	21.1	0.0043597 mg/L		0.00038497	0.0043597 mg/L	0.00038497	8.83%
Na 330.237†	5955.3	6.81352 mg/L		0.066140	6.81352 mg/L	0.066140	0.97%
Ni 231.604†	72.1	0.0022182 mg/L		0.00031971	0.0022182 mg/L	0.00031971	14.41%
Pb 220.353†	9.7	0.0025553 mg/L		0.00044517	0.0025553 mg/L	0.00044517	17.42%
Sb 206.836†	-0.1	0.0029128 mg/L		0.00110430	0.0029128 mg/L	0.00110430	37.91%
Se 196.026†	9.0	0.0121754 mg/L		0.00702221	0.0121754 mg/L	0.00702221	57.68%
Sn 189.927†	5.8	0.0055626 mg/L		0.00019373	0.0055626 mg/L	0.00019373	3.48%
Ti 334.940†	121.3	0.0025250 mg/L		0.00005706	0.0025250 mg/L	0.00005706	2.26%
Tl 190.801†	0.3	0.0022286 mg/L		0.00080362	0.0022286 mg/L	0.00080362	36.06%
V 290.880†	-81.9	0.0007714 mg/L		0.00005449	0.0007714 mg/L	0.00005449	7.06%
Zn 206.200†	390.1	0.0079080 mg/L		0.00016590	0.0079080 mg/L	0.00016590	2.10%

Sequence No.: 38
 Sample ID: 75576-014
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 81
 Date Collected: 11/14/2013 11:58:55 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-014

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1170313.4	101	%	0.0			0.04%
Y 371.029	409979.9	99.1	%	0.62			0.62%
Ag 328.068†	-89.3	-0.0003978	mg/L	0.00029573	-0.0003978	mg/L	0.00029573 74.34%
Al 308.215†	406.2	0.0204202	mg/L	0.00273288	0.0204202	mg/L	0.00273288 13.38%
As 188.979†	3.9	0.0033714	mg/L	0.00118393	0.0033714	mg/L	0.00118393 35.12%
Ba 233.527†	5478.9	0.0577950	mg/L	0.00009337	0.0577950	mg/L	0.00009337 0.16%
Be 313.107†	438.5	0.0026307	mg/L	0.00005576	0.0026307	mg/L	0.00005576 2.12%
Ca 315.887†	1602436.8	18.6157	mg/L	0.13716	18.6157	mg/L	0.13716 0.74%
Cd 228.802†	-36.8	0.0007600	mg/L	0.00010917	0.0007600	mg/L	0.00010917 14.36%
Co 228.616†	1.6	0.0009336	mg/L	0.00017994	0.0009336	mg/L	0.00017994 19.27%
Cr 267.716†	82.6	0.0026542	mg/L	0.00028432	0.0026542	mg/L	0.00028432 10.71%
Cu 327.393†	944.9	0.0101593	mg/L	0.00247218	0.0101593	mg/L	0.00247218 24.33%
Fe 273.955†	104.2	0.0097672	mg/L	0.00003407	0.0097672	mg/L	0.00003407 0.35%
K 404.721†	746.5					50.95	6.82%
Mg 279.077†	61274.3	4.25462	mg/L	0.062031	4.25462	mg/L	0.062031 1.46%
Mn 257.610†	7685.6	0.0132654	mg/L	0.00014022	0.0132654	mg/L	0.00014022 1.06%
Mo 202.031†	46.0	0.0053892	mg/L	0.00042110	0.0053892	mg/L	0.00042110 7.81%
Na 330.237†	21425.5	22.6192	mg/L	0.20151	22.6192	mg/L	0.20151 0.89%
Ni 231.604†	-0.1	0.0006597	mg/L	0.00023545	0.0006597	mg/L	0.00023545 35.69%
Pb 220.353†	26.7	0.0040034	mg/L	0.00018722	0.0040034	mg/L	0.00018722 4.68%
Sb 206.836†	2.7	0.0044176	mg/L	0.00114981	0.0044176	mg/L	0.00114981 26.03%
Se 196.026†	3.7	0.0067485	mg/L	0.00018861	0.0067485	mg/L	0.00018861 2.79%
Sn 189.927†	4.7	0.0053595	mg/L	0.00044323	0.0053595	mg/L	0.00044323 8.27%
Ti 334.940†	97.0	0.0024789	mg/L	0.00024606	0.0024789	mg/L	0.00024606 9.93%
Tl 190.801†	0.1	0.0021408	mg/L	0.00095595	0.0021408	mg/L	0.00095595 44.65%
V 290.880†	-46.9	0.0009960	mg/L	0.00015742	0.0009960	mg/L	0.00015742 15.80%
Zn 206.200†	374.4	0.0075721	mg/L	0.00020351	0.0075721	mg/L	0.00020351 2.69%

Sequence No.: 39
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/15/2013 12:02:42 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1119987.0	96.6 %	0.08			0.08%
Y 371.029	386541.5	93.5 %	0.05			0.05%
Ag 328.068†	14198.2	0.0935877 mg/L	0.00025306	0.0935877 mg/L	0.00025306	0.27%
QC value within limits for Ag 328.068 Recovery = 93.59%						
Al 308.215†	104987.4	4.82022 mg/L	0.014339	4.82022 mg/L	0.014339	0.30%
QC value within limits for Al 308.215 Recovery = 96.40%						
As 188.979†	610.4	0.482763 mg/L	0.0051596	0.482763 mg/L	0.0051596	1.07%
QC value within limits for As 188.979 Recovery = 96.55%						
Ba 233.527†	46996.9	0.485249 mg/L	0.0024358	0.485249 mg/L	0.0024358	0.50%
QC value within limits for Ba 233.527 Recovery = 97.05%						
Be 313.107†	1068615.2	0.477663 mg/L	0.0071571	0.477663 mg/L	0.0071571	1.50%
QC value within limits for Be 313.107 Recovery = 95.53%						
Ca 315.887†	4241291.1	48.9351 mg/L	0.53800	48.9351 mg/L	0.53800	1.10%
QC value within limits for Ca 315.887 Recovery = 97.87%						
Cd 228.802†	23281.8	0.476509 mg/L	0.0000802	0.476509 mg/L	0.0000802	0.02%
QC value within limits for Cd 228.802 Recovery = 95.30%						
Co 228.616†	16860.1	0.468258 mg/L	0.0012505	0.468258 mg/L	0.0012505	0.27%
QC value within limits for Co 228.616 Recovery = 93.65%						
Cr 267.716†	29010.0	0.470145 mg/L	0.0033938	0.470145 mg/L	0.0033938	0.72%
QC value within limits for Cr 267.716 Recovery = 94.03%						
Cu 327.393†	50364.1	0.486657 mg/L	0.0020360	0.486657 mg/L	0.0020360	0.42%
QC value within limits for Cu 327.393 Recovery = 97.33%						
Fe 273.955†	80186.4	4.68967 mg/L	0.014897	4.68967 mg/L	0.014897	0.32%
QC value within limits for Fe 273.955 Recovery = 93.79%						
K 404.721†	3439.8				374.59	10.89%
Unable to evaluate QC.						
Mg 279.077†	740741.0	48.5812 mg/L	0.64820	48.5812 mg/L	0.64820	1.33%
QC value within limits for Mg 279.077 Recovery = 97.16%						
Mn 257.610†	291764.9	0.471627 mg/L	0.0000000	0.471627 mg/L	0.0000000	0.00%
QC value within limits for Mn 257.610 Recovery = 94.33%						
Mo 202.031†	8120.2	0.483485 mg/L	0.0028591	0.483485 mg/L	0.0028591	0.59%
QC value within limits for Mo 202.031 Recovery = 96.70%						
Na 330.237†	44305.4	45.9955 mg/L	0.35819	45.9955 mg/L	0.35819	0.78%
QC value within limits for Na 330.237 Recovery = 91.99%						
Ni 231.604†	21592.5	0.468337 mg/L	0.0032065	0.468337 mg/L	0.0032065	0.68%
QC value within limits for Ni 231.604 Recovery = 93.67%						
Pb 220.353†	5667.9	0.485703 mg/L	0.0029351	0.485703 mg/L	0.0029351	0.60%
QC value within limits for Pb 220.353 Recovery = 97.14%						
Sb 206.836†	874.2	0.487076 mg/L	0.0033253	0.487076 mg/L	0.0033253	0.68%
QC value within limits for Sb 206.836 Recovery = 97.42%						
Se 196.026†	490.1	0.490305 mg/L	0.0025314	0.490305 mg/L	0.0025314	0.52%
QC value within limits for Se 196.026 Recovery = 98.06%						
Sn 189.927†	1492.9	0.476208 mg/L	0.0066420	0.476208 mg/L	0.0066420	1.39%
QC value within limits for Sn 189.927 Recovery = 95.24%						
Ti 334.940†	251602.4	0.480024 mg/L	0.0006893	0.480024 mg/L	0.0006893	0.14%
QC value within limits for Ti 334.940 Recovery = 96.00%						
Tl 190.801†	667.4	0.494072 mg/L	0.0039973	0.494072 mg/L	0.0039973	0.81%
QC value within limits for Tl 190.801 Recovery = 98.81%						
V 290.880†	55406.7	0.472293 mg/L	0.0003674	0.472293 mg/L	0.0003674	0.08%
QC value within limits for V 290.880 Recovery = 94.46%						
Zn 206.200†	21901.2	0.467350 mg/L	0.0005898	0.467350 mg/L	0.0005898	0.13%
QC value within limits for Zn 206.200 Recovery = 93.47%						

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 40

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/15/2013 12:06:28 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1158013.2	99.9 %		0.46			0.47%
Y 371.029	411085.6	99.4 %		0.62			0.62%
Ag 328.068†	2811.9	0.0186283 mg/L		0.00060236	0.0186283 mg/L	0.00060236	3.23%
QC value within limits for Ag			Recovery = 93.14%				
Al 308.215†	3954.7	0.183258 mg/L		0.0001723	0.183258 mg/L	0.0001723	0.09%
QC value within limits for Al			Recovery = 91.63%				
As 188.979†	25.9	0.0209927 mg/L		0.00261758	0.0209927 mg/L	0.00261758	12.47%
QC value within limits for As			Recovery = 104.96%				
Ba 233.527†	4805.7	0.0508495 mg/L		0.00009134	0.0508495 mg/L	0.00009134	0.18%
QC value within limits for Ba			Recovery = 101.70%				
Be 313.107†	25345.3	0.0136948 mg/L		0.00018229	0.0136948 mg/L	0.00018229	1.33%
QC value within limits for Be			Recovery = 114.12%				
Ca 315.887†	426649.6	5.10013 mg/L		0.055354	5.10013 mg/L	0.055354	1.09%
QC value within limits for Ca			Recovery = 102.00%				
Cd 228.802†	552.9	0.0128483 mg/L		0.00037925	0.0128483 mg/L	0.00037925	2.95%
QC value within limits for Cd			Recovery = 107.07%				
Co 228.616†	706.4	0.0204128 mg/L		0.00003107	0.0204128 mg/L	0.00003107	0.15%
QC value within limits for Co			Recovery = 102.06%				
Cr 267.716†	2954.7	0.0489216 mg/L		0.00046828	0.0489216 mg/L	0.00046828	0.96%
QC value within limits for Cr			Recovery = 97.84%				
Cu 327.393†	5557.5	0.0548615 mg/L		0.00215097	0.0548615 mg/L	0.00215097	3.92%
QC value within limits for Cu			Recovery = 109.72%				
Fe 273.955†	4940.4	0.292388 mg/L		0.0001376	0.292388 mg/L	0.0001376	0.05%
QC value within limits for Fe			Recovery = 97.46%				
K 404.721†	214.7					180.34	84.01%
Unable to evaluate QC.							
Mg 279.077†	75168.5	5.16108 mg/L		0.077257	5.16108 mg/L	0.077257	1.50%
QC value within limits for Mg			Recovery = 103.22%				
Mn 257.610†	23354.7	0.0386019 mg/L		0.00031457	0.0386019 mg/L	0.00031457	0.81%
QC value within limits for Mn			Recovery = 96.50%				
Mo 202.031†	339.8	0.0232884 mg/L		0.00038513	0.0232884 mg/L	0.00038513	1.65%
QC value within limits for Mo			Recovery = 116.44%				
Na 330.237†	3945.8	4.76040 mg/L		0.146322	4.76040 mg/L	0.146322	3.07%
QC value within limits for Na			Recovery = 95.21%				
Ni 231.604†	2253.0	0.0494039 mg/L		0.00005250	0.0494039 mg/L	0.00005250	0.11%
QC value within limits for Ni			Recovery = 98.81%				
Pb 220.353†	129.4	0.0127661 mg/L		0.00033685	0.0127661 mg/L	0.00033685	2.64%
QC value within limits for Pb			Recovery = 106.38%				
Sb 206.836†	30.3	0.0197404 mg/L		0.00097559	0.0197404 mg/L	0.00097559	4.94%
QC value within limits for Sb			Recovery = 98.70%				
Se 196.026†	37.6	0.0406612 mg/L		0.00183721	0.0406612 mg/L	0.00183721	4.52%
QC value within limits for Se			Recovery = 101.65%				
Sn 189.927†	132.5	0.0456132 mg/L		0.00102717	0.0456132 mg/L	0.00102717	2.25%
QC value within limits for Sn			Recovery = 91.23%				
Ti 334.940†	23823.8	0.0475300 mg/L		0.00034109	0.0475300 mg/L	0.00034109	0.72%
QC value within limits for Ti			Recovery = 95.06%				
Tl 190.801†	31.2	0.0251306 mg/L		0.00376290	0.0251306 mg/L	0.00376290	14.97%
QC value within limits for Tl			Recovery = 125.65%				
V 290.880†	5458.4	0.0478827 mg/L		0.00050804	0.0478827 mg/L	0.00050804	1.06%
QC value within limits for V			Recovery = 95.77%				
Zn 206.200†	2249.3	0.0476329 mg/L		0.00043690	0.0476329 mg/L	0.00043690	0.92%
QC value within limits for Zn			Recovery = 95.27%				

All analyte(s) passed QC. One or more analytes were not evaluated.

Autosampler Location: 2
Date Collected: 11/15/2013 12:10:07 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analyte		Mean Corrected		Calib	Sample			
		Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.
Sc	361.383	1797185.9	155	%	1.0			0.66%
Y	371.029	649331.2	157	%	1.0			0.64%
Ag	328.068†	-1486.3	-0.0095489	mg/L	0.00006640	-0.0095489	mg/L	0.00006640
	QC value	within limits	for Ag	328.068	Recovery	=	Not calculated	
Al	308.215†	-5970.9	-0.272675	mg/L	0.0002611	-0.272675	mg/L	0.0002611
	QC value	less than the lower limit	for Al	308.215	Recovery	=	Not calculated	
As	188.979†	13.9	0.0114684	mg/L	0.00106378	0.0114684	mg/L	0.00106378
	QC value	within limits	for As	188.979	Recovery	=	Not calculated	
Ba	233.527†	1184.3	0.0135612	mg/L	0.00003038	0.0135612	mg/L	0.00003038
	QC value	within limits	for Ba	233.527	Recovery	=	Not calculated	
Be	313.107†	3025.1	0.0037799	mg/L	0.00001239	0.0037799	mg/L	0.00001239
	QC value	within limits	for Be	313.107	Recovery	=	Not calculated	
Ca	315.887†	6327.6	0.269604	mg/L	0.0004809	0.269604	mg/L	0.0004809
	QC value	within limits	for Ca	315.887	Recovery	=	Not calculated	
Cd	228.802†	-420.5	-0.0069935	mg/L	0.00010307	-0.0069935	mg/L	0.00010307
	QC value	within limits	for Cd	228.802	Recovery	=	Not calculated	
Co	228.616†	-46.5	-0.0004176	mg/L	0.00017262	-0.0004176	mg/L	0.00017262
	QC value	within limits	for Co	228.616	Recovery	=	Not calculated	
Cr	267.716†	-58.9	0.0003549	mg/L	0.00004840	0.0003549	mg/L	0.00004840
	QC value	within limits	for Cr	267.716	Recovery	=	Not calculated	
Cu	327.393†	594.7	0.0070314	mg/L	0.00018512	0.0070314	mg/L	0.00018512
	QC value	within limits	for Cu	327.393	Recovery	=	Not calculated	
Fe	273.955†	-61.2	0.0000998	mg/L	0.00005831	0.0000998	mg/L	0.00005831
	QC value	within limits	for Fe	273.955	Recovery	=	Not calculated	
K	404.721†	7027.7						121.61
	Unable to evaluate QC.							1.73%
Mg	279.077†	2285.3	0.406631	mg/L	0.0007482	0.406631	mg/L	0.0007482
	QC value	within limits	for Mg	279.077	Recovery	=	Not calculated	
Mn	257.610†	-240.2	0.0005768	mg/L	0.00001178	0.0005768	mg/L	0.00001178
	QC value	within limits	for Mn	257.610	Recovery	=	Not calculated	
Mo	202.031†	-25.2	0.0018065	mg/L	0.00008518	0.0018065	mg/L	0.00008518
	QC value	within limits	for Mo	202.031	Recovery	=	Not calculated	
Na	330.237†	192.1	0.925316	mg/L	0.0177451	0.925316	mg/L	0.0177451
	QC value	within limits	for Na	330.237	Recovery	=	Not calculated	
Ni	231.604†	-342.7	-0.0067565	mg/L	0.00007388	-0.0067565	mg/L	0.00007388
	QC value	within limits	for Ni	231.604	Recovery	=	Not calculated	
Pb	220.353†	140.4	0.0136338	mg/L	0.00015549	0.0136338	mg/L	0.00015549
	QC value	within limits	for Pb	220.353	Recovery	=	Not calculated	
Sb	206.836†	19.0	0.0134544	mg/L	0.00049051	0.0134544	mg/L	0.00049051
	QC value	within limits	for Sb	206.836	Recovery	=	Not calculated	
Se	196.026†	31.9	0.0348411	mg/L	0.00276105	0.0348411	mg/L	0.00276105
	QC value	within limits	for Se	196.026	Recovery	=	Not calculated	

Sequence No.: 42
 Sample ID: 75576-016
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 82
 Date Collected: 11/15/2013 12:13:54 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-016

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1714979.1	148 %	%	2.9			1.98%
Y 371.029	640656.9	155 %	%	1.1			0.73%
Ag 328.068†	-1536.0	-0.0098744	mg/L	0.00035084	-0.0098744	0.00035084	3.55%
Al 308.215†	-5953.9	-0.271894	mg/L	0.0033117	-0.271894	0.0033117	1.22%
As 188.979†	12.9	0.0107085	mg/L	0.00106999	0.0107085	0.00106999	9.99%
Ba 233.527†	1153.4	0.0132424	mg/L	0.00016355	0.0132424	0.00016355	1.24%
Be 313.107†	3027.9	0.0037812	mg/L	0.00002142	0.0037812	0.00002142	0.57%
Ca 315.887†	5788.7	0.263408	mg/L	0.0024091	0.263408	0.0024091	0.91%
Cd 228.802†	-401.9	-0.0066138	mg/L	0.00038109	-0.0066138	0.00038109	5.76%
Co 228.616†	-44.9	-0.0003739	mg/L	0.00007284	-0.0003739	0.00007284	19.48%
Cr 267.716†	-58.8	0.0003553	mg/L	0.00005115	0.0003553	0.00005115	14.40%
Cu 327.393†	-24.5	0.0010526	mg/L	0.00043903	0.0010526	0.00043903	41.71%
Fe 273.955†	-52.1	0.0006358	mg/L	0.00029538	0.0006358	0.00029538	46.46%
K 404.721†	7099.6					115.20	1.62%
Mg 279.077†	2306.9	0.408041	mg/L	0.0022370	0.408041	0.0022370	0.55%
Mn 257.610†	-234.7	0.0005857	mg/L	0.00000045	0.0005857	0.00000045	0.08%
Mo 202.031†	-25.4	0.0017946	mg/L	0.00013854	0.0017946	0.00013854	7.72%
Na 330.237†	260.2	0.994907	mg/L	0.0383857	0.994907	0.0383857	3.86%
Ni 231.604†	-331.7	-0.0065179	mg/L	0.00011111	-0.0065179	0.00011111	1.70%
Pb 220.353†	147.8	0.0142708	mg/L	0.00128860	0.0142708	0.00128860	9.03%
Sb 206.836†	20.9	0.0144973	mg/L	0.00078817	0.0144973	0.00078817	5.44%
Se 196.026†	26.5	0.0294886	mg/L	0.00515690	0.0294886	0.00515690	17.49%
Sn 189.927†	6.6	0.0057329	mg/L	0.00015280	0.0057329	0.00015280	2.67%
Ti 334.940†	2221.2	0.0065122	mg/L	0.00013641	0.0065122	0.00013641	2.09%
Tl 190.801†	7.7	0.0076624	mg/L	0.00142303	0.0076624	0.00142303	18.57%
V 290.880†	-2862.1	-0.0228362	mg/L	0.00047760	-0.0228362	0.00047760	2.09%
Zn 206.200†	-28.6	-0.0010358	mg/L	0.00008692	-0.0010358	0.00008692	8.39%

Sequence No.: 43
 Sample ID: 75576-018
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 83
 Date Collected: 11/15/2013 12:17:32 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-018

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1740428.0	150	%	2.3			1.52%
Y 371.029	629795.3	152	%	2.4			1.54%
Ag 328.068†	-1534.3	-0.0098635	mg/L	0.00002255	-0.0098635 mg/L	0.00002255	0.23%
Al 308.215†	-5978.0	-0.272998	mg/L	0.0051482	-0.272998 mg/L	0.0051482	1.89%
As 188.979†	13.9	0.0115252	mg/L	0.00072215	0.0115252 mg/L	0.00072215	6.27%
Ba 233.527†	1179.6	0.0135120	mg/L	0.00002705	0.0135120 mg/L	0.00002705	0.20%
Be 313.107†	3066.4	0.0037983	mg/L	0.00003727	0.0037983 mg/L	0.00003727	0.98%
Ca 315.887†	5657.8	0.261905	mg/L	0.0039676	0.261905 mg/L	0.0039676	1.51%
Cd 228.802†	-418.1	-0.0069457	mg/L	0.00017440	-0.0069457 mg/L	0.00017440	2.51%
Co 228.616†	-44.1	-0.0003527	mg/L	0.00006143	-0.0003527 mg/L	0.00006143	17.42%
Cr 267.716†	-60.9	0.0003206	mg/L	0.00009088	0.0003206 mg/L	0.00009088	28.35%
Cu 327.393†	137.5	0.0026167	mg/L	0.00406526	0.0026167 mg/L	0.00406526	155.36%
Fe 273.955†	-56.0	0.0004061	mg/L	0.00020130	0.0004061 mg/L	0.00020130	49.57%
K 404.721†	7241.6					105.55	1.46%
Mg 279.077†	2296.7	0.407370	mg/L	0.0023599	0.407370 mg/L	0.0023599	0.58%
Mn 257.610†	-233.7	0.0005873	mg/L	0.00000837	0.0005873 mg/L	0.00000837	1.42%
Mo 202.031†	-28.9	0.0015885	mg/L	0.00018570	0.0015885 mg/L	0.00018570	11.69%
Na 330.237†	245.6	0.979918	mg/L	0.0457693	0.979918 mg/L	0.0457693	4.67%
Ni 231.604†	-334.9	-0.0065874	mg/L	0.00010409	-0.0065874 mg/L	0.00010409	1.58%
Pb 220.353†	145.1	0.0140410	mg/L	0.00057748	0.0140410 mg/L	0.00057748	4.11%
Sb 206.836†	22.9	0.0156399	mg/L	0.00008016	0.0156399 mg/L	0.00008016	0.51%
Se 196.026†	29.5	0.0324715	mg/L	0.00269554	0.0324715 mg/L	0.00269554	8.30%
Sn 189.927†	7.5	0.0060321	mg/L	0.00042693	0.0060321 mg/L	0.00042693	7.08%
Ti 334.940†	2329.3	0.0067173	mg/L	0.00021735	0.0067173 mg/L	0.00021735	3.24%
Tl 190.801†	6.8	-0.0069930	mg/L	0.00063665	-0.0069930 mg/L	0.00063665	9.10%
V 290.880†	-2918.1	-0.0233137	mg/L	0.00005387	-0.0233137 mg/L	0.00005387	0.23%
Zn 206.200†	-32.6	-0.0011198	mg/L	0.00014613	-0.0011198 mg/L	0.00014613	13.05%

Sequence No.: 44
 Sample ID: 75576-020
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 84
 Date Collected: 11/15/2013 12:21:19 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-020

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1148800.5	99.1	%	0.52			0.52%
Y 371.029	413047.9	99.9	%	0.65			0.65%
Ag 328.068†	-21.0	0.0000487	mg/L	0.00009952	0.0000487 mg/L	0.00009952	204.52%
Al 308.215†	-74.1	-0.0016186	mg/L	0.00234469	-0.0016186 mg/L	0.00234469	144.86%
As 188.979†	1.9	0.0019991	mg/L	0.00119269	0.0019991 mg/L	0.00119269	59.66%
Ba 233.527†	78.2	0.0021674	mg/L	0.00000701	0.0021674 mg/L	0.00000701	0.32%
Be 313.107†	418.1	0.0026216	mg/L	0.00007711	0.0026216 mg/L	0.00007711	2.94%
Ca 315.887†	2614.3	0.226844	mg/L	0.0212651	0.226844 mg/L	0.0212651	9.37%
Cd 228.802†	-4.6	0.0014948	mg/L	0.00009536	0.0014948 mg/L	0.00009536	6.38%
Co 228.616†	7.5	0.0010900	mg/L	0.00002936	0.0010900 mg/L	0.00002936	2.69%
Cr 267.716†	11.7	0.0014973	mg/L	0.00008956	0.0014973 mg/L	0.00008956	5.98%
Cu 327.393†	399.1	0.0051422	mg/L	0.00194839	0.0051422 mg/L	0.00194839	37.89%
Fe 273.955†	22.6	0.0049975	mg/L	0.00169817	0.0049975 mg/L	0.00169817	33.98%
K 404.721†	-8.8					127.31	>999.9%
Mg 279.077†	237.5	0.273070	mg/L	0.0062951	0.273070 mg/L	0.0062951	2.31%
Mn 257.610†	66.8	0.0010793	mg/L	0.00005810	0.0010793 mg/L	0.00005810	5.38%
Mo 202.031†	3.2	0.0034953	mg/L	0.00015531	0.0034953 mg/L	0.00015531	4.44%
Na 330.237†	-90.0	0.637080	mg/L	0.0098239	0.637080 mg/L	0.0098239	1.54%
Ni 231.604†	9.9	0.0008713	mg/L	0.00010271	0.0008713 mg/L	0.00010271	11.79%
Pb 220.353†	4.8	0.0021397	mg/L	0.00101050	0.0021397 mg/L	0.00101050	47.23%
Sb 206.836†	3.1	0.0046582	mg/L	0.00015081	0.0046582 mg/L	0.00015081	3.24%
Se 196.026†	5.9	0.0092148	mg/L	0.00400429	0.0092148 mg/L	0.00400429	43.45%
Sn 189.927†	0.2	0.0037231	mg/L	0.00042873	0.0037231 mg/L	0.00042873	11.52%
Ti 334.940†	137.2	0.0025552	mg/L	0.00000182	0.0025552 mg/L	0.00000182	0.07%
Tl 190.801†	-2.0	0.0005869	mg/L	0.00058042	0.0005869 mg/L	0.00058042	98.89%
V 290.880†	-71.2	0.0009475	mg/L	0.00005496	0.0009475 mg/L	0.00005496	5.80%
Zn 206.200†	12.4	-0.0001644	mg/L	0.00007774	-0.0001644 mg/L	0.00007774	47.27%

Sequence No.: 45
 Sample ID: 75576-022
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 85
 Date Collected: 11/15/2013 12:24:59 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-022

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1786433.0	154	%	0.6				0.41%
Y 371.029	646697.7	156	%	1.2				0.74%
Ag 328.068†	-1577.1	-0.0101436	mg/L	0.00011234	-0.0101436	mg/L	0.00011234	1.11%
Al 308.215†	-6107.7	-0.278962	mg/L	0.0020463	-0.278962	mg/L	0.0020463	0.73%
As 188.979†	11.9	0.0099376	mg/L	0.00018473	0.0099376	mg/L	0.00018473	1.86%
Ba 233.527†	1209.7	0.0138229	mg/L	0.00000806	0.0138229	mg/L	0.00000806	0.06%
Be 313.107†	3152.9	0.0038367	mg/L	0.00000974	0.0038367	mg/L	0.00000974	0.25%
Ca 315.887†	5880.4	0.264465	mg/L	0.0027310	0.264465	mg/L	0.0027310	1.03%
Cd 228.802†	-430.7	-0.0072017	mg/L	0.00015059	-0.0072017	mg/L	0.00015059	2.09%
Co 228.616†	-49.5	-0.0005016	mg/L	0.00004892	-0.0005016	mg/L	0.00004892	9.75%
Cr 267.716†	-67.9	0.0002101	mg/L	0.00000085	0.0002101	mg/L	0.00000085	0.40%
Cu 327.393†	383.2	0.0049896	mg/L	0.00338877	0.0049896	mg/L	0.00338877	67.92%
Fe 273.955†	-60.1	0.0001664	mg/L	0.00033180	0.0001664	mg/L	0.00033180	199.45%
K 404.721†	7355.6						38.69	0.53%
Mg 279.077†	2371.2	0.412234	mg/L	0.0033082	0.412234	mg/L	0.0033082	0.80%
Mn 257.610†	-247.6	0.0005646	mg/L	0.00000611	0.0005646	mg/L	0.00000611	1.08%
Mo 202.031†	-25.3	0.0018031	mg/L	0.00018230	0.0018031	mg/L	0.00018230	10.11%
Na 330.237†	203.5	0.936901	mg/L	0.0289562	0.936901	mg/L	0.0289562	3.09%
Ni 231.604†	-358.0	-0.0070869	mg/L	0.00025294	-0.0070869	mg/L	0.00025294	3.57%
Pb 220.353†	155.6	0.0149323	mg/L	0.00014821	0.0149323	mg/L	0.00014821	0.99%
Sb 206.836†	22.6	0.0154529	mg/L	0.00073755	0.0154529	mg/L	0.00073755	4.77%
Se 196.026†	32.2	0.0351156	mg/L	0.00188310	0.0351156	mg/L	0.00188310	5.36%
Sn 189.927†	7.2	0.0059191	mg/L	0.00057865	0.0059191	mg/L	0.00057865	9.78%
Ti 334.940†	2383.7	0.0068208	mg/L	0.00010294	0.0068208	mg/L	0.00010294	1.51%
Tl 190.801†	6.7	-0.0069484	mg/L	0.00050054	-0.0069484	mg/L	0.00050054	7.20%
V 290.880†	-2984.5	-0.0238788	mg/L	0.00057224	-0.0238788	mg/L	0.00057224	2.40%
Zn 206.200†	-24.6	-0.0009495	mg/L	0.00001462	-0.0009495	mg/L	0.00001462	1.54%

Sequence No.: 46
 Sample ID: 75576-024
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 86
 Date Collected: 11/15/2013 12:28:46 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-024

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1689135.0	146 %		0.5			0.37%
Y 371.029	627986.2	152 %		0.3			0.17%
Ag 328.068†	-1530.6	-0.0098391 mg/L		0.00003147	-0.0098391 mg/L	0.00003147	0.32%
Al 308.215†	-5869.3	-0.267999 mg/L		0.0000712	-0.267999 mg/L	0.0000712	0.03%
As 188.979†	13.2	0.0109395 mg/L		0.00039866	0.0109395 mg/L	0.00039866	3.64%
Ba 233.527†	1170.8	0.0134219 mg/L		0.00001669	0.0134219 mg/L	0.00001669	0.12%
Be 313.107†	3143.1	0.0038324 mg/L		0.00000985	0.0038324 mg/L	0.00000985	0.26%
Ca 315.887†	5540.3	0.260552 mg/L		0.0040097	0.260552 mg/L	0.0040097	1.54%
Cd 228.802†	-410.4	-0.0067875 mg/L		0.00002434	-0.0067875 mg/L	0.00002434	0.36%
Co 228.616†	-46.3	-0.0004131 mg/L		0.00004051	-0.0004131 mg/L	0.00004051	9.80%
Cr 267.716†	-59.5	0.0003445 mg/L		0.00018193	0.0003445 mg/L	0.00018193	52.82%
Cu 327.393†	194.5	0.0031676 mg/L		0.00166292	0.0031676 mg/L	0.00166292	52.50%
Fe 273.955†	-52.5	0.0006098 mg/L		0.00044581	0.0006098 mg/L	0.00044581	73.11%
K 404.721†	7144.8					52.49	0.73%
Mg 279.077†	2312.5	0.408405 mg/L		0.0008433	0.408405 mg/L	0.0008433	0.21%
Mn 257.610†	-228.5	0.0005956 mg/L		0.00000190	0.0005956 mg/L	0.00000190	0.32%
Mo 202.031†	-27.7	0.0016596 mg/L		0.00007674	0.0016596 mg/L	0.00007674	4.62%
Na 330.237†	277.8	1.01284 mg/L		0.061692	1.01284 mg/L	0.061692	6.09%
Ni 231.604†	-330.4	-0.0064896 mg/L		0.00019917	-0.0064896 mg/L	0.00019917	3.07%
Pb 220.353†	150.5	0.0144989 mg/L		0.00039646	0.0144989 mg/L	0.00039646	2.73%
Sb 206.836†	21.0	0.0145659 mg/L		0.00033769	0.0145659 mg/L	0.00033769	2.32%
Se 196.026†	30.9	0.0339189 mg/L		0.00049392	0.0339189 mg/L	0.00049392	1.46%
Sn 189.927†	7.6	0.0060666 mg/L		0.00014483	0.0060666 mg/L	0.00014483	2.39%
Ti 334.940†	2282.6	0.0066288 mg/L		0.00003785	0.0066288 mg/L	0.00003785	0.57%
Tl 190.801†	7.4	0.0074585 mg/L		0.00145236	0.0074585 mg/L	0.00145236	19.47%
V 290.880†	-2835.3	-0.0226081 mg/L		0.00022797	-0.0226081 mg/L	0.00022797	1.01%
Zn 206.200†	-29.5	-0.0010551 mg/L		0.00003271	-0.0010551 mg/L	0.00003271	3.10%

Sequence No.: 47
 Sample ID: 75576-026
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 87
 Date Collected: 11/15/2013 12:32:34 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-026

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1784915.0	154 %		3.8			2.49%
Y 371.029	643966.8	156 %		3.6			2.29%
Ag 328.068†	-1622.1	-0.0104384 mg/L		0.00014574	-0.0104384 mg/L	0.00014574	1.40%
Al 308.215†	-6106.5	-0.278904 mg/L		0.0061778	-0.278904 mg/L	0.0061778	2.22%
As 188.979†	15.8	0.0130303 mg/L		0.00129499	0.0130303 mg/L	0.00129499	9.94%
Ba 233.527†	1223.3	0.0139624 mg/L		0.00029679	0.0139624 mg/L	0.00029679	2.13%
Be 313.107†	3225.1	0.0038688 mg/L		0.00005011	0.0038688 mg/L	0.00005011	1.30%
Ca 315.887†	5356.5	0.258444 mg/L		0.0077980	0.258444 mg/L	0.0077980	3.02%
Cd 228.802†	-436.4	-0.0073198 mg/L		0.00020599	-0.0073198 mg/L	0.00020599	2.81%
Co 228.616†	-51.2	-0.0005494 mg/L		0.00001273	-0.0005494 mg/L	0.00001273	2.32%
Cr 267.716†	-63.2	0.0002838 mg/L		0.00009055	0.0002838 mg/L	0.00009055	31.91%
Cu 327.393†	771.9	0.0087425 mg/L		0.00224327	0.0087425 mg/L	0.00224327	25.66%
Fe 273.955†	-50.9	0.0007042 mg/L		0.00024502	0.0007042 mg/L	0.00024502	34.80%
K 404.721†	7380.8					143.95	1.95%
Mg 279.077†	2405.4	0.414460 mg/L		0.0056171	0.414460 mg/L	0.0056171	1.36%
Mn 257.610†	-241.6	0.0005742 mg/L		0.00003465	0.0005742 mg/L	0.00003465	6.03%
Mo 202.031†	-29.5	0.0015526 mg/L		0.00027409	0.0015526 mg/L	0.00027409	17.65%
Na 330.237†	226.7	0.960592 mg/L		0.0684318	0.960592 mg/L	0.0684318	7.12%
Ni 231.604†	-358.3	-0.0070931 mg/L		0.00032802	-0.0070931 mg/L	0.00032802	4.62%
Pb 220.353†	147.7	0.0142613 mg/L		0.00176424	0.0142613 mg/L	0.00176424	12.37%
Sb 206.836†	20.8	0.0144388 mg/L		0.00120686	0.0144388 mg/L	0.00120686	8.36%
Se 196.026†	29.6	0.0325813 mg/L		0.00066632	0.0325813 mg/L	0.00066632	2.05%
Sn 189.927†	7.3	0.0059507 mg/L		0.00030708	0.0059507 mg/L	0.00030708	5.16%
Ti 334.940†	2396.7	0.0068454 mg/L		0.00011812	0.0068454 mg/L	0.00011812	1.73%
Tl 190.801†	7.8	0.0077514 mg/L		0.00000192	0.0077514 mg/L	0.00000192	0.02%
V 290.880†	-2985.2	-0.0238856 mg/L		0.00089808	-0.0238856 mg/L	0.00089808	3.76%
Zn 206.200†	-26.4	-0.0009890 mg/L		0.00001369	-0.0009890 mg/L	0.00001369	1.38%

Sequence No.: 48
 Sample ID: 75576-028
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 88
 Date Collected: 11/15/2013 12:36:22 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-028

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1764846.6	152	%	0.2			0.16%
Y 371.029	637135.2	154	%	0.2			0.16%
Ag 328.068†	-1572.5	-0.0101133	mg/L	0.00018393	-0.0101133 mg/L	0.00018393	1.82%
Al 308.215†	-6068.1	-0.277139	mg/L	0.0010219	-0.277139 mg/L	0.0010219	0.37%
As 188.979†	13.9	0.0114953	mg/L	0.00018232	0.0114953 mg/L	0.00018232	1.59%
Ba 233.527†	1212.8	0.0138546	mg/L	0.00006690	0.0138546 mg/L	0.00006690	0.48%
Be 313.107†	3166.8	0.0038429	mg/L	0.00000826	0.0038429 mg/L	0.00000826	0.21%
Ca 315.887†	5742.9	0.262884	mg/L	0.0065551	0.262884 mg/L	0.0065551	2.49%
Cd 228.802†	-431.9	-0.0072278	mg/L	0.00028316	-0.0072278 mg/L	0.00028316	3.92%
Co 228.616†	-51.7	-0.0005626	mg/L	0.00015758	-0.0005626 mg/L	0.00015758	28.01%
Cr 267.716†	-67.3	0.0002186	mg/L	0.00024317	0.0002186 mg/L	0.00024317	111.26%
Cu 327.393†	374.0	0.0049005	mg/L	0.00152518	0.0049005 mg/L	0.00152518	31.12%
Fe 273.955†	-57.0	0.0003475	mg/L	0.00016642	0.0003475 mg/L	0.00016642	47.90%
K 404.721†	7270.5					180.01	2.48%
Mg 279.077†	2342.7	0.410372	mg/L	0.0008557	0.410372 mg/L	0.0008557	0.21%
Mn 257.610†	-248.2	0.0005637	mg/L	0.00001754	0.0005637 mg/L	0.00001754	3.11%
Mo 202.031†	-28.4	0.0016198	mg/L	0.00016870	0.0016198 mg/L	0.00016870	10.42%
Na 330.237†	176.7	0.909585	mg/L	0.0996708	0.909585 mg/L	0.0996708	10.96%
Ni 231.604†	-359.1	-0.0071107	mg/L	0.00005237	-0.0071107 mg/L	0.00005237	0.74%
Pb 220.353†	150.0	0.0144566	mg/L	0.00022417	0.0144566 mg/L	0.00022417	1.55%
Sb 206.836†	22.4	0.0153380	mg/L	0.00073452	0.0153380 mg/L	0.00073452	4.79%
Se 196.026†	28.6	0.0315868	mg/L	0.00054189	0.0315868 mg/L	0.00054189	1.72%
Sn 189.927†	7.8	0.0061372	mg/L	0.00014667	0.0061372 mg/L	0.00014667	2.39%
Ti 334.940†	2400.0	0.0068517	mg/L	0.00005208	0.0068517 mg/L	0.00005208	0.76%
Tl 190.801†	7.9	-0.0078200	mg/L	0.00069475	-0.0078200 mg/L	0.00069475	8.88%
V 290.880†	-2889.9	-0.0230735	mg/L	0.00018280	-0.0230735 mg/L	0.00018280	0.79%
Zn 206.200†	-27.7	-0.0010151	mg/L	0.00004073	-0.0010151 mg/L	0.00004073	4.01%

Autosampler Location: 7
Date Collected: 11/15/2013 12:40:09 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

[illegible]

Sequence No.: 50
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/15/2013 12:43:54 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-173231

		Mean Corrected		Calib		Sample		
Analyte		Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD	
Sc 361.383		1811617.5	156 %	4.0			2.55%	
Y 371.029		652581.0	158 %	4.1			2.60%	
Ag 328.068†		-1519.1	-0.0097640 mg/L	0.00016928	-0.0097640 mg/L	0.00016928	1.73%	
	QC value	less than the lower	limit for Ag 328.068	Recovery = -0.98%				
Al 308.215†		-6019.3	-0.274898 mg/L	0.0020659	-0.274898 mg/L	0.0020659	0.75%	
	QC value	less than the lower	limit for Al 308.215	Recovery = -0.05%				
As 188.979†		13.5	0.0112134 mg/L	0.00010249	0.0112134 mg/L	0.00010249	0.91%	
	QC value	less than the lower	limit for As 188.979	Recovery = 1.12%				
Ba 233.527†		1173.0	0.0134442 mg/L	0.00016576	0.0134442 mg/L	0.00016576	1.23%	
	QC value	less than the lower	limit for Ba 233.527	Recovery = 2.69%				
Be 313.107†		3035.7	0.0037845 mg/L	0.00003680	0.0037845 mg/L	0.00003680	0.97%	
	QC value	less than the lower	limit for Be 313.107	Recovery = 0.76%				
Ca 315.887†		5792.1	0.263449 mg/L	0.0000419	0.263449 mg/L	0.0000419	0.02%	
	QC value	less than the lower	limit for Ca 315.887	Recovery = 0.05%				
Cd 228.802†		-421.8	-0.0070211 mg/L	0.00030155	-0.0070211 mg/L	0.00030155	4.29%	
	QC value	less than the lower	limit for Cd 228.802	Recovery = -0.70%				
Co 228.616†		-52.9	-0.0005952 mg/L	0.00004702	-0.0005952 mg/L	0.00004702	7.90%	
	QC value	less than the lower	limit for Co 228.616	Recovery = -0.12%				
Cr 267.716†		-62.2	0.0003019 mg/L	0.00000050	0.0003019 mg/L	0.00000050	0.17%	
	QC value	less than the lower	limit for Cr 267.716	Recovery = 0.06%				
Cu 327.393†		452.8	0.0056613 mg/L	0.00017528	0.0056613 mg/L	0.00017528	3.10%	
	QC value	less than the lower	limit for Cu 327.393	Recovery = 1.13%				
Fe 273.955†		-66.3	-0.0001981 mg/L	0.00011871	-0.0001981 mg/L	0.00011871	59.93%	
	QC value	less than the lower	limit for Fe 273.955	Recovery = -0.00%				
K 404.721†		7215.9				13.90	0.19%	
Mg 279.077†		2320.9	0.408956 mg/L	0.0026510	0.408956 mg/L	0.0026510	0.65%	
	QC value	less than the lower	limit for Mg 279.077	Recovery = 0.08%				
Mn 257.610†		-261.1	0.0005429 mg/L	0.00001474	0.0005429 mg/L	0.00001474	2.72%	
	QC value	less than the lower	limit for Mn 257.610	Recovery = 0.11%				
Mo 202.031†		-25.8	0.0017718 mg/L	0.00008619	0.0017718 mg/L	0.00008619	4.86%	
Na 330.237†		217.8	0.951567 mg/L	0.0445975	0.951567 mg/L	0.0445975	4.69%	
Ni 231.604†		-361.7	-0.0071673 mg/L	0.00023386	-0.0071673 mg/L	0.00023386	3.26%	
	QC value	less than the lower	limit for Ni 231.604	Recovery = -0.72%				
Pb 220.353†		159.0	0.0152263 mg/L	0.00010175	0.0152263 mg/L	0.00010175	0.67%	
	QC value	less than the lower	limit for Pb 220.353	Recovery = 1.52%				
Sb 206.836†		20.4	0.0142166 mg/L	0.00061791	0.0142166 mg/L	0.00061791	4.35%	
	QC value	less than the lower	limit for Sb 206.836	Recovery = 1.42%				
Se 196.026†		31.9	0.0348403 mg/L	0.00347765	0.0348403 mg/L	0.00347765	9.98%	
	QC value	less than the lower	limit for Se 196.026	Recovery = 3.48%				
Sn 189.927†		8.0	0.0061966 mg/L	0.00056280	0.0061966 mg/L	0.00056280	9.08%	
Ti 334.940†		2380.3	0.0068142 mg/L	0.00010364	0.0068142 mg/L	0.00010364	1.52%	
Tl 190.801†		8.0	0.0078836 mg/L	0.00022842	0.0078836 mg/L	0.00022842	2.90%	
	QC value	less than the lower	limit for Tl 190.801	Recovery = 0.79%				
V 290.880†		-2905.6	-0.0232073 mg/L	0.00033391	-0.0232073 mg/L	0.00033391	1.44%	
	QC value	less than the lower	limit for V 290.880	Recovery = -4.64%				
Zn 206.200†		-26.3	-0.0009853 mg/L	0.00000260	-0.0009853 mg/L	0.00000260	0.26%	
	QC value	less than the lower	limit for Zn 206.200	Recovery = -0.10%				
QC Failed. Continue with analysis.								

QC Failed. Continue with analysis.

Autosampler Location: 6
Date Collected: 11/15/2013 12:47:39 AM
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	1796012.8	155 %	2.9				1.87%
Y	371.029	649816.1	157 %	2.9				1.82%
Ag	328.068†	-1549.7	-0.0099643 mg/L	0.00021177	-0.0099643 mg/L	0.00021177		2.13%
QC value	less than the lower		limit for Ag 328.068	Recovery = -9.96%				
Al	308.215†	-6073.1	-0.277367 mg/L	0.0076860	-0.277367 mg/L	0.0076860		2.77%
QC value	less than the lower		limit for Al 308.215	Recovery = -5.55%				
As	188.979†	11.5	0.0096328 mg/L	0.00120834	0.0096328 mg/L	0.00120834		12.54%
QC value	less than the lower		limit for As 188.979	Recovery = 1.93%				
Ba	233.527†	1201.8	0.0137415 mg/L	0.00012638	0.0137415 mg/L	0.00012638		0.92%
QC value	less than the lower		limit for Ba 233.527	Recovery = 2.75%				
Be	313.107†	3191.4	0.0038538 mg/L	0.00005265	0.0038538 mg/L	0.00005265		1.37%
QC value	less than the lower		limit for Be 313.107	Recovery = 0.77%				
Ca	315.887†	5905.7	0.264756 mg/L	0.0016033	0.264756 mg/L	0.0016033		0.61%
QC value	less than the lower		limit for Ca 315.887	Recovery = 0.53%				
Cd	228.802†	-428.1	-0.0071501 mg/L	0.00037030	-0.0071501 mg/L	0.00037030		5.18%
QC value	less than the lower		limit for Cd 228.802	Recovery = -1.43%				
Co	228.616†	-49.2	-0.0004952 mg/L	0.00010912	-0.0004952 mg/L	0.00010912		22.04%
QC value	less than the lower		limit for Co 228.616	Recovery = -0.10%				
Cr	267.716†	-63.7	0.0002764 mg/L	0.00007024	0.0002764 mg/L	0.00007024		25.41%
QC value	less than the lower		limit for Cr 267.716	Recovery = 0.06%				
Cu	327.393†	726.2	0.0083010 mg/L	0.00167497	0.0083010 mg/L	0.00167497		20.18%
QC value	less than the lower		limit for Cu 327.393	Recovery = 1.66%				
Fe	273.955†	-66.5	-0.0002092 mg/L	0.00012576	-0.0002092 mg/L	0.00012576		60.10%
QC value	less than the lower		limit for Fe 273.955	Recovery = -0.00%				
K	404.721†	7197.4				199.34		2.77%
Unable to evaluate QC.								
Mg	279.077†	2336.3	0.409958 mg/L	0.0058220	0.409958 mg/L	0.0058220		1.42%
QC value	less than the lower		limit for Mg 279.077	Recovery = 0.82%				
Mn	257.610†	-254.3	0.0005538 mg/L	0.00000382	0.0005538 mg/L	0.00000382		0.69%
QC value	less than the lower		limit for Mn 257.610	Recovery = 0.11%				
Mo	202.031†	-28.9	0.0015896 mg/L	0.00049454	0.0015896 mg/L	0.00049454		31.11%
QC value	less than the lower		limit for Mo 202.031	Recovery = 0.32%				
Na	330.237†	253.1	0.987587 mg/L	0.0276118	0.987587 mg/L	0.0276118		2.80%
QC value	less than the lower		limit for Na 330.237	Recovery = 1.98%				
Ni	231.604†	-352.4	-0.0069663 mg/L	0.00019057	-0.0069663 mg/L	0.00019057		2.74%
QC value	less than the lower		limit for Ni 231.604	Recovery = -1.39%				
Pb	220.353†	147.3	0.0142219 mg/L	0.00000822	0.0142219 mg/L	0.00000822		0.06%
QC value	less than the lower		limit for Pb 220.353	Recovery = 2.84%				
Sb	206.836†	19.1	0.0135142 mg/L	0.00289550	0.0135142 mg/L	0.00289550		21.43%
QC value	less than the lower		limit for Sb 206.836	Recovery = 2.70%				
Se	196.026†	32.7	0.0356691 mg/L	0.00099465	0.0			

Sequence No.: 52

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/15/2013 12:51:26 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1154105.9	99.6 %		0.66			0.66%
Y 371.029	408684.3	98.8 %		0.78			0.79%
Ag 328.068†	2780.1	0.0184198 mg/L		0.00042202	0.0184198 mg/L	0.00042202	2.29%
QC value within limits for Ag	328.068	Recovery = 92.10%					
Al 308.215†	3853.2	0.178602 mg/L		0.0025461	0.178602 mg/L	0.0025461	1.43%
QC value within limits for Al	308.215	Recovery = 89.30%					
As 188.979†	29.2	0.0236406 mg/L		0.00286895	0.0236406 mg/L	0.00286895	12.14%
QC value within limits for As	188.979	Recovery = 118.20%					
Ba 233.527†	4731.4	0.0500849 mg/L		0.00003560	0.0500849 mg/L	0.00003560	0.07%
QC value within limits for Ba	233.527	Recovery = 100.17%					
Be 313.107†	25181.1	0.0136219 mg/L		0.00011691	0.0136219 mg/L	0.00011691	0.86%
QC value within limits for Be	313.107	Recovery = 113.52%					
Ca 315.887†	422732.8	5.05512 mg/L		0.049948	5.05512 mg/L	0.049948	0.99%
QC value within limits for Ca	315.887	Recovery = 101.10%					
Cd 228.802†	521.5	0.0122082 mg/L		0.00031838	0.0122082 mg/L	0.00031838	2.61%
QC value within limits for Cd	228.802	Recovery = 101.74%					
Co 228.616†	706.6	0.0204179 mg/L		0.00033121	0.0204179 mg/L	0.00033121	1.62%
QC value within limits for Co	228.616	Recovery = 102.09%					
Cr 267.716†	2945.2	0.0487671 mg/L		0.00001408	0.0487671 mg/L	0.00001408	0.03%
QC value within limits for Cr	267.716	Recovery = 97.53%					
Cu 327.393†	5267.5	0.0520616 mg/L		0.00220765	0.0520616 mg/L	0.00220765	4.24%
QC value within limits for Cu	327.393	Recovery = 104.12%					
Fe 273.955†	4879.1	0.288808 mg/L		0.0012738	0.288808 mg/L	0.0012738	0.44%
QC value within limits for Fe	273.955	Recovery = 96.27%					
K 404.721†	478.0					269.92	56.47%
Unable to evaluate QC.							
Mg 279.077†	74657.0	5.12771 mg/L		0.050062	5.12771 mg/L	0.050062	0.98%
QC value within limits for Mg	279.077	Recovery = 102.55%					
Mn 257.610†	23199.1	0.0383510 mg/L		0.00021852	0.0383510 mg/L	0.00021852	0.57%
QC value within limits for Mn	257.610	Recovery = 95.88%					
Mo 202.031†	331.7	0.0228115 mg/L		0.00049798	0.0228115 mg/L	0.00049798	2.18%
QC value within limits for Mo	202.031	Recovery = 114.06%					
Na 330.237†	3946.7	4.76128 mg/L		0.054706	4.76128 mg/L	0.054706	1.15%
QC value within limits for Na	330.237	Recovery = 95.23%					
Ni 231.604†	2215.3	0.0485895 mg/L		0.00049688	0.0485895 mg/L	0.00049688	1.02%
QC value within limits for Ni	231.604	Recovery = 97.18%					
Pb 220.353†	147.3	0.0142886 mg/L		0.00081989	0.0142886 mg/L	0.00081989	5.74%
QC value within limits for Pb	220.353	Recovery = 119.07%					
Sb 206.836†	34.9	0.0223022 mg/L		0.00087556	0.0223022 mg/L	0.00087556	3.93%
QC value within limits for Sb	206.836	Recovery = 111.51%					
Se 196.026†	40.3	0.0433289 mg/L		0.00612208	0.0433289 mg/L	0.00612208	14.13%
QC value within limits for Se	196.026	Recovery = 108.32%					
Sn 189.927†	137.5	0.0471980 mg/L		0.00061715	0.0471980 mg/L	0.00061715	1.31%
QC value within limits for Sn	189.927	Recovery = 94.40%					
Ti 334.940†	23743.1	0.0473768 mg/L		0.00045878	0.0473768 mg/L	0.00045878	0.97%
QC value within limits for Ti	334.940	Recovery = 94.75%					
Tl 190.801†	21.4	0.0179546 mg/L		0.00324811	0.0179546 mg/L	0.00324811	18.09%
QC value within limits for Tl	190.801	Recovery = 89.77%					
V 290.880†	5491.6	0.0481665 mg/L		0.00075171	0.0481665 mg/L	0.00075171	1.56%
QC value within limits for V	290.880	Recovery = 96.33%					
Zn 206.200†	2203.1	0.0466467 mg/L		0.00001761	0.0466467 mg/L	0.00001761	0.04%
QC value within limits for Zn	206.200	Recovery = 93.29%					

All analyte(s) passed QC. One or more analytes were not evaluated.

Autosampler Location: 2
Date Collected: 11/15/2013 12:55:05 AM
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		1142598.3	98.6	%	0.90				0.92%
Y 371.029		410555.8	99.3	%	0.66				0.67%
Ag 328.068†		38.8	0.0004404	mg/L	0.00024977	0.0004404	mg/L	0.00024977	56.72%
QC value	within limits	for Ag	328.068	Recovery	= Not calculated				
Al 308.215†		-40.3	-0.0000671	mg/L	0.00679216	-0.0000671	mg/L	0.00679216	>999.9%
QC value	within limits	for Al	308.215	Recovery	= Not calculated				
As 188.979†		5.1	0.0045645	mg/L	0.00235609	0.0045645	mg/L	0.00235609	51.62%
QC value	within limits	for As	188.979	Recovery	= Not calculated				
Ba 233.527†		62.7	0.0020081	mg/L	0.00018569	0.0020081	mg/L	0.00018569	9.25%
QC value	within limits	for Ba	233.527	Recovery	= Not calculated				
Be 313.107†		250.0	0.0025469	mg/L	0.00000773	0.0025469	mg/L	0.00000773	0.30%
QC value	within limits	for Be	313.107	Recovery	= Not calculated				
Ca 315.887†		1101.3	0.209454	mg/L	0.0134264	0.209454	mg/L	0.0134264	6.41%
QC value	within limits	for Ca	315.887	Recovery	= Not calculated				
Cd 228.802†		-18.1	0.0012176	mg/L	0.00013752	0.0012176	mg/L	0.00013752	11.29%
QC value	within limits	for Cd	228.802	Recovery	= Not calculated				
Co 228.616†		5.4	0.0010326	mg/L	0.00011493	0.0010326	mg/L	0.00011493	11.13%
QC value	within limits	for Co	228.616	Recovery	= Not calculated				
Cr 267.716†		-13.4	0.0010933	mg/L	0.00003098	0.0010933	mg/L	0.00003098	2.83%
QC value	within limits	for Cr	267.716	Recovery	= Not calculated				
Cu 327.393†		172.8	0.0029575	mg/L	0.00223163	0.0029575	mg/L	0.00223163	75.46%
QC value	within limits	for Cu	327.393	Recovery	= Not calculated				
Fe 273.955†		1.7	0.0037777	mg/L	0.00103205	0.0037777	mg/L	0.00103205	27.32%
QC value	within limits	for Fe	273.955	Recovery	= Not calculated				
K 404.721†		-191.6						88.72	46.30%
Unable to evaluate QC.									
Mg 279.077†		28.9	0.259463	mg/L	0.0048431	0.259463	mg/L	0.0048431	1.87%
QC value	within limits	for Mg	279.077	Recovery	= Not calculated				
Mn 257.610†		-36.4	0.0009128	mg/L	0.00000449	0.0009128	mg/L	0.00000449	0.49%
QC value	within limits	for Mn	257.610	Recovery	= Not calculated				
Mo 202.031†		3.0	0.0034833	mg/L	0.00007919	0.0034833	mg/L	0.00007919	2.27%
QC value	within limits	for Mo	202.031	Recovery	= Not calculated				
Na 330.237†		-20.1	0.708451	mg/L	0.0258639	0.708451	mg/L	0.0258639	3.65%
QC value	within limits	for Na	330.237	Recovery	= Not calculated				
Ni 231.604†		-14.4	0.0003450	mg/L	0.00006205	0.0003450	mg/L	0.00006205	17.99%
QC value	within limits	for Ni	231.604	Recovery	= Not calculated				
Pb 220.353†		9.9	0.0025730	mg/L	0.00056562	0.0025730	mg/L	0.00056562	21.98%
QC value	within limits	for Pb	220.353	Recovery	= Not calculated				
Sb 206.836†		-2.8	0.0014444	mg/L	0.00232834	0.0014444	mg/L	0.00232834	161.19%
QC value	within limits	for Sb	206.836	Recovery	= Not calculated				
Se 196.026†		3.5	0.0067966	mg/L	0.00577111	0.0067966	mg/L	0.00577111	84.91%
QC value	within limits	for Se	196.026	Recovery	= Not calculated				
Sn 189.927†		-1.6	0.0031559	mg/L	0.00025538	0.0031559	mg/L	0.00025538	8.09%
QC value	within limits	for Sn	189.927	Recovery	= Not calculated				
Ti 334.940†		13.8	0.0023209	mg/L	0.00005189	0.0023209	mg/L	0.00005189	2.24%
QC value	within limits	for Ti							

Analyst J. Bl 11/18/13

Method Loaded

Method Name: PE2 4300DV AXIAL

IEC File: IECax092613.iec

Method Description: 200.7/6010B/6010C

Method Last Saved: 11/15/2013 11:35:27 AM

MSF File:

Sequence No.: 1

Sample ID: Calib Blk 1 V-174666

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 11/16/2013 3:24:16 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib Blk 1 V-174666

Analyte	Mean Corrected				Calib
	Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	1074987.7	4760.41	0.44%	100.0	%
Y 371.029	374568.0	904.31	0.24%	100	%
Ag 328.068†	3284.7	25.00	0.76%	[0.00]	mg/L
Al 308.215†	10058.7	1.10	0.01%	[0.00]	mg/L
As 188.979†	-1.1	3.31	293.75%	[0.00]	mg/L
Ba 233.527†	-2457.7	1.33	0.05%	[0.00]	mg/L
Be 313.107†	-6124.0	36.93	0.60%	[0.00]	mg/L
Ca 315.887†	-9115.2	274.88	3.02%	[0.00]	mg/L
Cd 228.802†	987.4	1.17	0.12%	[0.00]	mg/L
Co 228.616†	117.4	11.93	10.17%	[0.00]	mg/L
Cr 267.716†	180.5	11.48	6.36%	[0.00]	mg/L
Cu 327.393†	-7635.5	155.43	2.04%	[0.00]	mg/L
Fe 273.955†	164.2	25.87	15.75%	[0.00]	mg/L
K 404.721†	-16427.9	237.72	1.45%	[0.00]	mg/L
Mg 279.077†	-4825.7	25.50	0.53%	[0.00]	mg/L
Mn 257.610†	624.6	20.18	3.23%	[0.00]	mg/L
Mo 202.031†	63.7	2.75	4.31%	[0.00]	mg/L
Na 330.237†	256.7	71.55	27.87%	[0.00]	mg/L
Ni 231.604†	791.2	15.68	1.98%	[0.00]	mg/L
Pb 220.353†	-290.1	2.02	0.70%	[0.00]	mg/L
Sb 206.836†	-42.5	3.90	9.19%	[0.00]	mg/L
Se 196.026†	-64.4	4.14	6.42%	[0.00]	mg/L
Sn 189.927†	-16.5	4.58	27.78%	[0.00]	mg/L
Ti 334.940†	-5204.1	78.00	1.50%	[0.00]	mg/L
Tl 190.801†	-22.9	2.88	12.57%	[0.00]	mg/L
V 290.880†	4787.0	48.26	1.01%	[0.00]	mg/L
Zn 206.200†	77.0	4.52	5.87%	[0.00]	mg/L

15687

27402

75576-002-028 all elements
reported
except Na, K

Sequence No.: 2
Sample ID: Calib 1 V-173067
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 11/16/2013 3:27:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib 1 V-173067

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1082085.8	1763.19	0.16%	101 %
Y 371.029	376280.8	678.31	0.18%	100 %
As 188.979†	2.8	2.78	98.88%	[0.005] mg/L
Be 313.107†	8959.0	24.09	0.27%	[0.003] mg/L
Cd 228.802†	177.5	13.71	7.73%	[0.003] mg/L
Pb 220.353†	94.4	1.15	1.21%	[0.004] mg/L
Tl 190.801†	8.0	1.75	21.76%	[0.005] mg/L

Sequence No.: 3
 Sample ID: Calib 2 V-173273
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 9
 Date Collected: 11/16/2013 3:31:30 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: Calib 2 V-173273

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Sc 361.383	1078481.4	2048.17	0.19%	100 %	
Y 371.029	374022.8	935.36	0.25%	99.9 %	
Ag 328.068†	342.0	49.50	14.47%	[0.002]	mg/L
Al 308.215†	3084.4	34.99	1.13%	[0.10]	mg/L
As 188.979†	9.9	0.95	9.58%	[0.010]	mg/L
Ba 233.527†	1217.2	16.90	1.39%	[0.010]	mg/L
Be 313.107†	27721.0	88.33	0.32%	[0.010]	mg/L
Ca 315.887†	103165.0	955.24	0.93%	[1.0]	mg/L
Cd 228.802†	563.8	0.64	0.11%	[0.010]	mg/L
Co 228.616†	470.5	9.63	2.05%	[0.010]	mg/L
Cr 267.716†	801.7	6.21	0.77%	[0.010]	mg/L
Cu 327.393†	1082.3	307.71	28.43%	[0.010]	mg/L
Fe 273.955†	2238.7	3.68	0.16%	[0.10]	mg/L
K 404.721†	1014.0	124.16	12.24%	[1.0]	mg/L
Mg 279.077†	19007.2	17.55	0.09%	[1.0]	mg/L
Mn 257.610†	7751.0	10.87	0.14%	[0.010]	mg/L
Mo 202.031†	204.1	0.42	0.21%	[0.010]	mg/L
Na 330.237†	893.7	30.56	3.42%	[1.0]	mg/L
Ni 231.604†	609.9	9.80	1.61%	[0.010]	mg/L
Pb 220.353†	181.5	3.86	2.13%	[0.010]	mg/L
Sb 206.836†	26.0	5.92	22.81%	[0.010]	mg/L
Se 196.026†	17.7	7.32	41.40%	[0.010]	mg/L
Sn 189.927†	46.9	2.46	5.24%	[0.010]	mg/L
Ti 334.940†	6228.1	98.70	1.58%	[0.010]	mg/L
Tl 190.801†	16.9	3.63	21.56%	[0.010]	mg/L
V 290.880†	1440.7	33.95	2.36%	[0.010]	mg/L
Zn 206.200†	648.8	7.28	1.12%	[0.010]	mg/L

Sequence No.: 4

Sample ID: Calib 3 V-173274

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 11/16/2013 3:35:06 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib 3 V-173274

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	1029268.6	2974.83	0.29%	95.7 %
Y 371.029	351181.7	1777.91	0.51%	93.8 %
Ag 328.068†	18947.2	99.71	0.53%	[0.10] mg/L
Al 308.215†	136489.8	830.36	0.61%	[5.0] mg/L
As 188.979†	699.4	4.41	0.63%	[0.50] mg/L
Ba 233.527†	60847.4	390.55	0.64%	[0.50] mg/L
Be 313.107†	1437975.4	1500.73	0.10%	[0.50] mg/L
Ca 315.887†	5608970.4	13994.11	0.25%	[50] mg/L
Cd 228.802†	31160.5	26.16	0.08%	[0.50] mg/L
Co 228.616†	23829.1	25.02	0.11%	[0.50] mg/L
Cr 267.716†	40184.4	147.64	0.37%	[0.50] mg/L
Cu 327.393†	63077.0	503.59	0.80%	[0.50] mg/L
Fe 273.955†	112031.9	1258.26	1.12%	[5.0] mg/L
K 404.721†	4497.6	580.98	12.92%	[50] mg/L
Mg 279.077†	1022557.2	2364.05	0.23%	[50] mg/L
Mn 257.610†	390272.1	3042.69	0.78%	[0.50] mg/L
Mo 202.031†	10733.3	0.72	0.01%	[0.50] mg/L
Na 330.237†	58147.9	141.27	0.24%	[50] mg/L
Ni 231.604†	30373.3	157.05	0.52%	[0.50] mg/L
Pb 220.353†	7767.8	16.94	0.22%	[0.50] mg/L
Sb 206.836†	1158.9	4.18	0.36%	[0.50] mg/L
Se 196.026†	646.6	7.71	1.19%	[0.50] mg/L
Sn 189.927†	2199.0	5.02	0.23%	[0.50] mg/L
Ti 334.940†	322153.5	1949.36	0.61%	[0.50] mg/L
Tl 190.801†	879.8	3.00	0.34%	[0.50] mg/L
V 290.880†	73645.5	616.41	0.84%	[0.50] mg/L
Zn 206.200†	31417.9	75.14	0.24%	[0.50] mg/L

Sequence No.: 5

Sample ID: Calib 4 V-174144

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 11/16/2013 3:38:56 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib 4 V-174144

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Sc 361.383	1015900.0	8898.03	0.88%	94.5 %
Y 371.029	348726.8	3184.59	0.91%	93.1 %
Ag 328.068†	39452.7	11.43	0.03%	[0.20] mg/L
Al 308.215†	275876.5	187.57	0.07%	[10] mg/L
As 188.979†	1449.3	23.23	1.60%	[1.0] mg/L
Ba 233.527†	124119.7	50.34	0.04%	[1.0] mg/L
Be 313.107†	2954869.9	4555.92	0.15%	[1.0] mg/L
Ca 315.887†	11400490.3	17559.45	0.15%	[100] mg/L
Cd 228.802†	63372.3	87.84	0.14%	[1.0] mg/L
Co 228.616†	48203.0	73.13	0.15%	[1.0] mg/L
Cr 267.716†	82782.5	82.75	0.10%	[1.0] mg/L
Cu 327.393†	128717.2	169.99	0.13%	[1.0] mg/L
Fe 273.955†	227919.9	42.79	0.02%	[10] mg/L
K 404.721†	10080.0	95.62	0.95%	[100] mg/L
Mg 279.077†	2082156.4	2603.00	0.13%	[100] mg/L
Mn 257.610†	799943.9	381.32	0.05%	[1.0] mg/L
Mo 202.031†	21645.5	230.51	1.06%	[1.0] mg/L
Na 330.237†	125165.0	122.48	0.10%	[100] mg/L
Ni 231.604†	62145.8	91.42	0.15%	[1.0] mg/L
Pb 220.353†	15596.1	94.06	0.60%	[1.0] mg/L
Sb 206.836†	2349.7	22.56	0.96%	[1.0] mg/L
Se 196.026†	1324.0	2.25	0.17%	[1.0] mg/L
Sn 189.927†	4430.1	59.14	1.33%	[1.0] mg/L
Ti 334.940†	662344.9	230.59	0.03%	[1.0] mg/L
Tl 190.801†	1761.7	10.04	0.57%	[1.0] mg/L
V 290.880†	150800.8	65.52	0.04%	[1.0] mg/L
Zn 206.200†	63985.9	112.81	0.18%	[1.0] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	-165.6	196700	0.00000	0.999797	
Al 308.215	3	Lin, Calc Int	-115.8	27540	0.00000	0.999983	
As 188.979	4	Lin, Calc Int	-6.0	1446	0.00000	0.999868	
Ba 233.527	3	Lin, Calc Int	-231.6	123900	0.00000	0.999949	
Be 313.107	4	Lin, Calc Int	-5457.0	2946000	0.00000	0.999916	
Ca 315.887	3	Lin, Calc Int	-21533.4	113900	0.00000	0.999967	
Cd 228.802	4	Lin, Calc Int	-91.3	63270	0.00000	0.999969	
Co 228.616	3	Lin, Calc Int	-54.8	48160	0.00000	0.999983	
Cr 267.716	3	Lin, Calc Int	-231.5	82580	0.00000	0.999887	
Cu 327.393	3	Lin, Calc Int	-326.3	128600	0.00000	0.999950	
Fe 273.955	3	Lin, Calc Int	-369.3	22760	0.00000	0.999962	
K 404.721	3	Lin, Calc Int	315.9	94.89	0.00000	0.993081	
Mg 279.077	3	Lin, Calc Int	-4194.6	20800	0.00000	0.999959	
Mn 257.610	3	Lin, Calc Int	-1878.2	798300	0.00000	0.999922	
Mo 202.031	3	Lin, Calc Int	-21.9	21640	0.00000	0.999991	
Na 330.237	3	Lin, Calc Int	-969.6	1246	0.00000	0.999347	
Ni 231.604	3	Lin, Calc Int	-132.6	62030	0.00000	0.999932	
Pb 220.353	4	Lin, Calc Int	14.3	15570	0.00000	0.999995	
Sb 206.836	3	Lin, Calc Int	-1.8	2345	0.00000	0.999973	
Se 196.026	3	Lin, Calc Int	-0.8	1319	0.00000	0.999912	
Sn 189.927	3	Lin, Calc Int	-1.7	4426	0.00000	0.999992	
Ti 334.940	3	Lin, Calc Int	-1820.9	660900	0.00000	0.999902	
Tl 190.801	4	Lin, Calc Int	-0.6	1762	0.00000	1.000000	
V 290.880	3	Lin, Calc Int	-350.0	150500	0.00000	0.999929	
Zn 206.200	3	Lin, Calc Int	-100.6	63880	0.00000	0.999956	

Sequence No.: 6
 Sample ID: ICS3 V-173274
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 11/16/2013 3:43:56 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICS3 V-173274

Analyte		Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc	361.383	1037110.2	96.5 %		0.28			0.29%
Y	371.029	352994.6	94.2 %		0.54			0.57%
Ag	328.068†	18781.9	0.0967525 mg/L	0.00022110		0.0967525 mg/L	0.00022110	0.23%
	QC value within limits for Ag	328.068	Recovery = 96.75%					
Al	308.215†	135581.2	4.91842 mg/L	0.008016		4.91842 mg/L	0.008016	0.16%
	QC value within limits for Al	308.215	Recovery = 98.37%					
As	188.979†	697.5	0.486884 mg/L	0.0015504		0.486884 mg/L	0.0015504	0.32%
	QC value within limits for As	188.979	Recovery = 97.38%					
Ba	233.527†	60520.0	0.490084 mg/L	0.0000732		0.490084 mg/L	0.0000732	0.01%
	QC value within limits for Ba	233.527	Recovery = 98.02%					
Be	313.107†	1442384.0	0.491338 mg/L	0.0006756		0.491338 mg/L	0.0006756	0.14%
	QC value within limits for Be	313.107	Recovery = 98.27%					
Ca	315.887†	5616415.8	49.4863 mg/L	0.00279		49.4863 mg/L	0.00279	0.01%
	QC value within limits for Ca	315.887	Recovery = 98.97%					
Cd	228.802†	30876.6	0.489109 mg/L	0.0030977		0.489109 mg/L	0.0030977	0.63%
	QC value within limits for Cd	228.802	Recovery = 97.82%					
Co	228.616†	23596.7	0.491958 mg/L	0.0024952		0.491958 mg/L	0.0024952	0.51%
	QC value within limits for Co	228.616	Recovery = 98.39%					
Cr	267.716†	40075.9	0.490831 mg/L	0.0037199		0.490831 mg/L	0.0037199	0.76%
	QC value within limits for Cr	267.716	Recovery = 98.17%					
Cu	327.393†	62791.8	0.490123 mg/L	0.0002826		0.490123 mg/L	0.0002826	0.06%
	QC value within limits for Cu	327.393	Recovery = 98.02%					
Fe	273.955†	111564.9	4.91814 mg/L	0.019247		4.91814 mg/L	0.019247	0.39%
	QC value within limits for Fe	273.955	Recovery = 98.36%					
K	404.721†	4614.0	45.2967 mg/L	1.89679		45.2967 mg/L	1.89679	4.19%
	QC value within limits for K	404.721	Recovery = 90.59%					
Mg	279.077†	1023435.9	49.4151 mg/L	0.00525		49.4151 mg/L	0.00525	0.01%
	QC value within limits for Mg	279.077	Recovery = 98.83%					
Mn	257.610†	388550.6	0.487374 mg/L	0.0012810		0.487374 mg/L	0.0012810	0.26%
	QC value within limits for Mn	257.610	Recovery = 97.47%					
Mo	202.031†	10653.2	0.491428 mg/L	0.0021144		0.491428 mg/L	0.0021144	0.43%
	QC value within limits for Mo	202.031	Recovery = 98.29%					
Na	330.237†	57618.8	47.0364 mg/L	0.09776		47.0364 mg/L	0.09776	0.21%
	QC value within limits for Na	330.237	Recovery = 94.07%					
Ni	231.604†	30150.6	0.488806 mg/L	0.0033858		0.488806 mg/L	0.0033858	0.69%
	QC value within limits for Ni	231.604	Recovery = 97.76%					
Pb	220.353†	7677.8	0.493064 mg/L	0.0030259		0.493064 mg/L	0.0030259	0.61%
	QC value within limits for Pb	220.353	Recovery = 98.61%					
Sb	206.836†	1145.4	0.489999 mg/L	0.0028772		0.489999 mg/L	0.0028772	0.59%
	QC value within limits for Sb	206.836	Recovery = 98.00%					
Se	196.026†	635.5	0.483901 mg/L	0.0005590		0.483901 mg/L	0.0005590	0.12%
	QC value within limits for Se	196.026	Recovery = 96.78%					
Sn	189.927†	2171.8	0.490005 mg/L	0.0031557		0.490005 mg/L	0.0031557	0.64%
	QC value within limits for Sn	189.927	Recovery = 98.00%					
Ti	334.940†	320869.5	0.488234 mg/L	0.0003724		0.488234 mg/L	0.0003724	0.08%
	QC value within limits for Ti	334.940	Recovery = 97.65%					
Tl	190.801†	876.5	0.502844 mg/L	0.0059813		0.502844 mg/L	0.0059813	1.19%
	QC value within limits for Tl	190.801	Recovery = 100.57%					
V	290.880†	73392.1	0.487872 mg/L	0.0004039		0.487872 mg/L	0.0004039	0.08%
	QC value within limits for V	290.880	Recovery = 97.57%					
Zn	206.200†	31046.6	0.487200 mg/L	0.0023648		0.487200 mg/L	0.0023648	0.49%
	QC value within limits for Zn	206.200	Recovery = 97.44%					
All analyte(s) passed QC.								

All analyte(s) passed QC.

Sequence No.: 7
 Sample ID: ICV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 3:47:46 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1044893.9	97.2 %		0.06			0.06%
Y 371.029	355508.9	94.9 %		0.41			0.43%
Ag 328.068†	18644.4	0.0960490 mg/L		0.00028771	0.0960490 mg/L	0.00028771	0.30%
QC value within limits for Ag		328.068	Recovery = 96.05%				
Al 308.215†	132802.3	4.81770 mg/L		0.000445	4.81770 mg/L	0.000445	0.01%
QC value within limits for Al		308.215	Recovery = 96.35%				
As 188.979†	673.8	0.470541 mg/L		0.0093644	0.470541 mg/L	0.0093644	1.99%
QC value within limits for As		188.979	Recovery = 94.11%				
Ba 233.527†	59715.7	0.483596 mg/L		0.0011791	0.483596 mg/L	0.0011791	0.24%
QC value within limits for Ba		233.527	Recovery = 96.72%				
Be 313.107†	1398078.1	0.476301 mg/L		0.0012125	0.476301 mg/L	0.0012125	0.25%
QC value within limits for Be		313.107	Recovery = 95.26%				
Ca 315.887†	5557562.9	48.9699 mg/L		0.12366	48.9699 mg/L	0.12366	0.25%
QC value within limits for Ca		315.887	Recovery = 97.94%				
Cd 228.802†	30253.1	0.479259 mg/L		0.0037483	0.479259 mg/L	0.0037483	0.78%
QC value within limits for Cd		228.802	Recovery = 95.85%				
Co 228.616†	22974.1	0.479012 mg/L		0.0042932	0.479012 mg/L	0.0042932	0.90%
QC value within limits for Co		228.616	Recovery = 95.80%				
Cr 267.716†	39869.6	0.488274 mg/L		0.0031081	0.488274 mg/L	0.0031081	0.64%
QC value within limits for Cr		267.716	Recovery = 97.65%				
Cu 327.393†	60877.0	0.475241 mg/L		0.0016674	0.475241 mg/L	0.0016674	0.35%
QC value within limits for Cu		327.393	Recovery = 95.05%				
Fe 273.955†	110314.5	4.86320 mg/L		0.024958	4.86320 mg/L	0.024958	0.51%
QC value within limits for Fe		273.955	Recovery = 97.26%				
K 404.721†	5087.9	50.2909 mg/L		1.30378	50.2909 mg/L	1.30378	2.59%
QC value within limits for K		404.721	Recovery = 100.58%				
Mg 279.077†	1026805.0	49.5769 mg/L		0.16130	49.5769 mg/L	0.16130	0.33%
QC value within limits for Mg		279.077	Recovery = 99.15%				
Mn 257.610†	379497.4	0.476025 mg/L		0.0012827	0.476025 mg/L	0.0012827	0.27%
QC value within limits for Mn		257.610	Recovery = 95.20%				
Mo 202.031†	10425.6	0.480931 mg/L		0.0040650	0.480931 mg/L	0.0040650	0.85%
QC value within limits for Mo		202.031	Recovery = 96.19%				
Na 330.237†	56952.9	46.5019 mg/L		0.02288	46.5019 mg/L	0.02288	0.05%
QC value within limits for Na		330.237	Recovery = 93.00%				
Ni 231.604†	29922.3	0.485113 mg/L		0.0024755	0.485113 mg/L	0.0024755	0.51%
QC value within limits for Ni		231.604	Recovery = 97.02%				
Pb 220.353†	7488.2	0.480857 mg/L		0.0041751	0.480857 mg/L	0.0041751	0.87%
QC value within limits for Pb		220.353	Recovery = 96.17%				
Sb 206.836†	1133.0	0.484681 mg/L		0.0073525	0.484681 mg/L	0.0073525	1.52%
QC value within limits for Sb		206.836	Recovery = 96.94%				
Se 196.026†	624.2	0.475299 mg/L		0.0070606	0.475299 mg/L	0.0070606	1.49%
QC value within limits for Se		196.026	Recovery = 95.06%				
Sn 189.927†	2155.1	0.486251 mg/L		0.0092340	0.486251 mg/L	0.0092340	1.90%
QC value within limits for Sn		189.927	Recovery = 97.25%				
Ti 334.940†	313317.8	0.476808 mg/L		0.0008325	0.476808 mg/L	0.0008325	0.17%
QC value within limits for Ti		334.940	Recovery = 95.36%				
Tl 190.801†	860.7	0.493729 mg/L		0.0013276	0.493729 mg/L	0.0013276	0.27%
QC value within limits for Tl		190.801	Recovery = 98.75%				
V 290.880†	71733.5	0.476844 mg/L		0.0022012	0.476844 mg/L	0.0022012	0.46%
QC value within limits for V		290.880	Recovery = 95.37%				
Zn 206.200†	30270.4	0.475055 mg/L		0.0042041	0.475055 mg/L	0.0042041	0.88%
QC value within limits for Zn		206.200	Recovery = 95.01%				

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: LLICV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/16/2013 3:51:34 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1082687.7	101 %		0.1			0.13%
Y 371.029	374238.0	99.9 %		0.18			0.18%
Ag 328.068†	3847.9	0.0204315 mg/L		0.00003923	0.0204315 mg/L	0.00003923	0.19%
QC value within limits for Ag		328.068	Recovery = 102.16%				
Al 308.215†	5393.7	0.199661 mg/L		0.0004579	0.199661 mg/L	0.0004579	0.23%
QC value within limits for Al		308.215	Recovery = 99.83%				
As 188.979†	26.1	0.0222226 mg/L		0.00045661	0.0222226 mg/L	0.00045661	2.05%
QC value within limits for As		188.979	Recovery = 111.11%				
Ba 233.527†	6112.7	0.0511869 mg/L		0.00001875	0.0511869 mg/L	0.00001875	0.04%
QC value within limits for Ba		233.527	Recovery = 102.37%				
Be 313.107†	34240.3	0.0134588 mg/L		0.00001512	0.0134588 mg/L	0.00001512	0.11%
QC value within limits for Be		313.107	Recovery = 112.16%				
Ca 315.887†	576914.0	5.25339 mg/L		0.010104	5.25339 mg/L	0.010104	0.19%
QC value within limits for Ca		315.887	Recovery = 105.07%				
Cd 228.802†	748.4	0.0132429 mg/L		0.00005277	0.0132429 mg/L	0.00005277	0.40%
QC value within limits for Cd		228.802	Recovery = 110.36%				
Co 228.616†	969.7	0.0212549 mg/L		0.00026755	0.0212549 mg/L	0.00026755	1.26%
QC value within limits for Co		228.616	Recovery = 106.27%				
Cr 267.716†	4040.4	0.0518597 mg/L		0.00027688	0.0518597 mg/L	0.00027688	0.53%
QC value within limits for Cr		267.716	Recovery = 103.72%				
Cu 327.393†	6680.9	0.0544049 mg/L		0.00034279	0.0544049 mg/L	0.00034279	0.63%
QC value within limits for Cu		327.393	Recovery = 108.81%				
Fe 273.955†	6774.9	0.313901 mg/L		0.0032311	0.313901 mg/L	0.0032311	1.03%
QC value within limits for Fe		273.955	Recovery = 104.63%				
K 404.721†	757.3	4.65192 mg/L		2.737362	4.65192 mg/L	2.737362	58.84%
QC value within limits for K		404.721	Recovery = 93.04%				
Mg 279.077†	106896.6	5.34170 mg/L		0.012452	5.34170 mg/L	0.012452	0.23%
QC value within limits for Mg		279.077	Recovery = 106.83%				
Mn 257.610†	31276.7	0.0413388 mg/L		0.00007631	0.0413388 mg/L	0.00007631	0.18%
QC value within limits for Mn		257.610	Recovery = 103.35%				
Mo 202.031†	452.5	0.0217249 mg/L		0.00010956	0.0217249 mg/L	0.00010956	0.50%
QC value within limits for Mo		202.031	Recovery = 108.62%				
Na 330.237†	5200.7	4.95366 mg/L		0.0000564	4.95366 mg/L	0.0000564	0.01%
QC value within limits for Na		330.237	Recovery = 99.07%				
Ni 231.604†	3134.5	0.0526975 mg/L		0.00028758	0.0526975 mg/L	0.00028758	0.55%
QC value within limits for Ni		231.604	Recovery = 105.40%				
Pb 220.353†	197.0	0.0117406 mg/L		0.00046939	0.0117406 mg/L	0.00046939	4.00%
QC value within limits for Pb		220.353	Recovery = 97.84%				
Sb 206.836†	55.1	0.0243092 mg/L		0.00003342	0.0243092 mg/L	0.00003342	0.14%
QC value within limits for Sb		206.836	Recovery = 121.55%				
Se 196.026†	55.3	0.0425841 mg/L		0.00944435	0.0425841 mg/L	0.00944435	22.18%
QC value within limits for Se		196.026	Recovery = 106.46%				
Sn 189.927†	202.4	0.0460024 mg/L		0.00125506	0.0460024 mg/L	0.00125506	2.73%
QC value within limits for Sn		189.927	Recovery = 92.00%				
Ti 334.940†	30546.3	0.0489720 mg/L		0.00009220	0.0489720 mg/L	0.00009220	0.19%
QC value within limits for Ti		334.940	Recovery = 97.94%				
Tl 190.801†	39.4	0.0230937 mg/L		0.00273131	0.0230937 mg/L	0.00273131	11.83%
QC value within limits for Tl		190.801	Recovery = 115.47%				
V 290.880†	7513.5	0.0520220 mg/L		0.00010977	0.0520220 mg/L	0.00010977	0.21%
QC value within limits for V		290.880	Recovery = 104.04%				
Zn 206.200†	3131.6	0.0505786 mg/L		0.00005368	0.0505786 mg/L	0.00005368	0.11%
QC value within limits for Zn		206.200	Recovery = 101.16%				

All analyte(s) passed QC.

Sequence No.: 9
 Sample ID: ICB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 11/16/2013 3:55:13 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICB V-174666

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1079950.8	100 %		1.0			0.99%
Y 371.029	373148.2	99.6 %		1.06			1.06%
Ag 328.068†	13.0	0.0009093 mg/L	0.00024678	0.0009093 mg/L	0.00024678	27.14%	
QC value within limits for Ag	328.068	Recovery = Not calculated					
Al 308.215†	-78.7	0.0013219 mg/L	0.00346117	0.0013219 mg/L	0.00346117	261.84%	
QC value within limits for Al	308.215	Recovery = Not calculated					
As 188.979†	-1.2	0.0033054 mg/L	0.00091670	0.0033054 mg/L	0.00091670	27.73%	
QC value within limits for As	188.979	Recovery = Not calculated					
Ba 233.527†	20.4	0.0020327 mg/L	0.00018825	0.0020327 mg/L	0.00018825	9.26%	
QC value within limits for Ba	233.527	Recovery = Not calculated					
Be 313.107†	-29.2	0.0018416 mg/L	0.00002075	0.0018416 mg/L	0.00002075	1.13%	
QC value within limits for Be	313.107	Recovery = Not calculated					
Ca 315.887†	996.3	0.197762 mg/L	0.0045037	0.197762 mg/L	0.0045037	2.28%	
QC value within limits for Ca	315.887	Recovery = Not calculated					
Cd 228.802†	20.5	0.0017658 mg/L	0.00033533	0.0017658 mg/L	0.00033533	18.99%	
QC value within limits for Cd	228.802	Recovery = Not calculated					
Co 228.616†	-2.9	0.0010785 mg/L	0.00012466	0.0010785 mg/L	0.00012466	11.56%	
QC value within limits for Co	228.616	Recovery = Not calculated					
Cr 267.716†	20.8	0.0030642 mg/L	0.00001496	0.0030642 mg/L	0.00001496	0.49%	
QC value within limits for Cr	267.716	Recovery = Not calculated					
Cu 327.393†	-110.9	0.0016715 mg/L	0.00068954	0.0016715 mg/L	0.00068954	41.25%	
QC value within limits for Cu	327.393	Recovery = Not calculated					
Fe 273.955†	-17.3	0.0154649 mg/L	0.00056765	0.0154649 mg/L	0.00056765	3.67%	
QC value within limits for Fe	273.955	Recovery = Not calculated					
K 404.721†	7.1	-3.25429 mg/L	2.984924	-3.25429 mg/L	2.984924	91.72%	
QC value within limits for K	404.721	Recovery = Not calculated					
Mg 279.077†	-82.8	0.197717 mg/L	0.0011592	0.197717 mg/L	0.0011592	0.59%	
QC value within limits for Mg	279.077	Recovery = Not calculated					
Mn 257.610†	32.0	0.0023858 mg/L	0.00000410	0.0023858 mg/L	0.00000410	0.17%	
QC value within limits for Mn	257.610	Recovery = Not calculated					
Mo 202.031†	9.7	0.0014520 mg/L	0.00004144	0.0014520 mg/L	0.00004144	2.85%	
QC value within limits for Mo	202.031	Recovery = Not calculated					
Na 330.237†	-56.1	0.733368 mg/L	0.0641075	0.733368 mg/L	0.0641075	8.74%	
QC value within limits for Na	330.237	Recovery = Not calculated					
Ni 231.604†	-1.4	0.0021171 mg/L	0.00009319	0.0021171 mg/L	0.00009319	4.40%	
QC value within limits for Ni	231.604	Recovery = Not calculated					
Pb 220.353†	13.3	-0.0000614 mg/L	0.00071263	-0.0000614 mg/L	0.00071263	>999.9%	
QC value within limits for Pb	220.353	Recovery = Not calculated					
Sb 206.836†	1.8	0.0015343 mg/L	0.00055506	0.0015343 mg/L	0.00055506	36.18%	
QC value within limits for Sb	206.836	Recovery = Not calculated					
Se 196.026†	4.9	0.0043377 mg/L	0.00078961	0.0043377 mg/L	0.00078961	18.20%	
QC value within limits for Se	196.026	Recovery = Not calculated					
Sn 189.927†	-1.5	0.0000549 mg/L	0.00022634	0.0000549 mg/L	0.00022634	412.48%	
QC value within limits for Sn	189.927	Recovery = Not calculated					
Ti 334.940†	-12.6	0.0027361 mg/L	0.00013155	0.0027361 mg/L	0.00013155	4.81%	
QC value within limits for Ti	334.940	Recovery = Not calculated					
Tl 190.801†	2.8	0.0019476 mg/L	0.00168668	0.0019476 mg/L	0.00168668	86.60%	
QC value within limits for Tl	190.801	Recovery = Not calculated					
V 290.880†	100.5	0.0029846 mg/L	0.00048080	0.0029846 mg/L	0.00048080	16.11%	
QC value within limits for V	290.880	Recovery = Not calculated					
Zn 206.200†	8.2	0.0017024 mg/L	0.00020750	0.0017024 mg/L	0.00020750	12.19%	
QC value within limits for Zn	206.200	Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/16/2013 3:58:47 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	967211.3	90.0 %		0.17			0.19%
Y 371.029	330683.5	88.3 %		0.25			0.29%
Ag 328.068†	-2691.3	0.0030842 mg/L		0.00016743	0.0030842 mg/L	0.00016743	5.43%
Al 308.215†	12789750.4	464.343 mg/L		0.3383	464.343 mg/L	0.3383	0.07%
QC value within limits for Al 308.215 Recovery = 92.87%							
As 188.979†	-11.4	0.0056327 mg/L		0.00093707	0.0056327 mg/L	0.00093707	16.64%
Ba 233.527†	827.3	0.0015948 mg/L		0.00018450	0.0015948 mg/L	0.00018450	11.57%
Be 313.107†	-1488.2	0.0013459 mg/L		0.00003602	0.0013459 mg/L	0.00003602	2.68%
Ca 315.887†	52167758.1	457.876 mg/L		1.4827	457.876 mg/L	1.4827	0.32%
QC value within limits for Ca 315.887 Recovery = 91.58%							
Cd 228.802†	239.0	-0.0003542 mg/L		0.00026382	-0.0003542 mg/L	0.00026382	74.48%
Co 228.616†	-63.6	-0.0000972 mg/L		0.00011871	-0.0000972 mg/L	0.00011871	122.16%
Cr 267.716†	-222.8	0.0002350 mg/L		0.00043057	0.0002350 mg/L	0.00043057	183.23%
Cu 327.393†	1688.4	0.0037848 mg/L		0.00061513	0.0037848 mg/L	0.00061513	16.25%
Fe 273.955†	4171668.0	183.310 mg/L		0.1706	183.310 mg/L	0.1706	0.09%
QC value within limits for Fe 273.955 Recovery = 91.66%							
K 404.721†	-1760.5	-21.8824 mg/L		3.14305	-21.8824 mg/L	3.14305	14.36%
Mg 279.077†	10044454.2	483.027 mg/L		2.3237	483.027 mg/L	2.3237	0.48%
QC value within limits for Mg 279.077 Recovery = 96.61%							
Mn 257.610†	1474.7	-0.0137147 mg/L		0.00011451	-0.0137147 mg/L	0.00011451	0.83%
Mo 202.031†	513.3	0.0003636 mg/L		0.00010826	0.0003636 mg/L	0.00010826	29.77%
Na 330.237†	131.0	0.883629 mg/L		0.0584442	0.883629 mg/L	0.0584442	6.61%
Ni 231.604†	43.5	0.0028670 mg/L		0.00038167	0.0028670 mg/L	0.00038167	13.31%
Pb 220.353†	-1266.9	-0.0011969 mg/L		0.00112092	-0.0011969 mg/L	0.00112092	93.65%
Sb 206.836†	-101.1	-0.0002247 mg/L		0.00547982	-0.0002247 mg/L	0.00547982	>999.9%
Se 196.026†	-128.0	-0.0146668 mg/L		0.00393683	-0.0146668 mg/L	0.00393683	26.84%
Sn 189.927†	-14.9	-0.0150800 mg/L		0.00005360	-0.0150800 mg/L	0.00005360	0.36%
Ti 334.940†	857.8	0.0040529 mg/L		0.00018457	0.0040529 mg/L	0.00018457	4.55%
Tl 190.801†	6.7	-0.0027340 mg/L		0.00143867	-0.0027340 mg/L	0.00143867	52.62%
V 290.880†	4550.8	0.0056154 mg/L		0.00044257	0.0056154 mg/L	0.00044257	7.88%
Zn 206.200†	642.0	-0.0034696 mg/L		0.00008863	-0.0034696 mg/L	0.00008863	2.55%

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/16/2013 4:04:09 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	958297.5	89.1 %	0.11			0.12%
Y 371.029	328115.8	87.6 %	0.33			0.38%
Ag 328.068†	203584.9	1.05184 mg/L	0.002926	1.05184 mg/L	0.002926	0.28%
QC value within limits for Ag	328.068	Recovery = 105.18%				
Al 308.215†	12894514.0	468.147 mg/L	1.2343	468.147 mg/L	1.2343	0.26%
QC value within limits for Al	308.215	Recovery = 93.63%				
As 188.979†	1461.9	1.02423 mg/L	0.003530	1.02423 mg/L	0.003530	0.34%
QC value within limits for As	188.979	Recovery = 102.42%				
Ba 233.527†	62799.9	0.501681 mg/L	0.0005667	0.501681 mg/L	0.0005667	0.11%
QC value within limits for Ba	233.527	Recovery = 100.34%				
Be 313.107†	1498483.2	0.510557 mg/L	0.0002792	0.510557 mg/L	0.0002792	0.05%
QC value within limits for Be	313.107	Recovery = 102.11%				
Ca 315.887†	52423394.3	460.116 mg/L	1.5440	460.116 mg/L	1.5440	0.34%
QC value within limits for Ca	315.887	Recovery = 92.02%				
Cd 228.802†	64873.6	1.02115 mg/L	0.000778	1.02115 mg/L	0.000778	0.08%
QC value within limits for Cd	228.802	Recovery = 102.11%				
Co 228.616†	23473.0	0.488615 mg/L	0.0017162	0.488615 mg/L	0.0017162	0.35%
QC value within limits for Co	228.616	Recovery = 97.72%				
Cr 267.716†	40340.2	0.491614 mg/L	0.0006030	0.491614 mg/L	0.0006030	0.12%
QC value within limits for Cr	267.716	Recovery = 98.32%				
Cu 327.393†	68562.0	0.523732 mg/L	0.0017075	0.523732 mg/L	0.0017075	0.33%
QC value within limits for Cu	327.393	Recovery = 104.75%				
Fe 273.955†	4194744.0	184.324 mg/L	0.1421	184.324 mg/L	0.1421	0.08%
QC value within limits for Fe	273.955	Recovery = 92.16%				
K 404.721†	-1833.2	-22.6486 mg/L	1.77158	-22.6486 mg/L	1.77158	7.82%
Mg 279.077†	10060642.8	483.807 mg/L	1.7457	483.807 mg/L	1.7457	0.36%
QC value within limits for Mg	279.077	Recovery = 96.76%				
Mn 257.610†	395257.0	0.479513 mg/L	0.0002950	0.479513 mg/L	0.0002950	0.06%
QC value within limits for Mn	257.610	Recovery = 95.90%				
Mo 202.031†	504.1	-0.0002093 mg/L	0.00013161	-0.0002093 mg/L	0.00013161	62.88%
Na 330.237†	1244.2	1.77729 mg/L	0.011322	1.77729 mg/L	0.011322	0.64%
Ni 231.604†	58970.2	0.952898 mg/L	0.0008496	0.952898 mg/L	0.0008496	0.09%
QC value within limits for Ni	231.604	Recovery = 95.29%				
Pb 220.353†	13727.6	0.962748 mg/L	0.0034830	0.962748 mg/L	0.0034830	0.36%
QC value within limits for Pb	220.353	Recovery = 96.27%				
Sb 206.836†	2287.7	1.01856 mg/L	0.007410	1.01856 mg/L	0.007410	0.73%
QC value within limits for Sb	206.836	Recovery = 101.86%				
Se 196.026†	1169.9	0.969802 mg/L	0.0045205	0.969802 mg/L	0.0045205	0.47%
QC value within limits for Se	196.026	Recovery = 96.98%				
Sn 189.927†	-10.7	-0.0142070 mg/L	0.00018136	-0.0142070 mg/L	0.00018136	1.28%
Ti 334.940†	902.6	0.0041207 mg/L	0.00003607	0.0041207 mg/L	0.00003607	0.88%
Tl 190.801†	1700.5	0.957981 mg/L	0.0035857	0.957981 mg/L	0.0035857	0.37%
QC value within limits for Tl	190.801	Recovery = 95.80%				
V 290.880†	78630.4	0.497841 mg/L	0.0004349	0.497841 mg/L	0.0004349	0.09%
QC value within limits for V	290.880	Recovery = 99.57%				
Zn 206.200†	61105.8	0.942985 mg/L	0.0004901	0.942985 mg/L	0.0004901	0.05%
QC value within limits for Zn	206.200	Recovery = 94.30%				

All analyte(s) passed QC.

Sequence No.: 12
 Sample ID: 75576-002
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 75
 Date Collected: 11/16/2013 4:09:35 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: 75576-002

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1076950.1	100	%	0.5			0.53%
Y 371.029	365052.6	97.5	%	0.17			0.17%
Ag 328.068†	-65.3	0.0005160	mg/L	0.00046675	0.0005160 mg/L	0.00046675	90.45%
Al 308.215†	2504.1	0.0947795	mg/L	0.00187164	0.0947795 mg/L	0.00187164	1.97%
As 188.979†	4.8	0.0070826	mg/L	0.00074431	0.0070826 mg/L	0.00074431	10.51%
Ba 233.527†	3923.3	0.0335274	mg/L	0.00017057	0.0335274 mg/L	0.00017057	0.51%
Be 313.107†	174.4	0.0019105	mg/L	0.00000383	0.0019105 mg/L	0.00000383	0.20%
Ca 315.887†	3017862.8	26.6847	mg/L	0.01988	26.6847 mg/L	0.01988	0.07%
Cd 228.802†	190.4	0.0043372	mg/L	0.00002566	0.0043372 mg/L	0.00002566	0.59%
Co 228.616†	16.0	0.0015396	mg/L	0.00042170	0.0015396 mg/L	0.00042170	27.39%
Cr 267.716†	7620.8	0.0951953	mg/L	0.00106929	0.0951953 mg/L	0.00106929	1.12%
Cu 327.393†	1104.1	0.0107646	mg/L	0.00072716	0.0107646 mg/L	0.00072716	6.76%
Fe 273.955†	1149.0	0.0667086	mg/L	0.00001865	0.0667086 mg/L	0.00001865	0.03%
K 404.721†	819.5	5.30778	mg/L	3.588466	5.30778 mg/L	3.588466	67.61%
Mg 279.077†	84361.9	4.25814	mg/L	0.020888	4.25814 mg/L	0.020888	0.49%
Mn 257.610†	1832.7	0.0044966	mg/L	0.00003422	0.0044966 mg/L	0.00003422	0.76%
Mo 202.031†	417.4	0.0193712	mg/L	0.00030026	0.0193712 mg/L	0.00030026	1.55%
Na 330.237†	40169.2	33.0274	mg/L	0.24255	33.0274 mg/L	0.24255	0.73%
Ni 231.604†	132.4	0.0042952	mg/L	0.00013156	0.0042952 mg/L	0.00013156	3.06%
Pb 220.353†	56.1	0.0027157	mg/L	0.00004891	0.0027157 mg/L	0.00004891	1.80%
Sb 206.836†	4.8	0.0028071	mg/L	0.00223063	0.0028071 mg/L	0.00223063	79.46%
Se 196.026†	9.9	0.0075614	mg/L	0.00354385	0.0075614 mg/L	0.00354385	46.87%
Sn 189.927†	6.6	0.0009233	mg/L	0.00072057	0.0009233 mg/L	0.00072057	78.04%
Ti 334.940†	451.6	0.0034384	mg/L	0.00007400	0.0034384 mg/L	0.00007400	2.15%
Tl 190.801†	2.7	0.0021046	mg/L	0.00037039	0.0021046 mg/L	0.00037039	17.60%
V 290.880†	363.3	0.0045625	mg/L	0.00022974	0.0045625 mg/L	0.00022974	5.04%
Zn 206.200†	1619.5	0.0269191	mg/L	0.00019278	0.0269191 mg/L	0.00019278	0.72%

Sequence No.: 13
 Sample ID: 75576-004
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 76
 Date Collected: 11/16/2013 4:13:21 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-004

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1090463.7	101	%	0.8				0.84%
Y 371.029	370636.6	99.0	%	0.25				0.26%
Ag 328.068†	-197.9	-0.0001574	mg/L	0.00020525	-0.0001574	mg/L	0.00020525	130.43%
Al 308.215†	964.6	0.0391317	mg/L	0.00104591	0.0391317	mg/L	0.00104591	2.67%
As 188.979†	0.7	0.0042013	mg/L	0.00076622	0.0042013	mg/L	0.00076622	18.24%
Ba 233.527†	3660.5	0.0314067	mg/L	0.00018649	0.0314067	mg/L	0.00018649	0.59%
Be 313.107†	345.8	0.0019689	mg/L	0.00001119	0.0019689	mg/L	0.00001119	0.57%
Ca 315.887†	3353620.4	29.6326	mg/L	0.20329	29.6326	mg/L	0.20329	0.69%
Cd 228.802†	1176.5	0.0199104	mg/L	0.00036087	0.0199104	mg/L	0.00036087	1.81%
Co 228.616†	9.3	0.0013471	mg/L	0.00017694	0.0013471	mg/L	0.00017694	13.14%
Cr 267.716†	1482.3	0.0207856	mg/L	0.00000169	0.0207856	mg/L	0.00000169	0.01%
Cu 327.393†	1628.6	0.0147965	mg/L	0.00008573	0.0147965	mg/L	0.00008573	0.58%
Fe 273.955†	1382.7	0.0769778	mg/L	0.00001051	0.0769778	mg/L	0.00001051	0.01%
K 404.721†	880.0	5.94509	mg/L	1.978567	5.94509	mg/L	1.978567	33.28%
Mg 279.077†	88553.0	4.45952	mg/L	0.000655	4.45952	mg/L	0.000655	0.01%
Mn 257.610†	7864.1	0.0120396	mg/L	0.00005467	0.0120396	mg/L	0.00005467	0.45%
Mo 202.031†	96.5	0.0044364	mg/L	0.00034225	0.0044364	mg/L	0.00034225	7.71%
Na 330.237†	23814.5	19.8974	mg/L	0.07366	19.8974	mg/L	0.07366	0.37%
Ni 231.604†	272.6	0.0065379	mg/L	0.00007910	0.0065379	mg/L	0.00007910	1.21%
Pb 220.353†	29.9	0.0010084	mg/L	0.00207892	0.0010084	mg/L	0.00207892	206.16%
Sb 206.836†	6.3	0.0034264	mg/L	0.00025762	0.0034264	mg/L	0.00025762	7.52%
Se 196.026†	11.5	0.0086459	mg/L	0.00584365	0.0086459	mg/L	0.00584365	67.59%
Sn 189.927†	12.4	0.0021317	mg/L	0.00038163	0.0021317	mg/L	0.00038163	17.90%
Ti 334.940†	83.6	0.0028816	mg/L	0.00014219	0.0028816	mg/L	0.00014219	4.93%
Tl 190.801†	-0.1	0.0004556	mg/L	0.00253759	0.0004556	mg/L	0.00253759	557.03%
V 290.880†	274.3	0.0039629	mg/L	0.00065407	0.0039629	mg/L	0.00065407	16.50%
Zn 206.200†	7997.2	0.126765	mg/L	0.0013323	0.126765	mg/L	0.0013323	1.05%

Sequence No.: 14
 Sample ID: 75576-006
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 77
 Date Collected: 11/16/2013 4:17:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-006

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1090672.2	101 %		0.3			0.34%
Y 371.029	369687.0	98.7 %		1.43			1.45%
Ag 328.068†	-186.5	-0.0001033 mg/L		0.00010964	-0.0001033 mg/L	0.00010964	106.10%
Al 308.215†	487.9	0.0217926 mg/L		0.00226076	0.0217926 mg/L	0.00226076	10.37%
As 188.979†	1.4	0.0047410 mg/L		0.00076881	0.0047410 mg/L	0.00076881	16.22%
Ba 233.527†	2754.9	0.0241000 mg/L		0.00009824	0.0241000 mg/L	0.00009824	0.41%
Be 313.107†	167.3	0.0019083 mg/L		0.00003071	0.0019083 mg/L	0.00003071	1.61%
Ca 315.887†	3181370.3	28.1204 mg/L		0.05395	28.1204 mg/L	0.05395	0.19%
Cd 228.802†	2941.0	0.0478053 mg/L		0.00042280	0.0478053 mg/L	0.00042280	0.88%
Co 228.616†	8.0	0.0013265 mg/L		0.00002708	0.0013265 mg/L	0.00002708	2.04%
Cr 267.716†	10975.8	0.135757 mg/L		0.0005862	0.135757 mg/L	0.0005862	0.43%
Cu 327.393†	401.7	0.0052772 mg/L		0.00123342	0.0052772 mg/L	0.00123342	23.37%
Fe 273.955†	295.9	0.0292279 mg/L		0.00092273	0.0292279 mg/L	0.00092273	3.16%
K 404.721†	972.3	6.91798 mg/L		2.052575	6.91798 mg/L	2.052575	29.67%
Mg 279.077†	76522.1	3.88107 mg/L		0.028077	3.88107 mg/L	0.028077	0.72%
Mn 257.610†	1254.5	0.0037824 mg/L		0.00001401	0.0037824 mg/L	0.00001401	0.37%
Mo 202.031†	142.7	0.0066249 mg/L		0.00028246	0.0066249 mg/L	0.00028246	4.26%
Na 330.237†	10090.3	8.87916 mg/L		0.014999	8.87916 mg/L	0.014999	0.17%
Ni 231.604†	236.7	0.0059632 mg/L		0.00002376	0.0059632 mg/L	0.00002376	0.40%
Pb 220.353†	36.4	0.0014267 mg/L		0.00000614	0.0014267 mg/L	0.00000614	0.43%
Sb 206.836†	4.4	0.0026438 mg/L		0.00154479	0.0026438 mg/L	0.00154479	58.43%
Se 196.026†	11.4	0.0086164 mg/L		0.00414693	0.0086164 mg/L	0.00414693	48.13%
Sn 189.927†	16.7	0.0031440 mg/L		0.00133978	0.0031440 mg/L	0.00133978	42.61%
Ti 334.940†	134.8	0.0029591 mg/L		0.00001041	0.0029591 mg/L	0.00001041	0.35%
Tl 190.801†	-2.2	-0.0007574 mg/L		0.00073805	-0.0007574 mg/L	0.00073805	97.44%
V 290.880†	175.4	0.0033299 mg/L		0.00025162	0.0033299 mg/L	0.00025162	7.56%
Zn 206.200†	277.0	0.0059080 mg/L		0.00005613	0.0059080 mg/L	0.00005613	0.95%

Sequence No.: 15
 Sample ID: 75576-008
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 78
 Date Collected: 11/16/2013 4:20:53 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-008

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1070972.2	99.6	%	3.02			3.03%
Y 371.029	388022.4	104	%	3.0			2.93%
Ag 328.068†	14.6	0.0009187	mg/L	0.00039624	0.0009187	0.00039624	43.13%
Al 308.215†	11941.7	0.437708	mg/L	0.0255078	0.437708	0.0255078	5.83%
As 188.979†	-0.1	0.0039235	mg/L	0.00037706	0.0039235	0.00037706	9.61%
Ba 233.527†	28967.5	0.235638	mg/L	0.0076139	0.235638	0.0076139	3.23%
Be 313.107†	3602.8	0.0030746	mg/L	0.00006351	0.0030746	0.00006351	2.07%
Ca 315.887†	1154726.0	10.3243	mg/L	0.36426	10.3243	0.36426	3.53%
Cd 228.802†	278.3	0.0057949	mg/L	0.00057070	0.0057949	0.00057070	9.85%
Co 228.616†	-10.3	0.0009289	mg/L	0.00011120	0.0009289	0.00011120	11.97%
Cr 267.716†	274.1	0.0063304	mg/L	0.00004588	0.0063304	0.00004588	0.72%
Cu 327.393†	1101.1	0.0109531	mg/L	0.00091912	0.0109531	0.00091912	8.39%
Fe 273.955†	277.3	0.0284114	mg/L	0.00000465	0.0284114	0.00000465	0.02%
K 404.721†	166.9	-1.56991	mg/L	7.004088	-1.56991	7.004088	446.15%
Mg 279.077†	58194.9	3.00285	mg/L	0.098217	3.00285	0.098217	3.27%
Mn 257.610†	419844.7	0.528145	mg/L	0.0187149	0.528145	0.0187149	3.54%
Mo 202.031†	36.6	0.0023356	mg/L	0.00011105	0.0023356	0.00011105	4.75%
Na 330.237†	12305.3	10.6574	mg/L	0.32277	10.6574	0.32277	3.03%
Ni 231.604†	684.4	0.0131744	mg/L	0.00055678	0.0131744	0.00055678	4.23%
Pb 220.353†	12.1	-0.0000564	mg/L	0.00129319	-0.0000564	0.00129319	>999.9%
Sb 206.836†	-1.9	-0.0000181	mg/L	0.00025522	-0.0000181	0.00025522	>999.9%
Se 196.026†	6.1	0.0047820	mg/L	0.00259465	0.0047820	0.00259465	54.26%
Sn 189.927†	5.3	0.0012393	mg/L	0.00037652	0.0012393	0.00037652	30.38%
Ti 334.940†	15.6	0.0027787	mg/L	0.00004806	0.0027787	0.00004806	1.73%
Tl 190.801†	2.4	0.0011749	mg/L	0.00149880	0.0011749	0.00149880	127.57%
V 290.880†	223.6	0.0038363	mg/L	0.00183667	0.0038363	0.00183667	47.88%
Zn 206.200†	1683.0	0.0279134	mg/L	0.00117919	0.0279134	0.00117919	4.22%

Sequence No.: 16
 Sample ID: 75576-010
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 79
 Date Collected: 11/16/2013 4:24:30 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-010

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1102090.6	103	%	1.0			0.96%
Y 371.029	373878.0	99.8	%	0.35			0.35%
Ag 328.068†	-84.9	0.0004210	mg/L	0.00034532	0.0004210 mg/L	0.00034532	82.03%
Al 308.215†	918.8	0.0374974	mg/L	0.00473496	0.0374974 mg/L	0.00473496	12.63%
As 188.979†	-0.5	0.0035800	mg/L	0.00020794	0.0035800 mg/L	0.00020794	5.81%
Ba 233.527†	4875.3	0.0412084	mg/L	0.00033293	0.0412084 mg/L	0.00033293	0.81%
Be 313.107†	228.3	0.0019290	mg/L	0.00001780	0.0019290 mg/L	0.00001780	0.92%
Ca 315.887†	2044018.5	18.1345	mg/L	0.00328	18.1345 mg/L	0.00328	0.02%
Cd 228.802†	-35.5	0.0008035	mg/L	0.00038676	0.0008035 mg/L	0.00038676	48.14%
Co 228.616†	-0.8	0.0011314	mg/L	0.00032724	0.0011314 mg/L	0.00032724	28.92%
Cr 267.716†	130.0	0.0044119	mg/L	0.00011392	0.0044119 mg/L	0.00011392	2.58%
Cu 327.393†	309.5	0.0046959	mg/L	0.00133484	0.0046959 mg/L	0.00133484	28.43%
Fe 273.955†	2429.3	0.122963	mg/L	0.0013970	0.122963 mg/L	0.0013970	1.14%
K 404.721†	646.2	3.48123	mg/L	3.807697	3.48123 mg/L	3.807697	109.38%
Mg 279.077†	52939.1	2.74725	mg/L	0.007505	2.74725 mg/L	0.007505	0.27%
Mn 257.610†	27888.1	0.0371849	mg/L	0.00012558	0.0371849 mg/L	0.00012558	0.34%
Mo 202.031†	61.8	0.0032336	mg/L	0.00046054	0.0032336 mg/L	0.00046054	14.24%
Na 330.237†	11518.3	10.0257	mg/L	0.09104	10.0257 mg/L	0.09104	0.91%
Ni 231.604†	57.9	0.0030751	mg/L	0.00061144	0.0030751 mg/L	0.00061144	19.88%
Pb 220.353†	16.3	0.0001293	mg/L	0.00009043	0.0001293 mg/L	0.00009043	69.93%
Sb 206.836†	7.8	0.0040732	mg/L	0.00210099	0.0040732 mg/L	0.00210099	51.58%
Se 196.026†	7.8	0.0060851	mg/L	0.00073582	0.0060851 mg/L	0.00073582	12.09%
Sn 189.927†	9.1	0.0017951	mg/L	0.00001014	0.0017951 mg/L	0.00001014	0.56%
Ti 334.940†	-1.5	0.0027528	mg/L	0.00002599	0.0027528 mg/L	0.00002599	0.94%
Tl 190.801†	-0.2	0.0003020	mg/L	0.00337722	0.0003020 mg/L	0.00337722	>999.9%
V 290.880†	124.1	0.0030416	mg/L	0.00065564	0.0030416 mg/L	0.00065564	21.56%
Zn 206.200†	436.1	0.0083955	mg/L	0.00011876	0.0083955 mg/L	0.00011876	1.41%

Sequence No.: 17
 Sample ID: 75576-012
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 80
 Date Collected: 11/16/2013 4:28:16 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-012

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1083262.9	101	%	1.2			1.15%
Y 371.029	373288.9	99.7	%	0.97			0.98%
Ag 328.068†	-84.0	0.0004186	mg/L	0.00026038	0.0004186 mg/L	0.00026038	62.21%
Al 308.215†	1127.6	0.0451036	mg/L	0.00151070	0.0451036 mg/L	0.00151070	3.35%
As 188.979†	-2.1	0.0026257	mg/L	0.00075450	0.0026257 mg/L	0.00075450	28.74%
Ba 233.527†	1163.4	0.0112562	mg/L	0.00013968	0.0112562 mg/L	0.00013968	1.24%
Be 313.107†	134.5	0.0018972	mg/L	0.00001075	0.0018972 mg/L	0.00001075	0.57%
Ca 315.887†	677344.7	6.13584	mg/L	0.056984	6.13584 mg/L	0.056984	0.93%
Cd 228.802†	-12.9	0.0012116	mg/L	0.00011569	0.0012116 mg/L	0.00011569	9.55%
Co 228.616†	-8.1	0.0009722	mg/L	0.00010044	0.0009722 mg/L	0.00010044	10.33%
Cr 267.716†	60.0	0.0035443	mg/L	0.00023301	0.0035443 mg/L	0.00023301	6.57%
Cu 327.393†	424.6	0.0057546	mg/L	0.00213982	0.0057546 mg/L	0.00213982	37.18%
Fe 273.955†	549.6	0.0403752	mg/L	0.00090269	0.0403752 mg/L	0.00090269	2.24%
K 404.721†	804.8	5.15261	mg/L	1.563104	5.15261 mg/L	1.563104	30.34%
Mg 279.077†	46564.4	2.44059	mg/L	0.015523	2.44059 mg/L	0.015523	0.64%
Mn 257.610†	1704.5	0.0043979	mg/L	0.00001009	0.0043979 mg/L	0.00001009	0.23%
Mo 202.031†	29.1	0.0021404	mg/L	0.00001165	0.0021404 mg/L	0.00001165	0.54%
Na 330.237†	8123.6	7.30032	mg/L	0.091523	7.30032 mg/L	0.091523	1.25%
Ni 231.604†	86.2	0.0035299	mg/L	0.00025759	0.0035299 mg/L	0.00025759	7.30%
Pb 220.353†	15.8	0.0000967	mg/L	0.00074351	0.0000967 mg/L	0.00074351	769.00%
Sb 206.836†	3.1	0.0020790	mg/L	0.00128493	0.0020790 mg/L	0.00128493	61.80%
Se 196.026†	5.8	0.0048805	mg/L	0.00368716	0.0048805 mg/L	0.00368716	75.55%
Sn 189.927†	7.1	0.0017819	mg/L	0.00133594	0.0017819 mg/L	0.00133594	74.97%
Ti 334.940†	96.2	0.0029006	mg/L	0.00000300	0.0029006 mg/L	0.00000300	0.10%
Tl 190.801†	1.0	0.0009235	mg/L	0.00357733	0.0009235 mg/L	0.00357733	387.37%
V 290.880†	81.6	0.0027654	mg/L	0.00012831	0.0027654 mg/L	0.00012831	4.64%
Zn 206.200†	558.1	0.0103089	mg/L	0.00018050	0.0103089 mg/L	0.00018050	1.75%

Sequence No.: 18
 Sample ID: 75576-014
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 81
 Date Collected: 11/16/2013 4:31:53 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-014

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1088067.2	101 %	%	0.8			0.83%
Y 371.029	373070.1	99.6 %	%	0.94			0.94%
Ag 328.068†	-62.7	0.0005253	mg/L	0.00004891	0.0005253	0.00004891	9.31%
Al 308.215†	850.2	0.0350059	mg/L	0.00346426	0.0350059	0.00346426	9.90%
As 188.979†	1.8	0.0051404	mg/L	0.00124844	0.0051404	0.00124844	24.29%
Ba 233.527†	7343.1	0.0611271	mg/L	0.00053132	0.0611271	0.00053132	0.87%
Be 313.107†	199.2	0.0019192	mg/L	0.00003037	0.0019192	0.00003037	1.58%
Ca 315.887†	2215322.0	19.6388	mg/L	0.03922	19.6388	0.03922	0.20%
Cd 228.802†	-19.0	0.0010597	mg/L	0.00022876	0.0010597	0.00022876	21.59%
Co 228.616†	-8.2	0.0009768	mg/L	0.00038520	0.0009768	0.00038520	39.44%
Cr 267.716†	144.1	0.0045744	mg/L	0.00026280	0.0045744	0.00026280	5.74%
Cu 327.393†	282.1	0.0044619	mg/L	0.00037923	0.0044619	0.00037923	8.50%
Fe 273.955†	117.9	0.0214052	mg/L	0.00109645	0.0214052	0.00109645	5.12%
K 404.721†	824.8	5.36309	mg/L	3.024423	5.36309	3.024423	56.39%
Mg 279.077†	89801.5	4.51960	mg/L	0.063796	4.51960	0.063796	1.41%
Mn 257.610†	10727.0	0.0156229	mg/L	0.00021975	0.0156229	0.00021975	1.41%
Mo 202.031†	61.4	0.0031630	mg/L	0.00083972	0.0031630	0.00083972	26.55%
Na 330.237†	29296.6	24.2986	mg/L	0.34558	24.2986	0.34558	1.42%
Ni 231.604†	-22.7	0.0017753	mg/L	0.00001410	0.0017753	0.00001410	0.79%
Pb 220.353†	45.5	0.0020015	mg/L	0.00107499	0.0020015	0.00107499	53.71%
Sb 206.836†	-0.4	0.0005884	mg/L	0.00266190	0.0005884	0.00266190	452.36%
Se 196.026†	2.3	0.0019559	mg/L	0.00184085	0.0019559	0.00184085	94.12%
Sn 189.927†	9.6	0.0018616	mg/L	0.00133050	0.0018616	0.00133050	71.47%
Ti 334.940†	19.6	0.0027848	mg/L	0.00015285	0.0027848	0.00015285	5.49%
Tl 190.801†	-0.0	0.0004171	mg/L	0.00281258	0.0004171	0.00281258	674.28%
V 290.880†	220.7	0.0036073	mg/L	0.00077875	0.0036073	0.00077875	21.59%
Zn 206.200†	519.8	0.0097099	mg/L	0.00007813	0.0097099	0.00007813	0.80%

Sequence No.: 19
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 4:35:39 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1045054.3	97.2 %	0.05			0.05%
Y 371.029	355552.3	94.9 %	0.81			0.85%
Ag 328.068†	18353.9	0.0945693 mg/L	0.00045759	0.0945693 mg/L	0.00045759	0.48%
QC value within limits for Ag	328.068	Recovery = 94.57%				
Al 308.215†	132111.6	4.79265 mg/L	0.044671	4.79265 mg/L	0.044671	0.93%
QC value within limits for Al	308.215	Recovery = 95.85%				
As 188.979†	672.0	0.469271 mg/L	0.0004409	0.469271 mg/L	0.0004409	0.09%
QC value within limits for As	188.979	Recovery = 93.85%				
Ba 233.527†	59292.2	0.480179 mg/L	0.0047095	0.480179 mg/L	0.0047095	0.98%
QC value within limits for Ba	233.527	Recovery = 96.04%				
Be 313.107†	1389697.5	0.473456 mg/L	0.0009477	0.473456 mg/L	0.0009477	0.20%
QC value within limits for Be	313.107	Recovery = 94.69%				
Ca 315.887†	5515057.6	48.5967 mg/L	0.07196	48.5967 mg/L	0.07196	0.15%
QC value within limits for Ca	315.887	Recovery = 97.19%				
Cd 228.802†	30207.9	0.478547 mg/L	0.0015463	0.478547 mg/L	0.0015463	0.32%
QC value within limits for Cd	228.802	Recovery = 95.71%				
Co 228.616†	22948.0	0.478468 mg/L	0.0019176	0.478468 mg/L	0.0019176	0.40%
QC value within limits for Co	228.616	Recovery = 95.69%				
Cr 267.716†	39365.7	0.482165 mg/L	0.0017004	0.482165 mg/L	0.0017004	0.35%
QC value within limits for Cr	267.716	Recovery = 96.43%				
Cu 327.393†	60711.4	0.473959 mg/L	0.0051947	0.473959 mg/L	0.0051947	1.10%
QC value within limits for Cu	327.393	Recovery = 94.79%				
Fe 273.955†	109599.6	4.83179 mg/L	0.033047	4.83179 mg/L	0.033047	0.68%
QC value within limits for Fe	273.955	Recovery = 96.64%				
K 404.721†	5183.9	51.3022 mg/L	1.71061	51.3022 mg/L	1.71061	3.33%
QC value within limits for K	404.721	Recovery = 102.60%				
Mg 279.077†	1016027.0	49.0587 mg/L	0.15606	49.0587 mg/L	0.15606	0.32%
QC value within limits for Mg	279.077	Recovery = 98.12%				
Mn 257.610†	376964.2	0.472870 mg/L	0.0037735	0.472870 mg/L	0.0037735	0.80%
QC value within limits for Mn	257.610	Recovery = 94.57%				
Mo 202.031†	10397.3	0.479637 mg/L	0.0017640	0.479637 mg/L	0.0017640	0.37%
QC value within limits for Mo	202.031	Recovery = 95.93%				
Na 330.237†	56525.3	46.1585 mg/L	0.41941	46.1585 mg/L	0.41941	0.91%
QC value within limits for Na	330.237	Recovery = 92.32%				
Ni 231.604†	29512.9	0.478510 mg/L	0.0046319	0.478510 mg/L	0.0046319	0.97%
QC value within limits for Ni	231.604	Recovery = 95.70%				
Pb 220.353†	7441.3	0.477842 mg/L	0.0008552	0.477842 mg/L	0.0008552	0.18%
QC value within limits for Pb	220.353	Recovery = 95.57%				
Sb 206.836†	1121.2	0.479678 mg/L	0.0029111	0.479678 mg/L	0.0029111	0.61%
QC value within limits for Sb	206.836	Recovery = 95.94%				
Se 196.026†	613.7	0.467319 mg/L	0.0014759	0.467319 mg/L	0.0014759	0.32%
QC value within limits for Se	196.026	Recovery = 93.46%				
Sn 189.927†	2136.4	0.482045 mg/L	0.0024008	0.482045 mg/L	0.0024008	0.50%
QC value within limits for Sn	189.927	Recovery = 96.41%				
Ti 334.940†	312592.9	0.475711 mg/L	0.0049114	0.475711 mg/L	0.0049114	1.03%
QC value within limits for Ti	334.940	Recovery = 95.14%				
Tl 190.801†	857.3	0.491801 mg/L	0.0000913	0.491801 mg/L	0.0000913	0.02%
QC value within limits for Tl	190.801	Recovery = 98.36%				
V 290.880†	71267.1	0.473767 mg/L	0.0025684	0.473767 mg/L	0.0025684	0.54%
QC value within limits for V	290.880	Recovery = 94.75%				
Zn 206.200†	30049.4	0.471597 mg/L	0.0019570	0.471597 mg/L	0.0019570	0.41%
QC value within limits for Zn	206.200	Recovery = 94.32%				

All analyte(s) passed QC.

Sequence No.: 20
 Sample ID: LLCCV V-176606 [aq]
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 11/16/2013 4:39:28 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1076277.2	100 %		0.0			0.05%
Y 371.029	373087.4	99.6 %		0.01			0.01%
Ag 328.068†	3689.2	0.0196242 mg/L	0.00019748	0.0196242 mg/L	0.00019748	1.01%	
QC value within limits for Ag	328.068	Recovery = 98.12%					
Al 308.215†	5244.1	0.194240 mg/L	0.0045826	0.194240 mg/L	0.0045826	2.36%	
QC value within limits for Al	308.215	Recovery = 97.12%					
As 188.979†	24.3	0.0209672 mg/L	0.00527248	0.0209672 mg/L	0.00527248	25.15%	
QC value within limits for As	188.979	Recovery = 104.84%					
Ba 233.527†	6175.8	0.0516965 mg/L	0.00006139	0.0516965 mg/L	0.00006139	0.12%	
QC value within limits for Ba	233.527	Recovery = 103.39%					
Be 313.107†	34056.0	0.0133962 mg/L	0.00002181	0.0133962 mg/L	0.00002181	0.16%	
QC value within limits for Be	313.107	Recovery = 111.63%					
Ca 315.887†	568561.9	5.18007 mg/L	0.017538	5.18007 mg/L	0.017538	0.34%	
QC value within limits for Ca	315.887	Recovery = 103.60%					
Cd 228.802†	686.7	0.0122678 mg/L	0.00009742	0.0122678 mg/L	0.00009742	0.79%	
QC value within limits for Cd	228.802	Recovery = 102.23%					
Co 228.616†	936.2	0.0205576 mg/L	0.00003195	0.0205576 mg/L	0.00003195	0.16%	
QC value within limits for Co	228.616	Recovery = 102.79%					
Cr 267.716†	4025.9	0.0516805 mg/L	0.00000904	0.0516805 mg/L	0.00000904	0.02%	
QC value within limits for Cr	267.716	Recovery = 103.36%					
Cu 327.393†	6796.5	0.0553052 mg/L	0.00219853	0.0553052 mg/L	0.00219853	3.98%	
QC value within limits for Cu	327.393	Recovery = 110.61%					
Fe 273.955†	6639.4	0.307946 mg/L	0.0000374	0.307946 mg/L	0.0000374	0.01%	
QC value within limits for Fe	273.955	Recovery = 102.65%					
K 404.721†	925.5	6.42510 mg/L	2.035508	6.42510 mg/L	2.035508	31.68%	
QC value within limits for K	404.721	Recovery = 128.50%					
Mg 279.077†	104616.5	5.23207 mg/L	0.009422	5.23207 mg/L	0.009422	0.18%	
QC value within limits for Mg	279.077	Recovery = 104.64%					
Mn 257.610†	30929.3	0.0409076 mg/L	0.00008602	0.0409076 mg/L	0.00008602	0.21%	
QC value within limits for Mn	257.610	Recovery = 102.27%					
Mo 202.031†	441.3	0.0212074 mg/L	0.00010126	0.0212074 mg/L	0.00010126	0.48%	
QC value within limits for Mo	202.031	Recovery = 106.04%					
Na 330.237†	5137.6	4.90301 mg/L	0.077409	4.90301 mg/L	0.077409	1.58%	
QC value within limits for Na	330.237	Recovery = 98.06%					
Ni 231.604†	3036.8	0.0511229 mg/L	0.00019143	0.0511229 mg/L	0.00019143	0.37%	
QC value within limits for Ni	231.604	Recovery = 102.25%					
Pb 220.353†	198.6	0.0118459 mg/L	0.00017196	0.0118459 mg/L	0.00017196	1.45%	
QC value within limits for Pb	220.353	Recovery = 98.72%					
Sb 206.836†	54.3	0.0239455 mg/L	0.00077440	0.0239455 mg/L	0.00077440	3.23%	
QC value within limits for Sb	206.836	Recovery = 119.73%					
Se 196.026†	48.5	0.0374720 mg/L	0.00016157	0.0374720 mg/L	0.00016157	0.43%	
QC value within limits for Se	196.026	Recovery = 93.68%					
Sn 189.927†	198.6	0.0451398 mg/L	0.00012834	0.0451398 mg/L	0.00012834	0.28%	
QC value within limits for Sn	189.927	Recovery = 90.28%					
Ti 334.940†	30668.0	0.0491560 mg/L	0.00018342	0.0491560 mg/L	0.00018342	0.37%	
QC value within limits for Ti	334.940	Recovery = 98.31%					
Tl 190.801†	30.3	0.0179351 mg/L	0.00232494	0.0179351 mg/L	0.00232494	12.96%	
QC value within limits for Tl	190.801	Recovery = 89.68%					
V 290.880†	7372.4	0.0510893 mg/L	0.00002516	0.0510893 mg/L	0.00002516	0.05%	
QC value within limits for V	290.880	Recovery = 102.18%					
Zn 206.200†	3042.3	0.0491802 mg/L	0.00002514	0.0491802 mg/L	0.00002514	0.05%	
QC value within limits for Zn	206.200	Recovery = 98.36%					

All analyte(s) passed QC.

Sequence No.: 21
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 11/16/2013 4:43:07 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte		Mean Corrected		Calib		Sample			
		Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc	361.383	1094213.5	102	%	0.3				0.31%
Y	371.029	378886.4	101	%	0.3				0.25%
Ag	328.068†	-142.2	0.0001207	mg/L	0.00015188	0.0001207	mg/L	0.00015188	125.88%
	QC value	within limits	for Ag	328.068	Recovery	=	Not calculated		
Al	308.215†	-336.1	-0.0080258	mg/L	0.00361318	-0.0080258	mg/L	0.00361318	45.02%
	QC value	within limits	for Al	308.215	Recovery	=	Not calculated		
As	188.979†	-1.8	0.0028927	mg/L	0.00209127	0.0028927	mg/L	0.00209127	72.29%
	QC value	within limits	for As	188.979	Recovery	=	Not calculated		
Ba	233.527†	131.7	0.0029306	mg/L	0.00001978	0.0029306	mg/L	0.00001978	0.68%
	QC value	within limits	for Ba	233.527	Recovery	=	Not calculated		
Be	313.107†	434.9	0.0019991	mg/L	0.00001717	0.0019991	mg/L	0.00001717	0.86%
	QC value	within limits	for Be	313.107	Recovery	=	Not calculated		
Ca	315.887†	139.5	0.190241	mg/L	0.0055757	0.190241	mg/L	0.0055757	2.93%
	QC value	within limits	for Ca	315.887	Recovery	=	Not calculated		
Cd	228.802†	-34.7	0.0008932	mg/L	0.00014232	0.0008932	mg/L	0.00014232	15.93%
	QC value	within limits	for Cd	228.802	Recovery	=	Not calculated		
Co	228.616†	-19.9	0.0007250	mg/L	0.00027007	0.0007250	mg/L	0.00027007	37.25%
	QC value	within limits	for Co	228.616	Recovery	=	Not calculated		
Cr	267.716†	9.9	0.0029318	mg/L	0.00012575	0.0029318	mg/L	0.00012575	4.29%
	QC value	within limits	for Cr	267.716	Recovery	=	Not calculated		
Cu	327.393†	102.9	0.0033342	mg/L	0.00103632	0.0033342	mg/L	0.00103632	31.08%
	QC value	within limits	for Cu	327.393	Recovery	=	Not calculated		
Fe	273.955†	1.7	0.0163006	mg/L	0.00083475	0.0163006	mg/L	0.00083475	5.12%
	QC value	within limits	for Fe	273.955	Recovery	=	Not calculated		
K	404.721†	967.8	6.87014	mg/L	2.433483	6.87014	mg/L	2.433483	35.42%
	QC value	greater than	the upper limit	for K 404.721	Recovery	=	Not calculated		
Mg	279.077†	143.4	0.208594	mg/L	0.0019026	0.208594	mg/L	0.0019026	0.91%
	QC value	within limits	for Mg	279.077	Recovery	=	Not calculated		
Mn	257.610†	-11.3	0.0023312	mg/L	0.00000051	0.0023312	mg/L	0.00000051	0.02%
	QC value	within limits	for Mn	257.610	Recovery	=	Not calculated		
Mo	202.031†	10.6	0.0014916	mg/L	0.00000740	0.0014916	mg/L	0.00000740	0.50%
	QC value	within limits	for Mo	202.031	Recovery	=	Not calculated		
Na	330.237†	-85.6	0.709705	mg/L	0.0639699	0.709705	mg/L	0.0639699	9.01%
	QC value	within limits	for Na	330.237	Recovery	=	Not calculated		
Ni	231.604†	-14.4	0.0019065	mg/L	0.00020278	0.0019065	mg/L	0.00020278	10.64%
	QC value	within limits	for Ni	231.604	Recovery	=	Not calculated		
Pb	220.353†	27.9	0.0008750	mg/L	0.00099166	0.0008750	mg/L	0.00099166	113.33%
	QC value	within limits	for Pb	220.353	Recovery	=	Not calculated		
Sb	206.836†	10.6	0.0052751	mg/L	0.00324167	0.0052751	mg/L	0.00324167	61.45%
	QC value	within limits	for Sb	206.836	Recovery	=	Not calculated		
Se	196.026†	5.4	0.0047264	mg/L	0.00003795	0.0047264	mg/L	0.00003795	0.80%
	QC value	within limits	for Se	196.026	Recovery	=	Not calculated		
Sn	189.927†	3.5	0.0011760	mg/L	0.00052292	0.0011760	mg/L	0.00052292	44.47%
	QC value	within limits	for Sn	189.927	Recovery	=	Not calculated		
Ti	334.940†	184.9	0.0030348	mg/L	0.00010831	0.0030348	mg/L	0.00010831	3.57%
	QC value	within limits	for Ti	334.940	Recovery	=	Not calculated		
Tl	190.801†	-0.8	-0.0000966	mg/L	0.00244704	-0.0000966	mg/L	0.00244704	>999.9%
	QC value	within limits	for Tl	190.801	Recovery	=	Not calculated		
V	290.880†	-93.4	0.0016958	mg/L	0.00049618	0.0016958	mg/L	0.00049618	29.26%
	QC value	within limits	for V	290.880	Recovery	=	Not calculated		
Zn	206.200†	7.2	0.0016862	mg/L	0.00013352	0.0016862	mg/L	0.00013352	7.92%
	QC value	within limits	for Zn	206.200	Recovery	=	Not calculated		
QC Failed. Continue with analysis.									

Sequence No.: 22
 Sample ID: 75576-016
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 82
 Date Collected: 11/16/2013 4:46:41 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-016

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1074596.2	100.0	%	2.72			2.72%
Y 371.029	368987.7	98.5	%	2.71			2.75%
Ag 328.068†	-64.9	0.0005148	mg/L	0.00051048	0.0005148 mg/L	0.00051048	99.17%
Al 308.215†	323.7	0.0159069	mg/L	0.00883324	0.0159069 mg/L	0.00883324	55.53%
As 188.979†	1.6	0.0051388	mg/L	0.00166460	0.0051388 mg/L	0.00166460	32.39%
Ba 233.527†	1325.3	0.0125627	mg/L	0.00012143	0.0125627 mg/L	0.00012143	0.97%
Be 313.107†	148.7	0.0019020	mg/L	0.00000760	0.0019020 mg/L	0.00000760	0.40%
Ca 315.887†	1287118.2	11.4895	mg/L	0.21028	11.4895 mg/L	0.21028	1.83%
Cd 228.802†	-9.8	0.0012392	mg/L	0.00030910	0.0012392 mg/L	0.00030910	24.94%
Co 228.616†	-5.6	0.0010285	mg/L	0.00005647	0.0010285 mg/L	0.00005647	5.49%
Cr 267.716†	58.1	0.0035239	mg/L	0.00005539	0.0035239 mg/L	0.00005539	1.57%
Cu 327.393†	651.3	0.0074443	mg/L	0.00213452	0.0074443 mg/L	0.00213452	28.67%
Fe 273.955†	320.8	0.0303210	mg/L	0.00060981	0.0303210 mg/L	0.00060981	2.01%
K 404.721†	838.7	5.50958	mg/L	4.497578	5.50958 mg/L	4.497578	81.63%
Mg 279.077†	86169.1	4.34486	mg/L	0.073759	4.34486 mg/L	0.073759	1.70%
Mn 257.610†	1276.5	0.0037914	mg/L	0.00006972	0.0037914 mg/L	0.00006972	1.84%
Mo 202.031†	42.7	0.0025809	mg/L	0.00020557	0.0025809 mg/L	0.00020557	7.97%
Na 330.237†	14900.8	12.7412	mg/L	0.36444	12.7412 mg/L	0.36444	2.86%
Ni 231.604†	13.9	0.0023657	mg/L	0.00024763	0.0023657 mg/L	0.00024763	10.47%
Pb 220.353†	29.7	0.0009761	mg/L	0.00111163	0.0009761 mg/L	0.00111163	113.88%
Sb 206.836†	5.6	0.0031168	mg/L	0.00155370	0.0031168 mg/L	0.00155370	49.85%
Se 196.026†	2.2	0.0020422	mg/L	0.01295990	0.0020422 mg/L	0.01295990	634.60%
Sn 189.927†	13.2	0.0029900	mg/L	0.00103258	0.0029900 mg/L	0.00103258	34.53%
Ti 334.940†	44.3	0.0028221	mg/L	0.00029163	0.0028221 mg/L	0.00029163	10.33%
Tl 190.801†	0.2	0.0005156	mg/L	0.00072071	0.0005156 mg/L	0.00072071	139.77%
V 290.880†	237.5	0.0037227	mg/L	0.00099193	0.0037227 mg/L	0.00099193	26.65%
Zn 206.200†	569.2	0.0104839	mg/L	0.00036921	0.0104839 mg/L	0.00036921	3.52%

Sequence No.: 23
 Sample ID: 75576-018
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 83
 Date Collected: 11/16/2013 4:50:18 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-018

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1110873.1	103	%	0.7			0.63%
Y 371.029	383873.4	102	%	0.3			0.26%
Ag 328.068†	-50.3	0.0005884	mg/L	0.00012519	0.0005884 mg/L	0.00012519	21.27%
Al 308.215†	758.0	0.0317008	mg/L	0.00184712	0.0317008 mg/L	0.00184712	5.83%
As 188.979†	-2.7	0.0022602	mg/L	0.00170732	0.0022602 mg/L	0.00170732	75.54%
Ba 233.527†	104.4	0.0027101	mg/L	0.00003876	0.0027101 mg/L	0.00003876	1.43%
Be 313.107†	245.0	0.0019346	mg/L	0.00000750	0.0019346 mg/L	0.00000750	0.39%
Ca 315.887†	5367.5	0.236123	mg/L	0.0138170	0.236123 mg/L	0.0138170	5.85%
Cd 228.802†	-11.0	0.0012666	mg/L	0.00027293	0.0012666 mg/L	0.00027293	21.55%
Co 228.616†	-7.6	0.0009800	mg/L	0.00006132	0.0009800 mg/L	0.00006132	6.26%
Cr 267.716†	9.6	0.0029273	mg/L	0.00017600	0.0029273 mg/L	0.00017600	6.01%
Cu 327.393†	116.8	0.0034415	mg/L	0.00174423	0.0034415 mg/L	0.00174423	50.68%
Fe 273.955†	197.8	0.0249153	mg/L	0.00002551	0.0249153 mg/L	0.00002551	0.10%
K 404.721†	293.9	-0.231653	mg/L	1.0339530	-0.231653 mg/L	1.0339530	446.34%
Mg 279.077†	75.3	0.205314	mg/L	0.0025992	0.205314 mg/L	0.0025992	1.27%
Mn 257.610†	98.4	0.0024687	mg/L	0.00001372	0.0024687 mg/L	0.00001372	0.56%
Mo 202.031†	5.4	0.0012527	mg/L	0.00021970	0.0012527 mg/L	0.00021970	17.54%
Na 330.237†	-4.4	0.774852	mg/L	0.0306996	0.774852 mg/L	0.0306996	3.96%
Ni 231.604†	-17.7	0.0018528	mg/L	0.00004403	0.0018528 mg/L	0.00004403	2.38%
Pb 220.353†	35.2	0.0013475	mg/L	0.00054643	0.0013475 mg/L	0.00054643	40.55%
Sb 206.836†	6.1	0.0033646	mg/L	0.00069785	0.0033646 mg/L	0.00069785	20.74%
Se 196.026†	3.1	0.0029521	mg/L	0.00310453	0.0029521 mg/L	0.00310453	105.16%
Sn 189.927†	1.0	0.0006079	mg/L	0.00042767	0.0006079 mg/L	0.00042767	70.35%
Ti 334.940†	144.3	0.0029735	mg/L	0.00014806	0.0029735 mg/L	0.00014806	4.98%
Tl 190.801†	4.2	0.0027336	mg/L	0.00221507	0.0027336 mg/L	0.00221507	81.03%
V 290.880†	-87.1	0.0017376	mg/L	0.00126780	0.0017376 mg/L	0.00126780	72.96%
Zn 206.200†	206.7	0.0048089	mg/L	0.00007781	0.0048089 mg/L	0.00007781	1.62%

Sequence No.: 24
 Sample ID: 75576-020
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 84
 Date Collected: 11/16/2013 4:53:55 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: 75576-020

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1087010.1	101	%	0.0			0.02%
Y 371.029	369601.1	98.7	%	0.46			0.46%
Ag 328.068†	-58.8	0.0005464	mg/L	0.00035425	0.0005464 mg/L	0.00035425	64.83%
Al 308.215†	566.7	0.0246821	mg/L	0.00019266	0.0246821 mg/L	0.00019266	0.78%
As 188.979†	0.9	0.0042116	mg/L	0.00009762	0.0042116 mg/L	0.00009762	2.32%
Ba 233.527†	5557.9	0.0467196	mg/L	0.00002487	0.0467196 mg/L	0.00002487	0.05%
Be 313.107†	126.4	0.0018945	mg/L	0.00001524	0.0018945 mg/L	0.00001524	0.80%
Ca 315.887†	4601153.8	40.5857	mg/L	0.03772	40.5857 mg/L	0.03772	0.09%
Cd 228.802†	8.9	0.0014115	mg/L	0.00009652	0.0014115 mg/L	0.00009652	6.84%
Co 228.616†	-2.9	0.0010941	mg/L	0.00004663	0.0010941 mg/L	0.00004663	4.26%
Cr 267.716†	38.3	0.0032989	mg/L	0.00027342	0.0032989 mg/L	0.00027342	8.29%
Cu 327.393†	688.2	0.0073339	mg/L	0.00196370	0.0073339 mg/L	0.00196370	26.78%
Fe 273.955†	520.0	0.0390746	mg/L	0.00031170	0.0390746 mg/L	0.00031170	0.80%
K 404.721†	915.6	6.32002	mg/L	1.227054	6.32002 mg/L	1.227054	19.42%
Mg 279.077†	133088.8	6.60086	mg/L	0.031157	6.60086 mg/L	0.031157	0.47%
Mn 257.610†	1939.5	0.0045390	mg/L	0.00003155	0.0045390 mg/L	0.00003155	0.70%
Mo 202.031†	101.9	0.0043012	mg/L	0.00030814	0.0043012 mg/L	0.00030814	7.16%
Na 330.237†	13426.4	11.5576	mg/L	0.05528	11.5576 mg/L	0.05528	0.48%
Ni 231.604†	-6.5	0.0020387	mg/L	0.00005474	0.0020387 mg/L	0.00005474	2.68%
Pb 220.353†	45.4	0.0019980	mg/L	0.00023898	0.0019980 mg/L	0.00023898	11.96%
Sb 206.836†	4.4	0.0026248	mg/L	0.00067724	0.0026248 mg/L	0.00067724	25.80%
Se 196.026†	9.8	0.0071376	mg/L	0.00146382	0.0071376 mg/L	0.00146382	20.51%
Sn 189.927†	10.1	0.0012311	mg/L	0.00106368	0.0012311 mg/L	0.00106368	86.40%
Ti 334.940†	-27.2	0.0027140	mg/L	0.00007502	0.0027140 mg/L	0.00007502	2.76%
Tl 190.801†	-2.6	0.0009373	mg/L	0.00143476	0.0009373 mg/L	0.00143476	153.07%
V 290.880†	274.1	0.0038717	mg/L	0.00037374	0.0038717 mg/L	0.00037374	9.65%
Zn 206.200†	661.8	0.0119322	mg/L	0.00000434	0.0119322 mg/L	0.00000434	0.04%

Sequence No.: 25
 Sample ID: 75576-022
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 85
 Date Collected: 11/16/2013 4:57:44 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-022

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1103892.1	103	%	0.8			0.73%
Y 371.029	380172.2	101	%	0.8			0.80%
Ag 328.068†	-171.8	0.0000496	mg/L	0.00025049	0.0000496	mg/L	0.00025049 505.34%
Al 308.215†	4001.8	0.149441	mg/L	0.0005841	0.149441	mg/L	0.0005841 0.39%
As 188.979†	0.1	0.0041665	mg/L	0.00056211	0.0041665	mg/L	0.00056211 13.49%
Ba 233.527†	4971.0	0.0419496	mg/L	0.00009116	0.0419496	mg/L	0.00009116 0.22%
Be 313.107†	274.0	0.0019428	mg/L	0.00000392	0.0019428	mg/L	0.00000392 0.20%
Ca 315.887†	1351497.5	12.0520	mg/L	0.00606	12.0520	mg/L	0.00606 0.05%
Cd 228.802†	106.7	0.0030687	mg/L	0.00028111	0.0030687	mg/L	0.00028111 9.16%
Co 228.616†	4.5	0.0012272	mg/L	0.00003980	0.0012272	mg/L	0.00003980 3.24%
Cr 267.716†	3615.6	0.0467109	mg/L	0.00019708	0.0467109	mg/L	0.00019708 0.42%
Cu 327.393†	862.9	0.0090786	mg/L	0.00215672	0.0090786	mg/L	0.00215672 23.76%
Fe 273.955†	20773.6	0.928972	mg/L	0.0028304	0.928972	mg/L	0.0028304 0.30%
K 404.721†	1540.5	12.9059	mg/L	0.70205	12.9059	mg/L	0.70205 5.44%
Mg 279.077†	52096.0	2.70764	mg/L	0.000813	2.70764	mg/L	0.000813 0.03%
Mn 257.610†	235332.3	0.297033	mg/L	0.0002920	0.297033	mg/L	0.0002920 0.10%
Mo 202.031†	43.4	0.0025903	mg/L	0.00033544	0.0025903	mg/L	0.00033544 12.95%
Na 330.237†	12555.1	10.8580	mg/L	0.04684	10.8580	mg/L	0.04684 0.43%
Ni 231.604†	215.8	0.0056205	mg/L	0.00014551	0.0056205	mg/L	0.00014551 2.59%
Pb 220.353†	90.3	0.0048257	mg/L	0.00029803	0.0048257	mg/L	0.00029803 6.18%
Sb 206.836†	2.9	0.0021108	mg/L	0.00173921	0.0021108	mg/L	0.00173921 82.39%
Se 196.026†	6.5	0.0053081	mg/L	0.01208523	0.0053081	mg/L	0.01208523 227.67%
Sn 189.927†	8.3	0.0018417	mg/L	0.00016349	0.0018417	mg/L	0.00016349 8.88%
Ti 334.940†	3222.3	0.0076304	mg/L	0.00019107	0.0076304	mg/L	0.00019107 2.50%
Tl 190.801†	1.5	0.0009662	mg/L	0.00128733	0.0009662	mg/L	0.00128733 133.24%
V 290.880†	201.6	0.0036025	mg/L	0.00011091	0.0036025	mg/L	0.00011091 3.08%
Zn 206.200†	777.7	0.0137105	mg/L	0.00000509	0.0137105	mg/L	0.00000509 0.04%

Sequence No.: 26
 Sample ID: 75576-024
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 86
 Date Collected: 11/16/2013 5:01:22 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-024

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1081636.1	101	%	1.2			1.21%
Y 371.029	368079.9	98.3	%	1.37			1.40%
Ag 328.068†	-184.9	-0.0000943	mg/L	0.00020086	-0.0000943	mg/L	0.00020086 213.03%
Al 308.215†	936.1	0.0380904	mg/L	0.00265423	0.0380904	mg/L	0.00265423 6.97%
As 188.979†	-0.2	0.0034134	mg/L	0.00330696	0.0034134	mg/L	0.00330696 96.88%
Ba 233.527†	6075.1	0.0508937	mg/L	0.00031981	0.0508937	mg/L	0.00031981 0.63%
Be 313.107†	156.5	0.0019046	mg/L	0.00000480	0.0019046	mg/L	0.00000480 0.25%
Ca 315.887†	5029389.8	44.3455	mg/L	0.02564	44.3455	mg/L	0.02564 0.06%
Cd 228.802†	3.6	0.0013125	mg/L	0.00011501	0.0013125	mg/L	0.00011501 8.76%
Co 228.616†	-14.9	0.0008449	mg/L	0.00005608	0.0008449	mg/L	0.00005608 6.64%
Cr 267.716†	23.8	0.0031243	mg/L	0.00017078	0.0031243	mg/L	0.00017078 5.47%
Cu 327.393†	525.8	0.0060190	mg/L	0.00092416	0.0060190	mg/L	0.00092416 15.35%
Fe 273.955†	524.1	0.0392554	mg/L	0.00024574	0.0392554	mg/L	0.00024574 0.63%
K 404.721†	1415.2	11.5859	mg/L	1.66894	11.5859	mg/L	1.66894 14.40%
Mg 279.077†	145319.4	7.18893	mg/L	0.033972	7.18893	mg/L	0.033972 0.47%
Mn 257.610†	2417.0	0.0051153	mg/L	0.00002449	0.0051153	mg/L	0.00002449 0.48%
Mo 202.031†	108.1	0.0044581	mg/L	0.00043465	0.0044581	mg/L	0.00043465 9.75%
Na 330.237†	14661.6	12.5492	mg/L	0.10896	12.5492	mg/L	0.10896 0.87%
Ni 231.604†	-14.1	0.0019177	mg/L	0.00002674	0.0019177	mg/L	0.00002674 1.39%
Pb 220.353†	32.2	0.0011517	mg/L	0.00037008	0.0011517	mg/L	0.00037008 32.13%
Sb 206.836†	5.2	0.0029315	mg/L	0.00142801	0.0029315	mg/L	0.00142801 48.71%
Se 196.026†	4.4	0.0029214	mg/L	0.00111467	0.0029214	mg/L	0.00111467 38.16%
Sn 189.927†	13.5	0.0018539	mg/L	0.00003896	0.0018539	mg/L	0.00003896 2.10%
Ti 334.940†	142.8	0.0029712	mg/L	0.00019743	0.0029712	mg/L	0.00019743 6.64%
Tl 190.801†	0.6	0.0008870	mg/L	0.00220454	0.0008870	mg/L	0.00220454 248.53%
V 290.880†	290.2	0.0039545	mg/L	0.00034582	0.0039545	mg/L	0.00034582 8.75%
Zn 206.200†	659.8	0.0119002	mg/L	0.00007035	0.0119002	mg/L	0.00007035 0.59%

Sequence No.: 27
 Sample ID: 75576-026
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 87
 Date Collected: 11/16/2013 5:05:09 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-026

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1085691.0	101	%	0.4			0.40%
Y 371.029	370586.9	98.9	%	0.07			0.07%
Ag 328.068†	-107.9	0.0002954	mg/L	0.00009363	0.0002954 mg/L	0.00009363	31.69%
Al 308.215†	961.0	0.0390356	mg/L	0.00199426	0.0390356 mg/L	0.00199426	5.11%
As 188.979†	-1.7	0.0028075	mg/L	0.00052670	0.0028075 mg/L	0.00052670	18.76%
Ba 233.527†	5017.9	0.0423625	mg/L	0.00033765	0.0423625 mg/L	0.00033765	0.80%
Be 313.107†	180.3	0.0019127	mg/L	0.00004995	0.0019127 mg/L	0.00004995	2.61%
Ca 315.887†	2084259.0	18.4881	mg/L	0.04636	18.4881 mg/L	0.04636	0.25%
Cd 228.802†	-37.6	0.0007699	mg/L	0.00001044	0.0007699 mg/L	0.00001044	1.36%
Co 228.616†	-9.3	0.0009530	mg/L	0.00000492	0.0009530 mg/L	0.00000492	0.52%
Cr 267.716†	83.6	0.0038366	mg/L	0.00005928	0.0038366 mg/L	0.00005928	1.55%
Cu 327.393†	370.3	0.0051632	mg/L	0.00159187	0.0051632 mg/L	0.00159187	30.83%
Fe 273.955†	88.4	0.0201106	mg/L	0.00010889	0.0201106 mg/L	0.00010889	0.54%
K 404.721†	1115.0	8.42176	mg/L	2.394881	8.42176 mg/L	2.394881	28.44%
Mg 279.077†	187051.4	9.19547	mg/L	0.037737	9.19547 mg/L	0.037737	0.41%
Mn 257.610†	4654.7	0.0078432	mg/L	0.00002200	0.0078432 mg/L	0.00002200	0.28%
Mo 202.031†	50.9	0.0027188	mg/L	0.00051298	0.0027188 mg/L	0.00051298	18.87%
Na 330.237†	23313.6	19.4953	mg/L	0.09818	19.4953 mg/L	0.09818	0.50%
Ni 231.604†	6.3	0.0022431	mg/L	0.00003092	0.0022431 mg/L	0.00003092	1.38%
Pb 220.353†	35.4	0.0013315	mg/L	0.00041283	0.0013315 mg/L	0.00041283	31.01%
Sb 206.836†	7.1	0.0037355	mg/L	0.00274453	0.0037355 mg/L	0.00274453	73.47%
Se 196.026†	10.7	0.0084312	mg/L	0.00104705	0.0084312 mg/L	0.00104705	12.42%
Sn 189.927†	2.6	0.0003713	mg/L	0.00117879	0.0003713 mg/L	0.00117879	317.44%
Ti 334.940†	64.3	0.0028524	mg/L	0.00008704	0.0028524 mg/L	0.00008704	3.05%
Tl 190.801†	4.4	0.0028796	mg/L	0.00130428	0.0028796 mg/L	0.00130428	45.29%
V 290.880†	387.9	0.0045214	mg/L	0.00028616	0.0045214 mg/L	0.00028616	6.33%
Zn 206.200†	309.8	0.0064225	mg/L	0.00017137	0.0064225 mg/L	0.00017137	2.67%

Sequence No.: 28
 Sample ID: 75576-028
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 88
 Date Collected: 11/16/2013 5:08:56 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-028

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1084698.7	101 %		0.3			0.32%
Y 371.029	364946.4	97.4 %		0.23			0.23%
Ag 328.068†	-215.3	-0.0002495 mg/L		0.00009446	-0.0002495 mg/L	0.00009446	37.86%
Al 308.215†	885.7	0.0363064 mg/L		0.00082330	0.0363064 mg/L	0.00082330	2.27%
As 188.979†	1.0	0.0046877 mg/L		0.00223489	0.0046877 mg/L	0.00223489	47.68%
Ba 233.527†	8083.6	0.0671027 mg/L		0.00011767	0.0671027 mg/L	0.00011767	0.18%
Be 313.107†	260.2	0.0019397 mg/L		0.00000041	0.0019397 mg/L	0.00000041	0.02%
Ca 315.887†	1625194.6	14.4574 mg/L		0.02594	14.4574 mg/L	0.02594	0.18%
Cd 228.802†	-31.3	0.0008861 mg/L		0.00023831	0.0008861 mg/L	0.00023831	26.89%
Co 228.616†	-2.2	0.0010987 mg/L		0.00021486	0.0010987 mg/L	0.00021486	19.56%
Cr 267.716†	1236.7	0.0178204 mg/L		0.00020260	0.0178204 mg/L	0.00020260	1.14%
Cu 327.393†	503.7	0.0062557 mg/L		0.00108082	0.0062557 mg/L	0.00108082	17.28%
Fe 273.955†	410.2	0.0342482 mg/L		0.00008667	0.0342482 mg/L	0.00008667	0.25%
K 404.721†	1245.6	9.79837 mg/L		1.128759	9.79837 mg/L	1.128759	11.52%
Mg 279.077†	123660.1	6.14783 mg/L		0.000646	6.14783 mg/L	0.000646	0.01%
Mn 257.610†	49265.6	0.0638363 mg/L		0.00030338	0.0638363 mg/L	0.00030338	0.48%
Mo 202.031†	49.2	0.0027802 mg/L		0.00075240	0.0027802 mg/L	0.00075240	27.06%
Na 330.237†	18957.2	15.9978 mg/L		0.01303	15.9978 mg/L	0.01303	0.08%
Ni 231.604†	8.1	0.0022725 mg/L		0.00022574	0.0022725 mg/L	0.00022574	9.93%
Pb 220.353†	51.5	0.0023745 mg/L		0.00033635	0.0023745 mg/L	0.00033635	14.16%
Sb 206.836†	3.0	0.0020067 mg/L		0.00347410	0.0020067 mg/L	0.00347410	173.13%
Se 196.026†	8.4	0.0066984 mg/L		0.00670597	0.0066984 mg/L	0.00670597	100.11%
Sn 189.927†	9.5	0.0020536 mg/L		0.00047286	0.0020536 mg/L	0.00047286	23.03%
Ti 334.940†	294.8	0.0032011 mg/L		0.00002019	0.0032011 mg/L	0.00002019	0.63%
Tl 190.801†	2.1	0.0015210 mg/L		0.00016753	0.0015210 mg/L	0.00016753	11.01%
V 290.880†	271.9	0.0038930 mg/L		0.00007545	0.0038930 mg/L	0.00007545	1.94%
Zn 206.200†	409.8	0.0079868 mg/L		0.00006534	0.0079868 mg/L	0.00006534	0.82%

Sequence No.: 29
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/16/2013 5:12:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	969662.1	90.2 %		1.27			1.40%
Y 371.029	330451.6	88.2 %		1.27			1.44%
Ag 328.068†	-2848.3	0.0023430 mg/L		0.00004335	0.0023430 mg/L	0.00004335	1.85%
Al 308.215†	12868145.7	467.190 mg/L		5.6437	467.190 mg/L	5.6437	1.21%
QC value within limits for Al 308.215 Recovery = 93.44%							
As 188.979†	-13.0	0.0045671 mg/L		0.00182837	0.0045671 mg/L	0.00182837	40.03%
Ba 233.527†	827.0	0.0015679 mg/L		0.00009849	0.0015679 mg/L	0.00009849	6.28%
Be 313.107†	-1615.1	0.0013029 mg/L		0.00002805	0.0013029 mg/L	0.00002805	2.15%
Ca 315.887†	52463165.8	460.468 mg/L		4.9343	460.468 mg/L	4.9343	1.07%
QC value within limits for Ca 315.887 Recovery = 92.09%							
Cd 228.802†	247.3	-0.0002511 mg/L		0.00029056	-0.0002511 mg/L	0.00029056	115.71%
Co 228.616†	-69.8	-0.0002265 mg/L		0.00015378	-0.0002265 mg/L	0.00015378	67.89%
Cr 267.716†	-205.4	0.0004441 mg/L		0.00000813	0.0004441 mg/L	0.00000813	1.83%
Cu 327.393†	1704.1	0.0038367 mg/L		0.00128005	0.0038367 mg/L	0.00128005	33.36%
Fe 273.955†	4186616.1	183.967 mg/L		0.2284	183.967 mg/L	0.2284	0.12%
QC value within limits for Fe 273.955 Recovery = 91.98%							
K 404.721†	-1202.3	-15.9995 mg/L		3.89087	-15.9995 mg/L	3.89087	24.32%
Mg 279.077†	10085150.4	484.983 mg/L		4.8705	484.983 mg/L	4.8705	1.00%
QC value within limits for Mg 279.077 Recovery = 97.00%							
Mn 257.610†	1442.1	-0.0138282 mg/L		0.00014209	-0.0138282 mg/L	0.00014209	1.03%
Mo 202.031†	507.3	-0.0000525 mg/L		0.00022200	-0.0000525 mg/L	0.00022200	422.51%
Na 330.237†	94.4	0.854222 mg/L		0.0555498	0.854222 mg/L	0.0555498	6.50%
Ni 231.604†	26.5	0.0025938 mg/L		0.00003961	0.0025938 mg/L	0.00003961	1.53%
Pb 220.353†	-1296.9	-0.0025777 mg/L		0.00014087	-0.0025777 mg/L	0.00014087	5.46%
Sb 206.836†	-98.1	0.0012514 mg/L		0.00114701	0.0012514 mg/L	0.00114701	91.66%
Se 196.026†	-126.7	-0.0132838 mg/L		0.00747804	-0.0132838 mg/L	0.00747804	56.29%
Sn 189.927†	-16.4	-0.0154866 mg/L		0.00045008	-0.0154866 mg/L	0.00045008	2.91%
Ti 334.940†	725.6	0.0038530 mg/L		0.00010246	0.0038530 mg/L	0.00010246	2.66%
Tl 190.801†	3.9	-0.0043579 mg/L		0.00343005	-0.0043579 mg/L	0.00343005	78.71%
V 290.880†	4555.7	0.0055415 mg/L		0.00073838	0.0055415 mg/L	0.00073838	13.32%
Zn 206.200†	655.9	-0.0033267 mg/L		0.00051510	-0.0033267 mg/L	0.00051510	15.48%

All analyte(s) passed QC.

Sequence No.: 30
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/16/2013 5:18:05 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	975817.7	90.8 %		0.22			0.25%
Y 371.029	332622.0	88.8 %		0.05			0.06%
Ag 328.068†	202474.0	1.04623 mg/L		0.000518	1.04623 mg/L	0.000518	0.05%
QC value within limits for Ag	328.068	Recovery = 104.62%					
Al 308.215†	12891227.6	468.028 mg/L		1.5916	468.028 mg/L	1.5916	0.34%
QC value within limits for Al	308.215	Recovery = 93.61%					
As 188.979†	1460.3	1.02321 mg/L		0.000601	1.02321 mg/L	0.000601	0.06%
QC value within limits for As	188.979	Recovery = 102.32%					
Ba 233.527†	62836.9	0.501965 mg/L		0.0027897	0.501965 mg/L	0.0027897	0.56%
QC value within limits for Ba	233.527	Recovery = 100.39%					
Be 313.107†	1505614.7	0.512978 mg/L		0.0001212	0.512978 mg/L	0.0001212	0.02%
QC value within limits for Be	313.107	Recovery = 102.60%					
Ca 315.887†	52656638.8	462.163 mg/L		2.1630	462.163 mg/L	2.1630	0.47%
QC value within limits for Ca	315.887	Recovery = 92.43%					
Cd 228.802†	65341.2	1.02853 mg/L		0.005208	1.02853 mg/L	0.005208	0.51%
QC value within limits for Cd	228.802	Recovery = 102.85%					
Co 228.616†	23557.7	0.490377 mg/L		0.0032532	0.490377 mg/L	0.0032532	0.66%
QC value within limits for Co	228.616	Recovery = 98.08%					
Cr 267.716†	40559.1	0.494268 mg/L		0.0048740	0.494268 mg/L	0.0048740	0.99%
QC value within limits for Cr	267.716	Recovery = 98.85%					
Cu 327.393†	67710.3	0.517082 mg/L		0.0007679	0.517082 mg/L	0.0007679	0.15%
QC value within limits for Cu	327.393	Recovery = 103.42%					
Fe 273.955†	4204118.0	184.736 mg/L		0.3386	184.736 mg/L	0.3386	0.18%
QC value within limits for Fe	273.955	Recovery = 92.37%					
K 404.721†	1591.3	-20.0991 mg/L		0.54044	-20.0991 mg/L	0.54044	2.69%
Mg 279.077†	10148801.5	488.046 mg/L		2.9791	488.046 mg/L	2.9791	0.61%
QC value within limits for Mg	279.077	Recovery = 97.61%					
Mn 257.610†	394148.5	0.477968 mg/L		0.0002753	0.477968 mg/L	0.0002753	0.06%
QC value within limits for Mn	257.610	Recovery = 95.59%					
Mo 202.031†	518.1	0.0003698 mg/L		0.00057101	0.0003698 mg/L	0.00057101	154.41%
Na 330.237†	1212.2	1.75160 mg/L		0.010056	1.75160 mg/L	0.010056	0.57%
Ni 231.604†	59080.7	0.954680 mg/L		0.0049377	0.954680 mg/L	0.0049377	0.52%
QC value within limits for Ni	231.604	Recovery = 95.47%					
Pb 220.353†	13779.4	0.965986 mg/L		0.0046605	0.965986 mg/L	0.0046605	0.48%
QC value within limits for Pb	220.353	Recovery = 96.60%					
Sb 206.836†	2294.4	1.02141 mg/L		0.004909	1.02141 mg/L	0.004909	0.48%
QC value within limits for Sb	206.836	Recovery = 102.14%					
Se 196.026†	1185.1	0.981438 mg/L		0.0154204	0.981438 mg/L	0.0154204	1.57%
QC value within limits for Se	196.026	Recovery = 98.14%					
Sn 189.927†	-17.0	-0.0156517 mg/L		0.00122993	-0.0156517 mg/L	0.00122993	7.86%
Ti 334.940†	760.0	0.0039050 mg/L		0.00016349	0.0039050 mg/L	0.00016349	4.19%
Tl 190.801†	1711.8	0.964349 mg/L		0.0040614	0.964349 mg/L	0.0040614	0.42%
QC value within limits for Tl	190.801	Recovery = 96.43%					
V 290.880†	78377.4	0.495967 mg/L		0.0012451	0.495967 mg/L	0.0012451	0.25%
QC value within limits for V	290.880	Recovery = 99.19%					
Zn 206.200†	61344.0	0.946699 mg/L		0.0054272	0.946699 mg/L	0.0054272	0.57%
QC value within limits for Zn	206.200	Recovery = 94.67%					

All analyte(s) passed QC.

Sequence No.: 31
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/16/2013 5:23:04 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1052684.1	97.9 %		0.14			0.14%
Y 371.029	356773.3	95.2 %		0.76			0.79%
Ag 328.068†	18274.4	0.0941636 mg/L	0.00025296	0.0941636 mg/L	0.00025296		0.27%
QC value within limits for Ag	328.068	Recovery = 94.16%					
Al 308.215†	132399.3	4.80314 mg/L	0.052366	4.80314 mg/L	0.052366		1.09%
QC value within limits for Al	308.215	Recovery = 96.06%					
As 188.979†	666.9	0.465743 mg/L	0.0029034	0.465743 mg/L	0.0029034		0.62%
QC value within limits for As	188.979	Recovery = 93.15%					
Ba 233.527†	59040.5	0.478149 mg/L	0.0054707	0.478149 mg/L	0.0054707		1.14%
QC value within limits for Ba	233.527	Recovery = 95.63%					
Be 313.107†	1392241.1	0.474321 mg/L	0.0023119	0.474321 mg/L	0.0023119		0.49%
QC value within limits for Be	313.107	Recovery = 94.86%					
Ca 315.887†	5523303.0	48.6692 mg/L	0.15318	48.6692 mg/L	0.15318		0.31%
QC value within limits for Ca	315.887	Recovery = 97.34%					
Cd 228.802†	29972.2	0.474823 mg/L	0.0006316	0.474823 mg/L	0.0006316		0.13%
QC value within limits for Cd	228.802	Recovery = 94.96%					
Co 228.616†	22757.7	0.474512 mg/L	0.0016728	0.474512 mg/L	0.0016728		0.35%
QC value within limits for Co	228.616	Recovery = 94.90%					
Cr 267.716†	39152.5	0.479568 mg/L	0.0036354	0.479568 mg/L	0.0036354		0.76%
QC value within limits for Cr	267.716	Recovery = 95.91%					
Cu 327.393†	60463.8	0.472032 mg/L	0.0040970	0.472032 mg/L	0.0040970		0.87%
QC value within limits for Cu	327.393	Recovery = 94.41%					
Fe 273.955†	109262.7	4.81699 mg/L	0.044891	4.81699 mg/L	0.044891		0.93%
QC value within limits for Fe	273.955	Recovery = 96.34%					
K 404.721†	4883.4	48.1361 mg/L	1.66893	48.1361 mg/L	1.66893		3.47%
QC value within limits for K	404.721	Recovery = 96.27%					
Mg 279.077†	1015649.7	49.0405 mg/L	0.20120	49.0405 mg/L	0.20120		0.41%
QC value within limits for Mg	279.077	Recovery = 98.08%					
Mn 257.610†	374985.0	0.470391 mg/L	0.0048040	0.470391 mg/L	0.0048040		1.02%
QC value within limits for Mn	257.610	Recovery = 94.08%					
Mo 202.031†	10337.6	0.476876 mg/L	0.0006943	0.476876 mg/L	0.0006943		0.15%
QC value within limits for Mo	202.031	Recovery = 95.38%					
Na 330.237†	55974.0	45.7160 mg/L	0.44728	45.7160 mg/L	0.44728		0.98%
QC value within limits for Na	330.237	Recovery = 91.43%					
Ni 231.604†	29365.9	0.476138 mg/L	0.0055500	0.476138 mg/L	0.0055500		1.17%
QC value within limits for Ni	231.604	Recovery = 95.23%					
Pb 220.353†	7386.5	0.474322 mg/L	0.0014684	0.474322 mg/L	0.0014684		0.31%
QC value within limits for Pb	220.353	Recovery = 94.86%					
Sb 206.836†	1124.8	0.481214 mg/L	0.0021990	0.481214 mg/L	0.0021990		0.46%
QC value within limits for Sb	206.836	Recovery = 96.24%					
Se 196.026†	611.8	0.465858 mg/L	0.0037836	0.465858 mg/L	0.0037836		0.81%
QC value within limits for Se	196.026	Recovery = 93.17%					
Sn 189.927†	2123.1	0.479031 mg/L	0.0031160	0.479031 mg/L	0.0031160		0.65%
QC value within limits for Sn	189.927	Recovery = 95.81%					
Ti 334.940†	311047.8	0.473374 mg/L	0.0052776	0.473374 mg/L	0.0052776		1.11%
QC value within limits for Ti	334.940	Recovery = 94.67%					
Tl 190.801†	850.9	0.488159 mg/L	0.0024670	0.488159 mg/L	0.0024670		0.51%
QC value within limits for Tl	190.801	Recovery = 97.63%					
V 290.880†	70784.1	0.470558 mg/L	0.0047225	0.470558 mg/L	0.0047225		1.00%
QC value within limits for V	290.880	Recovery = 94.11%					
Zn 206.200†	29849.2	0.468464 mg/L	0.0013116	0.468464 mg/L	0.0013116		0.28%
QC value within limits for Zn	206.200	Recovery = 93.69%					

All analyte(s) passed QC.

Autosampler Location: 5
Date Collected: 11/16/2013 5:27:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analyte		Mean Corrected	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc	361.383	1079570.3	100	%	0.2				0.21%
Y	371.029	373009.1	99.6	%	0.42				0.42%
Ag	328.068†	3627.2	0.0193093	mg/L	0.00039428	0.0193093	mg/L	0.00039428	2.04%
	QC value	within limits	for Ag	328.068	Recovery = 96.55%				
Al	308.215†	5531.2	0.204666	mg/L	0.0034609	0.204666	mg/L	0.0034609	1.69%
	QC value	within limits	for Al	308.215	Recovery = 102.33%				
As	188.979†	24.2	0.0208995	mg/L	0.00068917	0.0208995	mg/L	0.00068917	3.30%
	QC value	within limits	for As	188.979	Recovery = 104.50%				
Ba	233.527†	6158.0	0.0515521	mg/L	0.00001187	0.0515521	mg/L	0.00001187	0.02%
	QC value	within limits	for Ba	233.527	Recovery = 103.10%				
Be	313.107†	33996.5	0.0133760	mg/L	0.00002909	0.0133760	mg/L	0.00002909	0.22%
	QC value	within limits	for Be	313.107	Recovery = 111.47%				
Ca	315.887†	567499.3	5.17073	mg/L	0.012443	5.17073	mg/L	0.012443	0.24%
	QC value	within limits	for Ca	315.887	Recovery = 103.41%				
Cd	228.802†	676.9	0.0121129	mg/L	0.00041340	0.0121129	mg/L	0.00041340	3.41%
	QC value	within limits	for Cd	228.802	Recovery = 100.94%				
Co	228.616†	927.7	0.0203800	mg/L	0.00022303	0.0203800	mg/L	0.00022303	1.09%
	QC value	within limits	for Co	228.616	Recovery = 101.90%				
Cr	267.716†	4025.9	0.0516807	mg/L	0.00038317	0.0516807	mg/L	0.00038317	0.74%
	QC value	within limits	for Cr	267.716	Recovery = 103.36%				
Cu	327.393†	6240.6	0.0509824	mg/L	0.00014945	0.0509824	mg/L	0.00014945	0.29%
	QC value	within limits	for Cu	327.393	Recovery = 101.96%				
Fe	273.955†	6754.2	0.312990	mg/L	0.0002242	0.312990	mg/L	0.0002242	0.07%
	QC value	within limits	for Fe	273.955	Recovery = 104.33%				
K	404.721†	1503.0	12.5106	mg/L	2.43558	12.5106	mg/L	2.43558	19.47%
	QC value	greater than the upper limit	for K	404.721	Recovery = 250.21%				
Mg	279.077†	104474.4	5.22523	mg/L	0.016307	5.22523	mg/L	0.016307	0.31%
	QC value	within limits	for Mg	279.077	Recovery = 104.50%				
Mn	257.610†	30826.6	0.0407792	mg/L	0.00009961	0.0407792	mg/L	0.00009961	0.24%
	QC value	within limits	for Mn	257.610	Recovery = 101.95%				
Mo	202.031†	438.7	0.0210884	mg/L	0.00020358	0.0210884	mg/L	0.00020358	0.97%
	QC value	within limits	for Mo	202.031	Recovery = 105.44%				
Na	330.237†	5058.4	4.83945	mg/L	0.016496	4.83945	mg/L	0.016496	0.34%
	QC value	within limits	for Na	330.237	Recovery = 96.79%				
Ni	231.604†	2987.1	0.0503203	mg/L	0.00017288	0.0503203	mg/L	0.00017288	0.34%
	QC value	within limits	for Ni	231.604	Recovery = 100.64%				
Pb	220.353†	190.8	0.0113445	mg/L	0.00043374	0.0113445	mg/L	0.00043374	3.82%
	QC value	within limits	for Pb	220.353	Recovery = 94.54%				
Sb	206.836†								

Sequence No.: 33
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/16/2013 5:30:48 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	1096425.4	102 %		0.2			0.24%
Y 371.029	377573.1	101 %		0.0			0.03%
Ag 328.068†	-163.0	0.0000153 mg/L		0.00051729	0.0000153 mg/L	0.00051729	>999.9%
QC value within limits for Ag		328.068	Recovery = Not calculated				
Al 308.215†	-90.3	0.0009014 mg/L		0.00326744	0.0009014 mg/L	0.00326744	362.48%
QC value within limits for Al		308.215	Recovery = Not calculated				
As 188.979†	-3.9	0.0014631 mg/L		0.00216918	0.0014631 mg/L	0.00216918	148.26%
QC value within limits for As		188.979	Recovery = Not calculated				
Ba 233.527†	149.4	0.0030740 mg/L		0.00009983	0.0030740 mg/L	0.00009983	3.25%
QC value within limits for Ba		233.527	Recovery = Not calculated				
Be 313.107†	222.8	0.0019270 mg/L		0.00002036	0.0019270 mg/L	0.00002036	1.06%
QC value within limits for Be		313.107	Recovery = Not calculated				
Ca 315.887†	1013.1	0.197906 mg/L		0.0011256	0.197906 mg/L	0.0011256	0.57%
QC value within limits for Ca		315.887	Recovery = Not calculated				
Cd 228.802†	-52.0	0.0006195 mg/L		0.00007896	0.0006195 mg/L	0.00007896	12.75%
QC value within limits for Cd		228.802	Recovery = Not calculated				
Co 228.616†	-21.5	0.0006912 mg/L		0.00001854	0.0006912 mg/L	0.00001854	2.68%
QC value within limits for Co		228.616	Recovery = Not calculated				
Cr 267.716†	6.8	0.0028943 mg/L		0.00007297	0.0028943 mg/L	0.00007297	2.52%
QC value within limits for Cr		267.716	Recovery = Not calculated				
Cu 327.393†	-114.6	0.0016430 mg/L		0.00146110	0.0016430 mg/L	0.00146110	88.93%
QC value within limits for Cu		327.393	Recovery = Not calculated				
Fe 273.955†	58.5	0.0187949 mg/L		0.00073735	0.0187949 mg/L	0.00073735	3.92%
QC value within limits for Fe		273.955	Recovery = Not calculated				
K 404.721†	1146.0	8.74842 mg/L		0.072882	8.74842 mg/L	0.072882	0.83%
QC value greater than the upper limit for K 404.721			Recovery = Not calculated				
Mg 279.077†	357.1	0.218867 mg/L		0.0020062	0.218867 mg/L	0.0020062	0.92%
QC value within limits for Mg		279.077	Recovery = Not calculated				
Mn 257.610†	9.0	0.0023562 mg/L		0.00000633	0.0023562 mg/L	0.00000633	0.27%
QC value within limits for Mn		257.610	Recovery = Not calculated				
Mo 202.031†	7.8	0.0013648 mg/L		0.00039366	0.0013648 mg/L	0.00039366	28.84%
QC value within limits for Mo		202.031	Recovery = Not calculated				
Na 330.237†	-98.5	0.699350 mg/L		0.0587542	0.699350 mg/L	0.0587542	8.40%
QC value within limits for Na		330.237	Recovery = Not calculated				
Ni 231.604†	-27.0	0.0017033 mg/L		0.00016477	0.0017033 mg/L	0.00016477	9.67%
QC value within limits for Ni		231.604	Recovery = Not calculated				
Pb 220.353†	46.0	0.0020356 mg/L		0.00068422	0.0020356 mg/L	0.00068422	33.61%
QC value within limits for Pb		220.353	Recovery = Not calculated				
Sb 206.836†	3.0	0.0020655 mg/L		0.00020620	0.0020655 mg/L	0.00020620	9.98%
QC value within limits for Sb		206.836	Recovery = Not calculated				
Se 196.026†	11.3	0.0092063 mg/L		0.00381788	0.0092063 mg/L	0.00381788	41.47%
QC value within limits for Se		196.026	Recovery = Not calculated				
Sn 189.927†	-1.7	0.0000053 mg/L		0.00003728	0.0000053 mg/L	0.00003728	702.03%
QC value within limits for Sn		189.927	Recovery = Not calculated				
Ti 334.940†	275.9	0.0031726 mg/L		0.00002036	0.0031726 mg/L	0.00002036	0.64%
QC value within limits for Ti		334.940	Recovery = Not calculated				
Tl 190.801†	0.8	0.0008191 mg/L		0.00092612	0.0008191 mg/L	0.00092612	113.06%
QC value within limits for Tl		190.801	Recovery = Not calculated				
V 290.880†	-35.0	0.0020835 mg/L		0.00040785	0.0020835 mg/L	0.00040785	19.57%
QC value within limits for V		290.880	Recovery = Not calculated				
Zn 206.200†	9.2	0.0017185 mg/L		0.00000490	0.0017185 mg/L	0.00000490	0.29%
QC value within limits for Zn		206.200	Recovery = Not calculated				

QC Failed. Continue with analysis.

Analyst JBL 11/19/13

Method Loaded

Method Name: PE 2 4300DV RADIAL

IEC File: IECrad101413.iec

Method Description: 200.7/6010B/6010C

Method Last Saved: 11/14/2013 5:54:55 PM

MSF File:

Sequence No.: 1

Sample ID: Calib Blk 1 V-174666

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 11/18/2013 7:17:08 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib Blk 1 V-174666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	25805.6	0.48	0.00%	100.000	%
Sc 361.383	74124.5	364.33	0.49%	100	%
Al 308.215†	431.2	6.00	1.39%	[0.00]	mg/L
Ca 315.887†	903.9	5.09	0.56%	[0.00]	mg/L
Fe 273.955†	47.3	1.27	2.70%	[0.00]	mg/L
Mg 279.077†	-161.8	2.79	1.72%	[0.00]	mg/L
Mn 257.610†	135.8	0.74	0.54%	[0.00]	mg/L
K 766.490†	759.6	18.48	2.43%	[0.00]	mg/L
Na 589.592†	9815.2	10.00	0.10%	[0.00]	mg/L
Ti 334.940†	-217.1	6.24	2.88%	[0.00]	mg/L

15687
27462

Na, K reported

Sequence No.: 2

Sample ID: Calib 1 V-173273

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 11/18/2013 7:20:23 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib 1 V-173273

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	25763.9	95.93	0.37%	99.8385	%
Sc 361.383	73122.5	645.71	0.88%	98.6	%
Al 308.215†	179.2	15.22	8.49%	[0.1]	mg/L
Ca 315.887†	7423.1	41.43	0.56%	[1]	mg/L
Fe 273.955†	195.3	6.47	3.31%	[0.1]	mg/L
Mg 279.077†	1280.1	2.18	0.17%	[1]	mg/L
Mn 257.610†	528.0	13.69	2.59%	[0.01]	mg/L
K 766.490†	1288.2	7.30	0.57%	[1]	mg/L
Na 589.592†	7757.8	28.34	0.37%	[1]	mg/L
Ti 334.940†	479.7	9.52	1.98%	[0.01]	mg/L

Sequence No.: 3
Sample ID: Calib 2 V-173274
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 11/18/2013 7:23:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib 2 V-173274

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Y 371.029	24878.9	60.48	0.24%	96.4088 %
Sc 361.383	71637.3	7.69	0.01%	96.6 %
Al 308.215†	7605.3	16.60	0.22%	[5] mg/L
Ca 315.887†	405017.5	97.83	0.02%	[50] mg/L
Fe 273.955†	9068.4	35.13	0.39%	[5] mg/L
Mg 279.077†	70650.1	113.20	0.16%	[50] mg/L
Mn 257.610†	26664.3	6.53	0.02%	[0.5] mg/L
K 766.490†	78357.1	4.33	0.01%	[50] mg/L
Na 589.592†	432300.3	236.74	0.05%	[50] mg/L
Ti 334.940†	26185.4	19.87	0.08%	[0.5] mg/L

Sequence No.: 4

Sample ID: Calib 3 V-174144

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 11/18/2013 7:26:16 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib 3 V-174144

Analyte	Intensity	Std.Dev.	RSD	Conc. Units
Y 371.029	24100.0	276.45	1.15%	93.3904 %
Sc 361.383	69515.2	708.45	1.02%	93.8 %
Al 308.215†	15199.2	77.14	0.51%	[10] mg/L
Ca 315.887†	809789.8	6035.79	0.75%	[100] mg/L
Fe 273.955†	18058.4	32.35	0.18%	[10] mg/L
Mg 279.077†	138300.6	94.90	0.07%	[100] mg/L
Mn 257.610†	53155.1	31.21	0.06%	[1.0] mg/L
K 766.490†	159681.8	1104.37	0.69%	[100] mg/L
Na 589.592†	871856.3	5671.28	0.65%	[100] mg/L
Ti 334.940†	52280.2	25.35	0.05%	[1.0] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Al 308.215	3	Lin, Calc Int	13.4	1519	0.00000	0.999999	
Ca 315.887	3	Lin, Calc Int	-284.0	8102	0.00000	1.000000	
Fe 273.955	3	Lin, Calc Int	13.8	1806	0.00000	0.999998	
Mg 279.077	3	Lin, Calc Int	226.3	1386	0.00000	0.999935	
Mn 257.610	3	Lin, Calc Int	14.2	53170	0.00000	0.999999	
K 766.490	3	Lin, Calc Int	-410.2	1596	0.00000	0.999957	
Na 589.592	3	Lin, Calc Int	-1096.5	8717	0.00000	0.999991	
Ti 334.940	3	Lin, Calc Int	-11.3	52310	0.00000	0.999999	

Sequence No.: 5
 Sample ID: ICS3 V-173274
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 11/18/2013 7:28:59 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICS3 V-173274

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	24722.3	95.8019 %	0.99792			1.04%
Sc 361.383	70917.7	95.7 %	0.77			0.81%
Al 308.215†	7553.1	4.96504 mg/L	0.017314	4.96504 mg/L	0.017314	0.35%
QC value within limits for Al	308.215	Recovery = 99.30%				
Ca 315.887†	408010.4	50.3957 mg/L	0.73889	50.3957 mg/L	0.73889	1.47%
QC value within limits for Ca	315.887	Recovery = 100.79%				
Fe 273.955†	9035.8	4.99629 mg/L	0.023039	4.99629 mg/L	0.023039	0.46%
QC value within limits for Fe	273.955	Recovery = 99.93%				
Mg 279.077†	70076.3	50.3873 mg/L	0.01764	50.3873 mg/L	0.01764	0.04%
QC value within limits for Mg	279.077	Recovery = 100.77%				
Mn 257.610†	26567.8	0.502642 mg/L	0.0009749	0.502642 mg/L	0.0009749	0.19%
QC value within limits for Mn	257.610	Recovery = 100.53%				
K 766.490†	80920.2	50.9649 mg/L	0.21739	50.9649 mg/L	0.21739	0.43%
QC value within limits for K	766.490	Recovery = 101.93%				
Na 589.592†	433504.8	49.8555 mg/L	1.09607	49.8555 mg/L	1.09607	2.20%
QC value within limits for Na	589.592	Recovery = 99.71%				
Ti 334.940†	26055.8	0.498305 mg/L	0.0005896	0.498305 mg/L	0.0005896	0.12%
QC value within limits for Ti	334.940	Recovery = 99.66%				

All analyte(s) passed QC.

Sequence No.: 6
 Sample ID: ICV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/18/2013 7:31:41 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICV V-173510

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	24699.8	95.7149 %	1.85087			1.93%
Sc 361.383	71195.7	96.0 %	1.82			1.90%
Al 308.215†	7244.4	4.76179 mg/L	0.025361	4.76179 mg/L	0.025361	0.53%
QC value within limits for Al	308.215	Recovery = 95.24%				
Ca 315.887†	388453.3	47.9818 mg/L	1.83455	47.9818 mg/L	1.83455	3.82%
QC value within limits for Ca	315.887	Recovery = 95.96%				
Fe 273.955†	8649.6	4.78238 mg/L	0.026654	4.78238 mg/L	0.026654	0.56%
QC value within limits for Fe	273.955	Recovery = 95.65%				
Mg 279.077†	68116.2	48.9733 mg/L	0.14137	48.9733 mg/L	0.14137	0.29%
QC value within limits for Mg	279.077	Recovery = 97.95%				
Mn 257.610†	25077.1	0.474467 mg/L	0.0001847	0.474467 mg/L	0.0001847	0.04%
QC value within limits for Mn	257.610	Recovery = 94.89%				
K 766.490†	77440.7	48.7845 mg/L	0.65038	48.7845 mg/L	0.65038	1.33%
QC value within limits for K	766.490	Recovery = 97.57%				
Na 589.592†	412655.8	47.4638 mg/L	1.85387	47.4638 mg/L	1.85387	3.91%
QC value within limits for Na	589.592	Recovery = 94.93%				
Ti 334.940†	24670.6	0.471824 mg/L	0.0017900	0.471824 mg/L	0.0017900	0.38%
QC value within limits for Ti	334.940	Recovery = 94.36%				

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/18/2013 7:34:21 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV V-176606 [aq]

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25312.5	98.0892 %	0.67798			0.69%
Sc 361.383	73216.2	98.8 %	0.62			0.63%
Al 308.215†	275.7	0.172737 mg/L	0.0154507	0.172737 mg/L	0.0154507	8.94%
QC value within limits for Al	308.215	Recovery = 86.37%				
Ca 315.887†	39033.8	4.85299 mg/L	0.001938	4.85299 mg/L	0.001938	0.04%
QC value within limits for Ca	315.887	Recovery = 97.06%				
Fe 273.955†	536.6	0.289534 mg/L	0.0028142	0.289534 mg/L	0.0028142	0.97%
QC value within limits for Fe	273.955	Recovery = 96.51%				
Mg 279.077†	6822.9	4.75857 mg/L	0.077874	4.75857 mg/L	0.077874	1.64%
QC value within limits for Mg	279.077	Recovery = 95.17%				
Mn 257.610†	2027.8	0.0380575 mg/L	0.00035822	0.0380575 mg/L	0.00035822	0.94%
QC value within limits for Mn	257.610	Recovery = 95.14%				
K 766.490†	7470.0	4.93803 mg/L	0.062088	4.93803 mg/L	0.062088	1.26%
QC value within limits for K	766.490	Recovery = 98.76%				
Na 589.592†	40953.9	4.82383 mg/L	0.072913	4.82383 mg/L	0.072913	1.51%
QC value within limits for Na	589.592	Recovery = 96.48%				
Ti 334.940†	2332.8	0.0448108 mg/L	0.00068527	0.0448108 mg/L	0.00068527	1.53%
QC value within limits for Ti	334.940	Recovery = 89.62%				

All analyte(s) passed QC.

Sequence No.: 8
 Sample ID: ICB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 11/18/2013 7:37:34 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICB V-174666

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	26224.5	101.623 %	1.3896			1.37%
Sc 361.383	74969.8	101 %	1.2			1.22%
Al 308.215†	-4.6	-0.0118660 mg/L	0.00102555	-0.0118660 mg/L	0.00102555	8.64%
QC value within limits for Al	308.215	Recovery = Not calculated				
Ca 315.887†	-22.6	0.0322732 mg/L	0.00293262	0.0322732 mg/L	0.00293262	9.09%
QC value within limits for Ca	315.887	Recovery = Not calculated				
Fe 273.955†	18.1	0.0023696 mg/L	0.00534218	0.0023696 mg/L	0.00534218	225.45%
QC value within limits for Fe	273.955	Recovery = Not calculated				
Mg 279.077†	24.0	-0.145864 mg/L	0.0030324	-0.145864 mg/L	0.0030324	2.08%
QC value within limits for Mg	279.077	Recovery = Not calculated				
Mn 257.610†	-4.0	-0.0003406 mg/L	0.00005734	-0.0003406 mg/L	0.00005734	16.83%
QC value within limits for Mn	257.610	Recovery = Not calculated				
K 766.490†	105.8	0.323333 mg/L	0.0123498	0.323333 mg/L	0.0123498	3.82%
QC value within limits for K	766.490	Recovery = Not calculated				
Na 589.592†	14.7	0.127470 mg/L	0.0133546	0.127470 mg/L	0.0133546	10.48%
QC value within limits for Na	589.592	Recovery = Not calculated				
Ti 334.940†	6.0	0.0003312 mg/L	0.00004392	0.0003312 mg/L	0.00004392	13.26%
QC value within limits for Ti	334.940	Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 9
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/18/2013 7:40:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	23024.6	89.2233 %	0.39961			0.45%
Sc 361.383	66382.1	89.6 %	0.44			0.49%
Al 308.215†	744037.2	489.956 mg/L	4.3812	489.956 mg/L	4.3812	0.89%
QC value within limits for Al 308.215 Recovery = 97.99%						
Ca 315.887†	3894996.1	480.794 mg/L	4.5377	480.794 mg/L	4.5377	0.94%
QC value within limits for Ca 315.887 Recovery = 96.16%						
Fe 273.955†	337547.6	186.922 mg/L	2.0745	186.922 mg/L	2.0745	1.11%
QC value within limits for Fe 273.955 Recovery = 93.46%						
Mg 279.077†	693273.3	499.939 mg/L	3.5400	499.939 mg/L	3.5400	0.71%
QC value within limits for Mg 279.077 Recovery = 99.99%						
Mn 257.610†	-4784.6	0.0315921 mg/L	0.00177061	0.0315921 mg/L	0.00177061	5.60%
QC value within limits for Mn 257.610 Recovery = 3.16%						
K 766.490†	319.2	0.457048 mg/L	0.0410193	0.457048 mg/L	0.0410193	8.97%
QC value within limits for K 766.490 Recovery = 45.70%						
Na 589.592†	1251.6	0.269361 mg/L	0.0038046	0.269361 mg/L	0.0038046	1.41%
QC value within limits for Na 589.592 Recovery = 26.94%						
Ti 334.940†	-2895.8	-0.0551407 mg/L	0.00179094	-0.0551407 mg/L	0.00179094	3.25%
QC value within limits for Ti 334.940 Recovery = -5.51%						

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/18/2013 7:44:20 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	23092.2	89.4850 %	0.22320			0.25%
Sc 361.383	66804.5	90.1 %	0.06			0.06%
Al 308.215†	737702.7	485.785 mg/L	1.2392	485.785 mg/L	1.2392	0.26%
QC value within limits for Al 308.215 Recovery = 97.16%						
Ca 315.887†	3857646.8	476.184 mg/L	0.1218	476.184 mg/L	0.1218	0.03%
QC value within limits for Ca 315.887 Recovery = 95.24%						
Fe 273.955†	334974.4	185.497 mg/L	0.1576	185.497 mg/L	0.1576	0.08%
QC value within limits for Fe 273.955 Recovery = 92.75%						
Mg 279.077†	686848.6	495.304 mg/L	0.7845	495.304 mg/L	0.7845	0.16%
QC value within limits for Mg 279.077 Recovery = 99.06%						
Mn 257.610†	21589.6	0.526674 mg/L	0.0002091	0.526674 mg/L	0.0002091	0.04%
QC value within limits for Mn 257.610 Recovery = 105.33%						
K 766.490†	183.4	0.371955 mg/L	0.0305992	0.371955 mg/L	0.0305992	8.23%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	1018.0	0.242561 mg/L	0.0060808	0.242561 mg/L	0.0060808	2.51%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940†	-2839.5	-0.0540652 mg/L	0.00084823	-0.0540652 mg/L	0.00084823	1.57%
All analyte(s) passed QC.						

Sequence No.: 11
 Sample ID: MB 27402 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 63
 Date Collected: 11/18/2013 7:47:58 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 27402 (1)

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25911.8	100.411	%	0.0544			0.05%
Sc 361.383	75527.0	102	%	1.0			1.00%
Al 308.215†	95.3	0.0539408	mg/L	0.00160213	0.0539408 mg/L	0.00160213	2.97%
Ca 315.887†	425.8	0.0876178	mg/L	0.00319422	0.0876178 mg/L	0.00319422	3.65%
Fe 273.955†	58.9	0.0249843	mg/L	0.00023553	0.0249843 mg/L	0.00023553	0.94%
Mg 279.077†	77.8	-0.107097	mg/L	0.0080288	-0.107097 mg/L	0.0080288	7.50%
Mn 257.610†	-0.1	-0.0002534	mg/L	0.00017421	-0.0002534 mg/L	0.00017421	68.75%
K 766.490†	24.9	0.272633	mg/L	0.0113556	0.272633 mg/L	0.0113556	4.17%
Na 589.592†	-182.4	0.104859	mg/L	0.0008848	0.104859 mg/L	0.0008848	0.84%
Ti 334.940†	11.7	0.0004396	mg/L	0.00012909	0.0004396 mg/L	0.00012909	29.36%

Sequence No.: 12
 Sample ID: LCSW 27402
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 64
 Date Collected: 11/18/2013 7:51:09 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW 27402

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	24805.2	96.1234	%	0.50830			0.53%
Sc 361.383	71416.6	96.3	%	0.42			0.44%
Al 308.215†	7802.4	5.12924	mg/L	0.007577	5.12924 mg/L	0.007577	0.15%
Ca 315.887†	415768.8	51.3534	mg/L	0.06820	51.3534 mg/L	0.06820	0.13%
Fe 273.955†	9292.3	5.13831	mg/L	0.003704	5.13831 mg/L	0.003704	0.07%
Mg 279.077†	71542.7	51.4450	mg/L	0.05896	51.4450 mg/L	0.05896	0.11%
Mn 257.610†	27008.4	0.511021	mg/L	0.0016191	0.511021 mg/L	0.0016191	0.32%
K 766.490†	80113.4	50.4593	mg/L	0.33101	50.4593 mg/L	0.33101	0.66%
Na 589.592†	441209.5	50.7393	mg/L	0.13906	50.7393 mg/L	0.13906	0.27%
Ti 334.940†	26135.6	0.499830	mg/L	0.0001489	0.499830 mg/L	0.0001489	0.03%

Sequence No.: 13
 Sample ID: LCSW MR 27402
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 65
 Date Collected: 11/18/2013 7:53:51 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW MR 27402

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	24824.5	96.1979	%	0.83609			0.87%
Sc 361.383	71619.4	96.6	%	1.25			1.29%
Al 308.215†	7759.6	5.10105	mg/L	0.013990	5.10105 mg/L	0.013990	0.27%
Ca 315.887†	414276.4	51.1691	mg/L	0.30189	51.1691 mg/L	0.30189	0.59%
Fe 273.955†	9303.9	5.14474	mg/L	0.011351	5.14474 mg/L	0.011351	0.22%
Mg 279.077†	71062.5	51.0987	mg/L	0.08429	51.0987 mg/L	0.08429	0.16%
Mn 257.610†	26883.5	0.508675	mg/L	0.0003269	0.508675 mg/L	0.0003269	0.06%
K 766.490†	81881.6	51.5673	mg/L	0.15117	51.5673 mg/L	0.15117	0.29%
Na 589.592†	438648.8	50.4456	mg/L	0.43554	50.4456 mg/L	0.43554	0.86%
Ti 334.940†	26086.2	0.498886	mg/L	0.0000604	0.498886 mg/L	0.0000604	0.01%

Sequence No.: 14
 Sample ID: 75576-030
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 66
 Date Collected: 11/18/2013 7:56:33 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-030

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25704.9	99.6098	%	0.66360			0.67%
Sc 361.383	74170.1	100	%	0.7			0.67%
Al 308.215†	71.0	0.0379465	mg/L	0.00785046	0.0379465 mg/L	0.00785046	20.69%
Ca 315.887†	252354.0	31.1831	mg/L	0.03571	31.1831 mg/L	0.03571	0.11%
Fe 273.955†	65.0	0.0283350	mg/L	0.00534643	0.0283350 mg/L	0.00534643	18.87%
Mg 279.077†	5916.5	4.10474	mg/L	0.029295	4.10474 mg/L	0.029295	0.71%
Mn 257.610†	62.3	0.0009238	mg/L	0.00016428	0.0009238 mg/L	0.00016428	17.78%
K 766.490†	4151.2	2.85835	mg/L	0.006900	2.85835 mg/L	0.006900	0.24%
Na 589.592†	136267.6	15.7578	mg/L	0.01236	15.7578 mg/L	0.01236	0.08%
Ti 334.940†	-182.0	-0.0032638	mg/L	0.00016049	-0.0032638 mg/L	0.00016049	4.92%

Sequence No.: 15
 Sample ID: 75576-030 MR
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 67
 Date Collected: 11/18/2013 7:59:44 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-030 MR

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	25627.5	99.3098	%	0.03304				0.03%
Sc 361.383	73576.9	99.3	%	0.57				0.58%
Al 308.215†	94.1	0.0531522	mg/L	0.00892873	0.0531522	mg/L	0.00892873	16.80%
Ca 315.887†	247720.9	30.6112	mg/L	0.02232	30.6112	mg/L	0.02232	0.07%
Fe 273.955†	106.7	0.0514710	mg/L	0.00084945	0.0514710	mg/L	0.00084945	1.65%
Mg 279.077†	5848.0	4.05529	mg/L	0.053045	4.05529	mg/L	0.053045	1.31%
Mn 257.610†	42.5	0.0005656	mg/L	0.00001896	0.0005656	mg/L	0.00001896	3.35%
K 766.490†	4054.7	2.79785	mg/L	0.017231	2.79785	mg/L	0.017231	0.62%
Na 589.592†	135372.8	15.6551	mg/L	0.07258	15.6551	mg/L	0.07258	0.46%
Ti 334.940†	-171.5	-0.0030630	mg/L	0.00047819	-0.0030630	mg/L	0.00047819	15.61%

Sequence No.: 16
 Sample ID: 75576-032 MS 1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 68
 Date Collected: 11/18/2013 8:02:56 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-032 MS 1

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25114.8	97.3231 %	0.66690			0.69%
Sc 361.383	71329.9	96.2 %	0.50			0.52%
Al 308.215†	7742.1	5.08949 mg/L	0.007586	5.08949 mg/L	0.007586	0.15%
Ca 315.887†	670970.1	82.8528 mg/L	0.48534	82.8528 mg/L	0.48534	0.59%
Fe 273.955†	9347.0	5.16862 mg/L	0.017051	5.16862 mg/L	0.017051	0.33%
Mg 279.077†	76757.8	55.2071 mg/L	0.18073	55.2071 mg/L	0.18073	0.33%
Mn 257.610†	27063.5	0.512077 mg/L	0.0006142	0.512077 mg/L	0.0006142	0.12%
K 766.490†	84928.9	53.4769 mg/L	0.17521	53.4769 mg/L	0.17521	0.33%
Na 589.592†	592761.2	68.1247 mg/L	0.55980	68.1247 mg/L	0.55980	0.82%
Ti 334.940†	25884.6	0.495033 mg/L	0.0012950	0.495033 mg/L	0.0012950	0.26%

Sequence No.: 17
 Sample ID: 75576-034 MS 2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 69
 Date Collected: 11/18/2013 8:05:39 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: 75576-034 MS 2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25136.5	97.4070	%	0.29335			0.30%
Sc 361.383	71289.0	96.2	%	0.27			0.28%
Al 308.215†	7714.1	5.07111	mg/L	0.005095	5.07111 mg/L	0.005095	0.10%
Ca 315.887†	659331.8	81.4163	mg/L	0.57072	81.4163 mg/L	0.57072	0.70%
Fe 273.955†	9284.6	5.13407	mg/L	0.013816	5.13407 mg/L	0.013816	0.27%
Mg 279.077†	76519.6	55.0352	mg/L	0.12652	55.0352 mg/L	0.12652	0.23%
Mn 257.610†	26937.7	0.509688	mg/L	0.0003217	0.509688 mg/L	0.0003217	0.06%
K 766.490†	83434.3	52.5403	mg/L	0.12318	52.5403 mg/L	0.12318	0.23%
Na 589.592†	580065.7	66.6683	mg/L	0.45221	66.6683 mg/L	0.45221	0.68%
Ti 334.940†	25906.2	0.495445	mg/L	0.0010463	0.495445 mg/L	0.0010463	0.21%

Sequence No.: 18
 Sample ID: 75576-030 PS
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 70
 Date Collected: 11/18/2013 8:08:21 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: 75576-030 PS

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	24971.8	96.7687	%	0.49389			0.51%
Sc 361.383	70855.1	95.6	%	0.12			0.13%
Al 308.215†	8133.6	5.34730	mg/L	0.033225	5.34730 mg/L	0.033225	0.62%
Ca 315.887†	679133.4	83.8604	mg/L	1.13505	83.8604 mg/L	1.13505	1.35%
Fe 273.955†	9818.6	5.42979	mg/L	0.063382	5.42979 mg/L	0.063382	1.17%
Mg 279.077†	81298.5	58.4825	mg/L	0.85206	58.4825 mg/L	0.85206	1.46%
Mn 257.610†	28180.2	0.533248	mg/L	0.0070957	0.533248 mg/L	0.0070957	1.33%
K 766.490†	87573.6	55.1341	mg/L	1.30199	55.1341 mg/L	1.30199	2.36%
Na 589.592†	600341.8	68.9943	mg/L	1.09846	68.9943 mg/L	1.09846	1.59%
Ti 334.940†	25098.7	0.480009	mg/L	0.0052821	0.480009 mg/L	0.0052821	1.10%

Sequence No.: 19
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/18/2013 8:11:03 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	24889.7	96.4505 %		1.12243			1.16%
Sc 361.383	71304.3	96.2 %		1.23			1.28%
Al 308.215†	7287.9	4.79041 mg/L		0.003729	4.79041 mg/L	0.003729	0.08%
QC value within limits for Al	308.215	Recovery = 95.81%					
Ca 315.887†	383510.3	47.3717 mg/L		0.45583	47.3717 mg/L	0.45583	0.96%
QC value within limits for Ca	315.887	Recovery = 94.74%					
Fe 273.955†	8785.8	4.85782 mg/L		0.001045	4.85782 mg/L	0.001045	0.02%
QC value within limits for Fe	273.955	Recovery = 97.16%					
Mg 279.077†	67956.4	48.8580 mg/L		0.13076	48.8580 mg/L	0.13076	0.27%
QC value within limits for Mg	279.077	Recovery = 97.72%					
Mn 257.610†	25091.5	0.474787 mg/L		0.0018234	0.474787 mg/L	0.0018234	0.38%
QC value within limits for Mn	257.610	Recovery = 94.96%					
K 766.490†	75830.7	47.7756 mg/L		0.19626	47.7756 mg/L	0.19626	0.41%
QC value within limits for K	766.490	Recovery = 95.55%					
Na 589.592†	406124.6	46.7146 mg/L		0.47866	46.7146 mg/L	0.47866	1.02%
QC value within limits for Na	589.592	Recovery = 93.43%					
Ti 334.940†	24650.3	0.471437 mg/L		0.0019917	0.471437 mg/L	0.0019917	0.42%
QC value within limits for Ti	334.940	Recovery = 94.29%					

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/18/2013 8:13:43 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25353.5	98.2479 %		0.07914			0.08%
Sc 361.383	72535.0	97.9 %		0.02			0.02%
Al 308.215†	287.1	0.180259 mg/L		0.0027981	0.180259 mg/L	0.0027981	1.55%
QC value within limits for Al	308.215	Recovery = 90.13%					
Ca 315.887†	38993.3	4.84800 mg/L		0.006928	4.84800 mg/L	0.006928	0.14%
QC value within limits for Ca	315.887	Recovery = 96.96%					
Fe 273.955†	558.6	0.301710 mg/L		0.0009515	0.301710 mg/L	0.0009515	0.32%
QC value within limits for Fe	273.955	Recovery = 100.57%					
Mg 279.077†	6899.9	4.81414 mg/L		0.028230	4.81414 mg/L	0.028230	0.59%
QC value within limits for Mg	279.077	Recovery = 96.28%					
Mn 257.610†	2040.2	0.0382981 mg/L		0.00001119	0.0382981 mg/L	0.00001119	0.03%
QC value within limits for Mn	257.610	Recovery = 95.75%					
K 766.490†	7489.6	4.95029 mg/L		0.058520	4.95029 mg/L	0.058520	1.18%
QC value within limits for K	766.490	Recovery = 99.01%					
Na 589.592†	40973.2	4.82604 mg/L		0.032792	4.82604 mg/L	0.032792	0.68%
QC value within limits for Na	589.592	Recovery = 96.52%					
Ti 334.940†	2332.6	0.0448060 mg/L		0.00021569	0.0448060 mg/L	0.00021569	0.48%
QC value within limits for Ti	334.940	Recovery = 89.61%					

All analyte(s) passed QC.

Sequence No.: 21
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/18/2013 8:16:56 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25874.2	100.266 %		1.1624			1.16%
Sc 361.383	73943.4	99.8 %		0.65			0.65%
Al 308.215†	-12.9	-0.0172913 mg/L		0.00505493	-0.0172913 mg/L	0.00505493	29.23%
QC value within limits for Al	308.215	Recovery = Not calculated					
Ca 315.887†	27.7	0.0384721 mg/L		0.00087656	0.0384721 mg/L	0.00087656	2.28%
QC value within limits for Ca	315.887	Recovery = Not calculated					
Fe 273.955†	28.8	0.0083038 mg/L		0.00066244	0.0083038 mg/L	0.00066244	7.98%
QC value within limits for Fe	273.955	Recovery = Not calculated					
Mg 279.077†	0.7	-0.162713 mg/L		0.0014892	-0.162713 mg/L	0.0014892	0.92%
QC value within limits for Mg	279.077	Recovery = Not calculated					
Mn 257.610†	-11.4	-0.0004763 mg/L		0.00009896	-0.0004763 mg/L	0.00009896	20.77%
QC value within limits for Mn	257.610	Recovery = Not calculated					
K 766.490†	137.2	0.342991 mg/L		0.0028689	0.342991 mg/L	0.0028689	0.84%
QC value within limits for K	766.490	Recovery = Not calculated					
Na 589.592†	107.2	0.138084 mg/L		0.0223540	0.138084 mg/L	0.0223540	16.19%
QC value within limits for Na	589.592	Recovery = Not calculated					
Ti 334.940†	-40.5	-0.0005579 mg/L		0.00019837	-0.0005579 mg/L	0.00019837	35.55%
QC value within limits for Ti	334.940	Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 22
 Sample ID: 75576-030 SD
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 71
 Date Collected: 11/18/2013 8:20:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-030 SD

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25687.8	99.5436 %	1.25261			1.26%
Sc 361.383	73383.7	99.0 %	1.05			1.06%
Al 308.215†	-3.4	-0.0110900 mg/L	0.00567282	-0.0110900 mg/L	0.00567282	51.15%
Ca 315.887†	53380.8	6.62384 mg/L	0.016988	6.62384 mg/L	0.016988	0.26%
Fe 273.955†	47.1	0.0184317 mg/L	0.00111663	0.0184317 mg/L	0.00111663	6.06%
Mg 279.077†	1285.1	0.763818 mg/L	0.0077240	0.763818 mg/L	0.0077240	1.01%
Mn 257.610†	10.9	-0.0000501 mg/L	0.00019134	-0.0000501 mg/L	0.00019134	382.24%
K 766.490†	892.1	0.816045 mg/L	0.0216844	0.816045 mg/L	0.0216844	2.66%
Na 589.592†	28524.6	3.39799 mg/L	0.009222	3.39799 mg/L	0.009222	0.27%
Ti 334.940†	-64.8	-0.0010233 mg/L	0.00014468	-0.0010233 mg/L	0.00014468	14.14%

Sequence No.: 23
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/18/2013 8:23:22 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	22969.2	89.0086 %		0.17378			0.20%
Sc 361.383	66245.7	89.4 %		0.10			0.11%
Al 308.215†	748310.8	492.771 mg/L		5.3137	492.771 mg/L	5.3137	1.08%
QC value within limits for Al	308.215	Recovery = 98.55%					
Ca 315.887†	3902895.5	481.769 mg/L		4.8984	481.769 mg/L	4.8984	1.02%
QC value within limits for Ca	315.887	Recovery = 96.35%					
Fe 273.955†	340615.9	188.621 mg/L		1.8379	188.621 mg/L	1.8379	0.97%
QC value within limits for Fe	273.955	Recovery = 94.31%					
Mg 279.077†	694400.7	500.752 mg/L		4.7706	500.752 mg/L	4.7706	0.95%
QC value within limits for Mg	279.077	Recovery = 100.15%					
Mn 257.610†	-4805.7	0.0323040 mg/L		0.00046869	0.0323040 mg/L	0.00046869	1.45%
QC value within limits for Mn	257.610	Recovery = 3.23%					
K 766.490†	313.1	0.453200 mg/L		0.0136492	0.453200 mg/L	0.0136492	3.01%
QC value within limits for K	766.490	Recovery = 45.32%					
Na 589.592†	1167.8	0.259748 mg/L		0.0067416	0.259748 mg/L	0.0067416	2.60%
QC value within limits for Na	589.592	Recovery = 25.97%					
Ti 334.940†	-2975.2	-0.0566588 mg/L		0.00028734	-0.0566588 mg/L	0.00028734	0.51%
QC value within limits for Ti	334.940	Recovery = -5.67%					

All analyte(s) passed QC.

Sequence No.: 24
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/18/2013 8:27:01 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	22969.1	89.0082 %	0.90044			1.01%
Sc 361.383	66262.1	89.4 %	0.69			0.77%
Al 308.215†	745156.8	490.694 mg/L	6.0757	490.694 mg/L	6.0757	1.24%
QC value within limits for Al	308.215	Recovery = 98.14%				
Ca 315.887†	3885569.1	479.630 mg/L	5.8820	479.630 mg/L	5.8820	1.23%
QC value within limits for Ca	315.887	Recovery = 95.93%				
Fe 273.955†	339932.0	188.242 mg/L	2.4089	188.242 mg/L	2.4089	1.28%
QC value within limits for Fe	273.955	Recovery = 94.12%				
Mg 279.077†	692114.5	499.103 mg/L	6.2451	499.103 mg/L	6.2451	1.25%
QC value within limits for Mg	279.077	Recovery = 99.82%				
Mn 257.610†	21704.7	0.530628 mg/L	0.0017161	0.530628 mg/L	0.0017161	0.32%
QC value within limits for Mn	257.610	Recovery = 106.13%				
K 766.490†	180.4	0.370086 mg/L	0.0017872	0.370086 mg/L	0.0017872	0.48%
QC value within limits for K	766.490	Recovery = Not calculated				
Na 589.592†	1006.8	0.241277 mg/L	0.0061934	0.241277 mg/L	0.0061934	2.57%
QC value within limits for Na	589.592	Recovery = Not calculated				
Ti 334.940†	-3009.6	-0.0573166 mg/L	0.00091875	-0.0573166 mg/L	0.00091875	1.60%

All analyte(s) passed QC.

Sequence No.: 25
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/18/2013 8:30:44 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	24963.7	96.7374 %	1.12668			1.16%
Sc 361.383	71481.7	96.4 %	1.17			1.21%
Al 308.215†	7349.5	4.83100 mg/L	0.009829	4.83100 mg/L	0.009829	0.20%
QC value within limits for Al 308.215 Recovery = 96.62%						
Ca 315.887†	387939.4	47.9184 mg/L	0.52518	47.9184 mg/L	0.52518	1.10%
QC value within limits for Ca 315.887 Recovery = 95.84%						
Fe 273.955†	8830.7	4.88266 mg/L	0.019019	4.88266 mg/L	0.019019	0.39%
QC value within limits for Fe 273.955 Recovery = 97.65%						
Mg 279.077†	68240.6	49.0631 mg/L	0.04403	49.0631 mg/L	0.04403	0.09%
QC value within limits for Mg 279.077 Recovery = 98.13%						
Mn 257.610†	25119.3	0.475326 mg/L	0.0000925	0.475326 mg/L	0.0000925	0.02%
QC value within limits for Mn 257.610 Recovery = 95.07%						
K 766.490†	75884.0	47.8090 mg/L	0.15283	47.8090 mg/L	0.15283	0.32%
QC value within limits for K 766.490 Recovery = 95.62%						
Na 589.592†	408151.6	46.9471 mg/L	0.55251	46.9471 mg/L	0.55251	1.18%
QC value within limits for Na 589.592 Recovery = 93.89%						
Ti 334.940†	24528.9	0.469116 mg/L	0.0008141	0.469116 mg/L	0.0008141	0.17%
QC value within limits for Ti 334.940 Recovery = 93.82%						

All analyte(s) passed QC.

Sequence No.: 26

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/18/2013 8:33:28 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25329.4	98.1547 %		0.10621			0.11%
Sc 361.383	72707.4	98.1 %		0.64			0.65%
Al 308.215†	315.8	0.199131 mg/L		0.0004672	0.199131 mg/L	0.0004672	0.23%
QC value within limits for Al 308.215 Recovery = 99.57%							
Ca 315.887†	39469.9	4.90682 mg/L		0.001083	4.90682 mg/L	0.001083	0.02%
QC value within limits for Ca 315.887 Recovery = 98.14%							
Fe 273.955†	577.4	0.312092 mg/L		0.0052112	0.312092 mg/L	0.0052112	1.67%
QC value within limits for Fe 273.955 Recovery = 104.03%							
Mg 279.077†	6980.1	4.87198 mg/L		0.034176	4.87198 mg/L	0.034176	0.70%
QC value within limits for Mg 279.077 Recovery = 97.44%							
Mn 257.610†	2051.3	0.0385148 mg/L		0.00027882	0.0385148 mg/L	0.00027882	0.72%
QC value within limits for Mn 257.610 Recovery = 96.29%							
K 766.490†	7447.6	4.92398 mg/L		0.076786	4.92398 mg/L	0.076786	1.56%
QC value within limits for K 766.490 Recovery = 98.48%							
Na 589.592†	41075.9	4.83782 mg/L		0.030641	4.83782 mg/L	0.030641	0.63%
QC value within limits for Na 589.592 Recovery = 96.76%							
Ti 334.940†	2293.9	0.0440675 mg/L		0.00038694	0.0440675 mg/L	0.00038694	0.88%
QC value within limits for Ti 334.940 Recovery = 88.14%							

All analyte(s) passed QC.

Sequence No.: 27
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/18/2013 8:36:42 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	25858.8	100.206 %		0.0209			0.02%
Sc 361.383	73873.7	99.7 %		0.06			0.06%
Al 308.215†	8.5	-0.0032453 mg/L		0.00764343	-0.0032453 mg/L	0.00764343	235.52%
QC value within limits for Al 308.215 Recovery = Not calculated							
Ca 315.887†	87.5	0.0458510 mg/L		0.00090651	0.0458510 mg/L	0.00090651	1.98%
QC value within limits for Ca 315.887 Recovery = Not calculated							
Fe 273.955†	35.6	0.0120823 mg/L		0.00117640	0.0120823 mg/L	0.00117640	9.74%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	17.9	-0.150311 mg/L		0.0066831	-0.150311 mg/L	0.0066831	4.45%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	-19.3	-0.0006215 mg/L		0.00015936	-0.0006215 mg/L	0.00015936	25.64%
QC value within limits for Mn 257.610 Recovery = Not calculated							
K 766.490†	61.1	0.295311 mg/L		0.0238103	0.295311 mg/L	0.0238103	8.06%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	-137.3	0.110036 mg/L		0.0014702	0.110036 mg/L	0.0014702	1.34%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	-56.3	-0.0008611 mg/L		0.00016341	-0.0008611 mg/L	0.00016341	18.98%
QC value within limits for Ti 334.940 Recovery = Not calculated							

All analyte(s) passed QC.

=====

Sequence No.: 28
 Sample ID: 75576-002
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 75
 Date Collected: 11/18/2013 8:39:52 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-002

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	25577.9	99.1174 %		0.26753			0.27%
Sc 361.383	73756.0	99.5 %		0.59			0.59%
Al 308.215†	69.7	0.0370500 mg/L		0.00545222	0.0370500 mg/L	0.00545222	14.72%
Ca 315.887†	211695.0	26.1645 mg/L		0.01817	26.1645 mg/L	0.01817	0.07%
Fe 273.955†	107.8	0.0520357 mg/L		0.00002662	0.0520357 mg/L	0.00002662	0.05%
Mg 279.077†	5664.4	3.92287 mg/L		0.043612	3.92287 mg/L	0.043612	1.11%
Mn 257.610†	102.4	0.0016934 mg/L		0.00004877	0.0016934 mg/L	0.00004877	2.88%
K 766.490†	4928.0	3.34510 mg/L		0.007449	3.34510 mg/L	0.007449	0.22%
Na 589.592†	304316.3	35.0356 mg/L		0.01626	35.0356 mg/L	0.01626	0.05%
Ti 334.940†	-176.2	-0.0031523 mg/L		0.00055314	-0.0031523 mg/L	0.00055314	17.55%

Sequence No.: 29
 Sample ID: 75576-004
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 76
 Date Collected: 11/18/2013 8:43:04 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-004

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25295.8	98.0242	%	0.09217			0.09%
Sc 361.383	73108.6	98.6	%	0.17			0.17%
Al 308.215†	30.7	0.0113882	mg/L	0.01159589	0.0113882 mg/L	0.01159589	101.82%
Ca 315.887†	240458.0	29.7148	mg/L	0.14465	29.7148 mg/L	0.14465	0.49%
Fe 273.955†	144.6	0.0724476	mg/L	0.00329123	0.0724476 mg/L	0.00329123	4.54%
Mg 279.077†	6094.5	4.23310	mg/L	0.019677	4.23310 mg/L	0.019677	0.46%
Mn 257.610†	529.2	0.0097334	mg/L	0.00007953	0.0097334 mg/L	0.00007953	0.82%
K 766.490†	5367.8	3.62068	mg/L	0.042180	3.62068 mg/L	0.042180	1.16%
Na 589.592†	186215.5	21.4876	mg/L	0.08056	21.4876 mg/L	0.08056	0.37%
Ti 334.940†	-257.9	-0.0047147	mg/L	0.00020968	-0.0047147 mg/L	0.00020968	4.45%

Sequence No.: 30
 Sample ID: 75576-006
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 77
 Date Collected: 11/18/2013 8:46:16 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: 75576-006

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25409.9	98.4664	%	0.98183			1.00%
Sc 361.383	74380.6	100	%	0.3			0.28%
Al 308.215†	-5.1	-0.0121785	mg/L	0.00571135	-0.0121785 mg/L	0.00571135	46.90%
Ca 315.887†	225466.2	27.8643	mg/L	0.00674	27.8643 mg/L	0.00674	0.02%
Fe 273.955†	104.8	0.0504089	mg/L	0.00269681	0.0504089 mg/L	0.00269681	5.35%
Mg 279.077†	5163.3	3.56143	mg/L	0.046786	3.56143 mg/L	0.046786	1.31%
Mn 257.610†	65.8	0.0010037	mg/L	0.00017089	0.0010037 mg/L	0.00017089	17.03%
K 766.490†	6044.7	4.04490	mg/L	0.101353	4.04490 mg/L	0.101353	2.51%
Na 589.592†	80211.4	9.32727	mg/L	0.039861	9.32727 mg/L	0.039861	0.43%
Ti 334.940†	-249.1	-0.0045450	mg/L	0.00048699	-0.0045450 mg/L	0.00048699	10.71%

Sequence No.: 31
 Sample ID: 75576-008
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 78
 Date Collected: 11/18/2013 8:49:28 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-008

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	27194.9	105.384	%	0.5369			0.51%
Sc 361.383	75235.1	101	%	0.2			0.19%
Al 308.215†	599.7	0.386095	mg/L	0.0059140	0.386095 mg/L	0.0059140	1.53%
Ca 315.887†	79393.5	9.83458	mg/L	0.043286	9.83458 mg/L	0.043286	0.44%
Fe 273.955†	62.9	0.0271892	mg/L	0.00033582	0.0271892 mg/L	0.00033582	1.24%
Mg 279.077†	3790.6	2.57117	mg/L	0.031105	2.57117 mg/L	0.031105	1.21%
Mn 257.610†	27476.2	0.516487	mg/L	0.0024563	0.516487 mg/L	0.0024563	0.48%
K 766.490†	6500.2	4.33028	mg/L	0.015112	4.33028 mg/L	0.015112	0.35%
Na 589.592†	94047.2	10.9145	mg/L	0.03752	10.9145 mg/L	0.03752	0.34%
Ti 334.940†	-134.0	-0.0023462	mg/L	0.00024374	-0.0023462 mg/L	0.00024374	10.39%

Sequence No.: 32
 Sample ID: 75576-010
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 79
 Date Collected: 11/18/2013 8:52:40 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-010

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25751.6	99.7906	%	0.33491			0.34%
Sc 361.383	74410.7	100	%	0.7			0.70%
Al 308.215†	13.4	0.0000151	mg/L	0.00189231	0.0000151 mg/L	0.00189231	>999.9%
Ca 315.887†	144941.3	17.9251	mg/L	0.05247	17.9251 mg/L	0.05247	0.29%
Fe 273.955†	243.0	0.126912	mg/L	0.0002919	0.126912 mg/L	0.0002919	0.23%
Mg 279.077†	3581.3	2.42020	mg/L	0.031670	2.42020 mg/L	0.031670	1.31%
Mn 257.610†	1882.4	0.0352169	mg/L	0.00016652	0.0352169 mg/L	0.00016652	0.47%
K 766.490†	7135.6	4.72848	mg/L	0.049040	4.72848 mg/L	0.049040	1.04%
Na 589.592†	92033.2	10.6834	mg/L	0.03611	10.6834 mg/L	0.03611	0.34%
Ti 334.940†	-217.9	-0.0039493	mg/L	0.00000993	-0.0039493 mg/L	0.00000993	0.25%

Sequence No.: 33
 Sample ID: 75576-012
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 80
 Date Collected: 11/18/2013 8:55:52 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-012

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25525.6	98.9148	%	0.31742			0.32%
Sc 361.383	74248.2	100	%	0.9			0.93%
Al 308.215†	40.7	0.0179939	mg/L	0.00090353	0.0179939 mg/L	0.00090353	5.02%
Ca 315.887†	48496.6	6.02099	mg/L	0.019438	6.02099 mg/L	0.019438	0.32%
Fe 273.955†	87.9	0.0410390	mg/L	0.00177359	0.0410390 mg/L	0.00177359	4.32%
Mg 279.077†	3196.8	2.14282	mg/L	0.000060	2.14282 mg/L	0.000060	0.00%
Mn 257.610†	84.2	0.0013441	mg/L	0.00005440	0.0013441 mg/L	0.00005440	4.05%
K 766.490†	795.9	0.755789	mg/L	0.0127059	0.755789 mg/L	0.0127059	1.68%
Na 589.592†	66407.2	7.74372	mg/L	0.037049	7.74372 mg/L	0.037049	0.48%
Ti 334.940†	-150.2	-0.0026546	mg/L	0.00023369	-0.0026546 mg/L	0.00023369	8.80%

Sequence No.: 34
 Sample ID: 75576-014
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 81
 Date Collected: 11/18/2013 8:59:04 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-014

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25395.0	98.4089	%	0.78833			0.80%
Sc 361.383	73556.4	99.2	%	0.56			0.56%
Al 308.215†	21.3	0.0051761	mg/L	0.00118035	0.0051761 mg/L	0.00118035	22.80%
Ca 315.887†	158494.5	19.5980	mg/L	0.02848	19.5980 mg/L	0.02848	0.15%
Fe 273.955†	56.7	0.0237761	mg/L	0.00269545	0.0237761 mg/L	0.00269545	11.34%
Mg 279.077†	6090.0	4.22991	mg/L	0.008630	4.22991 mg/L	0.008630	0.20%
Mn 257.610†	709.1	0.0130845	mg/L	0.00013759	0.0130845 mg/L	0.00013759	1.05%
K 766.490†	12061.9	7.81546	mg/L	0.052272	7.81546 mg/L	0.052272	0.67%
Na 589.592†	225256.5	25.9662	mg/L	0.01517	25.9662 mg/L	0.01517	0.06%
Ti 334.940†	-240.7	-0.0043853	mg/L	0.00004051	-0.0043853 mg/L	0.00004051	0.92%

Sequence No.: 35
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/18/2013 9:02:16 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	24523.8	95.0328 %	0.85098			0.90%
Sc 361.383	70419.7	95.0 %	0.90			0.95%
Al 308.215†	7313.2	4.80707 mg/L	0.000959	4.80707 mg/L	0.000959	0.02%
QC value within limits for Al	308.215	Recovery = 96.14%				
Ca 315.887†	394740.0	48.7578 mg/L	0.31191	48.7578 mg/L	0.31191	0.64%
QC value within limits for Ca	315.887	Recovery = 97.52%				
Fe 273.955†	8893.7	4.91759 mg/L	0.003615	4.91759 mg/L	0.003615	0.07%
QC value within limits for Fe	273.955	Recovery = 98.35%				
Mg 279.077†	69007.7	49.6164 mg/L	0.10194	49.6164 mg/L	0.10194	0.21%
QC value within limits for Mg	279.077	Recovery = 99.23%				
Mn 257.610†	25254.7	0.477895 mg/L	0.0016458	0.477895 mg/L	0.0016458	0.34%
QC value within limits for Mn	257.610	Recovery = 95.58%				
K 766.490†	77155.3	48.6056 mg/L	0.14437	48.6056 mg/L	0.14437	0.30%
QC value within limits for K	766.490	Recovery = 97.21%				
Na 589.592†	417315.4	47.9983 mg/L	0.24826	47.9983 mg/L	0.24826	0.52%
QC value within limits for Na	589.592	Recovery = 96.00%				
Ti 334.940†	24539.3	0.469315 mg/L	0.0003301	0.469315 mg/L	0.0003301	0.07%
QC value within limits for Ti	334.940	Recovery = 93.86%				

All analyte(s) passed QC.

Sequence No.: 36

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/18/2013 9:04:56 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25396.5	98.4144 %	%	0.02626			0.03%
Sc 361.383	72642.0	98.0 %	%	0.42			0.43%
Al 308.215†	279.1	0.174955 mg/L	mg/L	0.0120621	0.174955 mg/L	0.0120621	6.89%
QC value within limits for Al	308.215	Recovery = 87.48%					
Ca 315.887†	39239.5	4.87838 mg/L	mg/L	0.011491	4.87838 mg/L	0.011491	0.24%
QC value within limits for Ca	315.887	Recovery = 97.57%					
Fe 273.955†	568.7	0.307305 mg/L	mg/L	0.0013719	0.307305 mg/L	0.0013719	0.45%
QC value within limits for Fe	273.955	Recovery = 102.44%					
Mg 279.077†	6940.9	4.84373 mg/L	mg/L	0.000979	4.84373 mg/L	0.000979	0.02%
QC value within limits for Mg	279.077	Recovery = 96.87%					
Mn 257.610†	2032.6	0.0381605 mg/L	mg/L	0.00034764	0.0381605 mg/L	0.00034764	0.91%
QC value within limits for Mn	257.610	Recovery = 95.40%					
K 766.490†	7357.3	4.86741 mg/L	mg/L	0.063004	4.86741 mg/L	0.063004	1.29%
QC value within limits for K	766.490	Recovery = 97.35%					
Na 589.592†	40918.8	4.81980 mg/L	mg/L	0.001242	4.81980 mg/L	0.001242	0.03%
QC value within limits for Na	589.592	Recovery = 96.40%					
Ti 334.940†	2208.3	0.0424296 mg/L	mg/L	0.00007562	0.0424296 mg/L	0.00007562	0.18%
QC value within limits for Ti	334.940	Recovery = 84.86%					

All analyte(s) passed QC.

Sequence No.: 37
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/18/2013 9:08:09 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25740.4	99.7471 %	%	0.13398			0.13%
Sc 361.383	73606.3	99.3 %	%	0.00			0.00%
Al 308.215†	-24.4	-0.0248696	mg/L	0.00339815	-0.0248696	mg/L	0.00339815 13.66%
QC value within limits for Al	308.215	Recovery =	Not calculated				
Ca 315.887†	36.6	0.0395796	mg/L	0.00200365	0.0395796	mg/L	0.00200365 5.06%
QC value within limits for Ca	315.887	Recovery =	Not calculated				
Fe 273.955†	46.2	0.0179290	mg/L	0.00212314	0.0179290	mg/L	0.00212314 11.84%
QC value within limits for Fe	273.955	Recovery =	Not calculated				
Mg 279.077†	1.4	-0.162193	mg/L	0.0036169	-0.162193	mg/L	0.0036169 2.23%
QC value within limits for Mg	279.077	Recovery =	Not calculated				
Mn 257.610†	-26.3	-0.0007500	mg/L	0.00005716	-0.0007500	mg/L	0.00005716 7.62%
QC value within limits for Mn	257.610	Recovery =	Not calculated				
K 766.490†	6.0	0.260805	mg/L	0.0435620	0.260805	mg/L	0.0435620 16.70%
QC value within limits for K	766.490	Recovery =	Not calculated				
Na 589.592†	-183.9	0.104683	mg/L	0.0011650	0.104683	mg/L	0.0011650 1.11%
QC value within limits for Na	589.592	Recovery =	Not calculated				
Ti 334.940†	-148.2	-0.0026168	mg/L	0.00032360	-0.0026168	mg/L	0.00032360 12.37%
QC value within limits for Ti	334.940	Recovery =	Not calculated				

All analyte(s) passed QC.

Sequence No.: 38
 Sample ID: 75576-016
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 82
 Date Collected: 11/18/2013 9:11:21 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-016

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	25507.0	98.8427	%	0.65232				0.66%
Sc 361.383	73514.9	99.2	%	0.29				0.29%
Al 308.215†	1.4	-0.0078830	mg/L	0.01019705	-0.0078830	mg/L	0.01019705	129.36%
Ca 315.887†	92408.7	11.4411	mg/L	0.00943	11.4411	mg/L	0.00943	0.08%
Fe 273.955†	73.6	0.0331266	mg/L	0.00122963	0.0331266	mg/L	0.00122963	3.71%
Mg 279.077†	5887.8	4.08403	mg/L	0.028714	4.08403	mg/L	0.028714	0.70%
Mn 257.610†	65.2	0.0009800	mg/L	0.00007072	0.0009800	mg/L	0.00007072	7.22%
K 766.490†	1332.2	1.09184	mg/L	0.012836	1.09184	mg/L	0.012836	1.18%
Na 589.592†	119718.5	13.8593	mg/L	0.03443	13.8593	mg/L	0.03443	0.25%
Ti 334.940†	-212.2	-0.0038404	mg/L	0.00018498	-0.0038404	mg/L	0.00018498	4.82%

Sequence No.: 39
Sample ID: 75576-018
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 83
Date Collected: 11/18/2013 9:14:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75576-018

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25861.6	100.217	%	0.3007			0.30%
Sc 361.383	73537.7	99.2	%	0.63			0.64%
Al 308.215†	30.4	0.0111740	mg/L	0.00720103	0.0111740 mg/L	0.00720103	64.44%
Ca 315.887†	440.1	0.0893767	mg/L	0.00213355	0.0893767 mg/L	0.00213355	2.39%
Fe 273.955†	75.1	0.0339516	mg/L	0.00154873	0.0339516 mg/L	0.00154873	4.56%
Mg 279.077†	6.5	-0.158532	mg/L	0.0048256	-0.158532 mg/L	0.0048256	3.04%
Mn 257.610†	-15.0	-0.0005276	mg/L	0.00011283	-0.0005276 mg/L	0.00011283	21.39%
K 766.490†	59.2	0.294085	mg/L	0.0333019	0.294085 mg/L	0.0333019	11.32%
Na 589.592†	101.1	0.137382	mg/L	0.0043955	0.137382 mg/L	0.0043955	3.20%
Ti 334.940†	-145.4	-0.0025640	mg/L	0.00025389	-0.0025640 mg/L	0.00025389	9.90%

Sequence No.: 40
 Sample ID: 75576-020
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 84
 Date Collected: 11/18/2013 9:17:49 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-020

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 371.029	25274.5	97.9417 %		0.26992			0.28%
Sc 361.383	73657.2	99.4 %		0.84			0.84%
Al 308.215†	-3.6	-0.0111931 mg/L		0.00460520	-0.0111931 mg/L	0.00460520	41.14%
Ca 315.887†	335275.7	41.4181 mg/L		0.03906	41.4181 mg/L	0.03906	0.09%
Fe 273.955†	93.6	0.0442059 mg/L		0.00021269	0.0442059 mg/L	0.00021269	0.48%
Mg 279.077†	9152.1	6.43877 mg/L		0.034498	6.43877 mg/L	0.034498	0.54%
Mn 257.610†	105.2	0.0017403 mg/L		0.00007122	0.0017403 mg/L	0.00007122	4.09%
K 766.490†	5671.8	3.81119 mg/L		0.012043	3.81119 mg/L	0.012043	0.32%
Na 589.592†	108115.0	12.5282 mg/L		0.00474	12.5282 mg/L	0.00474	0.04%
Ti 334.940†	-394.3	-0.0073218 mg/L		0.00025352	-0.0073218 mg/L	0.00025352	3.46%

Sequence No.: 41
 Sample ID: 75576-022
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 85
 Date Collected: 11/18/2013 9:21:02 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-022

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	25505.1	98.8354	%	0.48708				0.49%
Sc 361.383	74250.7	100	%	0.9				0.91%
Al 308.215†	196.3	0.120469	mg/L	0.0133469	0.120469	mg/L	0.0133469	11.08%
Ca 315.887†	100105.8	12.3911	mg/L	0.01975	12.3911	mg/L	0.01975	0.16%
Fe 273.955†	1782.3	0.979353	mg/L	0.0060985	0.979353	mg/L	0.0060985	0.62%
Mg 279.077†	3686.1	2.49580	mg/L	0.004879	2.49580	mg/L	0.004879	0.20%
Mn 257.610†	16532.2	0.311286	mg/L	0.0012532	0.311286	mg/L	0.0012532	0.40%
K 766.490†	7035.1	4.66546	mg/L	0.007404	4.66546	mg/L	0.007404	0.16%
Na 589.592†	103376.5	11.9847	mg/L	0.07686	11.9847	mg/L	0.07686	0.64%
Ti 334.940†	-3.4	0.0001520	mg/L	0.00026384	0.0001520	mg/L	0.00026384	173.60%

Sequence No.: 42
 Sample ID: 75576-024
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 86
 Date Collected: 11/18/2013 9:24:15 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75576-024

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25429.3	98.5415 %	%	0.72337			0.73%
Sc 361.383	73374.7	99.0 %	%	0.59			0.59%
Al 308.215†	1.7	-0.0077222	mg/L	0.00347167	-0.0077222 mg/L	0.00347167	44.96%
Ca 315.887†	364700.8	45.0500	mg/L	0.04715	45.0500 mg/L	0.04715	0.10%
Fe 273.955†	92.0	0.0433169	mg/L	0.00141888	0.0433169 mg/L	0.00141888	3.28%
Mg 279.077†	10077.1	7.10604	mg/L	0.038581	7.10604 mg/L	0.038581	0.54%
Mn 257.610†	132.1	0.0022447	mg/L	0.00015313	0.0022447 mg/L	0.00015313	6.82%
K 766.490†	6030.1	4.03570	mg/L	0.004012	4.03570 mg/L	0.004012	0.10%
Na 589.592†	117317.6	13.5839	mg/L	0.06789	13.5839 mg/L	0.06789	0.50%
Ti 334.940†	-424.2	-0.0078938	mg/L	0.00007582	-0.0078938 mg/L	0.00007582	0.96%

Sequence No.: 43
 Sample ID: 75576-026
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 87
 Date Collected: 11/18/2013 9:27:27 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: 75576-026

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	25491.5	98.7827	%	0.06113				0.06%
Sc 361.383	73505.3	99.2	%	0.92				0.92%
Al 308.215†	14.7	0.0008776	mg/L	0.00116004	0.0008776	mg/L	0.00116004	132.18%
Ca 315.887†	154176.3	19.0650	mg/L	0.03567	19.0650	mg/L	0.03567	0.19%
Fe 273.955†	48.2	0.0190395	mg/L	0.00102215	0.0190395	mg/L	0.00102215	5.37%
Mg 279.077†	13181.6	9.34549	mg/L	0.055814	9.34549	mg/L	0.055814	0.60%
Mn 257.610†	303.5	0.0054528	mg/L	0.00001240	0.0054528	mg/L	0.00001240	0.23%
K 766.490†	2525.9	1.83985	mg/L	0.009260	1.83985	mg/L	0.009260	0.50%
Na 589.592†	186392.6	21.5079	mg/L	0.24669	21.5079	mg/L	0.24669	1.15%
Ti 334.940†	-300.3	-0.0055240	mg/L	0.00012506	-0.0055240	mg/L	0.00012506	2.26%

Sequence No.: 44
 Sample ID: 75576-028
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 88
 Date Collected: 11/18/2013 9:30:40 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: 75576-028

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25606.4	99.2281	%	0.37240			0.38%
Sc 361.383	73880.9	99.7	%	0.12			0.12%
Al 308.215†	-0.2	-0.0089838	mg/L	0.01197401	-0.0089838	mg/L	0.01197401 133.28%
Ca 315.887†	120164.0	14.8669	mg/L	0.00454	14.8669	mg/L	0.00454 0.03%
Fe 273.955†	75.5	0.0341586	mg/L	0.00499952	0.0341586	mg/L	0.00499952 14.64%
Mg 279.077†	8845.3	6.21749	mg/L	0.035387	6.21749	mg/L	0.035387 0.57%
Mn 257.610†	3469.6	0.0650071	mg/L	0.00032046	0.0650071	mg/L	0.00032046 0.49%
K 766.490†	8791.6	5.76616	mg/L	0.074024	5.76616	mg/L	0.074024 1.28%
Na 589.592†	154530.6	17.8528	mg/L	0.16294	17.8528	mg/L	0.16294 0.91%
Ti 334.940†	-258.0	-0.0047157	mg/L	0.00022545	-0.0047157	mg/L	0.00022545 4.78%

Sequence No.: 45
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/18/2013 9:33:52 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSA V-173614

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	23020.6	89.2076 %	0.41187			0.46%
Sc 361.383	66112.8	89.2 %	0.37			0.41%
Al 308.215†	754448.6	496.812 mg/L	2.2647	496.812 mg/L	2.2647	0.46%
QC value within limits for Al 308.215 Recovery = 99.36%						
Ca 315.887†	3911080.2	482.779 mg/L	2.7614	482.779 mg/L	2.7614	0.57%
QC value within limits for Ca 315.887 Recovery = 96.56%						
Fe 273.955†	342083.5	189.434 mg/L	1.0182	189.434 mg/L	1.0182	0.54%
QC value within limits for Fe 273.955 Recovery = 94.72%						
Mg 279.077†	695079.0	501.241 mg/L	2.3262	501.241 mg/L	2.3262	0.46%
QC value within limits for Mg 279.077 Recovery = 100.25%						
Mn 257.610†	-4837.7	0.0322310 mg/L	0.00032540	0.0322310 mg/L	0.00032540	1.01%
QC value within limits for Mn 257.610 Recovery = 3.22%						
K 766.490†	167.7	0.362077 mg/L	0.0191661	0.362077 mg/L	0.0191661	5.29%
QC value within limits for K 766.490 Recovery = 36.21%						
Na 589.592†	933.7	0.232890 mg/L	0.0031569	0.232890 mg/L	0.0031569	1.36%
QC value within limits for Na 589.592 Recovery = 23.29%						
Ti 334.940†	-3242.7	-0.0617729 mg/L	0.00048567	-0.0617729 mg/L	0.00048567	0.79%
QC value within limits for Ti 334.940 Recovery = -6.18%						

All analyte(s) passed QC.

Sequence No.: 46
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/18/2013 9:37:29 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSAB V-173231

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	23100.1	89.5155	%	0.34507			0.39%
Sc 361.383	66207.0	89.3	%	0.04			0.04%
Al 308.215†	746643.7	491.673	mg/L	1.0327	491.673 mg/L	1.0327	0.21%
QC value within limits for Al 308.215 Recovery = 98.33%							
Ca 315.887†	3859665.2	476.433	mg/L	1.0356	476.433 mg/L	1.0356	0.22%
QC value within limits for Ca 315.887 Recovery = 95.29%							
Fe 273.955†	337820.3	187.073	mg/L	1.0537	187.073 mg/L	1.0537	0.56%
QC value within limits for Fe 273.955 Recovery = 93.54%							
Mg 279.077†	685398.3	494.258	mg/L	2.0816	494.258 mg/L	2.0816	0.42%
QC value within limits for Mg 279.077 Recovery = 98.85%							
Mn 257.610†	21559.8	0.527141	mg/L	0.0005543	0.527141 mg/L	0.0005543	0.11%
QC value within limits for Mn 257.610 Recovery = 105.43%							
K 766.490†	147.5	0.349466	mg/L	0.0244723	0.349466 mg/L	0.0244723	7.00%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	745.6	0.211308	mg/L	0.0005516	0.211308 mg/L	0.0005516	0.26%
QC value within limits for Na 589.592 Recovery = Not calculated							
Ti 334.940†	-3172.2	-0.0604241	mg/L	0.00063512	-0.0604241 mg/L	0.00063512	1.05%

All analyte(s) passed QC.

Sequence No.: 47
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/18/2013 9:41:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	24733.4	95.8448 %	0.10789			0.11%
Sc 361.383	70844.5	95.6 %	0.02			0.02%
Al 308.215†	7353.6	4.83370 mg/L	0.071858	4.83370 mg/L	0.071858	1.49%
QC value within limits for Al 308.215 Recovery = 96.67%						
Ca 315.887†	391324.5	48.3362 mg/L	0.55680	48.3362 mg/L	0.55680	1.15%
QC value within limits for Ca 315.887 Recovery = 96.67%						
Fe 273.955†	8875.2	4.90736 mg/L	0.009805	4.90736 mg/L	0.009805	0.20%
QC value within limits for Fe 273.955 Recovery = 98.15%						
Mg 279.077†	68255.9	49.0741 mg/L	0.01792	49.0741 mg/L	0.01792	0.04%
QC value within limits for Mg 279.077 Recovery = 98.15%						
Mn 257.610†	25054.8	0.474129 mg/L	0.0013004	0.474129 mg/L	0.0013004	0.27%
QC value within limits for Mn 257.610 Recovery = 94.83%						
K 766.490†	75704.6	47.6965 mg/L	0.26371	47.6965 mg/L	0.26371	0.55%
QC value within limits for K 766.490 Recovery = 95.39%						
Na 589.592†	414372.4	47.6607 mg/L	0.72552	47.6607 mg/L	0.72552	1.52%
QC value within limits for Na 589.592 Recovery = 95.32%						
Ti 334.940†	24192.0	0.462676 mg/L	0.0019219	0.462676 mg/L	0.0019219	0.42%
QC value within limits for Ti 334.940 Recovery = 92.54%						

All analyte(s) passed QC.

Sequence No.: 48

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/18/2013 9:43:46 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25377.6	98.3415 %		0.15284			0.16%
Sc 361.383	72618.3	98.0 %		0.73			0.75%
Al 308.215†	272.8	0.170812 mg/L		0.0052796	0.170812 mg/L	0.0052796	3.09%
QC value within limits for Al	308.215	Recovery = 85.41%					
Ca 315.887†	39353.7	4.89248 mg/L		0.010588	4.89248 mg/L	0.010588	0.22%
QC value within limits for Ca	315.887	Recovery = 97.85%					
Fe 273.955†	598.8	0.323992 mg/L		0.0008301	0.323992 mg/L	0.0008301	0.26%
QC value within limits for Fe	273.955	Recovery = 108.00%					
Mg 279.077†	6957.9	4.85596 mg/L		0.018115	4.85596 mg/L	0.018115	0.37%
QC value within limits for Mg	279.077	Recovery = 97.12%					
Mn 257.610†	2010.6	0.0377561 mg/L		0.00020237	0.0377561 mg/L	0.00020237	0.54%
QC value within limits for Mn	257.610	Recovery = 94.39%					
K 766.490†	7362.4	4.87059 mg/L		0.068824	4.87059 mg/L	0.068824	1.41%
QC value within limits for K	766.490	Recovery = 97.41%					
Na 589.592†	40710.8	4.79594 mg/L		0.044265	4.79594 mg/L	0.044265	0.92%
QC value within limits for Na	589.592	Recovery = 95.92%					
Ti 334.940†	2108.8	0.0405277 mg/L		0.00003226	0.0405277 mg/L	0.00003226	0.08%
QC value within limits for Ti	334.940	Recovery = 81.06%					

All analyte(s) passed QC.

Sequence No.: 49
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/18/2013 9:46:59 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	25521.6	98.8992 %	%	0.55278			0.56%
Sc 361.383	73405.7	99.0 %	%	1.28			1.30%
Al 308.215†	-46.9	-0.0396832 mg/L	mg/L	0.00390540	-0.0396832 mg/L	0.00390540	9.84%
QC value within limits for Al 308.215			Recovery = Not calculated				
Ca 315.887†	129.5	0.0510468 mg/L	mg/L	0.00698758	0.0510468 mg/L	0.00698758	13.69%
QC value within limits for Ca 315.887			Recovery = Not calculated				
Fe 273.955†	68.0	0.0300036 mg/L	mg/L	0.00219184	0.0300036 mg/L	0.00219184	7.31%
QC value within limits for Fe 273.955			Recovery = Not calculated				
Mg 279.077†	9.9	-0.156079 mg/L	mg/L	0.0096658	-0.156079 mg/L	0.0096658	6.19%
QC value within limits for Mg 279.077			Recovery = Not calculated				
Mn 257.610†	-33.0	-0.0008690 mg/L	mg/L	0.00003297	-0.0008690 mg/L	0.00003297	3.79%
QC value within limits for Mn 257.610			Recovery = Not calculated				
K 766.490†	24.7	0.272489 mg/L	mg/L	0.0143702	0.272489 mg/L	0.0143702	5.27%
QC value within limits for K 766.490			Recovery = Not calculated				
Na 589.592†	-104.2	0.113823 mg/L	mg/L	0.0044047	0.113823 mg/L	0.0044047	3.87%
QC value within limits for Na 589.592			Recovery = Not calculated				
Ti 334.940†	-227.5	-0.0041334 mg/L	mg/L	0.00009215	-0.0041334 mg/L	0.00009215	2.23%
QC value within limits for Ti 334.940			Recovery = Not calculated				

All analyte(s) passed QC.

C:\ICPCHEM\1\DATA\S111913C.b\001CALB.D\001CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\001CALB.D\001CALB.D#
 Date Acquired: Nov 19 2013 08:45 pm
 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: Nov 19 2013 08:48 pm
 Sample Type: CalBlk

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	117	12.45
23	Na	45	1	157312	2.42
24	Mg	45	1	1620	5.10
27	Al	45	1	854	6.90
39	K	45	1	69560	3.52
44	Ca	45	1	376	3.85
51	V	45	1	99	10.48
52	Cr	45	1	703	2.54
55	Mn	45	1	505	4.43
56	Fe	45	1	31339	2.08
59	Co	45	1	141	11.60
60	Ni	45	1	75	18.24
65	Cu	45	1	831	10.22
66	Zn	45	1	2909	19.30
75	As	115	1	24	9.94
78	Se	115	1	181	15.18
83	Kr	115	2	566	7.08
95	Mo	115	2	6471	3.32
107	Ag	115	2	204	3.39
111	Cd	115	2	67	6.67
121	Sb	115	2	237	7.04
137	Ba	159	2	187	16.37
205	Tl	165	2	533	14.78
206	(Pb)	165	2	780	5.18
207	(Pb)	165	2	620	9.72
208	Pb	165	2	3009	4.66

15687
(27402)

Be, As, Sb, Tl,
Co, Cd, Pb reported.

W. Kalin
11.20.13

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
45	Sc	1	96964	3.62
45	Sc	2	1565573	3.49
115	In	1	568128	4.04
115	In	2	1818734	4.78
159	Tb	1	1339185	2.98
159	Tb	2	2364351	3.35
165	Ho	1	1305641	1.33
165	Ho	2	2325788	2.27

8 11/21/13

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\S111913C.b\002CALB.D\002CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\002CALB.D\002CALB.D#
 Date Acquired: Nov 19 2013 08:50 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalBlk V-176961
 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: Nov 19 2013 08:48 pm
 Sample Type: CalBlk

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	130	12.82
23	Na	45	1	162508	2.68
24	Mg	45	1	1639	12.65
27	Al	45	1	883	10.00
39	K	45	1	72791	2.79
44	Ca	45	1	359	8.72
51	V	45	1	101	5.49
52	Cr	45	1	724	4.47
55	Mn	45	1	549	11.20
56	Fe	45	1	32966	8.75
59	Co	45	1	177	12.53
60	Ni	45	1	64	4.36
65	Cu	45	1	817	8.48
66	Zn	45	1	634	8.23
75	As	115	1	25	17.43
78	Se	115	1	192	2.95
83	Kr	115	2	578	3.38
95	Mo	115	2	5085	2.36
107	Aq	115	2	171	4.50
111	Cd	115	2	60	6.54
121	Sb	115	2	194	4.31
137	Ba	159	2	217	13.15
205	Tl	165	2	470	5.81
206	(Pb)	165	2	717	5.64
207	(Pb)	165	2	586	6.14
208	Pb	165	2	2807	5.83

Internal Standard Elements

Element	Tune	CPS Mean	RSD(%)	
45	Sc	1	100961	0.45
45	Sc	2	1543978	1.92
115	In	1	607558	1.23
115	In	2	1778001	1.98
159	Tb	1	1380036	0.68
159	Tb	2	2348266	0.77
165	Ho	1	1347066	0.46
165	Ho	2	2253341	1.39

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\S111913C.b\003CALI.D\003CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\003CALI.D\003CALI.D#
 Date Acquired: Nov 19 2013 08:55 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd1 V-176962
 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: Nov 19 2013 08:53 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	3442	3.06
23	Na	45	1	216295	0.51
24	Mg	45	1	34949	2.88
27	Al	45	1	6374	4.24
39	K	45	1	102484	0.82
44	Ca	45	1	2134	2.87
51	V	45	1	2558	3.05
52	Cr	45	1	3605	3.84
55	Mn	45	1	2724	2.08
56	Fe	45	1	304662	1.77
59	Co	45	1	4799	2.58
60	Ni	45	1	1264	4.85
65	Cu	45	1	2068	2.47
66	Zn	45	1	1337	6.07
75	As	115	1	384	3.41
78	Se	115	1	371	3.07
83	Kr	115	2	552	3.43
95	Mo	115	2	7176	0.58
107	Aq	115	2	7799	2.94
111	Cd	115	2	1720	2.86
121	Sb	115	2	5868	3.24
137	Ba	159	2	2615	4.35
205	Tl	165	2	14330	1.15
206	(Pb)	165	2	5190	2.81
207	(Pb)	165	2	4438	4.10
208	Pb	165	2	20668	1.74

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	108622	0.07	100961	107.6	80 - 120
45	Sc	2	1589475	0.20	1543978	102.9	80 - 120
115	In	1	648753	1.42	607558	106.8	80 - 120
115	In	2	1863667	0.69	1778001	104.8	80 - 120
159	Tb	1	1446056	1.39	1380036	104.8	80 - 120
159	Tb	2	2407533	0.72	2348266	102.5	80 - 120
165	Ho	1	1413514	1.97	1347066	104.9	80 - 120
165	Ho	2	2344689	2.29	2253341	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\S111913C.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S111913C.b\004CALI.D\004CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\004CALI.D\004CALI.D#
 Date Acquired: Nov 19 2013 09:01 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd2 V-176963
 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: Nov 19 2013 08:59 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	35815	1.00
23	Na	45	1	768892	1.92
24	Mg	45	1	344445	0.97
27	Al	45	1	58726	2.99
39	K	45	1	388698	1.32
44	Ca	45	1	17468	2.42
51	V	45	1	25219	1.59
52	Cr	45	1	30661	3.25
55	Mn	45	1	23258	2.20
56	Fe	45	1	2888689	2.78
59	Co	45	1	47823	2.90
60	Ni	45	1	12255	0.52
65	Cu	45	1	16747	3.66
66	Zn	45	1	6793	2.91
75	As	115	1	3913	2.21
78	Se	115	1	2078	2.60
83	Kr	115	2	568	5.26
95	Mo	115	2	32779	2.16
107	Aq	115	2	80137	3.28
111	Cd	115	2	17066	0.92
121	Sb	115	2	58680	0.31
137	Ba	159	2	24681	1.18
205	Tl	165	2	143868	1.11
206	(Pb)	165	2	48693	0.85
207	(Pb)	165	2	40234	1.77
208	Pb	165	2	187404	1.76

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	107534	1.46	100961	106.5	80 - 120
45	Sc	2	1605413	1.71	1543978	104.0	80 - 120
115	In	1	645111	0.55	607558	106.2	80 - 120
115	In	2	1870294	1.77	1778001	105.2	80 - 120
159	Tb	1	1437279	1.36	1380036	104.1	80 - 120
159	Tb	2	2433843	1.97	2348266	103.6	80 - 120
165	Ho	1	1398733	2.16	1347066	103.8	80 - 120
165	Ho	2	2361681	0.83	2253341	104.8	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\S111913C.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S111913C.b\005CALI.D\005CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\005CALI.D\005CALI.D#
 Date Acquired: Nov 19 2013 09:07 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd3 V-176964
 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: Nov 19 2013 09:05 pm
 Sample Type: CalStd

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	70928	1.90
23	Na	45	1	1359489	0.80
24	Mg	45	1	691816	1.31
27	Al	45	1	111274	0.35
39	K	45	1	729487	0.51
44	Ca	45	1	33524	0.64
51	V	45	1	50205	0.48
52	Cr	45	1	59945	1.63
55	Mn	45	1	46213	0.32
56	Fe	45	1	5637564	0.81
59	Co	45	1	95002	1.47
60	Ni	45	1	24534	0.88
65	Cu	45	1	32912	0.94
66	Zn	45	1	13021	1.46
75	As	115	1	7821	2.67
78	Se	115	1	4027	1.85
83	Kr	115	2	583	1.14
95	Mo	115	2	61934	2.34
107	Aq	115	2	160419	1.78
111	Cd	115	2	33441	0.84
121	Sb	115	2	118438	0.44
137	Ba	159	2	45817	0.16
205	Tl	165	2	286445	0.42
206	(Pb)	165	2	95912	1.55
207	(Pb)	165	2	79262	2.49
208	Pb	165	2	369402	0.93

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	107420	0.59	100961	106.4	80 - 120
45	Sc	2	1612691	1.41	1543978	104.5	80 - 120
115	In	1	645390	1.54	607558	106.2	80 - 120
115	In	2	1845327	0.87	1778001	103.8	80 - 120
159	Tb	1	1442625	0.35	1380036	104.5	80 - 120
159	Tb	2	2468563	1.82	2348266	105.1	80 - 120
165	Ho	1	1408228	1.64	1347066	104.5	80 - 120
165	Ho	2	2349570	0.85	2253341	104.3	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\S111913C.b\002CALB.D\002CALB.D#

0 : Element Failures 0
 0 : ISTD Failures 0

C:\ICPCHEM\1\DATA\S111913C.b\006CALI.D\006CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\006CALI.D\006CALI.D#
 Date Acquired: Nov 19 2013 09:13 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd4 V-176965
 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: Nov 19 2013 09:11 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	352545	1.75
23	Na	45	1	5989867	1.20
24	Mg	45	1	3306070	0.55
27	Al	45	1	546854	1.34
39	K	45	1	3220108	2.40
44	Ca	45	1	168442	1.14
51	V	45	1	250979	0.57
52	Cr	45	1	295981	0.94
55	Mn	45	1	228064	0.41
56	Fe	45	1	27229590	1.32
59	Co	45	1	469687	1.06
60	Ni	45	1	121006	1.08
65	Cu	45	1	158092	1.20
66	Zn	45	1	63175	0.40
75	As	115	1	39110	0.98
78	Se	115	1	20117	0.63
83	Kr	115	2	601	3.69
95	Mo	115	2	299015	2.33
107	Aq	115	2	796949	0.67
111	Cd	115	2	167300	0.93
121	Sb	115	2	579769	1.65
137	Ba	159	2	230104	0.78
205	Tl	165	2	1548906	0.47
206	(Pb)	165	2	480577	1.65
207	(Pb)	165	2	389730	1.21
208	Pb	165	2	1907933	1.29

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	104790	1.13	100961	103.8	80 - 120
45	Sc	2	1583626	2.19	1543978	102.6	80 - 120
115	In	1	634460	1.14	607558	104.4	80 - 120
115	In	2	1818433	2.17	1778001	102.3	80 - 120
159	Tb	1	1422700	1.18	1380036	103.1	80 - 120
159	Tb	2	2420634	0.86	2348266	103.1	80 - 120
165	Ho	1	1402319	2.50	1347066	104.1	80 - 120
165	Ho	2	2342810	1.41	2253341	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\S111913C.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S111913C.b\007CALI.D\007CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\007CALI.D\007CALI.D#
 Date Acquired: Nov 19 2013 09:18 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd5 V-176966
 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: Nov 19 2013 09:17 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	721204	0.82
23	Na	45	1	11672860	3.24
24	Mg	45	1	6457750	4.42
27	Al	45	1	1095261	4.18
39	K	45	1	6233184	4.23
44	Ca	45	1	332591	3.99
51	V	45	1	498908	4.33
52	Cr	45	1	582616	3.79
55	Mn	45	1	448924	4.22
56	Fe	45	1	53955872	3.63
59	Co	45	1	954211	5.34
60	Ni	45	1	237039	4.59
65	Cu	45	1	311451	4.07
66	Zn	45	1	120781	3.85
75	As	115	1	77169	3.69
78	Se	115	1	39536	3.17
83	Kr	115	2	584	8.19
95	Mo	115	2	591367	0.82
107	Ag	115	2	1622907	0.15
111	Cd	115	2	330418	1.50
121	Sb	115	2	1191772	0.33
137	Ba	159	2	454032	0.56
205	Tl	165	2	2998018	0.72
206	(Pb)	165	2	1006868	1.08
207	(Pb)	165	2	770406	0.62
208	Pb	165	2	3843199	0.34

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range (%)	Flaq
45	Sc	1	110977	2.66	100961	109.9	80 - 120
45	Sc	2	1569143	1.00	1543978	101.6	80 - 120
115	In	1	666840	2.39	607558	109.8	80 - 120
115	In	2	1801443	0.68	1778001	101.3	80 - 120
159	Tb	1	1503289	2.03	1380036	108.9	80 - 120
159	Tb	2	2403476	1.33	2348266	102.4	80 - 120
165	Ho	1	1461259	3.02	1347066	108.5	80 - 120
165	Ho	2	2321867	0.11	2253341	103.0	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\S111913C.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S111913C.b\008_ICV.D\008_ICV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\008_ICV.D\008_ICV.D#
 Date Acquired: Nov 19 2013 09:24 pm
 Operator: GK
 Sample Name: ICV V-176967
 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: Nov 19 2013 09:22 pm
 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	47.93 ppb	0.77	350536	50	95.9	90 - 110	
23 Na	45	1	5132.00 ppb	0.89	5812886	5000	102.6	90 - 110	
24 Mg	45	1	5174.00 ppb	0.31	3206539	5000	103.5	90 - 110	
27 Al	45	1	5087.00 ppb	0.84	1770779	5000	101.7	90 - 110	
39 K	45	1	5189.00 ppb	1.71	3137459	5000	103.8	90 - 110	
44 Ca	45	1	4951.00 ppb	0.59	157692	5000	99.0	90 - 110	
51 V	45	1	51.91 ppb	0.20	247477	50	103.8	90 - 110	
52 Cr	45	1	51.23 ppb	0.26	286036	50	102.5	90 - 110	
55 Mn	45	1	51.01 ppb	0.75	219505	50	102.0	90 - 110	
56 Fe	45	1	5202.00 ppb	0.95	26852650	5000	104.0	90 - 110	
59 Co	45	1	48.52 ppb	0.21	440386	50	97.0	90 - 110	
60 Ni	45	1	51.73 ppb	0.22	117564	50	103.5	90 - 110	
65 Cu	45	1	51.58 ppb	1.63	154617	50	103.2	90 - 110	
66 Zn	45	1	52.14 ppb	0.21	60918	50	104.3	90 - 110	
75 As	115	1	46.44 ppb	1.14	34665	50	92.9	90 - 110	
78 Se	115	1	49.75 ppb	1.88	4101	50	99.5	90 - 110	
83 Kr	115	2	----- ppb	-----	657	50	#VALUE!	##### - #####	
95 Mo	115	2	47.02 ppb	0.55	289051	50	94.0	90 - 110	
107 Ag	115	2	9.56 ppb	1.84	159252	10	95.6	90 - 110	
111 Cd	115	2	48.31 ppb	1.97	164723	50	96.6	90 - 110	
121 Sb	115	2	45.17 ppb	1.17	551172	50	90.3	90 - 110	
137 Ba	159	2	49.74 ppb	1.01	226431	50	99.5	90 - 110	
205 Tl	165	2	48.43 ppb	1.38	1472885	50	96.9	90 - 110	
206 (Pb)	165	2	46.61 ppb	1.67	468984	50	93.2	90 - 110	
207 (Pb)	165	2	52.23 ppb	2.77	406909	50	104.5	90 - 110	
208 Pb	165	2	50.13 ppb	2.71	1939905	50	100.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	104568	0.68	100961	103.6	80 - 120	
45 Sc	2	1601497	0.24	1543978	103.7	80 - 120	
115 In	1	635972	1.45	607558	104.7	80 - 120	
115 In	2	1858013	0.83	1778001	104.5	80 - 120	
159 Tb	1	1437037	2.38	1380036	104.1	80 - 120	
159 Tb	2	2406033	0.99	2348266	102.5	80 - 120	
165 Ho	1	1386257	1.76	1347066	102.9	80 - 120	
165 Ho	2	2345562	1.11	2253341	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\S111913C.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\S111913C.b\009_CCV.D\009_CCV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\009_CCV.D\009_CCV.D#
 Date Acquired: Nov 19 2013 09:30 pm
 Operator: GK
 Sample Name: LLICV V-176972
 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: Nov 19 2013 09:22 pm
 Sample Type: LL-ICV
 Total Dil Factor: 1.00

QC Summary:

Analytes: Fail

ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.51 ppb	4.11	1	101.2	70 - 130	
23 Na	45	1	228.70 ppb	1.23	250	91.5	70 - 130	
24 Mg	45	1	273.50 ppb	0.46	250	109.4	70 - 130	
27 Al	45	1	105.40 ppb	1.12	100	105.4	70 - 130	
39 K	45	1	245.90 ppb	0.67	250	98.4	70 - 130	
44 Ca	45	1	256.50 ppb	0.89	250	102.6	70 - 130	
51 V	45	1	1.05 ppb	1.69	1	104.7	70 - 130	
52 Cr	45	1	1.05 ppb	0.70	1	104.9	70 - 130	
55 Mn	45	1	3.05 ppb	1.11	3	101.7	70 - 130	
56 Fe	45	1	171.70 ppb	0.59	150	114.5	70 - 130	
59 Co	45	1	1.02 ppb	0.16	1	101.8	70 - 130	
60 Ni	45	1	1.60 ppb	1.32	2	106.8	70 - 130	
65 Cu	45	1	4.40 ppb	0.66	5	88.0	70 - 130	
66 Zn	45	1	10.25 ppb	1.45	10	102.5	70 - 130	
75 As	115	1	1.09 ppb	1.71	1	108.5	70 - 130	
78 Se	115	1	3.12 ppb	4.23	5	62.3	70 - 130	FAIL
83 Kr	115	2	----- ppb	-----	1	#VALUE! ##### - #####		
95 Mo	115	2	0.37 ppb	4.00	1	36.8	70 - 130	FAIL
107 Ag	115	2	0.49 ppb	2.88	1	98.7	70 - 130	
111 Cd	115	2	0.99 ppb	2.29	1	99.0	70 - 130	
121 Sb	115	2	1.10 ppb	2.40	1	109.7	70 - 130	
137 Ba	159	2	2.48 ppb	1.62	3	99.1	70 - 130	
205 Tl	165	2	0.97 ppb	2.59	1	96.8	70 - 130	
206 (Pb)	165	2	1.37 ppb	3.57	2	91.5	70 - 130	
207 (Pb)	165	2	1.52 ppb	2.29	2	101.5	70 - 130	
208 Pb	165	2	1.41 ppb	1.70	2	93.9	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	107205	0.50	100961	106.2	80 - 120	
45 Sc	2	1611927	1.66	1543978	104.4	80 - 120	
115 In	1	651264	0.74	607558	107.2	80 - 120	
115 In	2	1873274	1.28	1778001	105.4	80 - 120	
159 Tb	1	1442152	1.91	1380036	104.5	80 - 120	
159 Tb	2	2442480	1.02	2348266	104.0	80 - 120	
165 Ho	1	1421812	1.52	1347066	105.5	80 - 120	
165 Ho	2	2379742	0.39	2253341	105.6	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\S111913C.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\S111913C.b\010_ICB.D\010_ICB.D#

Initial Calibration Blank (ICB) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\010_ICB.D\010_ICB.D#
 Date Acquired: Nov 19 2013 09:36 pm
 Operator: GK
 Sample Name: ICB V-176968
 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: Nov 19 2013 09:22 pm
 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	0.02	ppb	19.73	287	0.50	
23 Na	45	1	-24.61	ppb	3.89	145252	250.00	
24 Mg	45	1	3.10	ppb	5.16	3717	250.00	
27 Al	45	1	26.89	ppb	1.30	10562	100.00	
39 K	45	1	-13.47	ppb	10.30	69354	250.00	
44 Ca	45	1	58.54	ppb	4.50	2296	250.00	
51 V	45	1	0.04	ppb	7.44	287	1.00	
52 Cr	45	1	0.04	ppb	23.29	1029	1.00	
55 Mn	45	1	0.00	ppb	150.14	600	3.00	
56 Fe	45	1	4.32	ppb	3.86	57992	150.00	
59 Co	45	1	0.02	ppb	9.63	406	1.00	
60 Ni	45	1	0.03	ppb	11.82	130	1.50	
65 Cu	45	1	-0.31	ppb	5.07	1453	5.00	
66 Zn	45	1	0.53	ppb	4.45	1307	10.00	
75 As	115	1	0.04	ppb	10.14	57	1.00	
78 Se	115	1	-1.83	ppb	6.86	203	5.00	
83 Kr	115	2	-----	ppb	-----	546	1.00	
95 Mo	115	2	-0.53	ppb	18.21	2117	1.00	
107 Ag	115	2	0.02	ppb	34.23	427	0.50	
111 Cd	115	2	0.02	ppb	28.28	144	1.00	
121 Sb	115	2	0.07	ppb	8.75	1007	1.00	
137 Ba	159	2	0.08	ppb	22.80	597	2.50	
205 Tl	165	2	0.03	ppb	21.69	1310	1.00	
206 (Pb)	165	2	0.07	ppb	7.74	1413	1.50	
207 (Pb)	165	2	0.08	ppb	5.09	1183	1.50	
208 Pb	165	2	0.07	ppb	3.63	5511	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range (%)	Flag
45 Sc	1	107542	0.66	100961	106.5	80 - 120	
45 Sc	2	1567140	0.28	1543978	101.5	80 - 120	
115 In	1	645740	1.39	607558	106.3	80 - 120	
115 In	2	1846227	1.33	1778001	103.8	80 - 120	
159 Tb	1	1458309	0.95	1380036	105.7	80 - 120	
159 Tb	2	2389061	0.22	2348266	101.7	80 - 120	
165 Ho	1	1408123	0.26	1347066	104.5	80 - 120	
165 Ho	2	2319094	0.44	2253341	102.9	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqa.s.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S111913C.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\S111913C.b\011ICSA.D\011ICSA.D#

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\011ICSA.D\011ICSA.D#
 Date Acquired: Nov 19 2013 09:42 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: ICSA V-176969
 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: Nov 19 2013 09:22 pm
 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	0.03 ppb	10.86	0.50	
23 Na	45	1	126400.00 ppb	1.08	250.00	
24 Mg	45	1	49950.00 ppb	0.79	250.00	
27 Al	45	1	49350.00 ppb	0.27	100.00	
39 K	45	1	50970.00 ppb	0.98	250.00	
44 Ca	45	1	151500.00 ppb	1.15	250.00	
51 V	45	1	0.07 ppb	10.72	1.00	
52 Cr	45	1	0.83 ppb	3.66	1.00	
55 Mn	45	1	4.72 ppb	1.13	3.00	**
56 Fe	45	1	122700.00 ppb	0.87	150.00	
59 Co	45	1	1.85 ppb	0.52	1.00	**
60 Ni	45	1	3.39 ppb	1.78	1.50	**
65 Cu	45	1	0.90 ppb	3.39	5.00	
66 Zn	45	1	1.36 ppb	1.53	10.00	
75 As	115	1	0.35 ppb	10.54	1.00	
78 Se	115	1	-1.27 ppb	25.71	5.00	
83 Kr	115	2	----- ppb	-----	1.00	
95 Mo	115	2	996.90 ppb	2.47	1.00	
107 Ag	115	2	0.03 ppb	5.24	0.50	
111 Cd	115	2	1.12 ppb	3.01	1.00	**
121 Sb	115	2	0.32 ppb	2.29	1.00	
137 Ba	159	2	0.96 ppb	2.76	2.50	
205 Tl	165	2	0.04 ppb	7.58	1.00	
206 (Pb)	165	2	0.20 ppb	8.08	1.50	
207 (Pb)	165	2	0.21 ppb	2.37	1.50	
208 Pb	165	2	0.20 ppb	3.73	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	91618	1.04	100961	90.7	70 - 150	
45 Sc	2	1428807	1.54	1543978	92.5	70 - 150	
115 In	1	530337	1.11	607558	87.3	70 - 150	
115 In	2	1586120	2.30	1778001	89.2	70 - 150	
159 Tb	1	1267392	1.21	1380036	91.8	70 - 150	
159 Tb	2	2161998	0.78	2348266	92.1	70 - 150	
165 Ho	1	1229160	1.99	1347066	91.2	70 - 150	
165 Ho	2	2097676	2.42	2253341	93.1	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\S111913C.b\002CALB.D\002CALB.D#

4 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S111913C.b\012ICSB.D\012ICSB.D#

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\012ICSB.D\012ICSB.D#
 Date Acquired: Nov 19 2013 09:48 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: ICSAB V-176970
 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: Nov 19 2013 09:22 pm
 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	0.02	40.64	---		-	
23 Na	45	1	126500.00	1.74	---		-	
24 Mg	45	1	49790.00	1.90	---		-	
27 Al	45	1	49350.00	1.33	---		-	
39 K	45	1	50570.00	0.43	---		-	
44 Ca	45	1	149000.00	1.47	---		-	
51 V	45	1	216.90	2.53	200	108.5	80 - 120	
52 Cr	45	1	206.70	1.89	200	103.4	80 - 120	
55 Mn	45	1	213.60	0.72	200	106.8	80 - 120	
56 Fe	45	1	120300.00	0.15	---		-	
59 Co	45	1	196.00	1.20	200	98.0	80 - 120	
60 Ni	45	1	189.50	0.95	200	94.8	80 - 120	
65 Cu	45	1	191.30	0.82	---		-	
66 Zn	45	1	94.31	1.02	100	94.3	80 - 120	
75 As	115	1	108.90	0.96	100	108.9	80 - 120	
78 Se	115	1	101.20	2.75	100	101.2	80 - 120	
83 Kr	115	2	-----	---	---		-	
95 Mo	115	2	1009.00	1.62	---		-	
107 Ag	115	2	45.52	2.16	50	91.0	80 - 120	
111 Cd	115	2	97.32	1.30	100	97.3	80 - 120	
121 Sb	115	2	0.30	3.96	---		-	
137 Ba	159	2	1.11	0.59	---		-	
205 Tl	165	2	0.04	1.39	---		-	
206 (Pb)	165	2	0.21	4.85	---		-	
207 (Pb)	165	2	0.21	6.21	---		-	
208 Pb	165	2	0.21	4.68	---		-	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	100426	0.44	100961	99.5	70 - 150	
45 Sc	2	1538234	1.64	1543978	99.6	70 - 150	
115 In	1	576027	0.55	607558	94.8	70 - 150	
115 In	2	1682515	2.23	1778001	94.6	70 - 150	
159 Tb	1	1338616	1.32	1380036	97.0	70 - 150	
159 Tb	2	2243674	0.09	2348266	95.5	70 - 150	
165 Ho	1	1319023	1.26	1347066	97.9	70 - 150	
165 Ho	2	2191278	1.12	2253341	97.2	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\S111913C.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\S111913C.b\013_CCV.D\013_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\013_CCV.D\013_CCV.D#
 Date Acquired: Nov 19 2013 09:53 pm
 Operator: GK
 Sample Name: CCV V-176971
 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: Nov 19 2013 09:22 pm
 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	47.21 ppb	0.93	357107	50	94.4	90 - 110	
23 Na	45	1	5362.00 ppb	0.36	6300526	5000	107.2	90 - 110	
24 Mg	45	1	5336.00 ppb	1.28	3435475	5000	106.7	90 - 110	
27 Al	45	1	1594.00 ppb	0.43	576928	1500	106.3	90 - 110	
39 K	45	1	5377.00 ppb	1.55	3374318	5000	107.5	90 - 110	
44 Ca	45	1	5354.00 ppb	1.53	177114	5000	107.1	90 - 110	
51 V	45	1	53.06 ppb	0.66	262760	50	106.1	90 - 110	
52 Cr	45	1	53.16 ppb	0.65	308343	50	106.3	90 - 110	
55 Mn	45	1	52.95 ppb	1.90	236637	50	105.9	90 - 110	
56 Fe	45	1	5392.00 ppb	2.25	28910300	5000	107.8	90 - 110	
59 Co	45	1	52.13 ppb	0.97	491568	50	104.3	90 - 110	
60 Ni	45	1	53.00 ppb	0.82	125120	50	106.0	90 - 110	
65 Cu	45	1	53.40 ppb	0.69	166200	50	106.8	90 - 110	
66 Zn	45	1	52.92 ppb	0.59	64218	50	105.8	90 - 110	
75 As	115	1	53.04 ppb	1.34	40553	50	106.1	90 - 110	
78 Se	115	1	262.60 ppb	1.00	20693	250	105.0	90 - 110	
83 Kr	115	2	----- ppb	-----	582	50	#VALUE!	##### - #####	
95 Mo	115	2	50.14 ppb	0.27	309364	50	100.3	90 - 110	
107 Ag	115	2	49.56 ppb	3.44	828783	50	99.1	90 - 110	
111 Cd	115	2	50.10 ppb	0.85	171636	50	100.2	90 - 110	
121 Sb	115	2	49.55 ppb	1.74	607465	50	99.1	90 - 110	
137 Ba	159	2	52.37 ppb	2.24	239620	50	104.7	90 - 110	
205 Tl	165	2	51.04 ppb	1.60	1548307	50	102.1	90 - 110	
206 (Pb)	165	2	48.33 ppb	2.45	485036	50	96.7	90 - 110	
207 (Pb)	165	2	51.52 ppb	2.54	400359	50	103.0	90 - 110	
208 Pb	165	2	50.99 ppb	2.38	1968206	50	102.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	108623	0.78	100961	107.6	80 - 120	
45 Sc	2	1656421	1.69	1543978	107.3	80 - 120	
115 In	1	651536	1.32	607558	107.2	80 - 120	
115 In	2	1866794	0.67	1778001	105.0	80 - 120	
159 Tb	1	1439671	1.86	1380036	104.3	80 - 120	
159 Tb	2	2418568	0.88	2348266	103.0	80 - 120	
165 Ho	1	1426662	2.07	1347066	105.9	80 - 120	
165 Ho	2	2339513	0.92	2253341	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\S111913C.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\S111913C.b\014_CCV.D\014_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\014_CCV.D\014_CCV.D#
 Date Acquired: Nov 19 2013 09:59 pm
 Operator: GK
 Sample Name: LLCCV V-176972
 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: Nov 19 2013 09:22 pm
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:

Analytes: Fail

ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.49 ppb	2.26	1	97.5	70 - 130	
23 Na	45	1	250.10 ppb	1.59	250	100.0	70 - 130	
24 Mg	45	1	284.90 ppb	1.27	250	114.0	70 - 130	
27 Al	45	1	117.80 ppb	1.21	100	117.8	70 - 130	
39 K	45	1	251.90 ppb	0.29	250	100.8	70 - 130	
44 Ca	45	1	291.40 ppb	1.93	250	116.6	70 - 130	
51 V	45	1	1.05 ppb	1.80	1	105.2	70 - 130	
52 Cr	45	1	1.07 ppb	1.75	1	107.1	70 - 130	
55 Mn	45	1	3.01 ppb	0.18	3	100.3	70 - 130	
56 Fe	45	1	197.10 ppb	1.37	150	131.4	70 - 130	FAIL
59 Co	45	1	1.04 ppb	0.34	1	103.5	70 - 130	
60 Ni	45	1	1.61 ppb	1.42	2	107.1	70 - 130	
65 Cu	45	1	4.56 ppb	0.96	5	91.1	70 - 130	
66 Zn	45	1	10.23 ppb	2.06	10	102.3	70 - 130	
75 As	115	1	1.04 ppb	2.50	1	103.6	70 - 130	
78 Se	115	1	3.18 ppb	9.80	5	63.5	70 - 130	FAIL
83 Kr	115	2	----- ppb	-----	1	#VALUE! ##### - #####		
95 Mo	115	2	0.54 ppb	12.68	1	54.5	70 - 130	FAIL
107 Ag	115	2	0.50 ppb	0.66	1	99.5	70 - 130	
111 Cd	115	2	0.98 ppb	3.07	1	98.4	70 - 130	
121 Sb	115	2	0.97 ppb	2.25	1	96.6	70 - 130	
137 Ba	159	2	2.50 ppb	2.58	3	99.9	70 - 130	
205 Tl	165	2	0.94 ppb	2.37	1	94.0	70 - 130	
206 (Pb)	165	2	1.38 ppb	2.64	2	92.3	70 - 130	
207 (Pb)	165	2	1.51 ppb	3.52	2	100.5	70 - 130	
208 Pb	165	2	1.40 ppb	1.90	2	93.1	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	109915	0.44	100961	108.9	80 - 120	
45 Sc	2	1639686	2.12	1543978	106.2	80 - 120	
115 In	1	662615	1.67	607558	109.1	80 - 120	
115 In	2	1907190	0.91	1778001	107.3	80 - 120	
159 Tb	1	1480684	1.41	1380036	107.3	80 - 120	
159 Tb	2	2467837	0.99	2348266	105.1	80 - 120	
165 Ho	1	1434348	1.72	1347066	106.5	80 - 120	
165 Ho	2	2426640	1.12	2253341	107.7	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\S111913C.b\002CALB.D\002CALB.D#

3 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S111913C.b\015_CCB.D\015_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\015_CCB.D\015_CCB.D#
 Date Acquired: Nov 19 2013 10:05 pm
 Operator: GK
 Sample Name: CCB V-176968
 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: Nov 19 2013 09:22 pm
 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	48.67	237	0.50	
23 Na	45	1	-1.469 ppb	277.81	170546	250.00	
24 Mg	45	1	13.190 ppb	10.73	10099	250.00	
27 Al	45	1	36.980 ppb	2.18	14102	100.00	
39 K	45	1	-5.284 ppb	49.72	73942	250.00	
44 Ca	45	1	84.790 ppb	5.23	3137	250.00	
51 V	45	1	0.050 ppb	17.18	351	1.00	
52 Cr	45	1	0.066 ppb	7.22	1146	1.00	
55 Mn	45	1	0.033 ppb	57.06	724	3.00	
56 Fe	45	1	30.010 ppb	10.53	193206	150.00	
59 Co	45	1	0.038 ppb	15.55	542	1.00	
60 Ni	45	1	0.058 ppb	15.08	203	1.50	
65 Cu	45	1	-0.272 ppb	8.69	1569	5.00	
66 Zn	45	1	0.562 ppb	5.08	1337	10.00	
75 As	115	1	0.030 ppb	20.66	49	1.00	
78 Se	115	1	-1.747 ppb	9.06	208	5.00	
83 Kr	115	2	----- ppb	-----	549	1.00	
95 Mo	115	2	-0.451 ppb	27.62	2684	1.00	
107 Ag	115	2	0.020 ppb	20.27	523	0.50	
111 Cd	115	2	0.031 ppb	31.97	173	1.00	
121 Sb	115	2	0.028 ppb	28.71	561	1.00	
137 Ba	159	2	0.082 ppb	10.12	617	2.50	
205 Tl	165	2	0.019 ppb	34.67	1107	1.00	
206 (Pb)	165	2	0.074 ppb	19.28	1537	1.50	
207 (Pb)	165	2	0.080 ppb	20.65	1268	1.50	
208 Pb	165	2	0.070 ppb	21.78	5812	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	106990	0.59	100961	106.0	80 - 120	
45 Sc	2	1628966	2.43	1543978	105.5	80 - 120	
115 In	1	642922	0.91	607558	105.8	80 - 120	
115 In	2	1924515	0.50	1778001	108.2	80 - 120	
159 Tb	1	1440068	1.88	1380036	104.4	80 - 120	
159 Tb	2	2496987	1.79	2348266	106.3	80 - 120	
165 Ho	1	1412441	1.99	1347066	104.9	80 - 120	
165 Ho	2	2419485	0.96	2253341	107.4	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S111913C.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\S111913C.b\016SMPL.D\016SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\016SMPL.D\016SMPL.D#
 Date Acquired: Nov 19 2013 10:11 pm
 Acq. Method: 6020AQ.M
 Operator: GK *02 sk 1/20*
 Sample Name: MB 27435
 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: Nov 19 2013 09:22 pm
 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	169.40	133	2700	
23 Na	45		1	43.68	43.68	ppb	3.74	207505	225000	
24 Mg	45		1	7.79	7.79	ppb	16.26	6254	225000	
27 Al	45		1	22.47	22.47	ppb	4.50	8375	67500	
39 K	45		1	0.20	0.20	ppb	1492.80	72420	225000	
44 Ca	45		1	36.77	36.77	ppb	7.89	1478	225000	
51 V	45		1	0.23	0.23	ppb	4.03	1169	2700	
52 Cr	45		1	0.10	0.10	ppb	13.21	1246	2700	
55 Mn	45		1	0.68	0.68	ppb	5.14	3351	2700	
56 Fe	45		1	19.50	19.50	ppb	14.70	129164	202500	
59 Co	45		1	0.02	0.02	ppb	22.60	364	2700	
60 Ni	45		1	0.06	0.06	ppb	12.23	190	2700	
65 Cu	45		1	-0.14	-0.14	ppb	30.96	1837	2700	
66 Zn	45		1	1.73	1.73	ppb	3.52	2545	2700	
75 As	115		1	0.22	0.22	ppb	9.40	185	2250	
78 Se	115		1	-1.82	-1.82	ppb	4.82	193	2700	
83 Kr	115		2	-----	-----	ppb	-----	616	2700	
95 Mo	115		2	-0.58	-0.58	ppb	3.45	1449	2700	
107 Ag	115		2	0.06	0.06	ppb	16.64	1005	900	
111 Cd	115		2	0.01	0.01	ppb	14.15	89	2700	
121 Sb	115		2	0.16	0.16	ppb	8.70	1699	1125	
137 Ba	159		2	0.22	0.22	ppb	12.87	969	1350	
205 Tl	165		2	0.01	0.01	ppb	31.10	753	900	
206 (Pb)	165		2	0.07	0.07	ppb	15.97	1156	2700	
207 (Pb)	165		2	0.07	0.07	ppb	31.34	938	2700	
208 Pb	165		2	0.07	0.07	ppb	20.32	4555	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	100294	0.44	100961	99.3	70 - 150	
45 Sc	2	1305344	10.60	1543978	84.5	70 - 150	
115 In	1	609906	1.15	607558	100.4	70 - 150	
115 In	2	1505895	10.51	1778001	84.7	70 - 150	
159 Tb	1	1396823	2.57	1380036	101.2	70 - 150	
159 Tb	2	1944745	8.62	2348266	82.8	70 - 150	
165 Ho	1	1360062	1.29	1347066	101.0	70 - 150	
165 Ho	2	1905984	10.23	2253341	84.6	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\S111913C.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\S111913C.b\017SMPL.D\017SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\017SMPL.D\017SMPL.D#
 Date Acquired: Nov 19 2013 10:17 pm
 Acq. Method: 6020AQ.M
 Operator: GK **02**
 Sample Name: LCSW 27495
 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: Nov 19 2013 09:22 pm
 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		254.50	254.50	ppb	1.69	1608286	2700	
23 Na	45	1		25,920.00	25920.00	ppb	6.03	25985530	225000	
24 Mg	45	1		25,310.00	25310.00	ppb	5.68	14212290	225000	
27 Al	45	1		2,585.00	2585.00	ppb	5.49	815933	67500	
39 K	45	1		24,940.00	24940.00	ppb	5.73	13405470	225000	
44 Ca	45	1		25,170.00	25170.00	ppb	6.23	725007	225000	
51 V	45	1		263.00	263.00	ppb	5.78	1135983	2700	
52 Cr	45	1		255.50	255.50	ppb	6.54	1289848	2700	
55 Mn	45	1		259.30	259.30	ppb	6.56	1008705	2700	
56 Fe	45	1		2,578.00	2578.00	ppb	7.27	12069130	202500	
59 Co	45	1		248.70	248.70	ppb	6.67	2043952	2700	
60 Ni	45	1		248.20	248.20	ppb	6.43	510723	2700	
65 Cu	45	1		257.80	257.80	ppb	6.91	691346	2700	
66 Zn	45	1		255.20	255.20	ppb	7.37	267706	2700	
75 As	115	1		256.90	256.90	ppb	4.55	170708	2250	
78 Se	115	1		257.10	257.10	ppb	5.08	17628	2700	
83 Kr	115	2		-----	-----	ppb	-----	592	2700	
95 Mo	115	2		261.20	261.20	ppb	2.24	1313755	2700	
107 Ag	115	2		46.60	46.60	ppb	1.93	644388	900	
111 Cd	115	2		251.90	251.90	ppb	1.54	713639	2700	
121 Sb	115	2		255.30	255.30	ppb	1.89	2587506	1125	
137 Ba	159	2		256.70	256.70	ppb	1.80	1025626	1350	
205 Tl	165	2		237.90	237.90	ppb	2.03	6323721	900	
206 (Pb)	165	2		249.10	249.10	ppb	1.36	2188913	2700	
207 (Pb)	165	2		268.40	268.40	ppb	1.11	1826294	2700	
208 Pb	165	2		248.70	248.70	ppb	0.92	8406261	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	94981	6.11	100961	94.1	70 - 150	
45 Sc	2	1383972	1.40	1543978	89.6	70 - 150	
115 In	1	567416	4.92	607558	93.4	70 - 150	
115 In	2	1543913	1.30	1778001	86.8	70 - 150	
159 Tb	1	1352538	5.82	1380036	98.0	70 - 150	
159 Tb	2	2113459	0.54	2348266	90.0	70 - 150	
165 Ho	1	1313906	6.61	1347066	97.5	70 - 150	
165 Ho	2	2050326	0.93	2253341	91.0	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\S111913C.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\S111913C.b\018SMPL.D\018SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\018SMPL.D\018SMPL.D#
 Date Acquired: Nov 19 2013 10:23 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW MR 27435
 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: Nov 19 2013 09:22 pm
 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		269.70	269.70	ppb	1.00	1853413	2700	
23 Na	45	1		28,810.00	28810.00	ppb	2.04	27544950	225000	
24 Mg	45	1		28,500.00	28500.00	ppb	1.60	15269830	225000	
27 Al	45	1		2,903.00	2903.00	ppb	0.41	874172	67500	
39 K	45	1		27,720.00	27720.00	ppb	0.48	14210240	225000	
44 Ca	45	1		28,250.00	28250.00	ppb	0.19	776453	225000	
51 V	45	1		294.00	294.00	ppb	0.63	1211596	2700	
52 Cr	45	1		283.60	283.60	ppb	0.76	1366300	2700	
55 Mn	45	1		286.50	286.50	ppb	1.11	1063569	2700	
56 Fe	45	1		2,848.00	2848.00	ppb	0.96	12728960	202500	
59 Co	45	1		278.10	278.10	ppb	0.54	2182279	2700	
60 Ni	45	1		278.60	278.60	ppb	1.42	547286	2700	
65 Cu	45	1		288.00	288.00	ppb	1.01	737344	2700	
66 Zn	45	1		283.20	283.20	ppb	0.37	283638	2700	
75 As	115	1		287.80	287.80	ppb	0.75	181386	2250	
78 Se	115	1		285.60	285.60	ppb	0.99	18540	2700	
83 Kr	115	2		-----	-----	ppb	-----	583	2700	
95 Mo	115	2		281.70	281.70	ppb	1.68	1514214	2700	
107 Ag	115	2		50.45	50.45	ppb	1.29	745768	900	
111 Cd	115	2		271.90	271.90	ppb	1.55	823248	2700	
121 Sb	115	2		274.70	274.70	ppb	0.90	2975761	1125	
137 Ba	159	2		276.50	276.50	ppb	0.26	1180321	1350	
205 Tl	165	2		251.50	251.50	ppb	1.15	7097383	900	
206 (Pb)	165	2		264.50	264.50	ppb	2.12	2466610	2700	
207 (Pb)	165	2		285.00	285.00	ppb	0.71	2058167	2700	
208 Pb	165	2		264.00	264.00	ppb	1.07	9467350	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	90429	0.50	100961	89.6	70 - 150	
45 Sc	2	1505466	1.78	1543978	97.5	70 - 150	
115 In	1	537354	0.35	607558	88.4	70 - 150	
115 In	2	1650358	2.72	1778001	92.8	70 - 150	
159 Tb	1	1284695	1.95	1380036	93.1	70 - 150	
159 Tb	2	2257988	2.04	2348266	96.2	70 - 150	
165 Ho	1	1255042	1.26	1347066	93.2	70 - 150	
165 Ho	2	2176531	1.30	2253341	96.6	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\S111913C.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\S111913C.b\019SMPL.D\019SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\019SMPL.D\019SMPL.D#
 Date Acquired: Nov 19 2013 10:28 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-030
 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: Nov 19 2013 09:22 pm
 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		0.08	0.08	ppb	18.49	679	2700	
23 Na	45	1		8,655.00	8655.00	ppb	1.05	8975748	225000	
24 Mg	45	1		2,281.00	2281.00	ppb	0.65	1310681	225000	
27 Al	45	1		26.01	26.01	ppb	3.10	9232	67500	
39 K	45	1		1,447.00	1447.00	ppb	0.60	861222	225000	
44 Ca	45	1		15,910.00	15910.00	ppb	1.31	468797	225000	
51 V	45	1		0.27	0.27	ppb	13.72	1299	2700	
52 Cr	45	1		32.68	32.68	ppb	1.20	169317	2700	
55 Mn	45	1		1.99	1.99	ppb	2.77	8431	2700	
56 Fe	45	1		17.30	17.30	ppb	12.68	114270	202500	
59 Co	45	1		0.15	0.15	ppb	21.13	1449	2700	
60 Ni	45	1		0.67	0.67	ppb	8.20	1462	2700	
65 Cu	45	1		0.56	0.56	ppb	9.45	3692	2700	
66 Zn	45	1		5.93	5.93	ppb	1.92	6964	2700	
75 As	115	1		0.32	0.32	ppb	8.94	252	2250	
78 Se	115	1		-1.56	-1.56	ppb	13.47	208	2700	
83 Kr	115	2		----	-----	ppb	-----	562	2700	
95 Mo	115	2		1.19	1.19	ppb	5.77	11598	2700	
107 Ag	115	2		0.04	0.04	ppb	0.96	840	900	
111 Cd	115	2		0.69	0.69	ppb	3.07	2226	2700	
121 Sb	115	2		0.21	0.21	ppb	0.75	2513	1125	
137 Ba	159	2		15.97	15.97	ppb	2.14	69437	1350	
205 Tl	165	2		0.38	0.38	ppb	4.23	11362	900	
206 (Pb)	165	2		0.22	0.22	ppb	6.03	2756	2700	
207 (Pb)	165	2		0.21	0.21	ppb	6.20	2140	2700	
208 Pb	165	2		0.21	0.21	ppb	2.02	10361	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	96890	0.25	100961	96.0	70 - 150	
45 Sc	2	1525816	2.33	1543978	98.8	70 - 150	
115 In	1	600501	0.47	607558	98.8	70 - 150	
115 In	2	1724266	1.28	1778001	97.0	70 - 150	
159 Tb	1	1375267	1.05	1380036	99.7	70 - 150	
159 Tb	2	2293623	1.44	2348266	97.7	70 - 150	
165 Ho	1	1364530	1.97	1347066	101.3	70 - 150	
165 Ho	2	2215553	1.84	2253341	98.3	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqa.s.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S111913C.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\S111913C.b\020SMPL.D\020SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\020SMPL.D\020SMPL.D#
 Date Acquired: Nov 19 2013 10:34 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-030 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: Nov 19 2013 09:22 pm
 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	15.86	560	2700	
23 Na	45	1		8,206.00	8206.00	ppb	9.89	7791557	225000	
24 Mg	45	1		2,216.00	2216.00	ppb	9.44	1164901	225000	
27 Al	45	1		33.73	33.73	ppb	9.08	10731	67500	
39 K	45	1		1,407.00	1407.00	ppb	10.26	767843	225000	
44 Ca	45	1		15,180.00	15180.00	ppb	9.17	409150	225000	
51 V	45	1		0.25	0.25	ppb	11.41	1106	2700	
52 Cr	45	1		31.28	31.28	ppb	8.63	148364	2700	
55 Mn	45	1		0.74	0.74	ppb	9.77	3163	2700	
56 Fe	45	1		25.36	25.36	ppb	12.68	139811	202500	
59 Co	45	1		0.12	0.12	ppb	16.52	1101	2700	
60 Ni	45	1		0.66	0.66	ppb	11.04	1326	2700	
65 Cu	45	1		0.49	0.49	ppb	17.94	3217	2700	
66 Zn	45	1		6.46	6.46	ppb	9.83	6891	2700	
75 As	115	1		0.27	0.27	ppb	10.70	197	2250	
78 Se	115	1		-1.40	-1.40	ppb	25.41	200	2700	
83 Kr	115	2		-----	-----	ppb	-----	564	2700	
95 Mo	115	2		0.91	0.91	ppb	8.45	10152	2700	
107 Ag	115	2		0.03	0.03	ppb	5.81	633	900	
111 Cd	115	2		0.60	0.60	ppb	4.09	1994	2700	
121 Sb	115	2		0.14	0.14	ppb	10.32	1777	1125	
137 Ba	159	2		13.80	13.80	ppb	1.10	60678	1350	
205 Tl	165	2		0.15	0.15	ppb	7.10	4720	900	
206 (Pb)	165	2		0.15	0.15	ppb	15.41	2151	2700	
207 (Pb)	165	2		0.15	0.15	ppb	10.33	1712	2700	
208 Pb	165	2		0.14	0.14	ppb	11.52	8105	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range (%)	Flag
45 Sc	1	89157	9.34	100961	88.3	70 - 150	
45 Sc	2	1511631	0.61	1543978	97.9	70 - 150	
115 In	1	552155	9.90	607558	90.9	70 - 150	
115 In	2	1748664	2.21	1778001	98.4	70 - 150	
159 Tb	1	1284505	8.46	1380036	93.1	70 - 150	
159 Tb	2	2318351	0.55	2348266	98.7	70 - 150	
165 Ho	1	1257369	9.38	1347066	93.3	70 - 150	
165 Ho	2	2242172	0.66	2253341	99.5	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqa.s.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S111913C.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\S111913C.b\021SMPL.D\021SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\021SMPL.D\021SMPL.D#
 Date Acquired: Nov 19 2013 10:40 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-030 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: Nov 19 2013 09:22 pm
 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	19.79	457	2700	
23 Na	45	1	1,765.00	1765.00	ppb	1.53	2075342	225000	
24 Mg	45	1	475.50	475.50	ppb	0.98	291516	225000	
27 Al	45	1	12.41	12.41	ppb	0.92	5150	67500	
39 K	45	1	286.60	286.60	ppb	0.82	240609	225000	
44 Ca	45	1	3,342.00	3342.00	ppb	1.38	104867	225000	
51 V	45	1	0.12	0.12	ppb	1.12	646	2700	
52 Cr	45	1	6.71	6.71	ppb	1.52	37485	2700	
55 Mn	45	1	1.02	1.02	ppb	2.90	4881	2700	
56 Fe	45	1	15.17	15.17	ppb	3.23	110557	202500	
59 Co	45	1	0.07	0.07	ppb	4.06	849	2700	
60 Ni	45	1	0.21	0.21	ppb	2.70	537	2700	
65 Cu	45	1	-0.27	-0.27	ppb	8.18	1515	2700	
66 Zn	45	1	2.49	2.49	ppb	2.08	3482	2700	
75 As	115	1	0.11	0.11	ppb	9.23	113	2250	
78 Se	115	1	-2.00	-2.00	ppb	7.70	189	2700	
83 Kr	115	2	-----	-----	ppb	-----	584	2700	
95 Mo	115	2	-0.32	-0.32	ppb	4.18	3374	2700	
107 Ag	115	2	0.01	0.01	ppb	13.49	367	900	
111 Cd	115	2	0.17	0.17	ppb	4.60	650	2700	
121 Sb	115	2	0.07	0.07	ppb	9.17	1066	1125	
137 Ba	159	2	3.48	3.48	ppb	1.56	16125	1350	
205 Tl	165	2	0.08	0.08	ppb	5.38	2933	900	
206 (Pb)	165	2	0.21	0.21	ppb	2.51	2824	2700	
207 (Pb)	165	2	0.22	0.22	ppb	5.20	2328	2700	
208 Pb	165	2	0.21	0.21	ppb	3.05	11039	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	102903	0.89	100961	101.9	70 - 150	
45 Sc	2	1570512	1.16	1543978	101.7	70 - 150	
115 In	1	642799	1.40	607558	105.8	70 - 150	
115 In	2	1839478	0.86	1778001	103.5	70 - 150	
159 Tb	1	1456557	1.29	1380036	105.5	70 - 150	
159 Tb	2	2418202	1.46	2348266	103.0	70 - 150	
165 Ho	1	1441713	1.70	1347066	107.0	70 - 150	
165 Ho	2	2353837	2.11	2253341	104.5	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\S111913C.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\S111913C.b\022SMPL.D\022SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\022SMPL.D\022SMPL.D#
 Date Acquired: Nov 19 2013 10:46 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-032 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: Nov 19 2013 09:22 pm
 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	247.70	247.70	ppb	0.69	1653922	2700	
23 Na	45	1	34,650.00	34650.00	ppb	0.68	34133312	225000	
24 Mg	45	1	27,770.00	27770.00	ppb	1.08	15337830	225000	
27 Al	45	1	2,639.00	2639.00	ppb	1.19	819451	67500	
39 K	45	1	26,620.00	26620.00	ppb	1.81	14071940	225000	
44 Ca	45	1	42,070.00	42070.00	ppb	1.81	1192196	225000	
51 V	45	1	266.50	266.50	ppb	0.24	1132445	2700	
52 Cr	45	1	287.10	287.10	ppb	0.16	1426480	2700	
55 Mn	45	1	265.20	265.20	ppb	0.29	1015285	2700	
56 Fe	45	1	2,635.00	2635.00	ppb	0.80	12143200	202500	
59 Co	45	1	257.20	257.20	ppb	0.95	2080821	2700	
60 Ni	45	1	257.60	257.60	ppb	0.92	521733	2700	
65 Cu	45	1	262.70	262.70	ppb	1.63	693595	2700	
66 Zn	45	1	264.30	264.30	ppb	1.15	272960	2700	
75 As	115	1	264.00	264.00	ppb	0.66	173862	2250	
78 Se	115	1	257.60	257.60	ppb	0.89	17501	2700	
83 Kr	115	2	----	-----	ppb	-----	576	2700	
95 Mo	115	2	259.90	259.90	ppb	1.34	1374882	2700	
107 Ag	115	2	45.75	45.75	ppb	1.58	665415	900	
111 Cd	115	2	247.10	247.10	ppb	1.42	736174	2700	
121 Sb	115	2	253.30	253.30	ppb	0.67	2700198	1125	
137 Ba	159	2	269.00	269.00	ppb	0.59	1122589	1350	
205 Tl	165	2	237.70	237.70	ppb	0.48	6571707	900	
206 (Pb)	165	2	247.50	247.50	ppb	0.82	2261527	2700	
207 (Pb)	165	2	269.20	269.20	ppb	0.72	1904537	2700	
208 Pb	165	2	248.40	248.40	ppb	0.85	8729793	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93238	0.83	100961	92.4	70 - 150	
45 Sc	2	1462540	1.21	1543978	94.7	70 - 150	
115 In	1	561465	0.19	607558	92.4	70 - 150	
115 In	2	1623691	1.47	1778001	91.3	70 - 150	
159 Tb	1	1341747	2.03	1380036	97.2	70 - 150	
159 Tb	2	2207061	1.09	2348266	94.0	70 - 150	
165 Ho	1	1307013	1.46	1347066	97.0	70 - 150	
165 Ho	2	2132069	0.98	2253341	94.6	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqa.s.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S111913C.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\S111913C.b\023SMPL.D\023SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\023SMPL.D\023SMPL.D#
 Date Acquired: Nov 19 2013 10:52 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-034 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: Nov 19 2013 09:22 pm
 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		260.70	260.70	ppb	1.57	1730153	2700	
23 Na	45	1		35,910.00	35910.00	ppb	1.02	35215480	225000	
24 Mg	45	1		28,600.00	28600.00	ppb	0.54	15729400	225000	
27 Al	45	1		2,701.00	2701.00	ppb	1.48	834952	67500	
39 K	45	1		27,510.00	27510.00	ppb	1.66	14478220	225000	
44 Ca	45	1		43,170.00	43170.00	ppb	1.86	1217937	225000	
51 V	45	1		282.10	282.10	ppb	0.63	1193534	2700	
52 Cr	45	1		301.40	301.40	ppb	0.30	1490773	2700	
55 Mn	45	1		276.80	276.80	ppb	1.45	1055116	2700	
56 Fe	45	1		2,709.00	2709.00	ppb	1.44	12430030	202500	
59 Co	45	1		263.40	263.40	ppb	3.09	2121405	2700	
60 Ni	45	1		265.60	265.60	ppb	2.39	535638	2700	
65 Cu	45	1		275.70	275.70	ppb	1.85	724487	2700	
66 Zn	45	1		271.80	271.80	ppb	1.87	279465	2700	
75 As	115	1		273.20	273.20	ppb	0.91	179990	2250	
78 Se	115	1		266.00	266.00	ppb	0.79	18068	2700	
83 Kr	115	2		---	---	ppb	---	602	2700	
95 Mo	115	2		272.20	272.20	ppb	1.80	1425648	2700	
107 Ag	115	2		47.75	47.75	ppb	0.74	687717	900	
111 Cd	115	2		257.60	257.60	ppb	1.30	760009	2700	
121 Sb	115	2		265.50	265.50	ppb	1.70	2802776	1125	
137 Ba	159	2		284.30	284.30	ppb	2.19	1176155	1350	
205 Tl	165	2		243.30	243.30	ppb	0.78	6713664	900	
206 (Pb)	165	2		253.70	253.70	ppb	0.11	2314022	2700	
207 (Pb)	165	2		277.60	277.60	ppb	1.19	1960736	2700	
208 Pb	165	2		255.90	255.90	ppb	1.36	8978443	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	92843	2.11	100961	92.0	70 - 150	
45 Sc	2	1454102	2.09	1543978	94.2	70 - 150	
115 In	1	561699	1.56	607558	92.5	70 - 150	
115 In	2	1607894	1.80	1778001	90.4	70 - 150	
159 Tb	1	1349971	1.59	1380036	97.8	70 - 150	
159 Tb	2	2188494	1.15	2348266	93.2	70 - 150	
165 Ho	1	1321472	2.59	1347066	98.1	70 - 150	
165 Ho	2	2128634	0.75	2253341	94.5	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S111913C.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\S111913C.b\024SMPL.D\024SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\024SMPL.D\024SMPL.D#
 Date Acquired: Nov 19 2013 10:58 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-030 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: Nov 19 2013 09:22 pm
 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	49.87	49.87	ppb	0.44	330898	2700	
23 Na	45		1	14,040.00	14040.00	ppb	0.68	13933080	225000	
24 Mg	45		1	7,404.00	7404.00	ppb	0.96	4095768	225000	
27 Al	45		1	1,571.00	1571.00	ppb	1.02	488927	67500	
39 K	45		1	6,584.00	6584.00	ppb	1.29	3535470	225000	
44 Ca	45		1	20,560.00	20560.00	ppb	1.26	583434	225000	
51 V	45		1	52.47	52.47	ppb	1.19	223316	2700	
52 Cr	45		1	85.05	85.05	ppb	1.90	423478	2700	
55 Mn	45		1	53.99	53.99	ppb	0.55	207335	2700	
56 Fe	45		1	5,255.00	5255.00	ppb	0.70	24216730	202500	
59 Co	45		1	51.85	51.85	ppb	0.39	420131	2700	
60 Ni	45		1	54.24	54.24	ppb	1.55	110035	2700	
65 Cu	45		1	55.61	55.61	ppb	1.75	148640	2700	
66 Zn	45		1	59.98	59.98	ppb	0.49	62477	2700	
75 As	115		1	52.87	52.87	ppb	0.52	35483	2250	
78 Se	115		1	253.80	253.80	ppb	0.95	17568	2700	
83 Kr	115		2	-----	-----	ppb	-----	543	2700	
95 Mo	115		2	51.38	51.38	ppb	1.07	278214	2700	
107 Ag	115		2	48.48	48.48	ppb	1.19	711879	900	
111 Cd	115		2	50.36	50.36	ppb	0.54	151515	2700	
121 Sb	115		2	49.85	49.85	ppb	0.96	536605	1125	
137 Ba	159		2	66.45	66.45	ppb	0.55	277273	1350	
205 Tl	165		2	49.76	49.76	ppb	1.30	1384523	900	
206 (Pb)	165		2	46.96	46.96	ppb	1.96	432290	2700	
207 (Pb)	165		2	49.97	49.97	ppb	0.97	356234	2700	
208 Pb	165		2	47.92	47.92	ppb	1.07	1696811	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93349	1.11	100961	92.5	70 - 150	
45 Sc	2	1453066	1.29	1543978	94.1	70 - 150	
115 In	1	571931	1.35	607558	94.1	70 - 150	
115 In	2	1639282	0.66	1778001	92.2	70 - 150	
159 Tb	1	1346531	1.64	1380036	97.6	70 - 150	
159 Tb	2	2205792	0.70	2348266	93.9	70 - 150	
165 Ho	1	1307963	0.51	1347066	97.1	70 - 150	
165 Ho	2	2145784	0.76	2253341	95.2	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\S111913C.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\S111913C.b\025SMPL.D\025SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\025SMPL.D\025SMPL.D#
 Date Acquired: Nov 19 2013 11:04 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: Nov 19 2013 09:22 pm
 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		0.99	0.99	ppb	1.82	7445	2700	
23 Na	45	1		454.70	454.70	ppb	2.71	660208	225000	
24 Mg	45	1		217.90	217.90	ppb	2.01	134969	225000	
27 Al	45	1		133.20	133.20	ppb	0.55	46675	67500	
39 K	45	1		262.60	262.60	ppb	0.47	227505	225000	
44 Ca	45	1		455.30	455.30	ppb	1.91	14658	225000	
51 V	45	1		1.44	1.44	ppb	1.46	6872	2700	
52 Cr	45	1		1.59	1.59	ppb	1.75	9473	2700	
55 Mn	45	1		4.46	4.46	ppb	0.71	19462	2700	
56 Fe	45	1		370.00	370.00	ppb	1.01	1917773	202500	
59 Co	45	1		1.29	1.29	ppb	1.76	11695	2700	
60 Ni	45	1		1.42	1.42	ppb	4.24	3259	2700	
65 Cu	45	1		1.34	1.34	ppb	7.53	6202	2700	
66 Zn	45	1		3.13	3.13	ppb	3.06	4226	2700	
75 As	115	1		1.16	1.16	ppb	4.82	900	2250	
78 Se	115	1		0.19	0.19	ppb	73.02	355	2700	
83 Kr	115	2		----	-----	ppb	-----	580	2700	
95 Mo	115	2		6.01	6.01	ppb	1.42	42017	2700	
107 Ag	115	2		0.46	0.46	ppb	3.20	7933	900	
111 Cd	115	2		1.36	1.36	ppb	2.00	4740	2700	
121 Sb	115	2		1.00	1.00	ppb	3.64	12529	1125	
137 Ba	159	2		1.78	1.78	ppb	3.20	8510	1350	
205 Tl	165	2		1.16	1.16	ppb	0.60	36300	900	
206 (Pb)	165	2		2.20	2.20	ppb	0.48	23318	2700	
207 (Pb)	165	2		2.31	2.31	ppb	1.24	18934	2700	
208 Pb	165	2		2.17	2.17	ppb	0.50	88428	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range (%)	Flag
45 Sc	1	103285	0.63	100961	102.3	70 - 150	
45 Sc	2	1623904	0.28	1543978	105.2	70 - 150	
115 In	1	640785	1.58	607558	105.5	70 - 150	
115 In	2	1876866	0.27	1778001	105.6	70 - 150	
159 Tb	1	1459675	0.17	1380036	105.8	70 - 150	
159 Tb	2	2464756	1.41	2348266	105.0	70 - 150	
165 Ho	1	1442510	1.06	1347066	107.1	70 - 150	
165 Ho	2	2389757	0.36	2253341	106.1	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\S111913C.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\S111913C.b\026_CCV.D\026_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\026_CCV.D\026_CCV.D#
 Date Acquired: Nov 19 2013 11:09 pm
 Operator: GK
 Sample Name: CCV V-176971
 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: Nov 19 2013 09:22 pm
 Sample Type: 6-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	48.85	ppb	1.37	348870	50	97.7	90 - 110	
23 Na	45	1	5368.00	ppb	5.40	5811002	5000	107.4	90 - 110	
24 Mg	45	1	5475.00	ppb	5.03	3247302	5000	109.5	90 - 110	
27 Al	45	1	1631.00	ppb	6.57	543556	1500	108.7	90 - 110	
39 K	45	1	5407.00	ppb	6.44	3124405	5000	108.1	90 - 110	
44 Ca	45	1	5289.00	ppb	6.36	161104	5000	105.8	90 - 110	
51 V	45	1	53.40	ppb	6.90	243443	50	106.8	90 - 110	
52 Cr	45	1	54.35	ppb	7.30	290130	50	108.7	90 - 110	
55 Mn	45	1	54.35	ppb	6.59	223629	50	108.7	90 - 110	
56 Fe	45	1	5518.00	ppb	5.99	27250030	5000	110.4	90 - 110	Fail
59 Co	45	1	53.38	ppb	7.04	463318	50	106.8	90 - 110	
60 Ni	45	1	54.75	ppb	6.46	119011	50	109.5	90 - 110	
65 Cu	45	1	55.30	ppb	5.85	158432	50	110.6	90 - 110	Fail
66 Zn	45	1	55.04	ppb	6.65	61478	50	110.1	90 - 110	Fail
75 As	115	1	54.23	ppb	6.68	38579	50	108.5	90 - 110	
78 Se	115	1	266.30	ppb	5.37	19532	250	106.5	90 - 110	
83 Kr	115	2	-----	ppb	-----	517	50	#VALUE!	##### - #####	
95 Mo	115	2	49.87	ppb	0.49	296010	50	99.7	90 - 110	
107 Ag	115	2	50.15	ppb	3.04	806898	50	100.3	90 - 110	
111 Cd	115	2	50.11	ppb	0.71	165175	50	100.2	90 - 110	
121 Sb	115	2	49.72	ppb	1.34	586378	50	99.4	90 - 110	
137 Ba	159	2	51.38	ppb	2.24	230312	50	102.8	90 - 110	
205 Tl	165	2	51.38	ppb	0.30	1544332	50	102.8	90 - 110	
206 (Pb)	165	2	48.51	ppb	1.65	482343	50	97.0	90 - 110	
207 (Pb)	165	2	51.57	ppb	2.22	397063	50	103.1	90 - 110	
208 Pb	165	2	50.86	ppb	1.63	1945045	50	101.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	100244	5.20	100961	99.3	80 - 120	
45 Sc	2	1563932	1.70	1543978	101.3	80 - 120	
115 In	1	607582	5.02	607558	100.0	80 - 120	
115 In	2	1795846	0.97	1778001	101.0	80 - 120	
159 Tb	1	1380405	2.92	1380036	100.0	80 - 120	
159 Tb	2	2369170	0.57	2348266	100.9	80 - 120	
165 Ho	1	1344960	5.65	1347066	99.8	80 - 120	
165 Ho	2	2317928	1.18	2253341	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\S111913C.b\002CALB.D\002CALB.D#

3 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S111913C.b\027_CC.V.D\027_CC.V.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\027_CC.V.D\027_CC.V.D#
 Date Acquired: Nov 19 2013 11:15 pm
 Operator: GK
 Sample Name: LLCCV V-176972
 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: Nov 19 2013 09:22 pm
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.54 ppb	3.10	1	107.8	70 - 130	
23 Na	45	1	228.70 ppb	2.70	250	91.5	70 - 130	
24 Mg	45	1	279.60 ppb	2.31	250	111.8	70 - 130	
27 Al	45	1	108.90 ppb	2.16	100	108.9	70 - 130	
39 K	45	1	239.50 ppb	0.95	250	95.8	70 - 130	
44 Ca	45	1	268.90 ppb	2.17	250	107.6	70 - 130	
51 V	45	1	1.08 ppb	3.34	1	108.2	70 - 130	
52 Cr	45	1	1.11 ppb	2.65	1	110.5	70 - 130	
55 Mn	45	1	3.05 ppb	0.45	3	101.5	70 - 130	
56 Fe	45	1	173.00 ppb	1.64	150	115.3	70 - 130	
59 Co	45	1	1.07 ppb	3.07	1	107.1	70 - 130	
60 Ni	45	1	1.66 ppb	0.68	2	110.7	70 - 130	
65 Cu	45	1	4.79 ppb	6.24	5	95.8	70 - 130	
66 Zn	45	1	10.39 ppb	1.19	10	103.9	70 - 130	
75 As	115	1	1.07 ppb	6.20	1	107.0	70 - 130	
78 Se	115	1	3.05 ppb	12.19	5	61.0	70 - 130	FAIL
83 Kr	115	2	----- ppb	-----	1	#VALUE!	##### - #####	
95 Mo	115	2	0.24 ppb	17.25	1	24.0	70 - 130	FAIL
107 Ag	115	2	0.49 ppb	3.61	1	98.7	70 - 130	
111 Cd	115	2	1.00 ppb	0.49	1	99.8	70 - 130	
121 Sb	115	2	1.01 ppb	2.11	1	101.0	70 - 130	
137 Ba	159	2	2.57 ppb	1.38	3	102.6	70 - 130	
205 Tl	165	2	1.04 ppb	3.26	1	104.3	70 - 130	
206 (Pb)	165	2	1.45 ppb	3.99	2	96.7	70 - 130	
207 (Pb)	165	2	1.60 ppb	1.64	2	106.9	70 - 130	
208 Pb	165	2	1.47 ppb	2.21	2	98.3	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	102588	0.87	100961	101.6	80 - 120	
45 Sc	2	1542677	1.85	1543978	99.9	80 - 120	
115 In	1	631465	0.82	607558	103.9	80 - 120	
115 In	2	1819276	1.02	1778001	102.3	80 - 120	
159 Tb	1	1447032	1.86	1380036	104.9	80 - 120	
159 Tb	2	2380289	1.18	2348266	101.4	80 - 120	
165 Ho	1	1414203	0.64	1347066	105.0	80 - 120	
165 Ho	2	2310148	1.97	2253341	102.5	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\S111913C.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\S111913C.b\028_CCB.D\028_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\028_CCB.D\028_CCB.D#
 Date Acquired: Nov 19 2013 11:21 pm
 Operator: GK
 Sample Name: CCB V-176968
 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: Nov 19 2013 09:22 pm
 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	0.032 ppb	8.81	372	0.50	
23 Na	45	1	-11.980 ppb	49.87	143464	250.00	
24 Mg	45	1	12.580 ppb	31.27	8787	250.00	
27 Al	45	1	30.140 ppb	3.67	10553	100.00	
39 K	45	1	-6.992 ppb	51.63	65913	250.00	
44 Ca	45	1	75.750 ppb	11.52	2573	250.00	
51 V	45	1	0.099 ppb	18.47	533	1.00	
52 Cr	45	1	0.130 ppb	28.04	1363	1.00	
55 Mn	45	1	0.084 ppb	39.63	860	3.00	
56 Fe	45	1	10.200 ppb	24.05	80284	150.00	
59 Co	45	1	0.085 ppb	30.05	886	1.00	
60 Ni	45	1	0.099 ppb	25.76	270	1.50	
65 Cu	45	1	-0.197 ppb	24.62	1626	5.00	
66 Zn	45	1	0.626 ppb	9.94	1277	10.00	
75 As	115	1	0.093 ppb	31.81	90	1.00	
78 Se	115	1	-1.680 ppb	14.80	200	5.00	
83 Kr	115	2	----- ppb	-----	538	1.00	
95 Mo	115	2	-0.769 ppb	0.18	666	1.00	
107 Ag	115	2	0.015 ppb	20.35	431	0.50	
111 Cd	115	2	0.041 ppb	7.34	202	1.00	
121 Sb	115	2	0.053 ppb	3.95	847	1.00	
137 Ba	159	2	0.101 ppb	11.24	684	2.50	
205 Tl	165	2	0.074 ppb	6.73	2775	1.00	
206 (Pb)	165	2	0.110 ppb	4.16	1870	1.50	
207 (Pb)	165	2	0.117 ppb	6.25	1532	1.50	
208 Pb	165	2	0.107 ppb	1.19	7121	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range (%)	Flag
45 Sc	1	96746	3.04	100961	95.8	80 - 120	
45 Sc	2	1603358	0.67	1543978	103.8	80 - 120	
115 In	1	602907	3.16	607558	99.2	80 - 120	
115 In	2	1844885	0.41	1778001	103.8	80 - 120	
159 Tb	1	1366409	3.04	1380036	99.0	80 - 120	
159 Tb	2	2420478	0.74	2348266	103.1	80 - 120	
165 Ho	1	1344988	2.89	1347066	99.8	80 - 120	
165 Ho	2	2370809	0.69	2253341	105.2	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S111913C.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\S111913C.b\029SMPL.D\029SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\029SMPL.D\029SMPL.D#
 Date Acquired: Nov 19 2013 11:27 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-002
 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: Nov 19 2013 09:22 pm
 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	19.80	253	2700	
23 Na	45		1	19,190.00	19190.00	ppb	0.84	19362490	225000	
24 Mg	45		1	2,192.00	2192.00	ppb	0.37	1237532	225000	
27 Al	45		1	37.80	37.80	ppb	1.66	12804	67500	
39 K	45		1	1,789.00	1789.00	ppb	0.96	1029273	225000	
44 Ca	45		1	13,490.00	13490.00	ppb	1.86	390396	225000	
51 V	45		1	0.37	0.37	ppb	5.64	1692	2700	
52 Cr	45		1	48.66	48.66	ppb	1.52	247341	2700	
55 Mn	45		1	3.05	3.05	ppb	3.10	12430	2700	
56 Fe	45		1	45.87	45.87	ppb	1.10	246354	202500	
59 Co	45		1	0.36	0.36	ppb	2.41	3115	2700	
60 Ni	45		1	1.60	1.60	ppb	1.10	3359	2700	
65 Cu	45		1	4.33	4.33	ppb	1.69	13768	2700	
66 Zn	45		1	17.61	17.61	ppb	1.28	19122	2700	
75 As	115		1	0.24	0.24	ppb	11.43	189	2250	
78 Se	115		1	-1.94	-1.94	ppb	7.85	179	2700	
83 Kr	115		2			ppb		543	2700	
95 Mo	115		2	7.07	7.07	ppb	3.70	43818	2700	
107 Ag	115		2	0.03	0.03	ppb	10.44	556	900	
111 Cd	115		2	1.74	1.74	ppb	1.41	5470	2700	
121 Sb	115		2	0.13	0.13	ppb	1.82	1682	1125	
137 Ba	159		2	16.01	16.01	ppb	0.08	68395	1350	
205 Tl	165		2	0.06	0.06	ppb	3.84	2069	900	
206 (Pb)	165		2	0.49	0.49	ppb	2.94	5333	2700	
207 (Pb)	165		2	0.53	0.53	ppb	5.28	4440	2700	
208 Pb	165		2	0.50	0.50	ppb	2.63	20914	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	95188	1.37	100961	94.3	70 - 150	
45 Sc	2	1479514	0.61	1543978	95.8	70 - 150	
115 In	1	593618	1.31	607558	97.7	70 - 150	
115 In	2	1697951	1.15	1778001	95.5	70 - 150	
159 Tb	1	1384611	1.32	1380036	100.3	70 - 150	
159 Tb	2	2252586	0.46	2348266	95.9	70 - 150	
165 Ho	1	1362164	1.15	1347066	101.1	70 - 150	
165 Ho	2	2193478	0.21	2253341	97.3	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\S111913C.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\S111913C.b\030SMPL.D\030SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\030SMPL.D\030SMPL.D#
 Date Acquired: Nov 19 2013 11:33 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-004
 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: Nov 19 2013 09:22 pm
 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	36.16	204	2700	
23 Na	45	1	12,690.00	12690.00	ppb	1.39	12623880	225000	
24 Mg	45	1	2,501.00	2501.00	ppb	2.32	1386020	225000	
27 Al	45	1	16.35	16.35	ppb	4.33	5903	67500	
39 K	45	1	2,089.00	2089.00	ppb	0.85	1169215	225000	
44 Ca	45	1	16,340.00	16340.00	ppb	1.19	464460	225000	
51 V	45	1	0.47	0.47	ppb	3.01	2105	2700	
52 Cr	45	1	10.29	10.29	ppb	1.15	51894	2700	
55 Mn	45	1	6.03	6.03	ppb	1.87	23634	2700	
56 Fe	45	1	37.70	37.70	ppb	5.54	204283	202500	
59 Co	45	1	0.26	0.26	ppb	5.10	2251	2700	
60 Ni	45	1	2.65	2.65	ppb	0.90	5447	2700	
65 Cu	45	1	5.49	5.49	ppb	1.59	16578	2700	
66 Zn	45	1	70.90	70.90	ppb	0.79	73836	2700	
75 As	115	1	0.35	0.35	ppb	6.18	266	2250	
78 Se	115	1	-1.77	-1.77	ppb	13.01	188	2700	
83 Kr	115	2	----	-----	ppb	-----	530	2700	
95 Mo	115	2	-0.41	-0.41	ppb	5.74	2620	2700	
107 Ag	115	2	0.02	0.02	ppb	8.75	498	900	
111 Cd	115	2	10.63	10.63	ppb	1.17	33352	2700	
121 Sb	115	2	0.23	0.23	ppb	4.43	2794	1125	
137 Ba	159	2	15.78	15.78	ppb	1.76	67052	1350	
205 Tl	165	2	0.04	0.04	ppb	9.34	1697	900	
206 (Pb)	165	2	0.28	0.28	ppb	1.54	3358	2700	
207 (Pb)	165	2	0.32	0.32	ppb	6.24	2903	2700	
208 Pb	165	2	0.29	0.29	ppb	2.66	13229	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93466	0.70	100961	92.6	70 - 150	
45 Sc	2	1472020	0.30	1543978	95.3	70 - 150	
115 In	1	583923	1.12	607558	96.1	70 - 150	
115 In	2	1706330	0.87	1778001	96.0	70 - 150	
159 Tb	1	1368994	0.61	1380036	99.2	70 - 150	
159 Tb	2	2241222	1.23	2348266	95.4	70 - 150	
165 Ho	1	1347728	0.47	1347066	100.0	70 - 150	
165 Ho	2	2193018	0.23	2253341	97.3	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\S111913C.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

G:\ICPCHEM\1\DATA\S111913C.b\031SMPL.D\031SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\031SMPL.D\031SMPL.D#
 Date Acquired: Nov 19 2013 11:39 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-006
 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: Nov 19 2013 09:22 pm
 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	20.13	260	2700	
23 Na	45		1	5,308.00	5308.00	ppb	1.32	5043119	225000	
24 Mg	45		1	2,064.00	2064.00	ppb	0.83	1074978	225000	
27 Al	45		1	10.65	10.65	ppb	5.62	3879	67500	
39 K	45		1	2,179.00	2179.00	ppb	1.44	1143032	225000	
44 Ca	45		1	14,610.00	14610.00	ppb	1.14	390161	225000	
51 V	45		1	0.21	0.21	ppb	6.06	932	2700	
52 Cr	45		1	73.56	73.56	ppb	0.85	344554	2700	
55 Mn	45		1	1.65	1.65	ppb	0.69	6431	2700	
56 Fe	45		1	12.33	12.33	ppb	9.09	82066	202500	
59 Co	45		1	0.27	0.27	ppb	5.59	2188	2700	
60 Ni	45		1	2.63	2.63	ppb	2.66	5061	2700	
65 Cu	45		1	0.29	0.29	ppb	16.53	2673	2700	
66 Zn	45		1	2.72	2.72	ppb	1.41	3189	2700	
75 As	115		1	0.21	0.21	ppb	9.22	156	2250	
78 Se	115		1	-1.64	-1.64	ppb	18.77	184	2700	
83 Kr	115		2	-----	-----	ppb	-----	544	2700	
95 Mo	115		2	0.62	0.62	ppb	7.01	7911	2700	
107 Ag	115		2	0.02	0.02	ppb	27.66	404	900	
111 Cd	115		2	24.99	24.99	ppb	0.90	74381	2700	
121 Sb	115		2	0.08	0.08	ppb	4.35	1015	1125	
137 Ba	159		2	11.27	11.27	ppb	2.93	46012	1350	
205 Tl	165		2	0.07	0.07	ppb	4.10	2224	900	
206 (Pb)	165		2	0.08	0.08	ppb	2.63	1357	2700	
207 (Pb)	165		2	0.10	0.10	ppb	6.82	1249	2700	
208 Pb	165		2	0.08	0.08	ppb	3.00	5422	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	87794	0.50	100961	87.0	70 - 150	
45 Sc	2	1419390	1.03	1543978	91.9	70 - 150	
115 In	1	547209	1.27	607558	90.1	70 - 150	
115 In	2	1621415	1.49	1778001	91.2	70 - 150	
159 Tb	1	1279760	2.49	1380036	92.7	70 - 150	
159 Tb	2	2151376	1.44	2348266	91.6	70 - 150	
165 Ho	1	1257828	3.38	1347066	93.4	70 - 150	
165 Ho	2	2102707	0.40	2253341	93.3	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\S111913C.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\S111913C.b\032SMPL.D\032SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\032SMPL.D\032SMPL.D#
 Date Acquired: Nov 19 2013 11:45 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-008
 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: Nov 19 2013 09:22 pm
 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		0.62	0.62	ppb	1.83	4079	2700	
23 Na	45	1		6,066.00	6066.00	ppb	1.79	5601403	225000	
24 Mg	45	1		1,480.00	1480.00	ppb	0.64	752241	225000	
27 Al	45	1		224.70	224.70	ppb	0.82	64779	67500	
39 K	45	1		2,341.00	2341.00	ppb	1.80	1193168	225000	
44 Ca	45	1		5,033.00	5033.00	ppb	2.96	131218	225000	
51 V	45	1		0.18	0.18	ppb	22.85	771	2700	
52 Cr	45	1		1.80	1.80	ppb	4.28	8799	2700	
55 Mn	45	1		281.50	281.50	ppb	3.58	989281	2700	
56 Fe	45	1		14.40	14.40	ppb	28.44	88847	202500	
59 Co	45	1		0.20	0.20	ppb	17.14	1612	2700	
60 Ni	45	1		5.75	5.75	ppb	1.59	10744	2700	
65 Cu	45	1		3.54	3.54	ppb	2.91	10478	2700	
66 Zn	45	1		14.45	14.45	ppb	1.10	14214	2700	
75 As	115	1		0.22	0.22	ppb	21.78	159	2250	
78 Se	115	1		-1.56	-1.56	ppb	5.93	186	2700	
83 Kr	115	2		----	-----	ppb	-----	590	2700	
95 Mo	115	2		-0.82	-0.82	ppb	0.59	327	2700	
107 Ag	115	2		0.03	0.03	ppb	9.10	577	900	
111 Cd	115	2		1.95	1.95	ppb	2.04	5737	2700	
121 Sb	115	2		0.07	0.07	ppb	4.88	877	1125	
137 Ba	159	2		110.50	110.50	ppb	0.59	451547	1350	
205 Tl	165	2		0.04	0.04	ppb	8.77	1406	900	
206 (Pb)	165	2		0.08	0.08	ppb	4.79	1351	2700	
207 (Pb)	165	2		0.09	0.09	ppb	11.84	1146	2700	
208 Pb	165	2		0.07	0.07	ppb	3.03	5168	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	85662	3.19	100961	84.8	70 - 150	
45 Sc	2	1409457	1.78	1543978	91.3	70 - 150	
115 In	1	539574	5.23	607558	88.8	70 - 150	
115 In	2	1590703	0.84	1778001	89.5	70 - 150	
159 Tb	1	1272093	3.87	1380036	92.2	70 - 150	
159 Tb	2	2159981	0.78	2348266	92.0	70 - 150	
165 Ho	1	1267688	4.03	1347066	94.1	70 - 150	
165 Ho	2	2085780	0.18	2253341	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\S111913C.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\S111913C.b\033SMPL.D\033SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\033SMPL.D\033SMPL.D#
 Date Acquired: Nov 19 2013 11:51 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-010
 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: Nov 19 2013 09:22 pm
 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	21.21	352	2700	
23 Na	45	1	6,149.00	6149.00	ppb	3.02	5660234	225000	
24 Mg	45	1	1,462.00	1462.00	ppb	2.52	740640	225000	
27 Al	45	1	28.74	28.74	ppb	3.23	8912	67500	
39 K	45	1	2,680.00	2680.00	ppb	0.80	1353143	225000	
44 Ca	45	1	9,534.00	9534.00	ppb	1.68	247692	225000	
51 V	45	1	0.16	0.16	ppb	2.24	720	2700	
52 Cr	45	1	0.76	0.76	ppb	2.13	4073	2700	
55 Mn	45	1	19.76	19.76	ppb	2.36	69694	2700	
56 Fe	45	1	64.84	64.84	ppb	1.89	300895	202500	
59 Co	45	1	0.10	0.10	ppb	2.44	856	2700	
60 Ni	45	1	0.86	0.86	ppb	7.34	1651	2700	
65 Cu	45	1	0.00	0.00	ppb	826.79	1920	2700	
66 Zn	45	1	4.12	4.12	ppb	3.32	4422	2700	
75 As	115	1	0.17	0.17	ppb	11.51	128	2250	
78 Se	115	1	-2.01	-2.01	ppb	9.32	158	2700	
83 Kr	115	2	----	-----	ppb	-----	603	2700	
95 Mo	115	2	-0.82	-0.82	ppb	1.03	307	2700	
107 Ag	115	2	0.01	0.01	ppb	11.09	342	900	
111 Cd	115	2	0.04	0.04	ppb	5.00	172	2700	
121 Sb	115	2	0.07	0.07	ppb	1.89	885	1125	
137 Ba	159	2	20.53	20.53	ppb	1.32	81361	1350	
205 Tl	165	2	0.03	0.03	ppb	4.41	1255	900	
206 (Pb)	165	2	0.03	0.03	ppb	34.95	893	2700	
207 (Pb)	165	2	0.04	0.04	ppb	19.07	830	2700	
208 Pb	165	2	0.03	0.03	ppb	20.00	3702	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	85415	2.19	100961	84.6	70 - 150	
45 Sc	2	1371676	1.42	1543978	88.8	70 - 150	
115 In	1	541534	0.91	607558	89.1	70 - 150	
115 In	2	1574128	0.58	1778001	88.5	70 - 150	
159 Tb	1	1266379	2.25	1380036	91.8	70 - 150	
159 Tb	2	2091826	0.76	2348266	89.1	70 - 150	
165 Ho	1	1251615	1.09	1347066	92.9	70 - 150	
165 Ho	2	2033404	2.29	2253341	90.2	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\S111913C.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\S111913C.b\034SMPL.D\034SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\034SMPL.D\034SMPL.D#
 Date Acquired: Nov 19 2013 11:57 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-012
 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: Nov 19 2013 09:22 pm
 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	41.97	171	2700	
23 Na	45	1		4,343.00	4343.00	ppb	2.10	4091017	225000	
24 Mg	45	1		1,250.00	1250.00	ppb	1.13	641442	225000	
27 Al	45	1		29.17	29.17	ppb	3.37	9135	67500	
39 K	45	1		294.20	294.20	ppb	2.77	205722	225000	
44 Ca	45	1		3,127.00	3127.00	ppb	1.72	82428	225000	
51 V	45	1		0.22	0.22	ppb	6.19	952	2700	
52 Cr	45	1		0.41	0.41	ppb	4.06	2510	2700	
55 Mn	45	1		1.59	1.59	ppb	4.13	6099	2700	
56 Fe	45	1		22.91	22.91	ppb	6.62	125633	202500	
59 Co	45	1		0.18	0.18	ppb	8.21	1465	2700	
60 Ni	45	1		0.99	0.99	ppb	2.12	1911	2700	
65 Cu	45	1		0.74	0.74	ppb	10.79	3744	2700	
66 Zn	45	1		5.98	5.98	ppb	0.93	6253	2700	
75 As	115	1		0.17	0.17	ppb	6.48	131	2250	
78 Se	115	1		-1.94	-1.94	ppb	6.94	166	2700	
83 Kr	115	2		-----	-----	ppb	-----	537	2700	
95 Mo	115	2		-0.69	-0.69	ppb	1.51	1026	2700	
107 Ag	115	2		0.01	0.01	ppb	31.12	270	900	
111 Cd	115	2		0.04	0.04	ppb	12.22	171	2700	
121 Sb	115	2		0.05	0.05	ppb	2.54	768	1125	
137 Ba	159	2		4.54	4.54	ppb	1.60	19235	1350	
205 Tl	165	2		0.02	0.02	ppb	7.78	880	900	
206 (Pb)	165	2		0.04	0.04	ppb	13.32	1020	2700	
207 (Pb)	165	2		0.05	0.05	ppb	20.77	907	2700	
208 Pb	165	2		0.04	0.04	ppb	6.41	4163	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	86443	5.18	100961	85.6	70 - 150	
45 Sc	2	1434853	1.25	1543978	92.9	70 - 150	
115 In	1	553246	5.22	607558	91.1	70 - 150	
115 In	2	1683105	0.70	1778001	94.7	70 - 150	
159 Tb	1	1291169	4.80	1380036	93.6	70 - 150	
159 Tb	2	2218746	0.56	2348266	94.5	70 - 150	
165 Ho	1	1270639	6.61	1347066	94.3	70 - 150	
165 Ho	2	2133806	0.80	2253341	94.7	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S111913C.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\S111913C.b\035SMPL.D\035SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\035SMPL.D\035SMPL.D#
 Date Acquired: Nov 20 2013 12:03 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-014
 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: Nov 19 2013 09:22 pm
 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	19.41	222	2700	
23 Na	45		1	15,700.00	15700.00	ppb	3.35	14941420	225000	
24 Mg	45		1	2,616.00	2616.00	ppb	2.56	1390474	225000	
27 Al	45		1	19.29	19.29	ppb	0.60	6538	67500	
39 K	45		1	4,698.00	4698.00	ppb	2.75	2441024	225000	
44 Ca	45		1	11,280.00	11280.00	ppb	1.77	307495	225000	
51 V	45		1	0.23	0.23	ppb	0.50	1037	2700	
52 Cr	45		1	1.04	1.04	ppb	2.62	5602	2700	
55 Mn	45		1	8.23	8.23	ppb	1.33	30764	2700	
56 Fe	45		1	7.13	7.13	ppb	5.02	60774	202500	
59 Co	45		1	0.17	0.17	ppb	3.50	1472	2700	
60 Ni	45		1	0.25	0.25	ppb	5.75	551	2700	
65 Cu	45		1	0.31	0.31	ppb	8.33	2778	2700	
66 Zn	45		1	4.62	4.62	ppb	1.91	5138	2700	
75 As	115		1	0.17	0.17	ppb	12.99	133	2250	
78 Se	115		1	-1.74	-1.74	ppb	8.28	184	2700	
83 Kr	115		2	----	-----	ppb	-----	552	2700	
95 Mo	115		2	-0.82	-0.82	ppb	0.77	308	2700	
107 Ag	115		2	0.01	0.01	ppb	16.58	319	900	
111 Cd	115		2	0.02	0.02	ppb	6.46	131	2700	
121 Sb	115		2	0.05	0.05	ppb	17.05	697	1125	
137 Ba	159		2	32.07	32.07	ppb	0.89	134026	1350	
205 Tl	165		2	0.01	0.01	ppb	1.86	653	900	
206 (Pb)	165		2	0.04	0.04	ppb	27.35	1067	2700	
207 (Pb)	165		2	0.04	0.04	ppb	10.11	870	2700	
208 Pb	165		2	0.04	0.04	ppb	7.11	4187	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89671	2.41	100961	88.8	70 - 150	
45 Sc	2	1444317	0.74	1543978	93.5	70 - 150	
115 In	1	566157	1.94	607558	93.2	70 - 150	
115 In	2	1664660	0.82	1778001	93.6	70 - 150	
159 Tb	1	1320298	3.44	1380036	95.7	70 - 150	
159 Tb	2	2207710	1.22	2348266	94.0	70 - 150	
165 Ho	1	1294394	2.29	1347066	96.1	70 - 150	
165 Ho	2	2139523	2.09	2253341	94.9	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\S111913C.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\S111913C.b\036SMPL.D\036SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\036SMPL.D\036SMPL.D#
 Date Acquired: Nov 20 2013 12:09 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-016
 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: Nov 19 2013 09:22 pm
 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	80.74	172	2700	
23 Na	45	1		8,368.00	8368.00	ppb	1.17	8249344	225000	
24 Mg	45	1		2,475.00	2475.00	ppb	0.89	1351065	225000	
27 Al	45	1		10.79	10.79	ppb	2.67	4110	67500	
39 K	45	1		529.20	529.20	ppb	1.15	341265	225000	
44 Ca	45	1		6,368.00	6368.00	ppb	0.52	178462	225000	
51 V	45	1		0.17	0.17	ppb	1.21	793	2700	
52 Cr	45	1		0.38	0.38	ppb	1.39	2518	2700	
55 Mn	45	1		1.11	1.11	ppb	0.94	4677	2700	
56 Fe	45	1		11.66	11.66	ppb	3.57	82944	202500	
59 Co	45	1		0.10	0.10	ppb	11.29	931	2700	
60 Ni	45	1		0.43	0.43	ppb	5.98	914	2700	
65 Cu	45	1		1.66	1.66	ppb	5.51	6374	2700	
66 Zn	45	1		5.20	5.20	ppb	0.30	5867	2700	
75 As	115	1		0.16	0.16	ppb	3.88	134	2250	
78 Se	115	1		-1.85	-1.85	ppb	5.28	181	2700	
83 Kr	115	2		----	-----	ppb	-----	573	2700	
95 Mo	115	2		-0.80	-0.80	ppb	0.40	450	2700	
107 Ag	115	2		0.00	0.00	ppb	26.06	234	900	
111 Cd	115	2		0.03	0.03	ppb	13.89	160	2700	
121 Sb	115	2		0.12	0.12	ppb	4.70	1445	1125	
137 Ba	159	2		5.99	5.99	ppb	0.41	25297	1350	
205 Tl	165	2		0.01	0.01	ppb	39.88	633	900	
206 (Pb)	165	2		0.11	0.11	ppb	2.05	1706	2700	
207 (Pb)	165	2		0.13	0.13	ppb	8.86	1451	2700	
208 Pb	165	2		0.11	0.11	ppb	3.44	6681	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	92050	0.89	100961	91.2	70 - 150	
45 Sc	2	1440207	2.19	1543978	93.3	70 - 150	
115 In	1	581770	0.98	607558	95.8	70 - 150	
115 In	2	1672042	0.73	1778001	94.0	70 - 150	
159 Tb	1	1371179	2.08	1380036	99.4	70 - 150	
159 Tb	2	2215891	1.50	2348266	94.4	70 - 150	
165 Ho	1	1339770	1.20	1347066	99.5	70 - 150	
165 Ho	2	2149839	1.81	2253341	95.4	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\S111913C.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\S111913C.b\037SMPL.D\037SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\037SMPL.D\037SMPL.D#
 Date Acquired: Nov 20 2013 12:15 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-018
 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: Nov 19 2013 09:22 pm
 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	122.11	147	2700	
23 Na	45		1	55.43	55.43	ppb	4.95	202144	225000	
24 Mg	45		1	5.95	5.95	ppb	12.51	4746	225000	
27 Al	45		1	28.16	28.16	ppb	2.67	9445	67500	
39 K	45		1	2.13	2.13	ppb	36.08	67575	225000	
44 Ca	45		1	55.55	55.55	ppb	3.02	1884	225000	
51 V	45		1	0.16	0.16	ppb	5.99	747	2700	
52 Cr	45		1	0.16	0.16	ppb	5.11	1445	2700	
55 Mn	45		1	1.11	1.11	ppb	4.18	4695	2700	
56 Fe	45		1	10.44	10.44	ppb	4.16	77574	202500	
59 Co	45		1	0.01	0.01	ppb	40.49	261	2700	
60 Ni	45		1	0.13	0.13	ppb	4.20	314	2700	
65 Cu	45		1	1.89	1.89	ppb	4.54	6983	2700	
66 Zn	45		1	2.46	2.46	ppb	2.23	3082	2700	
75 As	115		1	0.13	0.13	ppb	5.70	111	2250	
78 Se	115		1	-2.12	-2.12	ppb	5.83	162	2700	
83 Kr	115		2	----	-----	ppb	-----	568	2700	
95 Mo	115		2	-0.84	-0.84	ppb	0.46	231	2700	
107 Ag	115		2	0.01	0.01	ppb	37.08	224	900	
111 Cd	115		2	0.01	0.01	ppb	91.69	70	2700	
121 Sb	115		2	0.05	0.05	ppb	10.13	648	1125	
137 Ba	159		2	0.31	0.31	ppb	1.99	1416	1350	
205 Tl	165		2	0.01	0.01	ppb	6.70	638	900	
206 (Pb)	165		2	0.03	0.03	ppb	22.39	895	2700	
207 (Pb)	165		2	0.04	0.04	ppb	8.61	779	2700	
208 Pb	165		2	0.03	0.03	ppb	3.21	3505	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	92191	0.47	100961	91.3	70 - 150	
45 Sc	2	1358043	0.57	1543978	88.0	70 - 150	
115 In	1	578613	1.18	607558	95.2	70 - 150	
115 In	2	1584609	1.67	1778001	89.1	70 - 150	
159 Tb	1	1358985	0.92	1380036	98.5	70 - 150	
159 Tb	2	2109393	1.64	2348266	89.8	70 - 150	
165 Ho	1	1335753	1.43	1347066	99.2	70 - 150	
165 Ho	2	2062341	0.92	2253341	91.5	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\S111913C.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\S111913C.b\038SMPL.D\038SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\038SMPL.D\038SMPL.D#
 Date Acquired: Nov 20 2013 12:21 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: Nov 19 2013 09:22 pm
 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	0.92	0.92	ppb	0.21	6525	2700	
23 Na	45		1	443.90	443.90	ppb	4.80	614884	225000	
24 Mg	45		1	215.70	215.70	ppb	2.27	126679	225000	
27 Al	45		1	129.30	129.30	ppb	2.26	42994	67500	
39 K	45		1	261.80	261.80	ppb	0.76	215274	225000	
44 Ca	45		1	465.50	465.50	ppb	1.89	14198	225000	
51 V	45		1	1.37	1.37	ppb	1.47	6218	2700	
52 Cr	45		1	1.54	1.54	ppb	4.34	8725	2700	
55 Mn	45		1	4.48	4.48	ppb	1.23	18523	2700	
56 Fe	45		1	365.40	365.40	ppb	2.04	1796022	202500	
59 Co	45		1	1.20	1.20	ppb	2.18	10389	2700	
60 Ni	45		1	1.35	1.35	ppb	0.98	2931	2700	
65 Cu	45		1	1.30	1.30	ppb	6.32	5785	2700	
66 Zn	45		1	3.14	3.14	ppb	2.84	4016	2700	
75 As	115		1	1.11	1.11	ppb	3.15	817	2250	
78 Se	115		1	-0.10	-0.10	ppb	154.88	315	2700	
83 Kr	115		2	-----	-----	ppb	-----	516	2700	
95 Mo	115		2	5.92	5.92	ppb	1.89	39114	2700	
107 Ag	115		2	0.43	0.43	ppb	2.12	7022	900	
111 Cd	115		2	1.31	1.31	ppb	4.21	4327	2700	
121 Sb	115		2	0.91	0.91	ppb	3.83	10780	1125	
137 Ba	159		2	1.79	1.79	ppb	2.51	8251	1350	
205 Tl	165		2	0.95	0.95	ppb	1.95	28579	900	
206 (Pb)	165		2	2.05	2.05	ppb	3.37	20818	2700	
207 (Pb)	165		2	2.20	2.20	ppb	1.27	17251	2700	
208 Pb	165		2	2.06	2.06	ppb	2.53	80418	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97919	0.68	100961	97.0	70 - 150	
45 Sc	2	1523696	0.91	1543978	98.7	70 - 150	
115 In	1	606522	0.71	607558	99.8	70 - 150	
115 In	2	1770418	1.34	1778001	99.6	70 - 150	
159 Tb	1	1429160	0.39	1380036	103.6	70 - 150	
159 Tb	2	2368410	0.94	2348266	100.9	70 - 150	
165 Ho	1	1384455	1.33	1347066	102.8	70 - 150	
165 Ho	2	2285586	2.20	2253341	101.4	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\S111913C.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\S111913C.b\039_CCV.D\039_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\039_CCV.D\039_CCV.D#
 Date Acquired: Nov 20 2013 12:27 am
 Operator: GK
 Sample Name: CCV V-176971
 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: Nov 19 2013 09:22 pm
 Sample Type: 6-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	49.60 ppb	0.93	334078	50	99.2	90 - 110	
23 Na	45	1	5395.00 ppb	1.71	5460513	5000	107.9	90 - 110	
24 Mg	45	1	5447.00 ppb	0.14	3020428	5000	108.9	90 - 110	
27 Al	45	1	1613.00 ppb	0.68	502853	1500	107.5	90 - 110	
39 K	45	1	5369.00 ppb	1.61	2902160	5000	107.4	90 - 110	
44 Ca	45	1	5276.00 ppb	0.48	150345	5000	105.5	90 - 110	
51 V	45	1	53.74 ppb	0.38	229240	50	107.5	90 - 110	
52 Cr	45	1	54.36 ppb	1.26	271551	50	108.7	90 - 110	
55 Mn	45	1	54.23 ppb	0.21	208766	50	108.5	90 - 110	
56 Fe	45	1	5457.00 ppb	0.96	25207520	5000	109.1	90 - 110	
59 Co	45	1	53.74 ppb	0.34	436476	50	107.5	90 - 110	
60 Ni	45	1	55.19 ppb	1.16	112246	50	110.4	90 - 110	Fail
65 Cu	45	1	55.58 ppb	1.15	148929	50	111.2	90 - 110	Fail
66 Zn	45	1	55.56 ppb	0.42	58048	50	111.1	90 - 110	Fail
75 As	115	1	52.35 ppb	0.89	35727	50	104.7	90 - 110	
78 Se	115	1	257.20 ppb	0.99	18097	250	102.9	90 - 110	
83 Kr	115	2	----- ppb	-----	591	50	#VALUE!	#####	
95 Mo	115	2	49.92 ppb	1.00	284140	50	99.8	90 - 110	
107 Ag	115	2	48.93 ppb	2.30	754813	50	97.9	90 - 110	
111 Cd	115	2	49.69 ppb	1.61	157065	50	99.4	90 - 110	
121 Sb	115	2	49.18 ppb	1.07	556111	50	98.4	90 - 110	
137 Ba	159	2	51.63 ppb	0.82	218888	50	103.3	90 - 110	
205 Tl	165	2	51.35 ppb	1.16	1454788	50	102.7	90 - 110	
206 (Pb)	165	2	48.09 ppb	2.28	450734	50	96.2	90 - 110	
207 (Pb)	165	2	51.74 ppb	2.86	375444	50	103.5	90 - 110	
208 Pb	165	2	50.59 ppb	1.83	1823629	50	101.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93563	1.08	100961	92.7	80 - 120	
45 Sc	2	1475126	1.70	1543978	95.5	80 - 120	
115 In	1	581610	2.54	607558	95.7	80 - 120	
115 In	2	1722104	1.18	1778001	96.9	80 - 120	
159 Tb	1	1371528	1.15	1380036	99.4	80 - 120	
159 Tb	2	2240837	1.64	2348266	95.4	80 - 120	
165 Ho	1	1329367	1.82	1347066	98.7	80 - 120	
165 Ho	2	2185349	2.78	2253341	97.0	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\S111913C.b\002CALB.D\002CALB.D#

3 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S111913C.b\040_CCV.D\040_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\040_CCV.D\040_CCV.D#
 Date Acquired: Nov 20 2013 12:32 am
 Operator: GK
 Sample Name: LLCCV V-176972
 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: Nov 19 2013 09:22 pm
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.49	ppb	2.45	1	97.4	70 - 130	
23 Na	45	1	239.40	ppb	0.88	250	95.8	70 - 130	
24 Mg	45	1	280.30	ppb	0.45	250	112.1	70 - 130	
27 Al	45	1	108.60	ppb	1.69	100	108.6	70 - 130	
39 K	45	1	244.80	ppb	1.02	250	97.9	70 - 130	
44 Ca	45	1	266.80	ppb	0.90	250	106.7	70 - 130	
51 V	45	1	1.08	ppb	1.79	1	107.8	70 - 130	
52 Cr	45	1	1.11	ppb	1.62	1	110.7	70 - 130	
55 Mn	45	1	3.14	ppb	2.25	3	104.7	70 - 130	
56 Fe	45	1	178.20	ppb	1.49	150	118.8	70 - 130	
59 Co	45	1	1.08	ppb	2.61	1	108.2	70 - 130	
60 Ni	45	1	1.68	ppb	3.35	2	112.1	70 - 130	
65 Cu	45	1	4.95	ppb	4.53	5	99.0	70 - 130	
66 Zn	45	1	10.65	ppb	0.83	10	106.5	70 - 130	
75 As	115	1	1.03	ppb	5.47	1	102.9	70 - 130	
78 Se	115	1	2.82	ppb	7.80	5	56.5	70 - 130	FAIL
83 Kr	115	2	-----	ppb	-----	1	#VALUE! #####	70 - 130	
95 Mo	115	2	0.20	ppb	12.22	1	19.6	70 - 130	FAIL
107 Ag	115	2	0.49	ppb	1.76	1	97.4	70 - 130	
111 Cd	115	2	0.99	ppb	1.17	1	98.6	70 - 130	
121 Sb	115	2	0.97	ppb	1.92	1	96.5	70 - 130	
137 Ba	159	2	2.48	ppb	3.51	3	99.0	70 - 130	
205 Tl	165	2	0.99	ppb	1.05	1	98.5	70 - 130	
206 (Pb)	165	2	1.40	ppb	3.56	2	93.6	70 - 130	
207 (Pb)	165	2	1.54	ppb	1.24	2	102.9	70 - 130	
208 Pb	165	2	1.43	ppb	1.61	2	95.0	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93445	0.39	100961	92.6	80 - 120	
45 Sc	2	1472002	1.09	1543978	95.3	80 - 120	
115 In	1	584165	1.71	607558	96.1	80 - 120	
115 In	2	1738047	0.60	1778001	97.8	80 - 120	
159 Tb	1	1335753	0.24	1380036	96.8	80 - 120	
159 Tb	2	2282656	1.53	2348266	97.2	80 - 120	
165 Ho	1	1315166	1.26	1347066	97.6	80 - 120	
165 Ho	2	2222932	1.28	2253341	98.7	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S111913C.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\S111913C.b\041_CCB.D\041_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\041_CCB.D\041_CCB.D#
 Date Acquired: Nov 20 2013 12:38 am
 Operator: GK
 Sample Name: CCB V-176968
 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: Nov 19 2013 09:22 pm
 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	0.010 ppb	23.90	202	0.50	
23 Na	45	1	-29.730 ppb	1.14	128551	250.00	
24 Mg	45	1	2.982 ppb	6.63	3360	250.00	
27 Al	45	1	26.810 ppb	0.80	9711	100.00	
39 K	45	1	-18.540 ppb	3.66	61097	250.00	
44 Ca	45	1	58.470 ppb	3.83	2114	250.00	
51 V	45	1	0.024 ppb	5.55	209	1.00	
52 Cr	45	1	0.046 ppb	14.63	956	1.00	
55 Mn	45	1	0.004 ppb	253.52	556	3.00	
56 Fe	45	1	4.139 ppb	4.04	52600	150.00	
59 Co	45	1	0.016 ppb	8.30	308	1.00	
60 Ni	45	1	0.022 ppb	14.38	111	1.50	
65 Cu	45	1	-0.288 ppb	14.89	1410	5.00	
66 Zn	45	1	0.581 ppb	11.90	1260	10.00	
75 As	115	1	0.006 ppb	115.94	30	1.00	
78 Se	115	1	-2.279 ppb	8.24	162	5.00	
83 Kr	115	2	----- ppb	-----	561	1.00	
95 Mo	115	2	-0.813 ppb	1.57	399	1.00	
107 Ag	115	2	0.008 ppb	21.19	313	0.50	
111 Cd	115	2	0.018 ppb	33.56	120	1.00	
121 Sb	115	2	0.017 ppb	42.25	403	1.00	
137 Ba	159	2	0.086 ppb	14.50	614	2.50	
205 Tl	165	2	0.022 ppb	17.32	1141	1.00	
206 (Pb)	165	2	0.064 ppb	20.31	1380	1.50	
207 (Pb)	165	2	0.064 ppb	6.33	1101	1.50	
208 Pb	165	2	0.067 ppb	11.72	5460	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	99128	1.01	100961	98.2	80 - 120	
45 Sc	2	1556328	1.57	1543978	100.8	80 - 120	
115 In	1	623393	1.08	607558	102.6	80 - 120	
115 In	2	1828025	1.49	1778001	102.8	80 - 120	
159 Tb	1	1419849	0.70	1380036	102.9	80 - 120	
159 Tb	2	2415279	2.15	2348266	102.9	80 - 120	
165 Ho	1	1378667	1.87	1347066	102.3	80 - 120	
165 Ho	2	2331147	0.64	2253341	103.5	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\S111913C.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\S111913C.b\042SMPL.D\042SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\042SMPL.D\042SMPL.D#
 Date Acquired: Nov 20 2013 12:44 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-020
 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: Nov 19 2013 09:22 pm
 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	68.77	158	2700	
23 Na	45	1	6,729.00	6729.00	ppb	1.27	6664267	225000	
24 Mg	45	1	3,462.00	3462.00	ppb	1.24	1889443	225000	
27 Al	45	1	14.94	14.94	ppb	2.56	5381	67500	
39 K	45	1	1,973.00	1973.00	ppb	0.98	1091410	225000	
44 Ca	45	1	20,750.00	20750.00	ppb	0.72	580651	225000	
51 V	45	1	0.30	0.30	ppb	2.93	1354	2700	
52 Cr	45	1	0.16	0.16	ppb	3.54	1430	2700	
55 Mn	45	1	1.55	1.55	ppb	1.89	6359	2700	
56 Fe	45	1	11.27	11.27	ppb	3.35	81219	202500	
59 Co	45	1	0.11	0.11	ppb	4.52	1009	2700	
60 Ni	45	1	0.26	0.26	ppb	6.59	571	2700	
65 Cu	45	1	0.09	0.09	ppb	80.90	2288	2700	
66 Zn	45	1	5.73	5.73	ppb	1.72	6407	2700	
75 As	115	1	0.19	0.19	ppb	3.32	154	2250	
78 Se	115	1	-2.10	-2.10	ppb	11.85	165	2700	
83 Kr	115	2	---	---	ppb	---	571	2700	
95 Mo	115	2	-0.81	-0.81	ppb	0.89	408	2700	
107 Ag	115	2	0.01	0.01	ppb	31.43	354	900	
111 Cd	115	2	0.27	0.27	ppb	5.41	906	2700	
121 Sb	115	2	0.09	0.09	ppb	1.76	1177	1125	
137 Ba	159	2	22.46	22.46	ppb	1.11	95096	1350	
205 Tl	165	2	0.02	0.02	ppb	5.66	969	900	
206 (Pb)	165	2	0.18	0.18	ppb	3.48	2386	2700	
207 (Pb)	165	2	0.20	0.20	ppb	6.34	2014	2700	
208 Pb	165	2	0.18	0.18	ppb	0.96	9343	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range (%)	Flag
45 Sc	1	92066	0.84	100961	91.2	70 - 150	
45 Sc	2	1479584	1.65	1543978	95.8	70 - 150	
115 In	1	585421	1.21	607558	96.4	70 - 150	
115 In	2	1691150	1.92	1778001	95.1	70 - 150	
159 Tb	1	1357083	0.72	1380036	98.3	70 - 150	
159 Tb	2	2234738	0.53	2348266	95.2	70 - 150	
165 Ho	1	1340488	1.66	1347066	99.5	70 - 150	
165 Ho	2	2178280	0.21	2253341	96.7	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqa.s.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S111913C.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\S111913C.b\043SMPL.D\043SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\043SMPL.D\043SMPL.D#
 Date Acquired: Nov 20 2013 12:50 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-022
 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: Nov 19 2013 09:22 pm
 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	39.25	207	2700	
23 Na	45		1	6,743.00	6743.00	ppb	2.02	6604764	225000	
24 Mg	45		1	1,474.00	1474.00	ppb	0.93	796711	225000	
27 Al	45		1	97.03	97.03	ppb	0.57	30195	67500	
39 K	45		1	2,640.00	2640.00	ppb	0.93	1422424	225000	
44 Ca	45		1	6,468.00	6468.00	ppb	0.54	179300	225000	
51 V	45		1	0.62	0.62	ppb	1.88	2662	2700	
52 Cr	45		1	24.95	24.95	ppb	1.44	121666	2700	
55 Mn	45		1	166.70	166.70	ppb	0.40	623375	2700	
56 Fe	45		1	542.50	542.50	ppb	0.80	2465436	202500	
59 Co	45		1	0.22	0.22	ppb	3.43	1885	2700	
60 Ni	45		1	2.59	2.59	ppb	2.05	5185	2700	
65 Cu	45		1	0.97	0.97	ppb	10.05	4518	2700	
66 Zn	45		1	8.51	8.51	ppb	1.07	9141	2700	
75 As	115		1	0.52	0.52	ppb	4.07	376	2250	
78 Se	115		1	-2.15	-2.15	ppb	8.70	160	2700	
83 Kr	115		2	----	-----	ppb	-----	580	2700	
95 Mo	115		2	-0.81	-0.81	ppb	0.70	407	2700	
107 Ag	115		2	0.01	0.01	ppb	31.66	329	900	
111 Cd	115		2	1.19	1.19	ppb	3.60	3723	2700	
121 Sb	115		2	0.25	0.25	ppb	3.71	2934	1125	
137 Ba	159		2	21.07	21.07	ppb	0.92	88389	1350	
205 Tl	165		2	0.01	0.01	ppb	18.22	779	900	
206 (Pb)	165		2	1.86	1.86	ppb	1.23	18096	2700	
207 (Pb)	165		2	1.96	1.96	ppb	3.30	14768	2700	
208 Pb	165		2	1.85	1.85	ppb	2.88	69281	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	91060	0.23	100961	90.2	70 - 150	
45 Sc	2	1485258	1.48	1543978	96.2	70 - 150	
115 In	1	577537	1.38	607558	95.1	70 - 150	
115 In	2	1677214	0.42	1778001	94.3	70 - 150	
159 Tb	1	1351197	0.80	1380036	97.9	70 - 150	
159 Tb	2	2213713	1.69	2348266	94.3	70 - 150	
165 Ho	1	1331005	0.90	1347066	98.8	70 - 150	
165 Ho	2	2180358	2.08	2253341	96.8	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S111913C.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\S111913C.b\044SMPL.D\044SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\044SMPL.D\044SMPL.D#
 Date Acquired: Nov 20 2013 12:56 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-024
 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: Nov 19 2013 09:22 pm
 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	13.58	163	2700	
23 Na	45	1		8,354.00	8354.00	ppb	1.40	8174340	225000	
24 Mg	45	1		4,294.00	4294.00	ppb	1.78	2325297	225000	
27 Al	45	1		23.75	23.75	ppb	1.66	8018	67500	
39 K	45	1		2,464.00	2464.00	ppb	0.91	1336104	225000	
44 Ca	45	1		27,260.00	27260.00	ppb	1.95	756930	225000	
51 V	45	1		0.40	0.40	ppb	2.99	1769	2700	
52 Cr	45	1		0.20	0.20	ppb	3.60	1630	2700	
55 Mn	45	1		2.27	2.27	ppb	1.89	9019	2700	
56 Fe	45	1		19.99	19.99	ppb	2.09	119878	202500	
59 Co	45	1		0.14	0.14	ppb	3.30	1279	2700	
60 Ni	45	1		0.31	0.31	ppb	3.85	672	2700	
65 Cu	45	1		0.32	0.32	ppb	12.43	2867	2700	
66 Zn	45	1		8.55	8.55	ppb	2.64	9211	2700	
75 As	115	1		0.24	0.24	ppb	2.95	184	2250	
78 Se	115	1		-2.01	-2.01	ppb	10.10	168	2700	
83 Kr	115	2		----	-----	ppb	-----	604	2700	
95 Mo	115	2		-0.80	-0.80	ppb	0.06	411	2700	
107 Ag	115	2		0.01	0.01	ppb	40.99	241	900	
111 Cd	115	2		0.33	0.33	ppb	4.33	1050	2700	
121 Sb	115	2		0.10	0.10	ppb	9.26	1227	1125	
137 Ba	159	2		27.95	27.95	ppb	1.04	115430	1350	
205 Tl	165	2		0.01	0.01	ppb	1.65	846	900	
206 (Pb)	165	2		0.20	0.20	ppb	4.39	2523	2700	
207 (Pb)	165	2		0.21	0.21	ppb	8.37	2010	2700	
208 Pb	165	2		0.20	0.20	ppb	5.03	9583	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	91363	1.17	100961	90.5	70 - 150	
45 Sc	2	1442138	0.47	1543978	93.4	70 - 150	
115 In	1	575615	0.92	607558	94.7	70 - 150	
115 In	2	1655345	1.35	1778001	93.1	70 - 150	
159 Tb	1	1345289	1.73	1380036	97.5	70 - 150	
159 Tb	2	2180896	1.53	2348266	92.9	70 - 150	
165 Ho	1	1321689	0.58	1347066	98.1	70 - 150	
165 Ho	2	2128007	1.29	2253341	94.4	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\S111913C.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\S111913C.b\045SMPL.D\045SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\045SMPL.D\045SMPL.D#
 Date Acquired: Nov 20 2013 01:02 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-026
 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: Nov 19 2013 09:22 pm
 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	22.07	172	2700	
23 Na	45		1	12,060.00	12060.00	ppb	0.39	11501490	225000	
24 Mg	45		1	5,085.00	5085.00	ppb	1.45	2698995	225000	
27 Al	45		1	22.77	22.77	ppb	4.17	7568	67500	
39 K	45		1	904.60	904.60	ppb	0.64	521753	225000	
44 Ca	45		1	10,320.00	10320.00	ppb	1.72	281014	225000	
51 V	45		1	0.17	0.17	ppb	3.25	790	2700	
52 Cr	45		1	0.62	0.62	ppb	2.88	3604	2700	
55 Mn	45		1	3.61	3.61	ppb	0.97	13758	2700	
56 Fe	45		1	10.13	10.13	ppb	3.16	73994	202500	
59 Co	45		1	0.07	0.07	ppb	10.93	690	2700	
60 Ni	45		1	0.39	0.39	ppb	5.12	810	2700	
65 Cu	45		1	0.34	0.34	ppb	21.93	2862	2700	
66 Zn	45		1	2.75	2.75	ppb	1.48	3289	2700	
75 As	115		1	0.12	0.12	ppb	9.74	102	2250	
78 Se	115		1	-2.18	-2.18	ppb	6.76	153	2700	
83 Kr	115		2	----	-----	ppb	-----	587	2700	
95 Mo	115		2	-0.83	-0.83	ppb	0.02	251	2700	
107 Ag	115		2	0.01	0.01	ppb	37.31	293	900	
111 Cd	115		2	0.02	0.02	ppb	6.13	106	2700	
121 Sb	115		2	0.04	0.04	ppb	5.18	553	1125	
137 Ba	159		2	21.17	21.17	ppb	1.71	85665	1350	
205 Tl	165		2	0.00	0.00	ppb	51.56	559	900	
206 (Pb)	165		2	0.04	0.04	ppb	13.91	1039	2700	
207 (Pb)	165		2	0.05	0.05	ppb	25.77	857	2700	
208 Pb	165		2	0.04	0.04	ppb	11.14	4073	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89559	1.14	100961	88.7	70 - 150	
45 Sc	2	1425646	1.54	1543978	92.3	70 - 150	
115 In	1	562272	1.05	607558	92.5	70 - 150	
115 In	2	1615208	0.94	1778001	90.8	70 - 150	
159 Tb	1	1330886	2.31	1380036	96.4	70 - 150	
159 Tb	2	2135881	1.40	2348266	91.0	70 - 150	
165 Ho	1	1300003	2.24	1347066	96.5	70 - 150	
165 Ho	2	2067513	0.30	2253341	91.8	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\S111913C.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\S111913C.b\046SMPL.D\046SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\046SMPL.D\046SMPL.D#
 Date Acquired: Nov 20 2013 01:08 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-028
 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: Nov 19 2013 09:22 pm
 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	32.99	158	2700	
23 Na	45	1	9,846.00	9846.00	ppb	2.63	9358820	225000	
24 Mg	45	1	3,355.00	3355.00	ppb	2.27	1769867	225000	
27 Al	45	1	29.77	29.77	ppb	2.34	9593	67500	
39 K	45	1	3,108.00	3108.00	ppb	1.41	1625300	225000	
44 Ca	45	1	8,045.00	8045.00	ppb	1.86	217863	225000	
51 V	45	1	0.16	0.16	ppb	5.18	730	2700	
52 Cr	45	1	7.98	7.98	ppb	1.44	38470	2700	
55 Mn	45	1	34.40	34.40	ppb	3.09	126094	2700	
56 Fe	45	1	18.90	18.90	ppb	0.69	112020	202500	
59 Co	45	1	0.08	0.08	ppb	2.53	784	2700	
60 Ni	45	1	1.16	1.16	ppb	4.22	2302	2700	
65 Cu	45	1	0.23	0.23	ppb	24.33	2568	2700	
66 Zn	45	1	7.87	7.87	ppb	1.71	8301	2700	
75 As	115	1	0.12	0.12	ppb	13.68	102	2250	
78 Se	115	1	-2.10	-2.10	ppb	10.63	160	2700	
83 Kr	115	2	----	-----	ppb	-----	556	2700	
95 Mo	115	2	-0.82	-0.82	ppb	0.65	316	2700	
107 Ag	115	2	0.00	0.00	ppb	43.49	211	900	
111 Cd	115	2	0.05	0.05	ppb	11.82	199	2700	
121 Sb	115	2	0.04	0.04	ppb	8.49	574	1125	
137 Ba	159	2	33.44	33.44	ppb	0.56	133634	1350	
205 Tl	165	2	0.01	0.01	ppb	23.11	634	900	
206 (Pb)	165	2	0.03	0.03	ppb	26.13	919	2700	
207 (Pb)	165	2	0.04	0.04	ppb	18.98	781	2700	
208 Pb	165	2	0.03	0.03	ppb	15.56	3662	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89008	1.49	100961	88.2	70 - 150	
45 Sc	2	1395773	0.54	1543978	90.4	70 - 150	
115 In	1	565059	0.73	607558	93.0	70 - 150	
115 In	2	1607139	0.36	1778001	90.4	70 - 150	
159 Tb	1	1332432	1.79	1380036	96.6	70 - 150	
159 Tb	2	2111132	0.61	2348266	89.9	70 - 150	
165 Ho	1	1318941	1.86	1347066	97.9	70 - 150	
165 Ho	2	2058796	0.23	2253341	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\S111913C.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\S111913C.b\047SMPL.D\047SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\047SMPL.D\047SMPL.D#
 Date Acquired: Nov 20 2013 01:14 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: Nov 19 2013 09:22 pm
 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		0.89	0.89	ppb	2.29	5192	2700	
23 Na	45	1		491.00	491.00	ppb	2.44	486992	225000	
24 Mg	45	1		234.50	234.50	ppb	1.24	101056	225000	
27 Al	45	1		134.50	134.50	ppb	1.79	32812	67500	
39 K	45	1		290.70	290.70	ppb	0.51	169779	225000	
44 Ca	45	1		509.60	509.60	ppb	0.57	11390	225000	
51 V	45	1		1.43	1.43	ppb	0.70	4761	2700	
52 Cr	45	1		1.63	1.63	ppb	2.26	6756	2700	
55 Mn	45	1		4.75	4.75	ppb	1.24	14407	2700	
56 Fe	45	1		383.50	383.50	ppb	1.53	1382912	202500	
59 Co	45	1		1.27	1.27	ppb	1.50	8041	2700	
60 Ni	45	1		1.44	1.44	ppb	2.52	2298	2700	
65 Cu	45	1		1.53	1.53	ppb	4.18	4709	2700	
66 Zn	45	1		3.40	3.40	ppb	1.83	3156	2700	
75 As	115	1		1.16	1.16	ppb	6.59	644	2250	
78 Se	115	1		0.30	0.30	ppb	126.03	261	2700	
83 Kr	115	2		----	-----	ppb	-----	541	2700	
95 Mo	115	2		5.58	5.58	ppb	3.66	30479	2700	
107 Ag	115	2		0.45	0.45	ppb	2.58	5937	900	
111 Cd	115	2		1.25	1.25	ppb	3.35	3391	2700	
121 Sb	115	2		0.89	0.89	ppb	3.75	8633	1125	
137 Ba	159	2		1.75	1.75	ppb	1.67	6792	1350	
205 Tl	165	2		0.92	0.92	ppb	1.93	23372	900	
206 (Pb)	165	2		1.94	1.94	ppb	2.56	16582	2700	
207 (Pb)	165	2		2.12	2.12	ppb	1.73	14048	2700	
208 Pb	165	2		1.98	1.98	ppb	0.96	65212	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	71899	0.54	100961	71.2	70 - 150	
45 Sc	2	1253669	1.97	1543978	81.2	70 - 150	
115 In	1	460575	1.55	607558	75.8	70 - 150	
115 In	2	1452730	2.75	1778001	81.7	70 - 150	
159 Tb	1	1130296	2.88	1380036	81.9	70 - 150	
159 Tb	2	1996528	1.15	2348266	85.0	70 - 150	
165 Ho	1	1080549	2.93	1347066	80.2	70 - 150	
165 Ho	2	1924020	1.06	2253341	85.4	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\S111913C.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\S111913C.b\048_CCV.D\048_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\048_CCV.D\048_CCV.D#
 Date Acquired: Nov 20 2013 01:20 am
 Operator: GK
 Sample Name: CCV V-176971
 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: Nov 19 2013 09:22 pm
 Sample Type: 6-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	48.93	ppb	2.08	326113	50	97.9	90 - 110	
23 Na	45	1	5412.00	ppb	1.00	5362743	5000	108.2	90 - 110	
24 Mg	45	1	5454.00	ppb	0.51	2961909	5000	109.1	90 - 110	
27 Al	45	1	1617.00	ppb	0.30	493735	1500	107.8	90 - 110	
39 K	45	1	5331.00	ppb	1.46	2822392	5000	106.6	90 - 110	
44 Ca	45	1	5245.00	ppb	0.19	146369	5000	104.9	90 - 110	
51 V	45	1	54.00	ppb	0.68	225559	50	108.0	90 - 110	
52 Cr	45	1	54.59	ppb	0.68	267021	50	109.2	90 - 110	
55 Mn	45	1	53.80	ppb	0.44	202782	50	107.6	90 - 110	
56 Fe	45	1	5464.00	ppb	0.43	24714080	5000	109.3	90 - 110	
59 Co	45	1	54.41	ppb	0.59	432719	50	108.8	90 - 110	
60 Ni	45	1	55.62	ppb	0.41	110769	50	111.2	90 - 110	Fail
65 Cu	45	1	55.96	ppb	1.13	146819	50	111.9	90 - 110	Fail
66 Zn	45	1	55.29	ppb	0.59	56565	50	110.6	90 - 110	Fail
75 As	115	1	51.52	ppb	1.46	35013	50	103.0	90 - 110	
78 Se	115	1	253.70	ppb	1.51	17781	250	101.5	90 - 110	
83 Kr	115	2	-----	ppb	-----	586	50	#VALUE!	##### - #####	
95 Mo	115	2	49.28	ppb	1.00	277415	50	98.6	90 - 110	
107 Ag	115	2	48.86	ppb	0.45	745381	50	97.7	90 - 110	
111 Cd	115	2	49.69	ppb	1.04	155286	50	99.4	90 - 110	
121 Sb	115	2	48.56	ppb	0.84	543052	50	97.1	90 - 110	
137 Ba	159	2	50.71	ppb	1.28	215631	50	101.4	90 - 110	
205 Tl	165	2	51.92	ppb	2.42	1471212	50	103.8	90 - 110	
206 (Pb)	165	2	48.39	ppb	3.57	453472	50	96.8	90 - 110	
207 (Pb)	165	2	51.27	ppb	3.50	372058	50	102.5	90 - 110	
208 Pb	165	2	50.85	ppb	3.18	1833103	50	101.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	91624	0.12	100961	90.8	80 - 120	
45 Sc	2	1459946	2.17	1543978	94.6	80 - 120	
115 In	1	579132	0.95	607558	95.3	80 - 120	
115 In	2	1702886	1.37	1778001	95.8	80 - 120	
159 Tb	1	1335655	1.46	1380036	96.8	80 - 120	
159 Tb	2	2247705	1.91	2348266	95.7	80 - 120	
165 Ho	1	1317781	0.38	1347066	97.8	80 - 120	
165 Ho	2	2185954	3.26	2253341	97.0	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\S111913C.b\002CALB.D\002CALB.D#

3 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S111913C.b\049_CCV.D\049_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\049_CCV.D\049_CCV.D#
 Date Acquired: Nov 20 2013 01:26 am
 Operator: GK
 Sample Name: LLCCV V-176972
 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: Nov 19 2013 09:22 pm
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.50	ppb	2.23	1	99.6	70 - 130	
23 Na	45	1	227.40	ppb	4.16	250	91.0	70 - 130	
24 Mg	45	1	272.80	ppb	2.67	250	109.1	70 - 130	
27 Al	45	1	104.20	ppb	3.09	100	104.2	70 - 130	
39 K	45	1	233.10	ppb	2.85	250	93.2	70 - 130	
44 Ca	45	1	253.90	ppb	4.04	250	101.6	70 - 130	
51 V	45	1	1.04	ppb	1.70	1	103.6	70 - 130	
52 Cr	45	1	1.06	ppb	2.23	1	106.4	70 - 130	
55 Mn	45	1	3.01	ppb	3.74	3	100.3	70 - 130	
56 Fe	45	1	170.70	ppb	1.20	150	113.8	70 - 130	
59 Co	45	1	1.05	ppb	1.64	1	105.2	70 - 130	
60 Ni	45	1	1.64	ppb	2.80	2	109.4	70 - 130	
65 Cu	45	1	4.80	ppb	3.66	5	96.0	70 - 130	
66 Zn	45	1	10.19	ppb	2.15	10	101.9	70 - 130	
75 As	115	1	0.99	ppb	3.32	1	99.2	70 - 130	
78 Se	115	1	2.79	ppb	26.05	5	55.9	70 - 130	FAIL
83 Kr	115	2	-----	ppb	-----	1	#VALUE!	##### - #####	
95 Mo	115	2	0.14	ppb	5.22	1	13.7	70 - 130	FAIL
107 Ag	115	2	0.48	ppb	1.22	1	96.5	70 - 130	
111 Cd	115	2	0.96	ppb	2.94	1	96.3	70 - 130	
121 Sb	115	2	0.94	ppb	2.39	1	94.5	70 - 130	
137 Ba	159	2	2.47	ppb	0.42	3	98.9	70 - 130	
205 Tl	165	2	0.93	ppb	0.46	1	93.3	70 - 130	
206 (Pb)	165	2	1.32	ppb	2.16	2	87.7	70 - 130	
207 (Pb)	165	2	1.48	ppb	1.20	2	98.9	70 - 130	
208 Pb	165	2	1.37	ppb	0.73	2	91.4	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	92720	2.42	100961	91.8	80 - 120	
45 Sc	2	1435611	1.75	1543978	93.0	80 - 120	
115 In	1	586330	2.51	607558	96.5	80 - 120	
115 In	2	1695601	1.27	1778001	95.4	80 - 120	
159 Tb	1	1343701	1.65	1380036	97.4	80 - 120	
159 Tb	2	2246408	1.02	2348266	95.7	80 - 120	
165 Ho	1	1317485	1.78	1347066	97.8	80 - 120	
165 Ho	2	2195522	1.27	2253341	97.4	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\S111913C.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\S111913C.b\050_CCB.D\050_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S111913C.b\050_CCB.D\050_CCB.D#
 Date Acquired: Nov 20 2013 01:31 am
 Operator: GK
 Sample Name: CCB V-176968
 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: Nov 19 2013 09:22 pm
 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	0.008	ppb	26.32	172	0.50	
23 Na	45	1	-16.930	ppb	20.20	128167	250.00	
24 Mg	45	1	5.373	ppb	18.89	4304	250.00	
27 Al	45	1	27.760	ppb	1.45	9053	100.00	
39 K	45	1	-12.510	ppb	15.09	58229	250.00	
44 Ca	45	1	64.600	ppb	5.19	2076	250.00	
51 V	45	1	0.042	ppb	11.10	260	1.00	
52 Cr	45	1	0.062	ppb	7.10	940	1.00	
55 Mn	45	1	0.031	ppb	60.05	601	3.00	
56 Fe	45	1	5.482	ppb	15.85	53439	150.00	
59 Co	45	1	0.024	ppb	16.13	341	1.00	
60 Ni	45	1	0.035	ppb	35.31	126	1.50	
65 Cu	45	1	-0.268	ppb	13.70	1323	5.00	
66 Zn	45	1	0.710	ppb	31.14	1265	10.00	
75 As	115	1	0.017	ppb	18.95	34	1.00	
78 Se	115	1	-2.231	ppb	9.43	151	5.00	
83 Kr	115	2	-----	ppb	-----	533	1.00	
95 Mo	115	2	-0.820	ppb	0.29	331	1.00	
107 Ag	115	2	0.009	ppb	18.70	299	0.50	
111 Cd	115	2	0.011	ppb	29.37	91	1.00	
121 Sb	115	2	0.011	ppb	17.43	302	1.00	
137 Ba	159	2	0.074	ppb	8.69	516	2.50	
205 Tl	165	2	0.018	ppb	18.61	963	1.00	
206 (Pb)	165	2	0.062	ppb	10.84	1260	1.50	
207 (Pb)	165	2	0.064	ppb	16.62	1022	1.50	
208 Pb	165	2	0.061	ppb	10.46	4883	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89541	0.62	100961	88.7	80 - 120	
45 Sc	2	1442245	1.51	1543978	93.4	80 - 120	
115 In	1	566408	0.70	607558	93.2	80 - 120	
115 In	2	1683678	0.95	1778001	94.7	80 - 120	
159 Tb	1	1290945	2.24	1380036	93.5	80 - 120	
159 Tb	2	2229396	0.64	2348266	94.9	80 - 120	
165 Ho	1	1266086	1.16	1347066	94.0	80 - 120	
165 Ho	2	2164134	0.85	2253341	96.0	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S111913C.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

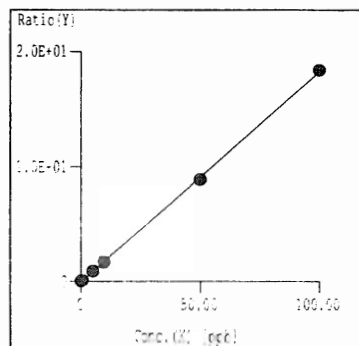
0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

=== Graph Detail ===

Step Mass Element
(2) 9 Be

ISTD
45

Unit
ppb



Curve Fit: $Y=aX+[blank]$

$r = 0.9999$

$Y = 1.826E-001 \cdot X + 3.366E-003$

$X = 5.477E+000 \cdot Y - 1.843E-002$

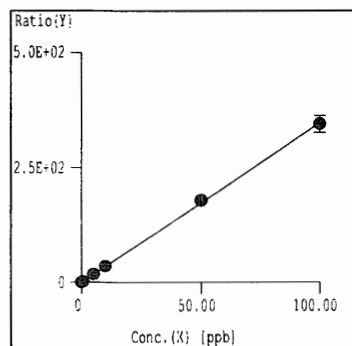
$DL = 6.559E-03$ ppb

$BEC = 1.843E-02$ ppb

Step Mass Element
(1) 59 Co

ISTD
45

Unit
ppb



Curve Fit: $Y=aX+[blank]$

$r = 0.9998$

$Y = 3.471E+000 \cdot X + 6.999E-002$

$X = 2.881E-001 \cdot Y - 2.017E-002$

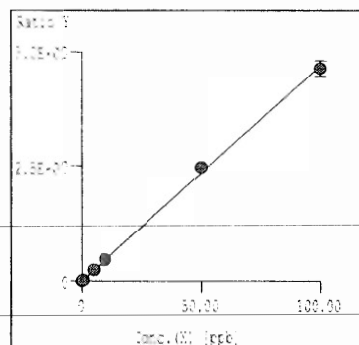
$DL = 7.547E-03$ ppb

$BEC = 2.017E-02$ ppb

Step Mass Element
(1) 75 As

ISTD
115

Unit
ppb



Curve Fit: $Y=aX+[blank]$

$r = 0.9995$

$Y = 4.691E-002 \cdot X + 1.637E-003$

$X = 2.132E+001 \cdot Y - 3.490E-002$

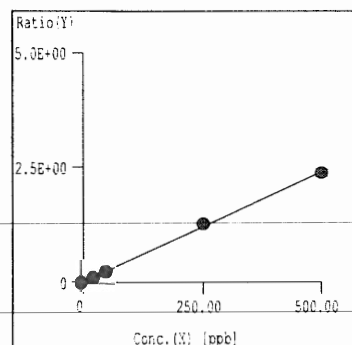
$DL = 1.719E-02$ ppb

$BEC = 3.490E-02$ ppb

Step Mass Element
(1) 78 Se

ISTD
115

Unit
ppb



Curve Fit: $Y=aX+b$

$r = 0.9995$

$Y = 4.758E-003 \cdot X + 2.127E-002$

$X = 2.102E+002 \cdot Y - 4.471E+000$

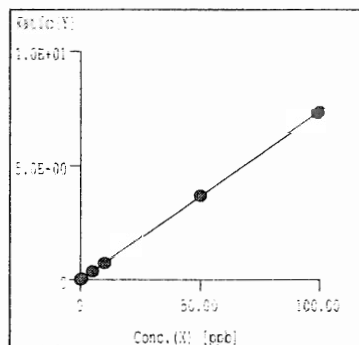
$DL = 3.127E-01$ ppb

$BEC = 4.471$ ppb

Step Mass Element
(2) 111 Cd

ISTD
115

Unit
ppb



Curve Fit: $Y=aX+[blank]$

$r = 1.0000$

$Y = 7.339E-002 \cdot X + 1.342E-003$

$X = 1.363E+001 \cdot Y - 1.829E-002$

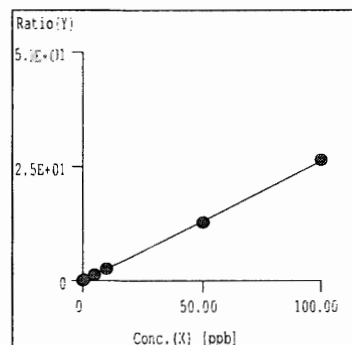
$DL = 4.093E-03$ ppb

$BEC = 1.829E-02$ ppb

Step Mass Element
(2) 121 Sb

ISTD
115

Unit
ppb



Curve Fit: $Y=aX+[blank]$

$r = 0.9999$

$Y = 2.626E-001 \cdot X + 4.375E-003$

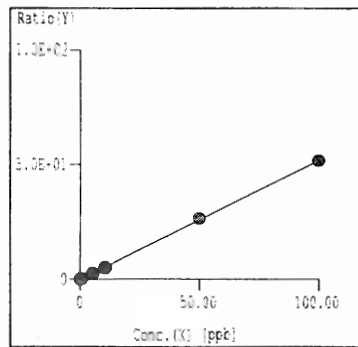
$X = 3.808E+000 \cdot Y - 1.666E-002$

$DL = 1.945E-03$ ppb

$BEC = 1.666E-02$ ppb

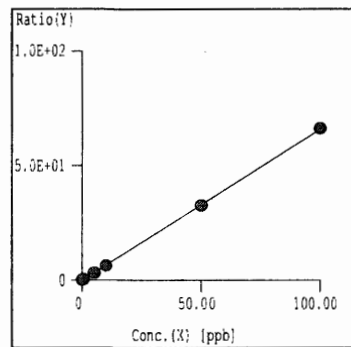
=== Graph Detail ===

Step Mass Element ISTD Unit
(2) 205 Tl 165 ppb



Curve Fit: $Y=aX+[blank]$
 $r = 0.9999$
 $Y = 5.185E-001 \cdot X + 8.343E-003$
 $X = 1.928E+000 \cdot Y - 1.609E-002$
DL = $2.630E-03$ ppb
BEC = $1.609E-02$ ppb

Step Mass Element ISTD Unit
(2) 208 Pb 165 ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 6.590E-001 \cdot X + 4.982E-002$
 $X = 1.517E+000 \cdot Y - 7.559E-002$
DL = $1.202E-02$ ppb
BEC = $7.559E-02$ ppb

C:\ICPCHEM\1\DATA\S112013A.b\001CALB.D\001CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\001CALB.D\001CALB.D#
 Date Acquired: Nov 20 2013 11:45 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: Nov 20 2013 11:48 am
 Sample Type: CalBlk

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	338	10.55
23	Na	45	1	122694	0.43
24	Mg	45	1	974	3.33
27	Al	45	1	719	2.78
39	K	45	1	59462	0.71
44	Ca	45	1	367	3.95
51	V	45	1	67	5.30
52	Cr	45	1	698	8.36
55	Mn	45	1	453	4.88
56	Fe	45	1	27433	8.66
59	Co	45	1	490	5.71
60	Ni	45	1	97	6.49
65	Cu	45	1	1047	2.83
66	Zn	45	1	773	13.18
75	As	115	1	17	3.85
78	Se	115	1	158	5.71
83	Kr	115	2	548	4.49
95	Mo	115	2	157	4.26
107	Ag	115	2	119	19.69
111	Cd	115	2	50	7.75
121	Sb	115	2	136	20.62
137	Ba	159	2	350	5.71
205	Tl	165	2	2397	3.24
206	(Pb)	165	2	867	4.16
207	(Pb)	165	2	705	6.90
208	Pb	165	2	3395	3.51

15687
(27402)

Se reported.

M. Galin
11.21.13

Internal Standard Elements

Element	Tune	CPS Mean	RSD(%)	
45	Sc	1	104820	1.32
45	Sc	2	1546238	0.41
115	In	1	566614	3.30
115	In	2	1798423	0.34
159	Tb	1	1155661	3.05
159	Tb	2	2375392	0.43
165	Ho	1	1106386	1.56
165	Ho	2	2324200	1.62

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\

11/21/13

C:\ICPCHEM\1\DATA\S112013A.b\002CALB.D\002CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\002CALB.D\002CALB.D#
 Date Acquired: Nov 20 2013 11:50 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalBlk V-176961
 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: Nov 20 2013 11:48 am
 Sample Type: CalBlk

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	208	3.34
23	Na	45	1	125396	1.07
24	Mg	45	1	944	5.51
27	Al	45	1	669	4.94
39	K	45	1	58591	1.20
44	Ca	45	1	329	5.71
51	V	45	1	71	22.70
52	Cr	45	1	694	2.88
55	Mn	45	1	490	3.97
56	Fe	45	1	25638	0.32
59	Co	45	1	361	5.69
60	Ni	45	1	94	14.67
65	Cu	45	1	1220	6.44
66	Zn	45	1	779	9.51
75	As	115	1	23	15.91
78	Se	115	1	170	6.16
83	Kr	115	2	518	17.11
95	Mo	115	2	171	7.87
107	Ag	115	2	119	13.25
111	Cd	115	2	46	6.04
121	Sb	115	2	142	7.16
137	Ba	159	2	282	10.05
205	Tl	165	2	1500	3.67
206	(Pb)	165	2	790	3.68
207	(Pb)	165	2	613	4.64
208	Pb	165	2	2973	4.26

Internal Standard Elements

Element	Tune	CPS Mean	RSD(%)	
45	Sc	1	101496	1.55
45	Sc	2	1448455	1.92
115	In	1	580519	0.38
115	In	2	1694704	2.11
159	Tb	1	1221266	1.20
159	Tb	2	2236647	1.50
165	Ho	1	1159933	2.23
165	Ho	2	2164693	0.52

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\S112013A.b\003CALI.D\003CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\003CALI.D\003CALI.D#
 Date Acquired: Nov 20 2013 11:55 am
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd1 V-176962
 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: Nov 20 2013 11:53 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
9 Be	45	2	3275	0.89
23 Na	45	1	174166	0.48
24 Mg	45	1	30740	0.82
27 Al	45	1	5397	2.04
39 K	45	1	86365	0.23
44 Ca	45	1	1832	0.70
51 V	45	1	2376	2.12
52 Cr	45	1	3338	2.71
55 Mn	45	1	2398	3.86
56 Fe	45	1	275070	1.26
59 Co	45	1	4439	1.07
60 Ni	45	1	1131	2.87
65 Cu	45	1	2175	0.99
66 Zn	45	1	1301	4.15
75 As	115	1	368	0.52
78 Se	115	1	352	4.74
83 Kr	115	2	510	4.58
95 Mo	115	2	2747	2.61
107 Ag	115	2	7046	2.51
111 Cd	115	2	1536	2.35
121 Sb	115	2	5176	3.00
137 Ba	159	2	2377	3.52
205 Tl	165	2	13593	1.57
206 (Pb)	165	2	4876	0.82
207 (Pb)	165	2	4062	1.19
208 Pb	165	2	19226	1.22

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97207	1.40	101496	95.8	80 - 120	
45 Sc	2	1439493	2.39	1448455	99.4	80 - 120	
115 In	1	567030	1.80	580519	97.7	80 - 120	
115 In	2	1687295	2.53	1694704	99.6	80 - 120	
159 Tb	1	1221605	0.89	1221266	100.0	80 - 120	
159 Tb	2	2199803	1.72	2236647	98.4	80 - 120	
165 Ho	1	1165015	2.39	1159933	100.4	80 - 120	
165 Ho	2	2122097	1.29	2164693	98.0	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\S112013A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112013A.b\004CALI.D\004CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\004CALI.D\004CALI.D#
 Date Acquired: Nov 20 2013 12:00 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd2 V-176963
 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: Nov 20 2013 11:59 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	31992	1.09
23	Na	45	1	676459	0.77
24	Mg	45	1	304881	0.57
27	Al	45	1	51426	0.99
39	K	45	1	344622	0.60
44	Ca	45	1	15842	0.72
51	V	45	1	22900	0.96
52	Cr	45	1	27751	0.47
55	Mn	45	1	21110	1.38
56	Fe	45	1	2602302	1.56
59	Co	45	1	42628	0.26
60	Ni	45	1	11041	2.90
65	Cu	45	1	15412	1.51
66	Zn	45	1	6265	0.94
75	As	115	1	3553	2.79
78	Se	115	1	2010	1.76
83	Kr	115	2	527	6.33
95	Mo	115	2	27048	0.37
107	Ag	115	2	71988	2.41
111	Cd	115	2	15147	0.44
121	Sb	115	2	53328	1.37
137	Ba	159	2	23137	2.45
205	Tl	165	2	128706	2.33
206	(Pb)	165	2	44107	3.92
207	(Pb)	165	2	36169	4.02
208	Pb	165	2	170769	2.93

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	97646	0.49	101496	96.2	80 - 120
45	Sc	2	1460386	0.64	1448455	100.8	80 - 120
115	In	1	582395	0.70	580519	100.3	80 - 120
115	In	2	1716095	0.25	1694704	101.3	80 - 120
159	Tb	1	1241956	3.35	1221266	101.7	80 - 120
159	Tb	2	2241943	2.71	2236647	100.2	80 - 120
165	Ho	1	1198272	1.15	1159933	103.3	80 - 120
165	Ho	2	2171521	2.28	2164693	100.3	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\S112013A.b\002CALB.D\002CALB.D#

0 : Element Failures 0
 0 : ISTD Failures 0

C:\ICPCHEM\1\DATA\S112013A.b\005CALI.D\005CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\005CALI.D\005CALI.D#
 Date Acquired: Nov 20 2013 12:06 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd3 V-176964
 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: Nov 20 2013 12:04 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	65673	0.54
23	Na	45	1	1273457	0.21
24	Mg	45	1	646409	1.71
27	Al	45	1	102235	1.27
39	K	45	1	659742	0.44
44	Ca	45	1	32327	0.64
51	V	45	1	47633	1.47
52	Cr	45	1	56656	0.46
55	Mn	45	1	43003	1.98
56	Fe	45	1	5243480	2.14
59	Co	45	1	89152	1.21
60	Ni	45	1	22968	1.37
65	Cu	45	1	31267	1.32
66	Zn	45	1	12651	0.64
75	As	115	1	7444	1.92
78	Se	115	1	3921	0.38
83	Kr	115	2	502	7.64
95	Mo	115	2	55685	2.58
107	Aq	115	2	150169	1.28
111	Cd	115	2	31679	0.57
121	Sb	115	2	113240	0.60
137	Ba	159	2	43901	0.21
205	Tl	165	2	267194	1.14
206	(Pb)	165	2	90535	2.81
207	(Pb)	165	2	75583	1.64
208	Pb	165	2	353881	1.38

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flaq
45	Sc	1	104284	0.37	101496	102.7	80 - 120
45	Sc	2	1532066	0.13	1448455	105.8	80 - 120
115	In	1	618527	1.41	580519	106.5	80 - 120
115	In	2	1773707	0.32	1694704	104.7	80 - 120
159	Tb	1	1328156	2.13	1221266	108.8	80 - 120
159	Tb	2	2342573	1.06	2236647	104.7	80 - 120
165	Ho	1	1306601	2.06	1159933	112.6	80 - 120
165	Ho	2	2263476	0.81	2164693	104.6	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\S112013A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112013A.b\006CALI.D\006CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\006CALI.D\006CALI.D#
 Date Acquired: Nov 20 2013 12:11 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd4 V-176965
 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: Nov 20 2013 12:10 pm
 Sample Type: CalStd

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	330696	1.22
23	Na	45	1	5709322	1.71
24	Mg	45	1	3145783	1.62
27	Al	45	1	510190	1.16
39	K	45	1	3112860	1.67
44	Ca	45	1	160600	0.65
51	V	45	1	242526	0.89
52	Cr	45	1	286857	0.23
55	Mn	45	1	214143	0.55
56	Fe	45	1	26073130	0.66
59	Co	45	1	448397	0.79
60	Ni	45	1	115607	0.79
65	Cu	45	1	151333	0.48
66	Zn	45	1	60408	0.13
75	As	115	1	37770	0.71
78	Se	115	1	19478	1.25
83	Kr	115	2	497	7.01
95	Mo	115	2	281255	0.88
107	Ag	115	2	747288	0.66
111	Cd	115	2	158260	0.73
121	Sb	115	2	547352	0.72
137	Ba	159	2	214474	1.74
205	Tl	165	2	1436016	0.76
206	(Pb)	165	2	450286	0.23
207	(Pb)	165	2	375392	1.44
208	Pb	165	2	1822009	1.52

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	104496	0.60	101496	103.0	80 - 120
45	Sc	2	1504756	1.56	1448455	103.9	80 - 120
115	In	1	621094	1.21	580519	107.0	80 - 120
115	In	2	1746855	1.00	1694704	103.1	80 - 120
159	Tb	1	1338476	1.02	1221266	109.6	80 - 120
159	Tb	2	2296508	2.42	2236647	102.7	80 - 120
165	Ho	1	1312605	1.68	1159933	113.2	80 - 120
165	Ho	2	2233306	2.22	2164693	103.2	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\S112013A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112013A.b\007CALI.D\007CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\007CALI.D\007CALI.D#
 Date Acquired: Nov 20 2013 12:17 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: CalStd5 V-176966
 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: Nov 20 2013 12:15 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	671134	0.58
23	Na	45	1	10919480	2.10
24	Mg	45	1	6115547	2.96
27	Al	45	1	1027705	1.28
39	K	45	1	5980115	0.46
44	Ca	45	1	317264	0.23
51	V	45	1	480721	0.76
52	Cr	45	1	567430	1.00
55	Mn	45	1	428929	0.20
56	Fe	45	1	52117152	1.67
59	Co	45	1	925567	2.10
60	Ni	45	1	226390	1.39
65	Cu	45	1	295561	0.36
66	Zn	45	1	115383	0.34
75	As	115	1	74482	0.73
78	Se	115	1	38077	1.21
83	Kr	115	2	483	20.56
95	Mo	115	2	561699	1.08
107	Ag	115	2	1554120	0.98
111	Cd	115	2	313102	1.45
121	Sb	115	2	1155684	1.12
137	Ba	159	2	434820	1.16
205	Tl	165	2	2844848	0.64
206	(Pb)	165	2	945037	5.01
207	(Pb)	165	2	746003	2.14
208	Pb	165	2	3674637	2.52

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	103227	0.80	101496	101.7	80 - 120
45	Sc	2	1522837	1.50	1448455	105.1	80 - 120
115	In	1	608119	1.51	580519	104.8	80 - 120
115	In	2	1748590	0.67	1694704	103.2	80 - 120
159	Tb	1	1330986	2.34	1221266	109.0	80 - 120
159	Tb	2	2307149	0.74	2236647	103.2	80 - 120
165	Ho	1	1285895	4.01	1159933	110.9	80 - 120
165	Ho	2	2244432	1.16	2164693	103.7	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\S112013A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112013A.b\008_ICV.D\008_ICV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\008_ICV.D\008_ICV.D#
 Date Acquired: Nov 20 2013 12:23 pm
 Operator: GK
 Sample Name: ICV V-176967
 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: Nov 20 2013 12:21 pm
 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	49.09	ppb	2.67	331257	50	98.2	90 - 110	
23 Na	45	1	5060.00	ppb	1.47	5624045	5000	101.2	90 - 110	
24 Mg	45	1	5013.00	ppb	1.19	3082800	5000	100.3	90 - 110	
27 Al	45	1	4915.00	ppb	1.91	1679535	5000	98.3	90 - 110	
39 K	45	1	5033.00	ppb	1.21	3056214	5000	100.7	90 - 110	
44 Ca	45	1	4804.00	ppb	1.90	152832	5000	96.1	90 - 110	
51 V	45	1	50.13	ppb	0.89	241233	50	100.3	90 - 110	
52 Cr	45	1	48.82	ppb	1.99	277657	50	97.6	90 - 110	
55 Mn	45	1	49.81	ppb	1.09	213632	50	99.6	90 - 110	
56 Fe	45	1	5031.00	ppb	1.22	26220830	5000	100.6	90 - 110	
59 Co	45	1	46.03	ppb	1.08	423126	50	92.1	90 - 110	
60 Ni	45	1	49.75	ppb	1.37	113072	50	99.5	90 - 110	
65 Cu	45	1	49.94	ppb	3.14	148744	50	99.9	90 - 110	
66 Zn	45	1	50.37	ppb	0.90	58946	50	100.7	90 - 110	
75 As	115	1	48.96	ppb	2.10	36735	50	97.9	90 - 110	
78 Se	115	1	50.77	ppb	1.44	4074	50	101.5	90 - 110	
83 Kr	115	2	-----	ppb	-----	513	50	#VALUE!	#####	
95 Mo	115	2	47.97	ppb	0.77	274279	50	95.9	90 - 110	
107 Ag	115	2	9.70	ppb	1.09	152220	10	97.0	90 - 110	
111 Cd	115	2	49.02	ppb	1.12	156540	50	98.0	90 - 110	
121 Sb	115	2	45.62	ppb	1.61	530686	50	91.2	90 - 110	
137 Ba	159	2	49.26	ppb	1.18	218177	50	98.5	90 - 110	
205 Tl	165	2	48.50	ppb	0.41	1396870	50	97.0	90 - 110	
206 (Pb)	165	2	46.99	ppb	0.56	444803	50	94.0	90 - 110	
207 (Pb)	165	2	50.89	ppb	0.33	384498	50	101.8	90 - 110	
208 Pb	165	2	49.43	ppb	0.26	1833454	50	98.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	103426	1.74	101496	101.9	80 - 120	
45 Sc	2	1532430	2.34	1448455	105.8	80 - 120	
115 In	1	613507	2.11	580519	105.7	80 - 120	
115 In	2	1778979	0.85	1694704	105.0	80 - 120	
159 Tb	1	1369489	1.87	1221266	112.1	80 - 120	
159 Tb	2	2352646	1.17	2236647	105.2	80 - 120	
165 Ho	1	1333666	2.59	1159933	115.0	80 - 120	
165 Ho	2	2266216	0.47	2164693	104.7	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\S112013A.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\S112013A.b\009_CCV.D\009_CCV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\009_CCV.D\009_CCV.D#
 Date Acquired: Nov 20 2013 12:29 pm
 Operator: GK
 Sample Name: LLICV V-176972
 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: Nov 20 2013 12:21 pm
 Sample Type: LL-ICV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.50	ppb	2.74	1	99.7	70 - 130	
23 Na	45	1	238.70	ppb	1.76	250	95.5	70 - 130	
24 Mg	45	1	261.90	ppb	1.23	250	104.8	70 - 130	
27 Al	45	1	103.70	ppb	1.40	100	103.7	70 - 130	
39 K	45	1	249.00	ppb	1.01	250	99.6	70 - 130	
44 Ca	45	1	249.50	ppb	1.66	250	99.8	70 - 130	
51 V	45	1	1.01	ppb	2.66	1	101.0	70 - 130	
52 Cr	45	1	0.99	ppb	0.97	1	99.4	70 - 130	
55 Mn	45	1	2.94	ppb	2.31	3	97.9	70 - 130	
56 Fe	45	1	166.70	ppb	2.19	150	111.1	70 - 130	
59 Co	45	1	0.95	ppb	0.99	1	95.3	70 - 130	
60 Ni	45	1	1.51	ppb	2.18	2	100.9	70 - 130	
65 Cu	45	1	4.80	ppb	1.43	5	96.0	70 - 130	
66 Zn	45	1	9.88	ppb	1.88	10	98.8	70 - 130	
75 As	115	1	0.99	ppb	4.29	1	98.6	70 - 130	
78 Se	115	1	4.63	ppb	9.29	5	92.6	70 - 130	
83 Kr	115	2	-----	ppb	-----	1	#VALUE!	##### - #####	
95 Mo	115	2	1.01	ppb	1.93	1	100.8	70 - 130	
107 Ag	115	2	0.51	ppb	1.57	1	101.5	70 - 130	
111 Cd	115	2	1.03	ppb	3.26	1	102.9	70 - 130	
121 Sb	115	2	1.06	ppb	2.25	1	106.1	70 - 130	
137 Ba	159	2	2.46	ppb	0.95	3	98.3	70 - 130	
205 Tl	165	2	0.94	ppb	1.31	1	94.2	70 - 130	
206 (Pb)	165	2	1.38	ppb	2.96	2	92.1	70 - 130	
207 (Pb)	165	2	1.52	ppb	3.32	2	101.5	70 - 130	
208 Pb	165	2	1.39	ppb	2.07	2	92.9	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	105602	0.98	101496	104.0	80 - 120	
45 Sc	2	1577034	0.31	1448455	108.9	80 - 120	
115 In	1	634382	0.46	580519	109.3	80 - 120	
115 In	2	1833931	0.55	1694704	108.2	80 - 120	
159 Tb	1	1380072	1.36	1221266	113.0	80 - 120	
159 Tb	2	2379878	0.66	2236647	106.4	80 - 120	
165 Ho	1	1345339	1.45	1159933	116.0	80 - 120	
165 Ho	2	2321842	0.53	2164693	107.3	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\S112013A.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\S112013A.b\010_ICB.D\010_ICB.D#

Initial Calibration Blank (ICB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\010_ICB.D\010_ICB.D#
 Date Acquired: Nov 20 2013 12:35 pm
 Operator: GK
 Sample Name: ICB V-176968
 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: Nov 20 2013 12:21 pm
 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	124.91	267	0.50	
23 Na	45	1	-2.33	ppb	69.37	127894	250.00	
24 Mg	45	1	3.86	ppb	3.73	3404	250.00	
27 Al	45	1	26.80	ppb	0.60	10046	100.00	
39 K	45	1	4.50	ppb	21.76	63703	250.00	
44 Ca	45	1	55.74	ppb	0.85	2150	250.00	
51 V	45	1	0.04	ppb	7.75	267	1.00	
52 Cr	45	1	0.04	ppb	23.06	962	1.00	
55 Mn	45	1	0.01	ppb	48.59	573	3.00	
56 Fe	45	1	5.54	ppb	1.58	56133	150.00	
59 Co	45	1	0.00	ppb	123.55	409	1.00	
60 Ni	45	1	0.03	ppb	16.70	166	1.50	
65 Cu	45	1	0.04	ppb	95.63	1518	5.00	
66 Zn	45	1	0.52	ppb	18.22	1422	10.00	
75 As	115	1	0.02	ppb	33.59	40	1.00	
78 Se	115	1	-0.31	ppb	25.20	180	5.00	
83 Kr	115	2	-----	ppb	-----	557	1.00	
95 Mo	115	2	0.03	ppb	39.54	339	1.00	
107 Ag	115	2	0.02	ppb	11.51	441	0.50	
111 Cd	115	2	0.02	ppb	21.05	126	1.00	
121 Sb	115	2	0.06	ppb	4.06	829	1.00	
137 Ba	159	2	0.07	ppb	13.23	616	2.50	
205 Tl	165	2	-0.01	ppb	41.31	1300	1.00	
206 (Pb)	165	2	0.06	ppb	17.47	1391	1.50	
207 (Pb)	165	2	0.06	ppb	12.32	1090	1.50	
208 Pb	165	2	0.06	ppb	9.76	5240	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	105610	0.69	101496	104.1	80 - 120	
45 Sc	2	1545262	0.67	1448455	106.7	80 - 120	
115 In	1	635508	0.91	580519	109.5	80 - 120	
115 In	2	1799141	0.68	1694704	106.2	80 - 120	
159 Tb	1	1388784	0.81	1221266	113.7	80 - 120	
159 Tb	2	2334198	1.99	2236647	104.4	80 - 120	
165 Ho	1	1371133	1.69	1159933	118.2	80 - 120	
165 Ho	2	2273868	1.23	2164693	105.0	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\S112013A.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\S112013A.b\011ICSA.D\011ICSA.D#

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\011ICSA.D\011ICSA.D#
 Date Acquired: Nov 20 2013 12:41 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: ICSA V-176969
 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: Nov 20 2013 12:21 pm
 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	0.02 ppb	23.85	0.50	
23 Na	45	1	121900.00 ppb	1.52	250.00	
24 Mg	45	1	47790.00 ppb	0.95	250.00	
27 Al	45	1	47450.00 ppb	0.13	100.00	
39 K	45	1	48790.00 ppb	0.67	250.00	
44 Ca	45	1	144800.00 ppb	0.90	250.00	
51 V	45	1	0.07 ppb	3.43	1.00	
52 Cr	45	1	0.80 ppb	3.72	1.00	
55 Mn	45	1	4.49 ppb	2.14	3.00	**
56 Fe	45	1	115500.00 ppb	2.09	150.00	
59 Co	45	1	1.74 ppb	0.62	1.00	**
60 Ni	45	1	3.19 ppb	1.14	1.50	**
65 Cu	45	1	1.09 ppb	1.27	5.00	
66 Zn	45	1	1.19 ppb	1.85	10.00	
75 As	115	1	0.28 ppb	8.03	1.00	
78 Se	115	1	0.05 ppb	465.50	5.00	
83 Kr	115	2	----- ppb	-----	1.00	
95 Mo	115	2	988.00 ppb	0.75	1.00	
107 Ag	115	2	0.04 ppb	8.00	0.50	
111 Cd	115	2	1.14 ppb	1.07	1.00	**
121 Sb	115	2	0.29 ppb	3.41	1.00	
137 Ba	159	2	0.99 ppb	1.57	2.50	
205 Tl	165	2	0.01 ppb	85.70	1.00	
206 (Pb)	165	2	0.19 ppb	4.71	1.50	
207 (Pb)	165	2	0.20 ppb	7.82	1.50	
208 Pb	165	2	0.19 ppb	5.33	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97294	0.72	101496	95.9	70 - 150	
45 Sc	2	1459485	1.32	1448455	100.8	70 - 150	
115 In	1	552606	2.58	580519	95.2	70 - 150	
115 In	2	1614693	1.27	1694704	95.3	70 - 150	
159 Tb	1	1279458	1.95	1221266	104.8	70 - 150	
159 Tb	2	2170409	1.21	2236647	97.0	70 - 150	
165 Ho	1	1247834	1.25	1159933	107.6	70 - 150	
165 Ho	2	2098581	2.01	2164693	96.9	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\S112013A.b\002CALB.D\002CALB.D#

4 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Nnumber of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S112013A.b\012ICSB.D\012ICSB.D#

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\012ICSB.D\012ICSB.D#
 Date Acquired: Nov 20 2013 12:47 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: ICSAB V-176970
 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: Nov 20 2013 12:21 pm
 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	99.02	---		-	
23 Na	45	1		123800.00	1.64	---		-	
24 Mg	45	1		48590.00	1.48	---		-	
27 Al	45	1		47830.00	1.44	---		-	
39 K	45	1		49100.00	0.65	---		-	
44 Ca	45	1		146400.00	1.28	---		-	
51 V	45	1		210.10	0.42	200	105.1	80 - 120	
52 Cr	45	1		198.00	0.92	200	99.0	80 - 120	
55 Mn	45	1		208.00	3.51	200	104.0	80 - 120	
56 Fe	45	1		117700.00	2.41	---		-	
59 Co	45	1		188.70	3.00	200	94.4	80 - 120	
60 Ni	45	1		183.40	2.50	200	91.7	80 - 120	
65 Cu	45	1		185.10	2.00	---		-	
66 Zn	45	1		91.38	1.48	100	91.4	80 - 120	
75 As	115	1		104.00	0.74	100	104.0	80 - 120	
78 Se	115	1		98.32	0.72	100	98.3	80 - 120	
83 Kr	115	2		-----	---			-	
95 Mo	115	2		1018.00	1.24	---		-	
107 Ag	115	2		45.70	1.35	50	91.4	80 - 120	
111 Cd	115	2		97.55	0.19	100	97.6	80 - 120	
121 Sb	115	2		0.27	3.24	---		-	
137 Ba	159	2		1.03	3.68	---		-	
205 Tl	165	2		-0.01	56.85	---		-	
206 (Pb)	165	2		0.17	5.16	---		-	
207 (Pb)	165	2		0.18	5.87	---		-	
208 Pb	165	2		0.17	4.04	---		-	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	98132	0.67	101496	96.7	70 - 150	
45 Sc	2	1485355	0.67	1448455	102.5	70 - 150	
115 In	1	556849	0.56	580519	95.9	70 - 150	
115 In	2	1616312	0.89	1694704	95.4	70 - 150	
159 Tb	1	1290571	0.40	1221266	105.7	70 - 150	
159 Tb	2	2204843	0.75	2236647	98.6	70 - 150	
165 Ho	1	1266309	1.11	1159933	109.2	70 - 150	
165 Ho	2	2126854	0.34	2164693	98.3	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\S112013A.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\S112013A.b\013_CCV.D\013_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\013_CCV.D\013_CCV.D#
 Date Acquired: Nov 20 2013 12:52 pm
 Operator: GK
 Sample Name: CCV V-176971
 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: Nov 20 2013 12:21 pm
 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	48.38	ppb	0.54	338571	50	96.8	90 - 110	
23 Na	45	1	5130.00	ppb	0.68	5885445	5000	102.6	90 - 110	
24 Mg	45	1	5052.00	ppb	1.13	3207450	5000	101.0	90 - 110	
27 Al	45	1	1533.00	ppb	0.97	541485	1500	102.2	90 - 110	
39 K	45	1	5130.00	ppb	1.51	3215292	5000	102.6	90 - 110	
44 Ca	45	1	5094.00	ppb	0.41	167317	5000	101.9	90 - 110	
51 V	45	1	50.54	ppb	1.26	251111	50	101.1	90 - 110	
52 Cr	45	1	50.08	ppb	0.59	294095	50	100.2	90 - 110	
55 Mn	45	1	51.41	ppb	1.18	227629	50	102.8	90 - 110	
56 Fe	45	1	5120.00	ppb	0.86	27545070	5000	102.4	90 - 110	
59 Co	45	1	48.59	ppb	1.82	461102	50	97.2	90 - 110	
60 Ni	45	1	50.39	ppb	1.44	118244	50	100.8	90 - 110	
65 Cu	45	1	50.55	ppb	0.67	155455	50	101.1	90 - 110	
66 Zn	45	1	51.18	ppb	0.25	61822	50	102.4	90 - 110	
75 As	115	1	50.35	ppb	1.80	39217	50	100.7	90 - 110	
78 Se	115	1	251.70	ppb	0.92	20157	250	100.7	90 - 110	
83 Kr	115	2	-----	ppb	-----	554	50	#VALUE!	#### - ####	
95 Mo	115	2	50.11	ppb	2.01	296273	50	100.2	90 - 110	
107 Ag	115	2	47.73	ppb	1.54	774308	50	95.5	90 - 110	
111 Cd	115	2	49.52	ppb	0.65	163519	50	99.0	90 - 110	
121 Sb	115	2	47.84	ppb	1.36	575580	50	95.7	90 - 110	
137 Ba	159	2	50.03	ppb	0.81	224568	50	100.1	90 - 110	
205 Tl	165	2	49.77	ppb	1.56	1467434	50	99.5	90 - 110	
206 (Pb)	165	2	47.38	ppb	1.68	459166	50	94.8	90 - 110	
207 (Pb)	165	2	49.26	ppb	0.67	381077	50	98.5	90 - 110	
208 Pb	165	2	48.82	ppb	0.92	1854189	50	97.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	106770	0.14	101496	105.2	80 - 120	
45 Sc	2	1588648	0.77	1448455	109.7	80 - 120	
115 In	1	636779	1.37	580519	109.7	80 - 120	
115 In	2	1839781	0.51	1694704	108.6	80 - 120	
159 Tb	1	1413729	0.96	1221266	115.8	80 - 120	
159 Tb	2	2384514	0.50	2236647	106.6	80 - 120	
165 Ho	1	1366178	1.18	1159933	117.8	80 - 120	
165 Ho	2	2320564	1.54	2164693	107.2	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\S112013A.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\S112013A.b\014_CCV.D\014_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\014_CCV.D\014_CCV.D#
 Date Acquired: Nov 20 2013 12:58 pm
 Operator: GK
 Sample Name: LLCCV V-176972
 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: Nov 20 2013 12:21 pm
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Fail
 ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.48 ppb		4.13	1	96.1	70 - 130	
23 Na	45	1	271.20 ppb		2.06	250	108.5	70 - 130	
24 Mg	45	1	269.50 ppb		1.40	250	107.8	70 - 130	
27 Al	45	1	114.40 ppb		1.68	100	114.4	70 - 130	
39 K	45	1	257.90 ppb		1.52	250	103.2	70 - 130	
44 Ca	45	1	285.10 ppb		2.05	250	114.0	70 - 130	
51 V	45	1	1.01 ppb		0.87	1	100.9	70 - 130	
52 Cr	45	1	1.01 ppb		0.53	1	100.8	70 - 130	
55 Mn	45	1	2.90 ppb		0.58	3	96.7	70 - 130	
56 Fe	45	1	195.60 ppb		1.06	150	130.4	70 - 130	FAIL
59 Co	45	1	0.99 ppb		0.52	1	99.0	70 - 130	
60 Ni	45	1	1.50 ppb		2.87	2	99.9	70 - 130	
65 Cu	45	1	4.62 ppb		3.93	5	92.4	70 - 130	
66 Zn	45	1	10.63 ppb		1.61	10	106.3	70 - 130	
75 As	115	1	0.98 ppb		3.98	1	98.2	70 - 130	
78 Se	115	1	4.42 ppb		0.76	5	88.4	70 - 130	
83 Kr	115	2	----- ppb		-----	1	#VALUE!	##### - #####	
95 Mo	115	2	1.27 ppb		3.54	1	126.6	70 - 130	
107 Ag	115	2	0.53 ppb		5.32	1	105.1	70 - 130	
111 Cd	115	2	1.02 ppb		4.05	1	101.8	70 - 130	
121 Sb	115	2	0.97 ppb		0.91	1	97.5	70 - 130	
137 Ba	159	2	2.55 ppb		1.26	3	102.1	70 - 130	
205 Tl	165	2	0.93 ppb		4.39	1	92.6	70 - 130	
206 (Pb)	165	2	1.44 ppb		3.50	2	95.7	70 - 130	
207 (Pb)	165	2	1.54 ppb		1.68	2	102.5	70 - 130	
208 Pb	165	2	1.43 ppb		2.43	2	95.6	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	108828	0.20	101496	107.2	80 - 120	
45 Sc	2	1546790	3.24	1448455	106.8	80 - 120	
115 In	1	652092	0.53	580519	112.3	80 - 120	
115 In	2	1781093	2.84	1694704	105.1	80 - 120	
159 Tb	1	1447592	0.54	1221266	118.5	80 - 120	
159 Tb	2	2312434	1.88	2236647	103.4	80 - 120	
165 Ho	1	1396357	2.27	1159933	120.4	80 - 120	ISFail
165 Ho	2	2225284	1.31	2164693	102.8	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\S112013A.b\002CALB.D\002CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
 1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S112013A.b\015_CCB.D\015_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\015_CCB.D\015_CCB.D#
 Date Acquired: Nov 20 2013 01:04 pm
 Operator: GK
 Sample Name: CCB V-176968
 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: Nov 20 2013 12:21 pm
 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	-0.003 ppb	133.60	198	0.50	
23 Na	45	1	24.840 ppb	12.45	157121	250.00	
24 Mg	45	1	14.010 ppb	9.75	9722	250.00	
27 Al	45	1	36.440 ppb	3.95	13332	100.00	
39 K	45	1	15.190 ppb	13.61	69790	250.00	
44 Ca	45	1	84.830 ppb	3.99	3075	250.00	
51 V	45	1	0.058 ppb	9.75	356	1.00	
52 Cr	45	1	0.076 ppb	11.67	1156	1.00	
55 Mn	45	1	0.023 ppb	34.90	608	3.00	
56 Fe	45	1	31.400 ppb	9.14	192498	150.00	
59 Co	45	1	0.018 ppb	30.92	542	1.00	
60 Ni	45	1	0.051 ppb	25.53	214	1.50	
65 Cu	45	1	0.053 ppb	72.60	1562	5.00	
66 Zn	45	1	0.525 ppb	7.21	1422	10.00	
75 As	115	1	-0.025 ppb	41.86	45	1.00	
78 Se	115	1	-0.228 ppb	46.85	184	5.00	
83 Kr	115	2	----- ppb	-----	516	1.00	
95 Mo	115	2	0.188 ppb	5.19	1257	1.00	
107 Ag	115	2	0.020 ppb	10.54	446	0.50	
111 Cd	115	2	0.026 ppb	18.30	133	1.00	
121 Sb	115	2	0.023 ppb	3.81	422	1.00	
137 Ba	159	2	0.053 ppb	3.81	534	2.50	
205 Tl	165	2	-0.020 ppb	3.37	979	1.00	
206 (Pb)	165	2	0.041 ppb	19.15	1213	1.50	
207 (Pb)	165	2	0.058 ppb	4.84	1080	1.50	
208 Pb	165	2	0.048 ppb	5.64	4861	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	104993	0.35	101496	103.4	80 - 120	
45 Sc	2	1545188	0.93	1448455	106.7	80 - 120	
115 In	1	628548	0.76	580519	108.3	80 - 120	
115 In	2	1781780	1.50	1694704	105.1	80 - 120	
159 Tb	1	1387587	1.91	1221266	113.6	80 - 120	
159 Tb	2	2357598	0.44	2236647	105.4	80 - 120	
165 Ho	1	1362775	0.95	1159933	117.5	80 - 120	
165 Ho	2	2259705	0.45	2164693	104.4	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112013A.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\S112013A.b\016SMPL.D\016SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\016SMPL.D\016SMPL.D#
 Date Acquired: Nov 20 2013 01:10 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: MB 27435 *02 11/21 MK*
 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: Nov 20 2013 12:21 pm
 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	14.35	101	2700	
23 Na	45		1	79.07	79.07	ppb	14.34	200548	225000	
24 Mg	45		1	12.27	12.27	ppb	37.24	7988	225000	
27 Al	45		1	25.76	25.76	ppb	12.95	8900	67500	
39 K	45		1	28.97	28.97	ppb	12.96	72214	225000	
44 Ca	45		1	47.42	47.42	ppb	22.65	1729	225000	
51 V	45		1	0.25	0.25	ppb	6.63	1179	2700	
52 Cr	45		1	0.11	0.11	ppb	9.51	1256	2700	
55 Mn	45		1	0.59	0.59	ppb	5.51	2843	2700	
56 Fe	45		1	28.89	28.89	ppb	35.06	165843	202500	
59 Co	45		1	0.01	0.01	ppb	129.70	447	2700	
60 Ni	45		1	0.06	0.06	ppb	35.82	218	2700	
65 Cu	45		1	1.01	1.01	ppb	3.74	4083	2700	
66 Zn	45		1	1.70	1.70	ppb	4.58	2589	2700	
75 As	115		1	0.14	0.14	ppb	16.81	123	2250	
78 Se	115		1	-0.20	-0.20	ppb	66.82	173	2700	
83 Kr	115		2	----	-----	ppb	-----	506	2700	
95 Mo	115		2	0.12	0.12	ppb	13.08	786	2700	
107 Ag	115		2	0.11	0.11	ppb	5.76	1649	900	
111 Cd	115		2	0.01	0.01	ppb	72.43	81	2700	
121 Sb	115		2	0.07	0.07	ppb	2.74	863	1125	
137 Ba	159		2	0.14	0.14	ppb	9.30	860	1350	
205 Tl	165		2	-0.03	-0.03	ppb	7.59	747	900	
206 (Pb)	165		2	0.00	0.00	ppb	166.45	795	2700	
207 (Pb)	165		2	0.01	0.01	ppb	101.75	648	2700	
208 Pb	165		2	0.00	0.00	ppb	146.48	3051	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97042	0.52	101496	95.6	70 - 150	
45 Sc	2	1452907	0.14	1448455	100.3	70 - 150	
115 In	1	581481	0.69	580519	100.2	70 - 150	
115 In	2	1631829	1.08	1694704	96.3	70 - 150	
159 Tb	1	1327517	0.49	1221266	108.7	70 - 150	
159 Tb	2	2189334	0.93	2236647	97.9	70 - 150	
165 Ho	1	1289251	0.34	1159933	111.1	70 - 150	
165 Ho	2	2103022	1.03	2164693	97.2	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqa.s.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112013A.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\S112013A.b\017SMPL.D\017SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\017SMPL.D\017SMPL.D#
 Date Acquired: Nov 20 2013 01:16 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW 27425 *02 ml 1/21*
 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: Nov 20 2013 12:21 pm
 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	259.30	259.30	ppb	1.49	1632027	2700	
23 Na	45	1	25,210.00	25210.00	ppb	0.94	25922450	225000	
24 Mg	45	1	24,820.00	24820.00	ppb	0.81	14377240	225000	
27 Al	45	1	2,544.00	2544.00	ppb	0.53	819316	67500	
39 K	45	1	24,500.00	24500.00	ppb	0.14	13797750	225000	
44 Ca	45	1	25,000.00	25000.00	ppb	1.85	748043	225000	
51 V	45	1	254.90	254.90	ppb	1.12	1155151	2700	
52 Cr	45	1	244.70	244.70	ppb	0.76	1308678	2700	
55 Mn	45	1	253.50	253.50	ppb	1.70	1022433	2700	
56 Fe	45	1	2,471.00	2471.00	ppb	0.96	12142820	202500	
59 Co	45	1	237.50	237.50	ppb	1.09	2055046	2700	
60 Ni	45	1	243.80	243.80	ppb	0.91	521580	2700	
65 Cu	45	1	253.10	253.10	ppb	1.40	704930	2700	
66 Zn	45	1	251.80	251.80	ppb	0.95	274562	2700	
75 As	115	1	248.90	248.90	ppb	0.58	175588	2250	
78 Se	115	1	248.60	248.60	ppb	0.64	18045	2700	
83 Kr	115	2	----	-----	ppb	-----	574	2700	
95 Mo	115	2	258.20	258.20	ppb	0.53	1318974	2700	
107 Ag	115	2	45.72	45.72	ppb	1.34	641104	900	
111 Cd	115	2	249.30	249.30	ppb	0.98	711382	2700	
121 Sb	115	2	247.30	247.30	ppb	2.45	2570951	1125	
137 Ba	159	2	253.50	253.50	ppb	1.17	1015816	1350	
205 Tl	165	2	230.80	230.80	ppb	2.61	6086056	900	
206 (Pb)	165	2	246.20	246.20	ppb	2.58	2132183	2700	
207 (Pb)	165	2	260.90	260.90	ppb	1.39	1803698	2700	
208 Pb	165	2	242.50	242.50	ppb	1.31	8231852	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97420	0.61	101496	96.0	70 - 150	
45 Sc	2	1429866	1.13	1448455	98.7	70 - 150	
115 In	1	577088	0.41	580519	99.4	70 - 150	
115 In	2	1590290	1.70	1694704	93.8	70 - 150	
159 Tb	1	1334922	0.49	1221266	109.3	70 - 150	
159 Tb	2	2130357	0.94	2236647	95.2	70 - 150	
165 Ho	1	1327636	0.59	1159933	114.5	70 - 150	
165 Ho	2	2076921	0.78	2164693	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\S112013A.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\S112013A.b\018SMPL.D\018SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\018SMPL.D\018SMPL.D#
 Date Acquired: Nov 20 2013 01:22 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW MR 27425 *02 g14 npl*
 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: Nov 20 2013 12:21 pm
 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		277.30	277.30	ppb	1.90	1744307	2700	
23 Na	45	1		27,570.00	27570.00	ppb	0.51	27628950	225000	
24 Mg	45	1		26,710.00	26710.00	ppb	2.09	15081530	225000	
27 Al	45	1		2,718.00	2718.00	ppb	0.37	853338	67500	
39 K	45	1		25,680.00	25680.00	ppb	2.15	14098490	225000	
44 Ca	45	1		26,470.00	26470.00	ppb	0.69	772187	225000	
51 V	45	1		279.70	279.70	ppb	0.23	1236031	2700	
52 Cr	45	1		267.70	267.70	ppb	1.36	1395904	2700	
55 Mn	45	1		275.00	275.00	ppb	0.48	1081345	2700	
56 Fe	45	1		2,678.00	2678.00	ppb	1.10	12831150	202500	
59 Co	45	1		261.10	261.10	ppb	0.54	2202483	2700	
60 Ni	45	1		262.90	262.90	ppb	1.43	548415	2700	
65 Cu	45	1		273.90	273.90	ppb	0.84	743800	2700	
66 Zn	45	1		272.60	272.60	ppb	0.39	289810	2700	
75 As	115	1		271.00	271.00	ppb	0.58	186077	2250	
78 Se	115	1		268.00	268.00	ppb	0.20	18921	2700	
83 Kr	115	2		----	-----	ppb	-----	483	2700	
95 Mo	115	2		272.40	272.40	ppb	0.96	1396258	2700	
107 Ag	115	2		48.14	48.14	ppb	0.39	677491	900	
111 Cd	115	2		262.10	262.10	ppb	1.78	750613	2700	
121 Sb	115	2		262.20	262.20	ppb	0.16	2735800	1125	
137 Ba	159	2		271.40	271.40	ppb	0.47	1088653	1350	
205 Tl	165	2		249.30	249.30	ppb	1.00	6591006	900	
206 (Pb)	165	2		263.60	263.60	ppb	0.39	2289307	2700	
207 (Pb)	165	2		279.20	279.20	ppb	0.59	1935599	2700	
208 Pb	165	2		260.30	260.30	ppb	0.78	8856613	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	94983	0.45	101496	93.6	70 - 150	
45 Sc	2	1429195	1.03	1448455	98.7	70 - 150	
115 In	1	561641	0.71	580519	96.7	70 - 150	
115 In	2	1596007	0.38	1694704	94.2	70 - 150	
159 Tb	1	1333036	1.90	1221266	109.2	70 - 150	
159 Tb	2	2133030	1.28	2236647	95.4	70 - 150	
165 Ho	1	1309487	0.47	1159933	112.9	70 - 150	
165 Ho	2	2082178	0.18	2164693	96.2	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\S112013A.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\S112013A.b\019SMPL.D\019SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\019SMPL.D\019SMPL.D#
 Date Acquired: Nov 20 2013 01:27 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-030
 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: Nov 20 2013 12:21 pm
 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	8.46	1279	2700	
23 Na	45	1		8,191.00	8191.00	ppb	1.83	8378841	225000	
24 Mg	45	1		2,161.00	2161.00	ppb	0.91	1234155	225000	
27 Al	45	1		27.03	27.03	ppb	2.46	9205	67500	
39 K	45	1		1,444.00	1444.00	ppb	1.27	853520	225000	
44 Ca	45	1		15,080.00	15080.00	ppb	2.21	444626	225000	
51 V	45	1		0.36	0.36	ppb	5.29	1693	2700	
52 Cr	45	1		30.80	30.80	ppb	2.38	162870	2700	
55 Mn	45	1		1.91	1.91	ppb	0.94	8068	2700	
56 Fe	45	1		18.72	18.72	ppb	8.48	114688	202500	
59 Co	45	1		0.22	0.22	ppb	7.65	2212	2700	
60 Ni	45	1		0.72	0.72	ppb	1.21	1600	2700	
65 Cu	45	1		1.17	1.17	ppb	7.35	4485	2700	
66 Zn	45	1		5.63	5.63	ppb	1.79	6776	2700	
75 As	115	1		0.35	0.35	ppb	8.86	275	2250	
78 Se	115	1		0.06	0.06	ppb	38.91	195	2700	
83 Kr	115	2		----	-----	ppb	-----	514	2700	
95 Mo	115	2		2.03	2.03	ppb	0.24	11002	2700	
107 Ag	115	2		0.07	0.07	ppb	9.32	1093	900	
111 Cd	115	2		0.76	0.76	ppb	3.75	2319	2700	
121 Sb	115	2		0.26	0.26	ppb	2.89	2939	1125	
137 Ba	159	2		15.49	15.49	ppb	1.59	64526	1350	
205 Tl	165	2		0.37	0.37	ppb	5.13	11667	900	
206 (Pb)	165	2		0.26	0.26	ppb	4.66	3105	2700	
207 (Pb)	165	2		0.26	0.26	ppb	2.41	2486	2700	
208 Pb	165	2		0.25	0.25	ppb	2.06	11840	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	96019	1.63	101496	94.6	70 - 150	
45 Sc	2	1467602	1.01	1448455	101.3	70 - 150	
115 In	1	592034	0.54	580519	102.0	70 - 150	
115 In	2	1660155	1.03	1694704	98.0	70 - 150	
159 Tb	1	1364170	1.16	1221266	111.7	70 - 150	
159 Tb	2	2206282	1.33	2236647	98.6	70 - 150	
165 Ho	1	1327376	1.37	1159933	114.4	70 - 150	
165 Ho	2	2154160	0.36	2164693	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\S112013A.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\S112013A.b\020SMPL.D\020SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\020SMPL.D\020SMPL.D#
 Date Acquired: Nov 20 2013 01:33 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-030 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: Nov 20 2013 12:21 pm
 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	6.17	554	2700	
23 Na	45		1	7,453.00	7453.00	ppb	1.85	7464391	225000	
24 Mg	45		1	1,951.00	1951.00	ppb	1.03	1089639	225000	
27 Al	45		1	30.65	30.65	ppb	2.57	10123	67500	
39 K	45		1	1,251.00	1251.00	ppb	0.98	730470	225000	
44 Ca	45		1	13,520.00	13520.00	ppb	1.30	389965	225000	
51 V	45		1	0.26	0.26	ppb	3.14	1192	2700	
52 Cr	45		1	27.68	27.68	ppb	1.13	143186	2700	
55 Mn	45		1	0.59	0.59	ppb	2.22	2740	2700	
56 Fe	45		1	23.40	23.40	ppb	6.58	134267	202500	
59 Co	45		1	0.11	0.11	ppb	15.21	1267	2700	
60 Ni	45		1	0.58	0.58	ppb	4.17	1284	2700	
65 Cu	45		1	0.82	0.82	ppb	4.69	3463	2700	
66 Zn	45		1	5.64	5.64	ppb	2.05	6630	2700	
75 As	115		1	0.22	0.22	ppb	11.21	177	2250	
78 Se	115		1	-0.28	-0.28	ppb	58.86	166	2700	
83 Kr	115		2	----	-----	ppb	-----	476	2700	
95 Mo	115		2	1.60	1.60	ppb	0.80	8770	2700	
107 Ag	115		2	0.04	0.04	ppb	6.89	650	900	
111 Cd	115		2	0.59	0.59	ppb	3.03	1808	2700	
121 Sb	115		2	0.12	0.12	ppb	1.49	1405	1125	
137 Ba	159		2	13.86	13.86	ppb	0.39	57496	1350	
205 Tl	165		2	0.11	0.11	ppb	5.58	4487	900	
206 (Pb)	165		2	0.12	0.12	ppb	4.80	1841	2700	
207 (Pb)	165		2	0.11	0.11	ppb	4.52	1388	2700	
208 Pb	165		2	0.12	0.12	ppb	0.69	6943	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93864	1.07	101496	92.5	70 - 150	
45 Sc	2	1462817	1.11	1448455	101.0	70 - 150	
115 In	1	577723	1.39	580519	99.5	70 - 150	
115 In	2	1669282	1.70	1694704	98.5	70 - 150	
159 Tb	1	1337586	2.04	1221266	109.5	70 - 150	
159 Tb	2	2195581	1.16	2236647	98.2	70 - 150	
165 Ho	1	1316178	2.91	1159933	113.5	70 - 150	
165 Ho	2	2118336	0.69	2164693	97.9	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\S112013A.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\S112013A.b\021SMPL.D\021SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\021SMPL.D\021SMPL.D#
 Date Acquired: Nov 20 2013 01:39 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-030 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: Nov 20 2013 12:21 pm
 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	8.59	458	2700	
23 Na	45	1		1,775.00	1775.00	ppb	3.12	1961351	225000	
24 Mg	45	1		460.60	460.60	ppb	2.74	271097	225000	
27 Al	45	1		12.33	12.33	ppb	6.07	4667	67500	
39 K	45	1		302.00	302.00	ppb	2.98	228512	225000	
44 Ca	45	1		3,204.00	3204.00	ppb	2.73	97361	225000	
51 V	45	1		0.12	0.12	ppb	2.19	604	2700	
52 Cr	45	1		6.44	6.44	ppb	2.52	35528	2700	
55 Mn	45	1		0.97	0.97	ppb	4.06	4439	2700	
56 Fe	45	1		15.18	15.18	ppb	7.53	100281	202500	
59 Co	45	1		0.05	0.05	ppb	9.59	776	2700	
60 Ni	45	1		0.20	0.20	ppb	8.96	526	2700	
65 Cu	45	1		0.05	0.05	ppb	40.20	1458	2700	
66 Zn	45	1		2.40	2.40	ppb	4.29	3398	2700	
75 As	115	1		0.10	0.10	ppb	24.02	104	2250	
78 Se	115	1		-0.55	-0.55	ppb	22.41	157	2700	
83 Kr	115	2		----	-----	ppb	-----	517	2700	
95 Mo	115	2		0.46	0.46	ppb	6.69	2758	2700	
107 Ag	115	2		0.02	0.02	ppb	25.22	399	900	
111 Cd	115	2		0.18	0.18	ppb	3.02	631	2700	
121 Sb	115	2		0.07	0.07	ppb	8.08	927	1125	
137 Ba	159	2		3.37	3.37	ppb	1.11	15139	1350	
205 Tl	165	2		0.05	0.05	ppb	8.06	3048	900	
206 (Pb)	165	2		0.19	0.19	ppb	3.38	2596	2700	
207 (Pb)	165	2		0.19	0.19	ppb	8.90	2078	2700	
208 Pb	165	2		0.19	0.19	ppb	1.73	10043	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	98709	2.46	101496	97.3	70 - 150	
45 Sc	2	1520049	1.24	1448455	104.9	70 - 150	
115 In	1	621730	3.26	580519	107.1	70 - 150	
115 In	2	1764074	2.37	1694704	104.1	70 - 150	
159 Tb	1	1413203	2.20	1221266	115.7	70 - 150	
159 Tb	2	2344859	1.17	2236647	104.8	70 - 150	
165 Ho	1	1390550	2.11	1159933	119.9	70 - 150	
165 Ho	2	2250791	0.05	2164693	104.0	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112013A.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\S112013A.b\022SMPL.D\022SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\022SMPL.D\022SMPL.D#
 Date Acquired: Nov 20 2013 01:45 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-032 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: Nov 20 2013 12:21 pm
 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	256.80	256.80	ppb	0.61	1597682	2700	
23 Na	45		1	32,960.00	32960.00	ppb	1.13	31762890	225000	
24 Mg	45		1	26,150.00	26150.00	ppb	0.70	14208950	225000	
27 Al	45		1	2,476.00	2476.00	ppb	1.95	748165	67500	
39 K	45		1	24,890.00	24890.00	ppb	2.09	13156200	225000	
44 Ca	45		1	39,700.00	39700.00	ppb	1.77	1114575	225000	
51 V	45		1	256.10	256.10	ppb	2.11	1088854	2700	
52 Cr	45		1	274.90	274.90	ppb	1.67	1379379	2700	
55 Mn	45		1	251.30	251.30	ppb	0.79	950931	2700	
56 Fe	45		1	2,489.00	2489.00	ppb	0.93	11479410	202500	
59 Co	45		1	244.40	244.40	ppb	0.62	1984240	2700	
60 Ni	45		1	247.00	247.00	ppb	2.14	495746	2700	
65 Cu	45		1	253.50	253.50	ppb	3.20	662406	2700	
66 Zn	45		1	254.90	254.90	ppb	1.30	260816	2700	
75 As	115		1	248.60	248.60	ppb	0.61	167381	2250	
78 Se	115		1	242.50	242.50	ppb	1.20	16797	2700	
83 Kr	115		2	----	-----	ppb	-----	521	2700	
95 Mo	115		2	262.00	262.00	ppb	1.32	1317334	2700	
107 Ag	115		2	45.48	45.48	ppb	1.01	627810	900	
111 Cd	115		2	245.40	245.40	ppb	1.37	689346	2700	
121 Sb	115		2	248.60	248.60	ppb	0.84	2543897	1125	
137 Ba	159		2	262.90	262.90	ppb	0.43	1059462	1350	
205 Tl	165		2	227.60	227.60	ppb	1.23	6062529	900	
206 (Pb)	165		2	239.20	239.20	ppb	1.39	2093025	2700	
207 (Pb)	165		2	256.50	256.50	ppb	0.76	1791813	2700	
208 Pb	165		2	239.30	239.30	ppb	0.44	8205891	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	91412	1.96	101496	90.1	70 - 150	
45 Sc	2	1412846	0.60	1448455	97.5	70 - 150	
115 In	1	550625	0.62	580519	94.9	70 - 150	
115 In	2	1565182	1.26	1694704	92.4	70 - 150	
159 Tb	1	1334559	1.71	1221266	109.3	70 - 150	
159 Tb	2	2143202	0.81	2236647	95.8	70 - 150	
165 Ho	1	1276155	2.46	1159933	110.0	70 - 150	
165 Ho	2	2098311	1.07	2164693	96.9	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\S112013A.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\S112013A.b\023SMPL.D\023SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\023SMPL.D\023SMPL.D#
 Date Acquired: Nov 20 2013 01:51 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-034 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: Nov 20 2013 12:21 pm
 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		271.30	271.30	ppb	0.24	1683233	2700	
23 Na	45	1		37,870.00	37870.00	ppb	15.40	34469240	225000	
24 Mg	45	1		30,290.00	30290.00	ppb	15.75	15550500	225000	
27 Al	45	1		2,852.00	2852.00	ppb	15.88	813821	67500	
39 K	45	1		28,420.00	28420.00	ppb	14.95	14189420	225000	
44 Ca	45	1		45,090.00	45090.00	ppb	16.41	1194910	225000	
51 V	45	1		286.60	286.60	ppb	14.41	1153031	2700	
52 Cr	45	1		307.00	307.00	ppb	14.83	1456365	2700	
55 Mn	45	1		289.10	289.10	ppb	14.93	1034232	2700	
56 Fe	45	1		2,841.00	2841.00	ppb	15.73	12373270	202500	
59 Co	45	1		277.00	277.00	ppb	15.25	2125163	2700	
60 Ni	45	1		277.30	277.30	ppb	16.37	525449	2700	
65 Cu	45	1		284.80	284.80	ppb	16.91	702306	2700	
66 Zn	45	1		286.30	286.30	ppb	14.62	276949	2700	
75 As	115	1		276.70	276.70	ppb	14.76	178312	2250	
78 Se	115	1		268.60	268.60	ppb	14.39	17801	2700	
83 Kr	115	2		----	-----	ppb	-----	537	2700	
95 Mo	115	2		269.80	269.80	ppb	0.79	1358261	2700	
107 Ag	115	2		47.08	47.08	ppb	1.53	650619	900	
111 Cd	115	2		256.50	256.50	ppb	0.17	721487	2700	
121 Sb	115	2		262.10	262.10	ppb	0.44	2685524	1125	
137 Ba	159	2		279.70	279.70	ppb	1.49	1126354	1350	
205 Tl	165	2		245.00	245.00	ppb	0.87	6427477	900	
206 (Pb)	165	2		258.40	258.40	ppb	1.71	2226596	2700	
207 (Pb)	165	2		272.20	272.20	ppb	1.40	1872639	2700	
208 Pb	165	2		253.70	253.70	ppb	1.50	8566584	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	87648	14.19	101496	86.4	70 - 150	
45 Sc	2	1409174	0.85	1448455	97.3	70 - 150	
115 In	1	534203	13.70	580519	92.0	70 - 150	
115 In	2	1567195	1.58	1694704	92.5	70 - 150	
159 Tb	1	1285876	14.62	1221266	105.3	70 - 150	
159 Tb	2	2141529	1.51	2236647	95.7	70 - 150	
165 Ho	1	1264670	14.42	1159933	109.0	70 - 150	
165 Ho	2	2066076	0.53	2164693	95.4	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\S112013A.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\S112013A.b\024SMPL.D\024SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\024SMPL.D\024SMPL.D#
 Date Acquired: Nov 20 2013 01:56 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-030 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: Nov 20 2013 12:21 pm
 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	50.31	50.31	ppb	1.12	323631	2700	
23 Na	45		1	14,250.00	14250.00	ppb	3.33	13379520	225000	
24 Mg	45		1	7,509.00	7509.00	ppb	3.30	3958059	225000	
27 Al	45		1	1,581.00	1581.00	ppb	3.25	463569	67500	
39 K	45		1	6,628.00	6628.00	ppb	5.00	3432569	225000	
44 Ca	45		1	20,790.00	20790.00	ppb	4.61	565865	225000	
51 V	45		1	52.70	52.70	ppb	3.41	217411	2700	
52 Cr	45		1	85.36	85.36	ppb	3.02	415787	2700	
55 Mn	45		1	54.46	54.46	ppb	4.32	200137	2700	
56 Fe	45		1	5,265.00	5265.00	ppb	4.20	23515350	202500	
59 Co	45		1	52.31	52.31	ppb	3.55	412111	2700	
60 Ni	45		1	55.22	55.22	ppb	3.49	107570	2700	
65 Cu	45		1	57.04	57.04	ppb	3.00	145507	2700	
66 Zn	45		1	61.76	61.76	ppb	3.30	61804	2700	
75 As	115		1	51.87	51.87	ppb	3.11	34776	2250	
78 Se	115		1	249.20	249.20	ppb	2.53	17184	2700	
83 Kr	115		2	----	-----	ppb	-----	519	2700	
95 Mo	115		2	50.20	50.20	ppb	1.44	263643	2700	
107 Ag	115		2	46.86	46.86	ppb	0.83	675255	900	
111 Cd	115		2	49.09	49.09	ppb	0.77	144008	2700	
121 Sb	115		2	48.16	48.16	ppb	0.88	514719	1125	
137 Ba	159		2	63.28	63.28	ppb	0.88	262022	1350	
205 Tl	165		2	49.58	49.58	ppb	0.86	1348309	900	
206 (Pb)	165		2	46.66	46.66	ppb	1.10	417016	2700	
207 (Pb)	165		2	47.95	47.95	ppb	0.98	342076	2700	
208 Pb	165		2	46.04	46.04	ppb	0.50	1612510	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	88721	3.87	101496	87.4	70 - 150	
45 Sc	2	1460251	0.31	1448455	100.8	70 - 150	
115 In	1	548529	3.55	580519	94.5	70 - 150	
115 In	2	1634251	0.57	1694704	96.4	70 - 150	
159 Tb	1	1291037	4.21	1221266	105.7	70 - 150	
159 Tb	2	2200163	0.88	2236647	98.4	70 - 150	
165 Ho	1	1275368	4.45	1159933	110.0	70 - 150	
165 Ho	2	2139865	1.25	2164693	98.9	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112013A.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\S112013A.b\025SMPL.D\025SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\025SMPL.D\025SMPL.D#
 Date Acquired: Nov 20 2013 02:02 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: Nov 20 2013 12:21 pm
 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		0.37	0.37	ppb	3.22	2796	2700	
23 Na	45	1		103.80	103.80	ppb	4.41	234242	225000	
24 Mg	45	1		68.49	68.49	ppb	2.01	41942	225000	
27 Al	45	1		25.25	25.25	ppb	1.35	9065	67500	
39 K	45	1		59.92	59.92	ppb	3.57	92891	225000	
44 Ca	45	1		127.50	127.50	ppb	3.19	4269	225000	
51 V	45	1		0.46	0.46	ppb	1.24	2233	2700	
52 Cr	45	1		0.50	0.50	ppb	3.58	3451	2700	
55 Mn	45	1		0.44	0.44	ppb	2.67	2308	2700	
56 Fe	45	1		60.85	60.85	ppb	1.66	334005	202500	
59 Co	45	1		0.43	0.43	ppb	1.64	4203	2700	
60 Ni	45	1		0.47	0.47	ppb	2.94	1144	2700	
65 Cu	45	1		0.16	0.16	ppb	12.79	1799	2700	
66 Zn	45	1		0.12	0.12	ppb	4.01	903	2700	
75 As	115	1		0.43	0.43	ppb	6.19	358	2250	
78 Se	115	1		0.25	0.25	ppb	66.60	222	2700	
83 Kr	115	2		----	-----	ppb	-----	509	2700	
95 Mo	115	2		0.77	0.77	ppb	1.86	4706	2700	
107 Ag	115	2		0.13	0.13	ppb	3.25	2240	900	
111 Cd	115	2		0.41	0.41	ppb	1.02	1386	2700	
121 Sb	115	2		0.39	0.39	ppb	1.09	4778	1125	
137 Ba	159	2		0.37	0.37	ppb	4.68	1976	1350	
205 Tl	165	2		0.51	0.51	ppb	1.70	16611	900	
206 (Pb)	165	2		0.38	0.38	ppb	2.48	4504	2700	
207 (Pb)	165	2		0.40	0.40	ppb	3.97	3722	2700	
208 Pb	165	2		0.37	0.37	ppb	1.67	17161	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	100729	1.07	101496	99.2	70 - 150	
45 Sc	2	1566410	1.90	1448455	108.1	70 - 150	
115 In	1	629230	2.18	580519	108.4	70 - 150	
115 In	2	1820050	1.93	1694704	107.4	70 - 150	
159 Tb	1	1450242	1.40	1221266	118.7	70 - 150	
159 Tb	2	2390340	1.54	2236647	106.9	70 - 150	
165 Ho	1	1422880	1.44	1159933	122.7	70 - 150	
165 Ho	2	2322989	1.71	2164693	107.3	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\S112013A.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\S112013A.b\026_CCV.D\026_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\026_CCV.D\026_CCV.D#
 Date Acquired: Nov 20 2013 02:08 pm
 Operator: GK
 Sample Name: CCV V-176971
 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: Nov 20 2013 12:21 pm
 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	50.32	ppb	1.98	333053	50	100.6	90 - 110	
23 Na	45	1	5148.00	ppb	0.55	5395473	5000	103.0	90 - 110	
24 Mg	45	1	5212.00	ppb	0.88	3023321	5000	104.2	90 - 110	
27 Al	45	1	1542.00	ppb	0.88	497279	1500	102.8	90 - 110	
39 K	45	1	5072.00	ppb	0.70	2904759	5000	101.4	90 - 110	
44 Ca	45	1	5067.00	ppb	1.00	152045	5000	101.3	90 - 110	
51 V	45	1	50.95	ppb	1.47	231273	50	101.9	90 - 110	
52 Cr	45	1	51.28	ppb	0.83	275086	50	102.6	90 - 110	
55 Mn	45	1	51.71	ppb	0.68	209165	50	103.4	90 - 110	
56 Fe	45	1	5210.00	ppb	0.88	25611700	5000	104.2	90 - 110	
59 Co	45	1	50.82	ppb	0.79	440636	50	101.6	90 - 110	
60 Ni	45	1	52.76	ppb	2.11	113085	50	105.5	90 - 110	
65 Cu	45	1	53.02	ppb	1.24	148894	50	106.0	90 - 110	
66 Zn	45	1	53.00	ppb	1.60	58464	50	106.0	90 - 110	
75 As	115	1	49.19	ppb	0.29	36455	50	98.4	90 - 110	
78 Se	115	1	242.00	ppb	1.17	18441	250	96.8	90 - 110	
83 Kr	115	2	-----	ppb	-----	461	50	#VALUE!	#### - ####	
95 Mo	115	2	48.86	ppb	0.75	278110	50	97.7	90 - 110	
107 Ag	115	2	47.47	ppb	0.11	741315	50	94.9	90 - 110	
111 Cd	115	2	49.54	ppb	0.53	157466	50	99.1	90 - 110	
121 Sb	115	2	47.72	ppb	0.66	552639	50	95.4	90 - 110	
137 Ba	159	2	49.77	ppb	0.56	216563	50	99.5	90 - 110	
205 Tl	165	2	52.61	ppb	1.14	1487472	50	105.2	90 - 110	
206 (Pb)	165	2	50.02	ppb	0.89	464801	50	100.0	90 - 110	
207 (Pb)	165	2	51.75	ppb	0.93	383895	50	103.5	90 - 110	
208 Pb	165	2	51.54	ppb	1.07	1876678	50	103.1	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97546	1.12	101496	96.1	80 - 120	
45 Sc	2	1502710	1.39	1448455	103.7	80 - 120	
115 In	1	605771	0.69	580519	104.3	80 - 120	
115 In	2	1770863	0.80	1694704	104.5	80 - 120	
159 Tb	1	1393032	2.08	1221266	114.1	80 - 120	
159 Tb	2	2311298	1.08	2236647	103.3	80 - 120	
165 Ho	1	1349450	1.87	1159933	116.3	80 - 120	
165 Ho	2	2225228	1.19	2164693	102.8	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112013A.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\S112013A.b\027_CCV.D\027_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\027_CCV.D\027_CCV.D#
 Date Acquired: Nov 20 2013 02:14 pm
 Operator: GK
 Sample Name: LLCCV V-176972
 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: Nov 20 2013 12:21 pm
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.54	ppb	3.42	1	107.3	70 - 130	
23 Na	45	1	259.40	ppb	2.63	250	103.8	70 - 130	
24 Mg	45	1	275.40	ppb	0.95	250	110.2	70 - 130	
27 Al	45	1	107.10	ppb	0.96	100	107.1	70 - 130	
39 K	45	1	257.70	ppb	2.12	250	103.1	70 - 130	
44 Ca	45	1	265.40	ppb	2.30	250	106.2	70 - 130	
51 V	45	1	1.08	ppb	2.54	1	108.1	70 - 130	
52 Cr	45	1	1.09	ppb	1.38	1	108.8	70 - 130	
55 Mn	45	1	3.06	ppb	1.75	3	101.8	70 - 130	
56 Fe	45	1	174.70	ppb	2.17	150	116.5	70 - 130	
59 Co	45	1	1.05	ppb	1.93	1	104.7	70 - 130	
60 Ni	45	1	1.61	ppb	2.23	2	107.5	70 - 130	
65 Cu	45	1	4.98	ppb	0.86	5	99.6	70 - 130	
66 Zn	45	1	10.45	ppb	0.60	10	104.5	70 - 130	
75 As	115	1	1.06	ppb	4.10	1	105.9	70 - 130	
78 Se	115	1	4.76	ppb	7.31	5	95.3	70 - 130	
83 Kr	115	2	-----	ppb	-----	1	#VALUE!	##### - #####	
95 Mo	115	2	1.06	ppb	2.56	1	106.2	70 - 130	
107 Ag	115	2	0.51	ppb	1.31	1	101.0	70 - 130	
111 Cd	115	2	1.05	ppb	3.44	1	105.2	70 - 130	
121 Sb	115	2	1.02	ppb	2.28	1	101.6	70 - 130	
137 Ba	159	2	2.47	ppb	2.34	3	98.8	70 - 130	
205 Tl	165	2	1.02	ppb	1.66	1	101.7	70 - 130	
206 (Pb)	165	2	1.44	ppb	2.78	2	95.8	70 - 130	
207 (Pb)	165	2	1.54	ppb	3.90	2	102.6	70 - 130	
208 Pb	165	2	1.45	ppb	2.71	2	96.7	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	96816	1.06	101496	95.4	80 - 120	
45 Sc	2	1510770	0.85	1448455	104.3	80 - 120	
115 In	1	594859	2.07	580519	102.5	80 - 120	
115 In	2	1765841	2.44	1694704	104.2	80 - 120	
159 Tb	1	1370969	1.52	1221266	112.3	80 - 120	
159 Tb	2	2338963	1.29	2236647	104.6	80 - 120	
165 Ho	1	1343108	0.59	1159933	115.8	80 - 120	
165 Ho	2	2274656	0.91	2164693	105.1	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\S112013A.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\S112013A.b\028_CCB.D\028_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\028_CCB.D\028_CCB.D#
 Date Acquired: Nov 20 2013 02:20 pm
 Operator: GK
 Sample Name: CCB V-176968
 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: Nov 20 2013 12:21 pm
 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	0.020	ppb	54.32	350	0.50	
23 Na	45	1	4.086	ppb	57.12	124394	250.00	
24 Mg	45	1	7.602	ppb	13.56	5300	250.00	
27 Al	45	1	27.480	ppb	0.67	9475	100.00	
39 K	45	1	7.301	ppb	21.38	60262	250.00	
44 Ca	45	1	62.300	ppb	8.15	2176	250.00	
51 V	45	1	0.070	ppb	16.30	384	1.00	
52 Cr	45	1	0.080	ppb	9.25	1091	1.00	
55 Mn	45	1	0.040	ppb	16.05	632	3.00	
56 Fe	45	1	7.064	ppb	7.45	59178	150.00	
59 Co	45	1	0.030	ppb	35.96	605	1.00	
60 Ni	45	1	0.049	ppb	21.22	194	1.50	
65 Cu	45	1	0.053	ppb	25.72	1448	5.00	
66 Zn	45	1	0.414	ppb	5.34	1197	10.00	
75 As	115	1	0.041	ppb	23.05	54	1.00	
78 Se	115	1	-0.351	ppb	9.47	168	5.00	
83 Kr	115	2	-----	ppb	-----	471	1.00	
95 Mo	115	2	0.065	ppb	16.18	551	1.00	
107 Ag	115	2	0.019	ppb	10.53	429	0.50	
111 Cd	115	2	0.044	ppb	19.23	190	1.00	
121 Sb	115	2	0.048	ppb	14.86	704	1.00	
137 Ba	159	2	0.080	ppb	16.35	634	2.50	
205 Tl	165	2	0.039	ppb	4.75	2669	1.00	
206 (Pb)	165	2	0.077	ppb	6.05	1538	1.50	
207 (Pb)	165	2	0.090	ppb	14.10	1309	1.50	
208 Pb	165	2	0.084	ppb	2.96	6157	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97309	0.75	101496	95.9	80 - 120	
45 Sc	2	1508704	0.88	1448455	104.2	80 - 120	
115 In	1	604971	1.21	580519	104.2	80 - 120	
115 In	2	1778923	0.23	1694704	105.0	80 - 120	
159 Tb	1	1373260	2.16	1221266	112.4	80 - 120	
159 Tb	2	2291395	1.03	2236647	102.4	80 - 120	
165 Ho	1	1354323	2.11	1159933	116.8	80 - 120	
165 Ho	2	2239098	0.49	2164693	103.4	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\S112013A.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\S112013A.b\029SMPL.D\029SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\029SMPL.D\029SMPL.D#
 Date Acquired: Nov 20 2013 02:26 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-002
 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: Nov 20 2013 12:21 pm
 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	41.68	302	2700	
23 Na	45		1	17,690.00	17690.00	ppb	7.16	18049080	225000	
24 Mg	45		1	2,009.00	2009.00	ppb	6.97	1153241	225000	
27 Al	45		1	34.91	34.91	ppb	7.43	11761	67500	
39 K	45		1	1,625.00	1625.00	ppb	7.67	957953	225000	
44 Ca	45		1	12,340.00	12340.00	ppb	7.55	365838	225000	
51 V	45		1	0.34	0.34	ppb	8.52	1587	2700	
52 Cr	45		1	43.84	43.84	ppb	7.52	232621	2700	
55 Mn	45		1	2.73	2.73	ppb	9.00	11345	2700	
56 Fe	45		1	42.32	42.32	ppb	7.07	229971	202500	
59 Co	45		1	0.30	0.30	ppb	9.49	2903	2700	
60 Ni	45		1	1.47	1.47	ppb	8.60	3206	2700	
65 Cu	45		1	4.41	4.41	ppb	9.77	13410	2700	
66 Zn	45		1	16.12	16.12	ppb	8.60	18090	2700	
75 As	115		1	0.21	0.21	ppb	0.84	177	2250	
78 Se	115		1	-0.24	-0.24	ppb	96.17	176	2700	
83 Kr	115		2	----	-----	ppb	-----	503	2700	
95 Mo	115		2	7.82	7.82	ppb	1.19	41839	2700	
107 Ag	115		2	0.05	0.05	ppb	0.66	788	900	
111 Cd	115		2	1.74	1.74	ppb	4.74	5226	2700	
121 Sb	115		2	0.13	0.13	ppb	3.15	1532	1125	
137 Ba	159		2	15.59	15.59	ppb	0.97	64225	1350	
205 Tl	165		2	0.03	0.03	ppb	15.63	2213	900	
206 (Pb)	165		2	0.48	0.48	ppb	0.74	5018	2700	
207 (Pb)	165		2	0.52	0.52	ppb	4.15	4244	2700	
208 Pb	165		2	0.48	0.48	ppb	2.15	19530	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	96761	6.50	101496	95.3	70 - 150	
45 Sc	2	1435150	1.01	1448455	99.1	70 - 150	
115 In	1	604865	3.61	580519	104.2	70 - 150	
115 In	2	1658363	0.61	1694704	97.9	70 - 150	
159 Tb	1	1447049	4.09	1221266	118.5	70 - 150	
159 Tb	2	2181489	0.66	2236647	97.5	70 - 150	
165 Ho	1	1403055	4.23	1159933	121.0	70 - 150	
165 Ho	2	2106048	0.90	2164693	97.3	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\S112013A.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\S112013A.b\030SMPL.D\030SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\030SMPL.D\030SMPL.D#
 Date Acquired: Nov 20 2013 02:32 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-004
 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: Nov 20 2013 12:21 pm
 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	294.11	191	2700	
23 Na	45		1	12,210.00	12210.00	ppb	1.35	11505950	225000	
24 Mg	45		1	2,418.00	2418.00	ppb	1.07	1278208	225000	
27 Al	45		1	15.66	15.66	ppb	0.68	5183	67500	
39 K	45		1	2,024.00	2024.00	ppb	2.27	1086668	225000	
44 Ca	45		1	15,870.00	15870.00	ppb	0.35	433280	225000	
51 V	45		1	0.46	0.46	ppb	2.71	1962	2700	
52 Cr	45		1	9.79	9.79	ppb	0.85	48316	2700	
55 Mn	45		1	5.83	5.83	ppb	0.24	21867	2700	
56 Fe	45		1	34.78	34.78	ppb	1.98	178072	202500	
59 Co	45		1	0.20	0.20	ppb	2.84	1933	2700	
60 Ni	45		1	2.62	2.62	ppb	1.42	5187	2700	
65 Cu	45		1	5.63	5.63	ppb	3.80	15453	2700	
66 Zn	45		1	70.43	70.43	ppb	0.76	70550	2700	
75 As	115		1	0.28	0.28	ppb	10.08	218	2250	
78 Se	115		1	-0.36	-0.36	ppb	41.56	156	2700	
83 Kr	115		2	-----	-----	ppb	-----	492	2700	
95 Mo	115		2	0.40	0.40	ppb	5.53	2249	2700	
107 Ag	115		2	0.03	0.03	ppb	9.29	574	900	
111 Cd	115		2	10.69	10.69	ppb	1.78	30980	2700	
121 Sb	115		2	0.22	0.22	ppb	9.52	2434	1125	
137 Ba	159		2	15.40	15.40	ppb	0.89	63087	1350	
205 Tl	165		2	0.00	0.00	ppb	93.23	1406	900	
206 (Pb)	165		2	0.26	0.26	ppb	7.85	3057	2700	
207 (Pb)	165		2	0.27	0.27	ppb	6.45	2505	2700	
208 Pb	165		2	0.26	0.26	ppb	2.53	11776	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	88864	0.67	101496	87.6	70 - 150	
45 Sc	2	1413620	0.77	1448455	97.6	70 - 150	
115 In	1	564600	1.64	580519	97.3	70 - 150	
115 In	2	1613383	1.51	1694704	95.2	70 - 150	
159 Tb	1	1340187	0.15	1221266	109.7	70 - 150	
159 Tb	2	2169393	0.34	2236647	97.0	70 - 150	
165 Ho	1	1323362	0.67	1159933	114.1	70 - 150	
165 Ho	2	2101776	0.56	2164693	97.1	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\S112013A.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\S112013A.b\031SMPL.D\031SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\031SMPL.D\031SMPL.D#
 Date Acquired: Nov 20 2013 02:38 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-006
 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: Nov 20 2013 12:21 pm
 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	1266.40	200	2700	
23 Na	45	1	5,050.00	5050.00	ppb	1.07	4898050	225000	
24 Mg	45	1	1,961.00	1961.00	ppb	1.23	1052555	225000	
27 Al	45	1	9.69	9.69	ppb	1.22	3481	67500	
39 K	45	1	2,097.00	2097.00	ppb	0.55	1141482	225000	
44 Ca	45	1	13,860.00	13860.00	ppb	0.53	384244	225000	
51 V	45	1	0.20	0.20	ppb	4.16	916	2700	
52 Cr	45	1	69.80	69.80	ppb	0.47	346104	2700	
55 Mn	45	1	1.55	1.55	ppb	1.42	6224	2700	
56 Fe	45	1	10.56	10.56	ppb	1.38	70740	202500	
59 Co	45	1	0.22	0.22	ppb	0.58	2059	2700	
60 Ni	45	1	2.54	2.54	ppb	0.57	5116	2700	
65 Cu	45	1	0.52	0.52	ppb	5.75	2549	2700	
66 Zn	45	1	2.51	2.51	ppb	1.51	3217	2700	
75 As	115	1	0.15	0.15	ppb	14.26	128	2250	
78 Se	115	1	-0.22	-0.22	ppb	44.65	168	2700	
83 Kr	115	2	----	-----	ppb	-----	492	2700	
95 Mo	115	2	1.42	1.42	ppb	2.06	7562	2700	
107 Ag	115	2	0.03	0.03	ppb	19.84	488	900	
111 Cd	115	2	25.36	25.36	ppb	1.27	73637	2700	
121 Sb	115	2	0.07	0.07	ppb	2.05	826	1125	
137 Ba	159	2	10.95	10.95	ppb	0.68	44513	1350	
205 Tl	165	2	0.02	0.02	ppb	7.18	1948	900	
206 (Pb)	165	2	0.05	0.05	ppb	8.77	1189	2700	
207 (Pb)	165	2	0.05	0.05	ppb	8.25	970	2700	
208 Pb	165	2	0.05	0.05	ppb	7.43	4697	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	90220	0.54	101496	88.9	70 - 150	
45 Sc	2	1414008	3.03	1448455	97.6	70 - 150	
115 In	1	569627	0.85	580519	98.1	70 - 150	
115 In	2	1617397	1.58	1694704	95.4	70 - 150	
159 Tb	1	1348767	1.72	1221266	110.4	70 - 150	
159 Tb	2	2150176	1.62	2236647	96.1	70 - 150	
165 Ho	1	1322438	0.78	1159933	114.0	70 - 150	
165 Ho	2	2102852	1.91	2164693	97.1	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\S112013A.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\S112013A.b\032SMPL.D\032SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\032SMPL.D\032SMPL.D#
 Date Acquired: Nov 20 2013 02:44 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-008
 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: Nov 20 2013 12:21 pm
 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		0.64	0.64	ppb	3.97	4157	2700	
23 Na	45	1		5,782.00	5782.00	ppb	0.43	5503571	225000	
24 Mg	45	1		1,402.00	1402.00	ppb	0.55	740772	225000	
27 Al	45	1		213.70	213.70	ppb	1.28	63264	67500	
39 K	45	1		2,229.00	2229.00	ppb	0.34	1190772	225000	
44 Ca	45	1		4,707.00	4707.00	ppb	0.75	128606	225000	
51 V	45	1		0.16	0.16	ppb	10.74	720	2700	
52 Cr	45	1		1.62	1.62	ppb	3.05	8515	2700	
55 Mn	45	1		269.60	269.60	ppb	0.63	990958	2700	
56 Fe	45	1		11.91	11.91	ppb	12.39	75683	202500	
59 Co	45	1		0.14	0.14	ppb	9.07	1415	2700	
60 Ni	45	1		5.51	5.51	ppb	1.38	10833	2700	
65 Cu	45	1		3.58	3.58	ppb	6.21	10256	2700	
66 Zn	45	1		13.73	13.73	ppb	0.69	14299	2700	
75 As	115	1		0.17	0.17	ppb	4.77	140	2250	
78 Se	115	1		-0.28	-0.28	ppb	90.52	163	2700	
83 Kr	115	2		----	-----	ppb	-----	490	2700	
95 Mo	115	2		0.03	0.03	ppb	54.82	326	2700	
107 Ag	115	2		0.04	0.04	ppb	9.50	677	900	
111 Cd	115	2		2.03	2.03	ppb	2.06	5859	2700	
121 Sb	115	2		0.07	0.07	ppb	13.26	833	1125	
137 Ba	159	2		109.40	109.40	ppb	0.83	441100	1350	
205 Tl	165	2		0.01	0.01	ppb	82.78	1757	900	
206 (Pb)	165	2		0.08	0.08	ppb	22.19	1409	2700	
207 (Pb)	165	2		0.08	0.08	ppb	31.62	1115	2700	
208 Pb	165	2		0.07	0.07	ppb	22.99	5335	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	88799	0.41	101496	87.5	70 - 150	
45 Sc	2	1403545	0.94	1448455	96.9	70 - 150	
115 In	1	568545	0.73	580519	97.9	70 - 150	
115 In	2	1596530	1.14	1694704	94.2	70 - 150	
159 Tb	1	1356396	0.51	1221266	111.1	70 - 150	
159 Tb	2	2143486	2.40	2236647	95.8	70 - 150	
165 Ho	1	1335193	1.76	1159933	115.1	70 - 150	
165 Ho	2	2068613	2.05	2164693	95.6	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqa.s.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112013A.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\S112013A.b\033SMPL.D\033SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\033SMPL.D\033SMPL.D#
 Date Acquired: Nov 20 2013 02:50 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-010
 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: Nov 20 2013 12:21 pm
 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	31.04	319	2700	
23 Na	45		1	5,958.00	5958.00	ppb	0.84	5450310	225000	
24 Mg	45		1	1,390.00	1390.00	ppb	0.57	706343	225000	
27 Al	45		1	27.89	27.89	ppb	2.17	8428	67500	
39 K	45		1	2,486.00	2486.00	ppb	1.39	1271395	225000	
44 Ca	45		1	9,106.00	9106.00	ppb	1.59	238995	225000	
51 V	45		1	0.17	0.17	ppb	3.44	736	2700	
52 Cr	45		1	0.73	0.73	ppb	1.61	3988	2700	
55 Mn	45		1	18.98	18.98	ppb	1.48	67481	2700	
56 Fe	45		1	60.72	60.72	ppb	1.33	282590	202500	
59 Co	45		1	0.06	0.06	ppb	10.54	758	2700	
60 Ni	45		1	0.78	0.78	ppb	4.26	1539	2700	
65 Cu	45		1	0.26	0.26	ppb	20.08	1768	2700	
66 Zn	45		1	3.96	3.96	ppb	3.94	4430	2700	
75 As	115		1	0.14	0.14	ppb	21.05	118	2250	
78 Se	115		1	-0.40	-0.40	ppb	31.90	149	2700	
83 Kr	115		2	----	-----	ppb	-----	471	2700	
95 Mo	115		2	0.01	0.01	ppb	102.00	188	2700	
107 Ag	115		2	0.02	0.02	ppb	18.66	367	900	
111 Cd	115		2	0.04	0.04	ppb	13.37	153	2700	
121 Sb	115		2	0.05	0.05	ppb	13.28	597	1125	
137 Ba	159		2	19.50	19.50	ppb	0.24	76873	1350	
205 Tl	165		2	-0.01	-0.01	ppb	2.81	1122	900	
206 (Pb)	165		2	0.01	0.01	ppb	14.00	791	2700	
207 (Pb)	165		2	0.01	0.01	ppb	63.56	656	2700	
208 Pb	165		2	0.01	0.01	ppb	22.71	3116	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	85388	1.04	101496	84.1	70 - 150	
45 Sc	2	1337956	2.92	1448455	92.4	70 - 150	
115 In	1	546367	0.95	580519	94.1	70 - 150	
115 In	2	1534753	1.19	1694704	90.6	70 - 150	
159 Tb	1	1294167	1.96	1221266	106.0	70 - 150	
159 Tb	2	2089531	0.55	2236647	93.4	70 - 150	
165 Ho	1	1290554	2.33	1159933	111.3	70 - 150	
165 Ho	2	2002069	1.63	2164693	92.5	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\S112013A.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\S112013A.b\034SMPL.D\034SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\034SMPL.D\034SMPL.D#
 Date Acquired: Nov 20 2013 02:56 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-012
 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: Nov 20 2013 12:21 pm
 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	21.79	148	2700	
23 Na	45	1		4,224.00	4224.00	ppb	0.61	3769140	225000	
24 Mg	45	1		1,176.00	1176.00	ppb	0.93	578394	225000	
27 Al	45	1		27.18	27.18	ppb	0.20	7964	67500	
39 K	45	1		295.30	295.30	ppb	0.46	188182	225000	
44 Ca	45	1		2,963.00	2963.00	ppb	1.99	75449	225000	
51 V	45	1		0.20	0.20	ppb	4.04	823	2700	
52 Cr	45	1		0.37	0.37	ppb	3.47	2262	2700	
55 Mn	45	1		1.50	1.50	ppb	1.79	5539	2700	
56 Fe	45	1		20.03	20.03	ppb	2.12	104176	202500	
59 Co	45	1		0.13	0.13	ppb	3.90	1269	2700	
60 Ni	45	1		0.94	0.94	ppb	2.18	1788	2700	
65 Cu	45	1		0.98	0.98	ppb	6.39	3403	2700	
66 Zn	45	1		5.65	5.65	ppb	3.35	5848	2700	
75 As	115	1		0.15	0.15	ppb	8.73	117	2250	
78 Se	115	1		-0.35	-0.35	ppb	48.34	149	2700	
83 Kr	115	2		----	-----	ppb	-----	504	2700	
95 Mo	115	2		0.13	0.13	ppb	8.71	806	2700	
107 Ag	115	2		0.02	0.02	ppb	13.45	324	900	
111 Cd	115	2		0.04	0.04	ppb	5.23	161	2700	
121 Sb	115	2		0.04	0.04	ppb	7.53	564	1125	
137 Ba	159	2		4.43	4.43	ppb	1.53	17003	1350	
205 Tl	165	2		-0.02	-0.02	ppb	4.75	779	900	
206 (Pb)	165	2		0.03	0.03	ppb	34.97	935	2700	
207 (Pb)	165	2		0.03	0.03	ppb	5.58	731	2700	
208 Pb	165	2		0.03	0.03	ppb	22.26	3517	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	82635	1.96	101496	81.4	70 - 150	
45 Sc	2	1297207	0.94	1448455	89.6	70 - 150	
115 In	1	535575	1.79	580519	92.3	70 - 150	
115 In	2	1514391	0.45	1694704	89.4	70 - 150	
159 Tb	1	1271449	2.52	1221266	104.1	70 - 150	
159 Tb	2	2010329	1.13	2236647	89.9	70 - 150	
165 Ho	1	1246833	1.43	1159933	107.5	70 - 150	
165 Ho	2	1952520	1.20	2164693	90.2	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\S112013A.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\S112013A.b\035SMPL.D\035SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\035SMPL.D\035SMPL.D#
 Date Acquired: Nov 20 2013 03:01 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-014
 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: Nov 20 2013 12:21 pm
 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	105.09	239	2700	
23 Na	45	1		15,080.00	15080.00	ppb	0.58	12952010	225000	
24 Mg	45	1		2,464.00	2464.00	ppb	0.33	1188982	225000	
27 Al	45	1		19.16	19.16	ppb	2.97	5668	67500	
39 K	45	1		4,436.00	4436.00	ppb	1.27	2118264	225000	
44 Ca	45	1		10,700.00	10700.00	ppb	1.17	266612	225000	
51 V	45	1		0.23	0.23	ppb	5.08	913	2700	
52 Cr	45	1		0.96	0.96	ppb	0.70	4835	2700	
55 Mn	45	1		8.00	8.00	ppb	0.73	27230	2700	
56 Fe	45	1		7.86	7.86	ppb	3.48	52578	202500	
59 Co	45	1		0.14	0.14	ppb	2.78	1296	2700	
60 Ni	45	1		0.24	0.24	ppb	2.33	501	2700	
65 Cu	45	1		0.53	0.53	ppb	13.27	2308	2700	
66 Zn	45	1		4.55	4.55	ppb	0.84	4742	2700	
75 As	115	1		0.13	0.13	ppb	2.60	103	2250	
78 Se	115	1		-0.43	-0.43	ppb	27.97	139	2700	
83 Kr	115	2		-----	-----	ppb	-----	516	2700	
95 Mo	115	2		0.02	0.02	ppb	59.25	231	2700	
107 Ag	115	2		0.02	0.02	ppb	19.96	322	900	
111 Cd	115	2		0.03	0.03	ppb	9.06	117	2700	
121 Sb	115	2		0.05	0.05	ppb	1.85	612	1125	
137 Ba	159	2		31.34	31.34	ppb	2.59	120087	1350	
205 Tl	165	2		-0.03	-0.03	ppb	24.05	745	900	
206 (Pb)	165	2		0.03	0.03	ppb	2.56	946	2700	
207 (Pb)	165	2		0.04	0.04	ppb	45.99	822	2700	
208 Pb	165	2		0.03	0.03	ppb	11.56	3744	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	81106	0.77	101496	79.9	70 - 150	
45 Sc	2	1323253	0.87	1448455	91.4	70 - 150	
115 In	1	518902	0.54	580519	89.4	70 - 150	
115 In	2	1517590	0.85	1694704	89.5	70 - 150	
159 Tb	1	1258218	1.30	1221266	103.0	70 - 150	
159 Tb	2	2034701	2.55	2236647	91.0	70 - 150	
165 Ho	1	1245468	1.73	1159933	107.4	70 - 150	
165 Ho	2	1984652	0.78	2164693	91.7	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112013A.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\S112013A.b\036SMPL.D\036SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\036SMPL.D\036SMPL.D#
 Date Acquired: Nov 20 2013 03:07 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-016
 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: Nov 20 2013 12:21 pm
 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	33.51	136	2700	
23 Na	45	1		8,191.00	8191.00	ppb	1.10	7660429	225000	
24 Mg	45	1		2,384.00	2384.00	ppb	0.83	1244698	225000	
27 Al	45	1		10.55	10.55	ppb	1.72	3637	67500	
39 K	45	1		517.40	517.40	ppb	0.16	312083	225000	
44 Ca	45	1		6,029.00	6029.00	ppb	0.90	162705	225000	
51 V	45	1		0.18	0.18	ppb	2.67	787	2700	
52 Cr	45	1		0.36	0.36	ppb	2.06	2355	2700	
55 Mn	45	1		1.07	1.07	ppb	3.78	4307	2700	
56 Fe	45	1		12.06	12.06	ppb	2.95	75473	202500	
59 Co	45	1		0.07	0.07	ppb	0.99	895	2700	
60 Ni	45	1		0.40	0.40	ppb	2.52	858	2700	
65 Cu	45	1		1.90	1.90	ppb	2.92	5922	2700	
66 Zn	45	1		5.07	5.07	ppb	1.88	5645	2700	
75 As	115	1		0.14	0.14	ppb	9.03	120	2250	
78 Se	115	1		-0.17	-0.17	ppb	80.33	169	2700	
83 Kr	115	2		----	-----	ppb	-----	499	2700	
95 Mo	115	2		0.05	0.05	ppb	19.07	429	2700	
107 Ag	115	2		0.01	0.01	ppb	10.64	279	900	
111 Cd	115	2		0.03	0.03	ppb	2.95	130	2700	
121 Sb	115	2		0.10	0.10	ppb	3.49	1230	1125	
137 Ba	159	2		5.90	5.90	ppb	1.81	24428	1350	
205 Tl	165	2		-0.03	-0.03	ppb	5.07	606	900	
206 (Pb)	165	2		0.09	0.09	ppb	17.05	1518	2700	
207 (Pb)	165	2		0.10	0.10	ppb	5.26	1302	2700	
208 Pb	165	2		0.09	0.09	ppb	5.69	6061	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range (%)	Flag
45 Sc	1	87763	0.83	101496	86.5	70 - 150	
45 Sc	2	1409798	0.54	1448455	97.3	70 - 150	
115 In	1	562534	0.68	580519	96.9	70 - 150	
115 In	2	1627330	2.29	1694704	96.0	70 - 150	
159 Tb	1	1358989	1.63	1221266	111.3	70 - 150	
159 Tb	2	2176859	0.95	2236647	97.3	70 - 150	
165 Ho	1	1326528	0.77	1159933	114.4	70 - 150	
165 Ho	2	2108839	0.99	2164693	97.4	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112013A.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\S112013A.b\037SMPL.D\037SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\037SMPL.D\037SMPL.D#
 Date Acquired: Nov 20 2013 03:13 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-018
 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: Nov 20 2013 12:21 pm
 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	19.03	87	2700	
23 Na	45	1	92.61	92.61	ppb	5.78	197460	225000	
24 Mg	45	1	6.06	6.06	ppb	9.29	4050	225000	
27 Al	45	1	26.68	26.68	ppb	0.69	8470	67500	
39 K	45	1	22.90	22.90	ppb	3.50	63411	225000	
44 Ca	45	1	52.62	52.62	ppb	3.89	1735	225000	
51 V	45	1	0.14	0.14	ppb	0.69	651	2700	
52 Cr	45	1	0.14	0.14	ppb	6.69	1313	2700	
55 Mn	45	1	1.01	1.01	ppb	3.01	4160	2700	
56 Fe	45	1	10.05	10.05	ppb	1.91	67834	202500	
59 Co	45	1	-0.01	-0.01	ppb	24.86	205	2700	
60 Ni	45	1	0.10	0.10	ppb	6.11	288	2700	
65 Cu	45	1	2.01	2.01	ppb	6.25	6316	2700	
66 Zn	45	1	2.30	2.30	ppb	5.32	2982	2700	
75 As	115	1	0.11	0.11	ppb	6.40	97	2250	
78 Se	115	1	-0.60	-0.60	ppb	28.41	140	2700	
83 Kr	115	2	----	-----	ppb	-----	523	2700	
95 Mo	115	2	-0.01	-0.01	ppb	43.95	108	2700	
107 Ag	115	2	0.01	0.01	ppb	20.90	239	900	
111 Cd	115	2	0.00	0.00	ppb	231.18	42	2700	
121 Sb	115	2	0.03	0.03	ppb	4.04	496	1125	
137 Ba	159	2	0.26	0.26	ppb	7.32	1348	1350	
205 Tl	165	2	-0.04	-0.04	ppb	1.15	494	900	
206 (Pb)	165	2	-0.01	-0.01	ppb	51.64	726	2700	
207 (Pb)	165	2	0.00	0.00	ppb	77.85	639	2700	
208 Pb	165	2	0.00	0.00	ppb	806.15	2917	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89422	0.67	101496	88.1	70 - 150	
45 Sc	2	1425725	1.70	1448455	98.4	70 - 150	
115 In	1	570131	0.75	580519	98.2	70 - 150	
115 In	2	1643403	1.50	1694704	97.0	70 - 150	
159 Tb	1	1357992	1.82	1221266	111.2	70 - 150	
159 Tb	2	2195639	0.60	2236647	98.2	70 - 150	
165 Ho	1	1327372	1.01	1159933	114.4	70 - 150	
165 Ho	2	2136119	0.75	2164693	98.7	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\S112013A.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\S112013A.b\038SMPL.D\038SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\038SMPL.D\038SMPL.D#
 Date Acquired: Nov 20 2013 03:19 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: Nov 20 2013 12:21 pm
 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	0.33	0.33	ppb	1.62	2471	2700	
23 Na	45		1	117.30	117.30	ppb	1.26	243168	225000	
24 Mg	45		1	66.72	66.72	ppb	0.49	39998	225000	
27 Al	45		1	24.21	24.21	ppb	2.62	8528	67500	
39 K	45		1	56.12	56.12	ppb	3.11	88713	225000	
44 Ca	45		1	137.70	137.70	ppb	0.99	4485	225000	
51 V	45		1	0.42	0.42	ppb	1.73	1985	2700	
52 Cr	45		1	0.46	0.46	ppb	3.07	3170	2700	
55 Mn	45		1	0.46	0.46	ppb	4.48	2346	2700	
56 Fe	45		1	59.33	59.33	ppb	1.36	319190	202500	
59 Co	45		1	0.38	0.38	ppb	0.84	3679	2700	
60 Ni	45		1	0.44	0.44	ppb	2.74	1045	2700	
65 Cu	45		1	0.11	0.11	ppb	4.16	1634	2700	
66 Zn	45		1	0.10	0.10	ppb	24.91	862	2700	
75 As	115		1	0.39	0.39	ppb	4.85	323	2250	
78 Se	115		1	-0.17	-0.17	ppb	69.06	189	2700	
83 Kr	115		2	----	-----	ppb	-----	482	2700	
95 Mo	115		2	0.75	0.75	ppb	2.36	4588	2700	
107 Ag	115		2	0.12	0.12	ppb	1.80	2082	900	
111 Cd	115		2	0.39	0.39	ppb	2.22	1332	2700	
121 Sb	115		2	0.34	0.34	ppb	3.04	4225	1125	
137 Ba	159		2	0.41	0.41	ppb	2.42	2180	1350	
205 Tl	165		2	0.30	0.30	ppb	2.18	10726	900	
206 (Pb)	165		2	0.29	0.29	ppb	2.69	3737	2700	
207 (Pb)	165		2	0.31	0.31	ppb	1.56	3125	2700	
208 Pb	165		2	0.30	0.30	ppb	0.59	14773	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	98534	0.69	101496	97.1	70 - 150	
45 Sc	2	1555285	1.20	1448455	107.4	70 - 150	
115 In	1	629198	1.17	580519	108.4	70 - 150	
115 In	2	1834323	1.67	1694704	108.2	70 - 150	
159 Tb	1	1453113	0.96	1221266	119.0	70 - 150	
159 Tb	2	2447347	2.17	2236647	109.4	70 - 150	
165 Ho	1	1423564	1.45	1159933	122.7	70 - 150	
165 Ho	2	2357399	0.66	2164693	108.9	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\noqa.s.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112013A.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\S112013A.b\039_CCV.D\039_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\039_CCV.D\039_CCV.D#
 Date Acquired: Nov 20 2013 03:25 pm
 Operator: GK
 Sample Name: CCV V-176971
 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: Nov 20 2013 12:21 pm
 Sample Type: 6-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	50.84 ppb	1.84	337798	50	101.7	90 - 110	
23 Na	45	1	5171.00 ppb	1.24	5386576	5000	103.4	90 - 110	
24 Mg	45	1	5174.00 ppb	0.62	2983096	5000	103.5	90 - 110	
27 Al	45	1	1531.00 ppb	1.35	490841	1500	102.1	90 - 110	
39 K	45	1	5006.00 ppb	0.97	2850071	5000	100.1	90 - 110	
44 Ca	45	1	5020.00 ppb	0.36	149724	5000	100.4	90 - 110	
51 V	45	1	51.24 ppb	1.38	231178	50	102.5	90 - 110	
52 Cr	45	1	51.76 ppb	1.22	275966	50	103.5	90 - 110	
55 Mn	45	1	51.94 ppb	1.01	208835	50	103.9	90 - 110	
56 Fe	45	1	5219.00 ppb	0.94	25497500	5000	104.4	90 - 110	
59 Co	45	1	50.77 ppb	0.51	437458	50	101.5	90 - 110	
60 Ni	45	1	53.77 ppb	1.29	114568	50	107.5	90 - 110	
65 Cu	45	1	53.70 ppb	0.18	149888	50	107.4	90 - 110	
66 Zn	45	1	53.22 ppb	0.69	58344	50	106.4	90 - 110	
75 As	115	1	48.43 ppb	0.33	36190	50	96.9	90 - 110	
78 Se	115	1	235.80 ppb	1.77	18128	250	94.3	90 - 110	
83 Kr	115	2	----- ppb	-----	486	50	#VALUE!	##### - #####	
95 Mo	115	2	49.62 ppb	1.87	281263	50	99.2	90 - 110	
107 Ag	115	2	48.53 ppb	2.06	754766	50	97.1	90 - 110	
111 Cd	115	2	50.34 ppb	2.80	159346	50	100.7	90 - 110	
121 Sb	115	2	48.75 ppb	2.38	562288	50	97.5	90 - 110	
137 Ba	159	2	50.77 ppb	2.66	221270	50	101.5	90 - 110	
205 Tl	165	2	52.60 ppb	1.12	1509366	50	105.2	90 - 110	
206 (Pb)	165	2	50.15 ppb	0.95	472953	50	100.3	90 - 110	
207 (Pb)	165	2	51.60 ppb	1.80	388427	50	103.2	90 - 110	
208 Pb	165	2	51.36 ppb	1.66	1898004	50	102.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	96950	0.45	101496	95.5	80 - 120	
45 Sc	2	1508646	1.45	1448455	104.2	80 - 120	
115 In	1	610853	0.62	580519	105.2	80 - 120	
115 In	2	1764183	1.72	1694704	104.1	80 - 120	
159 Tb	1	1428823	1.25	1221266	117.0	80 - 120	
159 Tb	2	2315743	1.73	2236647	103.5	80 - 120	
165 Ho	1	1411572	0.40	1159933	121.7	80 - 120	ISFail
165 Ho	2	2258392	1.23	2164693	104.3	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\S112013A.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S112013A.b\040_CCV.D\040_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\040_CCV.D\040_CCV.D#
 Date Acquired: Nov 20 2013 03:31 pm
 Operator: GK
 Sample Name: LLCCV V-176972
 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: Nov 20 2013 12:21 pm
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.50	ppb	4.01	1	100.5	70 - 130	
23 Na	45	1	258.40	ppb	3.34	250	103.4	70 - 130	
24 Mg	45	1	276.00	ppb	1.24	250	110.4	70 - 130	
27 Al	45	1	107.90	ppb	1.73	100	107.9	70 - 130	
39 K	45	1	252.40	ppb	2.55	250	101.0	70 - 130	
44 Ca	45	1	261.50	ppb	2.11	250	104.6	70 - 130	
51 V	45	1	1.07	ppb	1.50	1	106.7	70 - 130	
52 Cr	45	1	1.07	ppb	5.05	1	107.4	70 - 130	
55 Mn	45	1	3.06	ppb	1.63	3	102.0	70 - 130	
56 Fe	45	1	177.40	ppb	1.13	150	118.3	70 - 130	
59 Co	45	1	1.04	ppb	2.22	1	104.4	70 - 130	
60 Ni	45	1	1.64	ppb	3.40	2	109.3	70 - 130	
65 Cu	45	1	5.29	ppb	1.99	5	105.8	70 - 130	
66 Zn	45	1	10.40	ppb	2.18	10	104.0	70 - 130	
75 As	115	1	0.98	ppb	3.05	1	98.4	70 - 130	
78 Se	115	1	4.10	ppb	2.42	5	81.9	70 - 130	
83 Kr	115	2	-----	ppb	-----	1	#VALUE! #####	70 - 130	
95 Mo	115	2	0.98	ppb	2.73	1	98.2	70 - 130	
107 Ag	115	2	0.50	ppb	4.22	1	99.5	70 - 130	
111 Cd	115	2	0.95	ppb	2.85	1	95.0	70 - 130	
121 Sb	115	2	0.95	ppb	1.26	1	95.3	70 - 130	
137 Ba	159	2	2.40	ppb	3.36	3	96.1	70 - 130	
205 Tl	165	2	0.93	ppb	0.49	1	92.7	70 - 130	
206 (Pb)	165	2	1.38	ppb	1.86	2	91.7	70 - 130	
207 (Pb)	165	2	1.47	ppb	3.83	2	98.1	70 - 130	
208 Pb	165	2	1.39	ppb	3.34	2	92.8	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	94376	2.01	101496	93.0	80 - 120	
45 Sc	2	1529523	2.33	1448455	105.6	80 - 120	
115 In	1	603190	1.73	580519	103.9	80 - 120	
115 In	2	1825440	1.77	1694704	107.7	80 - 120	
159 Tb	1	1413636	1.13	1221266	115.8	80 - 120	
159 Tb	2	2392169	2.06	2236647	107.0	80 - 120	
165 Ho	1	1366068	1.68	1159933	117.8	80 - 120	
165 Ho	2	2325744	1.72	2164693	107.4	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\S112013A.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\S112013A.b\041_CCB.D\041_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\041_CCB.D\041_CCB.D#
 Date Acquired: Nov 20 2013 03:37 pm
 Operator: GK
 Sample Name: CCB V-176968
 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: Nov 20 2013 12:21 pm
 Sample Type: 6-CCB
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.004	ppb	174.63	177	0.50	
23 Na	45	1	-1.741	ppb	170.59	118949	250.00	
24 Mg	45	1	3.648	ppb	6.42	3028	250.00	
27 Al	45	1	26.000	ppb	1.31	9038	100.00	
39 K	45	1	-0.316	ppb	820.42	56236	250.00	
44 Ca	45	1	54.870	ppb	3.52	1963	250.00	
51 V	45	1	0.032	ppb	9.68	212	1.00	
52 Cr	45	1	0.039	ppb	17.79	877	1.00	
55 Mn	45	1	-0.003	ppb	275.12	458	3.00	
56 Fe	45	1	4.575	ppb	5.44	47197	150.00	
59 Co	45	1	-0.007	ppb	63.12	289	1.00	
60 Ni	45	1	0.016	ppb	47.28	124	1.50	
65 Cu	45	1	0.043	ppb	74.66	1427	5.00	
66 Zn	45	1	0.422	ppb	3.95	1212	10.00	
75 As	115	1	0.013	ppb	52.18	35	1.00	
78 Se	115	1	-0.616	ppb	7.97	153	5.00	
83 Kr	115	2	-----	ppb	-----	527	1.00	
95 Mo	115	2	0.013	ppb	26.18	238	1.00	
107 Ag	115	2	0.012	ppb	18.05	298	0.50	
111 Cd	115	2	0.013	ppb	3.49	84	1.00	
121 Sb	115	2	0.019	ppb	1.59	349	1.00	
137 Ba	159	2	0.082	ppb	14.99	623	2.50	
205 Tl	165	2	-0.017	ppb	11.55	1021	1.00	
206 (Pb)	165	2	0.045	ppb	29.26	1185	1.50	
207 (Pb)	165	2	0.059	ppb	3.72	1033	1.50	
208 Pb	165	2	0.050	ppb	5.53	4713	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97744	1.52	101496	96.3	80 - 120	
45 Sc	2	1417326	4.51	1448455	97.9	80 - 120	
115 In	1	623807	1.83	580519	107.5	80 - 120	
115 In	2	1682750	5.66	1694704	99.3	80 - 120	
159 Tb	1	1437829	0.19	1221266	117.7	80 - 120	
159 Tb	2	2230976	3.39	2236647	99.7	80 - 120	
165 Ho	1	1411824	1.15	1159933	121.7	80 - 120	ISFail
165 Ho	2	2148025	3.33	2164693	99.2	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\S112013A.b\002CALB.D\002CALB.D#

0 :Element Failures
 1 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S112013A.b\042SMPL.D\042SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\042SMPL.D\042SMPL.D#
 Date Acquired: Nov 20 2013 03:43 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-020
 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: Nov 20 2013 12:21 pm
 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	25.02	172	2700	
23 Na	45	1	6,521.00	6521.00	ppb	0.71	6268294	225000	
24 Mg	45	1	3,358.00	3358.00	ppb	1.08	1795349	225000	
27 Al	45	1	14.89	14.89	ppb	1.51	5013	67500	
39 K	45	1	1,912.00	1912.00	ppb	0.30	1041634	225000	
44 Ca	45	1	20,000.00	20000.00	ppb	0.17	552318	225000	
51 V	45	1	0.31	0.31	ppb	5.30	1369	2700	
52 Cr	45	1	0.14	0.14	ppb	2.65	1307	2700	
55 Mn	45	1	1.51	1.51	ppb	4.37	6039	2700	
56 Fe	45	1	11.24	11.24	ppb	0.39	73589	202500	
59 Co	45	1	0.08	0.08	ppb	12.37	999	2700	
60 Ni	45	1	0.23	0.23	ppb	4.43	542	2700	
65 Cu	45	1	0.34	0.34	ppb	5.16	2082	2700	
66 Zn	45	1	5.73	5.73	ppb	1.29	6438	2700	
75 As	115	1	0.17	0.17	ppb	3.20	145	2250	
78 Se	115	1	-0.52	-0.52	ppb	16.06	149	2700	
83 Kr	115	2	----	-----	ppb	-----	492	2700	
95 Mo	115	2	0.03	0.03	ppb	38.76	346	2700	
107 Ag	115	2	0.02	0.02	ppb	11.02	407	900	
111 Cd	115	2	0.24	0.24	ppb	15.07	873	2700	
121 Sb	115	2	0.07	0.07	ppb	22.58	1073	1125	
137 Ba	159	2	19.12	19.12	ppb	13.70	92281	1350	
205 Tl	165	2	-0.02	-0.02	ppb	29.17	1006	900	
206 (Pb)	165	2	0.13	0.13	ppb	18.77	2245	2700	
207 (Pb)	165	2	0.14	0.14	ppb	23.74	1879	2700	
208 Pb	165	2	0.13	0.13	ppb	20.46	8703	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89889	0.72	101496	88.6	70 - 150	
45 Sc	2	1672361	13.50	1448455	115.5	70 - 150	
115 In	1	578189	1.40	580519	99.6	70 - 150	
115 In	2	1906229	13.65	1694704	112.5	70 - 150	
159 Tb	1	1380242	1.68	1221266	113.0	70 - 150	
159 Tb	2	2587454	12.51	2236647	115.7	70 - 150	
165 Ho	1	1353326	0.59	1159933	116.7	70 - 150	
165 Ho	2	2517630	12.92	2164693	116.3	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\S112013A.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\S112013A.b\043SMPL.D\043SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\043SMPL.D\043SMPL.D#
 Date Acquired: Nov 20 2013 03:49 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-022
 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: Nov 20 2013 12:21 pm
 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	21.61	166	2700	
23 Na	45	1		6,522.00	6522.00	ppb	1.12	6219549	225000	
24 Mg	45	1		1,421.00	1421.00	ppb	1.74	754229	225000	
27 Al	45	1		93.01	93.01	ppb	0.79	27982	67500	
39 K	45	1		2,457.00	2457.00	ppb	0.67	1313001	225000	
44 Ca	45	1		6,093.00	6093.00	ppb	0.47	167072	225000	
51 V	45	1		0.60	0.60	ppb	3.53	2547	2700	
52 Cr	45	1		23.28	23.28	ppb	0.56	114497	2700	
55 Mn	45	1		158.90	158.90	ppb	1.79	586753	2700	
56 Fe	45	1		519.70	519.70	ppb	0.92	2355421	202500	
59 Co	45	1		0.18	0.18	ppb	4.02	1758	2700	
60 Ni	45	1		2.57	2.57	ppb	3.40	5120	2700	
65 Cu	45	1		1.14	1.14	ppb	0.98	4087	2700	
66 Zn	45	1		8.04	8.04	ppb	3.30	8690	2700	
75 As	115	1		0.48	0.48	ppb	2.41	361	2250	
78 Se	115	1		-0.59	-0.59	ppb	17.46	143	2700	
83 Kr	115	2		----	-----	ppb	-----	488	2700	
95 Mo	115	2		0.03	0.03	ppb	50.05	324	2700	
107 Ag	115	2		0.02	0.02	ppb	6.83	357	900	
111 Cd	115	2		1.18	1.18	ppb	2.03	3591	2700	
121 Sb	115	2		0.25	0.25	ppb	2.73	2874	1125	
137 Ba	159	2		20.25	20.25	ppb	0.73	85722	1350	
205 Tl	165	2		-0.03	-0.03	ppb	4.21	741	900	
206 (Pb)	165	2		1.87	1.87	ppb	3.11	17798	2700	
207 (Pb)	165	2		1.89	1.89	ppb	3.19	14340	2700	
208 Pb	165	2		1.84	1.84	ppb	2.89	68336	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89171	0.83	101496	87.9	70 - 150	
45 Sc	2	1451742	0.96	1448455	100.2	70 - 150	
115 In	1	576762	0.93	580519	99.4	70 - 150	
115 In	2	1674029	1.23	1694704	98.8	70 - 150	
159 Tb	1	1392874	1.51	1221266	114.1	70 - 150	
159 Tb	2	2244644	1.03	2236647	100.4	70 - 150	
165 Ho	1	1349552	1.90	1159933	116.3	70 - 150	
165 Ho	2	2178090	1.38	2164693	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\S112013A.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\S112013A.b\044SMPL.D\044SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\044SMPL.D\044SMPL.D#
 Date Acquired: Nov 20 2013 03:55 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-024
 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: Nov 20 2013 12:21 pm
 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	23.47	130	2700	
23 Na	45		1	8,090.00	8090.00	ppb	1.33	7623443	225000	
24 Mg	45		1	4,146.00	4146.00	ppb	1.33	2180171	225000	
27 Al	45		1	22.97	22.97	ppb	3.56	7292	67500	
39 K	45		1	2,345.00	2345.00	ppb	1.77	1244910	225000	
44 Ca	45		1	25,740.00	25740.00	ppb	4.90	698804	225000	
51 V	45		1	0.38	0.38	ppb	1.62	1609	2700	
52 Cr	45		1	0.18	0.18	ppb	5.89	1474	2700	
55 Mn	45		1	2.21	2.21	ppb	1.54	8517	2700	
56 Fe	45		1	19.11	19.11	ppb	1.43	107416	202500	
59 Co	45		1	0.11	0.11	ppb	5.28	1143	2700	
60 Ni	45		1	0.30	0.30	ppb	9.85	656	2700	
65 Cu	45		1	0.47	0.47	ppb	5.25	2369	2700	
66 Zn	45		1	8.07	8.07	ppb	0.82	8648	2700	
75 As	115		1	0.19	0.19	ppb	3.52	157	2250	
78 Se	115		1	-0.39	-0.39	ppb	83.08	154	2700	
83 Kr	115		2	----	-----	ppb	-----	536	2700	
95 Mo	115		2	0.04	0.04	ppb	24.34	368	2700	
107 Ag	115		2	0.01	0.01	ppb	31.97	326	900	
111 Cd	115		2	0.32	0.32	ppb	4.12	1007	2700	
121 Sb	115		2	0.10	0.10	ppb	6.41	1169	1125	
137 Ba	159		2	27.05	27.05	ppb	1.72	112061	1350	
205 Tl	165		2	-0.02	-0.02	ppb	4.12	833	900	
206 (Pb)	165		2	0.18	0.18	ppb	4.84	2364	2700	
207 (Pb)	165		2	0.20	0.20	ppb	2.41	2037	2700	
208 Pb	165		2	0.18	0.18	ppb	3.69	9317	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	88419	0.55	101496	87.1	70 - 150	
45 Sc	2	1444383	0.38	1448455	99.7	70 - 150	
115 In	1	566131	1.50	580519	97.5	70 - 150	
115 In	2	1651937	1.32	1694704	97.5	70 - 150	
159 Tb	1	1367272	1.13	1221266	112.0	70 - 150	
159 Tb	2	2198619	1.89	2236647	98.3	70 - 150	
165 Ho	1	1344085	0.48	1159933	115.9	70 - 150	
165 Ho	2	2149783	1.30	2164693	99.3	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\S112013A.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\S112013A.b\045SMPL.D\045SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\045SMPL.D\045SMPL.D#
 Date Acquired: Nov 20 2013 04:01 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-026
 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: Nov 20 2013 12:21 pm
 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	1.69	101	2700	
23 Na	45	1	11,760.00	11760.00	ppb	2.49	10978650	225000	
24 Mg	45	1	4,864.00	4864.00	ppb	2.40	2544137	225000	
27 Al	45	1	22.39	22.39	ppb	2.40	7085	67500	
39 K	45	1	864.50	864.50	ppb	1.72	488583	225000	
44 Ca	45	1	9,691.00	9691.00	ppb	1.43	261986	225000	
51 V	45	1	0.17	0.17	ppb	5.90	749	2700	
52 Cr	45	1	0.56	0.56	ppb	0.92	3321	2700	
55 Mn	45	1	3.44	3.44	ppb	0.64	12951	2700	
56 Fe	45	1	10.28	10.28	ppb	3.63	67758	202500	
59 Co	45	1	0.04	0.04	ppb	7.29	629	2700	
60 Ni	45	1	0.37	0.37	ppb	5.31	790	2700	
65 Cu	45	1	0.44	0.44	ppb	6.85	2279	2700	
66 Zn	45	1	2.61	2.61	ppb	4.55	3235	2700	
75 As	115	1	0.11	0.11	ppb	23.61	98	2250	
78 Se	115	1	-0.56	-0.56	ppb	53.63	143	2700	
83 Kr	115	2	----	-----	ppb	-----	433	2700	
95 Mo	115	2	0.00	0.00	ppb	136.01	150	2700	
107 Ag	115	2	0.01	0.01	ppb	5.10	272	900	
111 Cd	115	2	0.02	0.02	ppb	12.33	101	2700	
121 Sb	115	2	0.03	0.03	ppb	5.15	457	1125	
137 Ba	159	2	20.14	20.14	ppb	0.39	85696	1350	
205 Tl	165	2	-0.04	-0.04	ppb	1.05	374	900	
206 (Pb)	165	2	0.02	0.02	ppb	70.05	947	2700	
207 (Pb)	165	2	0.02	0.02	ppb	7.61	797	2700	
208 Pb	165	2	0.02	0.02	ppb	13.13	3700	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	87975	1.47	101496	86.7	70 - 150	
45 Sc	2	1446641	2.87	1448455	99.9	70 - 150	
115 In	1	568887	1.01	580519	98.0	70 - 150	
115 In	2	1687166	0.99	1694704	99.6	70 - 150	
159 Tb	1	1365052	0.81	1221266	111.8	70 - 150	
159 Tb	2	2255654	0.53	2236647	100.8	70 - 150	
165 Ho	1	1348064	0.98	1159933	116.2	70 - 150	
165 Ho	2	2202327	0.54	2164693	101.7	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\S112013A.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\S112013A.b\046SMPL.D\046SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\046SMPL.D\046SMPL.D#
 Date Acquired: Nov 20 2013 04:07 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75576-028
 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: Nov 20 2013 12:21 pm
 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	13.31	121	2700	
23 Na	45	1	9,607.00	9607.00	ppb	0.61	8997676	225000	
24 Mg	45	1	3,260.00	3260.00	ppb	1.54	1707711	225000	
27 Al	45	1	29.49	29.49	ppb	2.26	9158	67500	
39 K	45	1	2,918.00	2918.00	ppb	2.72	1530099	225000	
44 Ca	45	1	7,586.00	7586.00	ppb	0.88	205401	225000	
51 V	45	1	0.17	0.17	ppb	4.42	738	2700	
52 Cr	45	1	7.63	7.63	ppb	1.65	37477	2700	
55 Mn	45	1	32.90	32.90	ppb	1.17	120320	2700	
56 Fe	45	1	18.95	18.95	ppb	1.09	106277	202500	
59 Co	45	1	0.05	0.05	ppb	1.94	738	2700	
60 Ni	45	1	1.11	1.11	ppb	1.05	2225	2700	
65 Cu	45	1	0.38	0.38	ppb	3.32	2125	2700	
66 Zn	45	1	7.67	7.67	ppb	1.57	8216	2700	
75 As	115	1	0.10	0.10	ppb	19.50	96	2250	
78 Se	115	1	-0.71	-0.71	ppb	29.93	134	2700	
83 Kr	115	2	----	-----	ppb	-----	513	2700	
95 Mo	115	2	0.02	0.02	ppb	19.79	304	2700	
107 Ag	115	2	0.01	0.01	ppb	10.64	263	900	
111 Cd	115	2	0.05	0.05	ppb	7.02	206	2700	
121 Sb	115	2	0.03	0.03	ppb	4.56	484	1125	
137 Ba	159	2	32.31	32.31	ppb	2.39	135646	1350	
205 Tl	165	2	-0.03	-0.03	ppb	10.85	590	900	
206 (Pb)	165	2	0.01	0.01	ppb	21.67	891	2700	
207 (Pb)	165	2	0.01	0.01	ppb	73.01	691	2700	
208 Pb	165	2	0.01	0.01	ppb	17.30	3416	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	88083	1.69	101496	86.8	70 - 150	
45 Sc	2	1444038	3.25	1448455	99.7	70 - 150	
115 In	1	575566	0.29	580519	99.1	70 - 150	
115 In	2	1687890	3.10	1694704	99.6	70 - 150	
159 Tb	1	1376023	0.87	1221266	112.7	70 - 150	
159 Tb	2	2230110	3.55	2236647	99.7	70 - 150	
165 Ho	1	1366098	1.13	1159933	117.8	70 - 150	
165 Ho	2	2181698	4.32	2164693	100.8	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\S112013A.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\S112013A.b\047SMPL.D\047SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\047SMPL.D\047SMPL.D#
 Date Acquired: Nov 20 2013 04:13 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: Nov 20 2013 12:21 pm
 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	0.35	0.35	ppb	5.12	2651	2700	
23 Na	45	1	147.50	147.50	ppb	0.80	268777	225000	
24 Mg	45	1	73.83	73.83	ppb	0.92	43254	225000	
27 Al	45	1	25.52	25.52	ppb	3.32	8770	67500	
39 K	45	1	68.65	68.65	ppb	1.96	93861	225000	
44 Ca	45	1	190.10	190.10	ppb	2.19	5946	225000	
51 V	45	1	0.42	0.42	ppb	2.44	1972	2700	
52 Cr	45	1	0.49	0.49	ppb	1.83	3233	2700	
55 Mn	45	1	0.73	0.73	ppb	3.84	3390	2700	
56 Fe	45	1	61.14	61.14	ppb	0.79	321432	202500	
59 Co	45	1	0.40	0.40	ppb	1.77	3799	2700	
60 Ni	45	1	0.52	0.52	ppb	2.61	1201	2700	
65 Cu	45	1	0.19	0.19	ppb	19.83	1807	2700	
66 Zn	45	1	1.83	1.83	ppb	7.26	2717	2700	
75 As	115	1	0.36	0.36	ppb	5.79	302	2250	
78 Se	115	1	-0.29	-0.29	ppb	27.16	179	2700	
83 Kr	115	2	----	-----	ppb	-----	497	2700	
95 Mo	115	2	0.72	0.72	ppb	2.30	4520	2700	
107 Ag	115	2	0.14	0.14	ppb	4.05	2460	900	
111 Cd	115	2	0.39	0.39	ppb	3.68	1359	2700	
121 Sb	115	2	0.35	0.35	ppb	1.87	4379	1125	
137 Ba	159	2	0.45	0.45	ppb	6.62	2403	1350	
205 Tl	165	2	0.32	0.32	ppb	2.71	11503	900	
206 (Pb)	165	2	0.31	0.31	ppb	5.69	3962	2700	
207 (Pb)	165	2	0.34	0.34	ppb	1.88	3403	2700	
208 Pb	165	2	0.31	0.31	ppb	1.71	15621	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	96514	0.63	101496	95.1	70 - 150	
45 Sc	2	1558321	0.73	1448455	107.6	70 - 150	
115 In	1	628023	0.86	580519	108.2	70 - 150	
115 In	2	1861950	0.85	1694704	109.9	70 - 150	
159 Tb	1	1482951	1.21	1221266	121.4	70 - 150	
159 Tb	2	2467434	1.87	2236647	110.3	70 - 150	
165 Ho	1	1451572	1.24	1159933	125.1	70 - 150	
165 Ho	2	2415181	1.48	2164693	111.6	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\S112013A.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\S112013A.b\048_CCV.D\048_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\048_CCV.D\048_CCV.D#
 Date Acquired: Nov 20 2013 04:19 pm
 Operator: GK
 Sample Name: CCV V-176971
 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: Nov 20 2013 12:21 pm
 Sample Type: 6-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Fail
 ISTD: Fail

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	49.85 ppb	1.38	334896	50	99.7	90 - 110	
23 Na	45	1	5232.00 ppb	1.06	5231303	5000	104.6	90 - 110	
24 Mg	45	1	5238.00 ppb	0.67	2899880	5000	104.8	90 - 110	
27 Al	45	1	1566.00 ppb	0.83	482220	1500	104.4	90 - 110	
39 K	45	1	4970.00 ppb	1.72	2717509	5000	99.4	90 - 110	
44 Ca	45	1	4943.00 ppb	0.40	141561	5000	98.9	90 - 110	
51 V	45	1	51.11 ppb	1.00	221438	50	102.2	90 - 110	
52 Cr	45	1	51.49 ppb	0.98	263641	50	103.0	90 - 110	
55 Mn	45	1	51.59 ppb	0.19	199194	50	103.2	90 - 110	
56 Fe	45	1	5260.00 ppb	0.50	24678680	5000	105.2	90 - 110	
59 Co	45	1	51.40 ppb	0.52	425361	50	102.8	90 - 110	
60 Ni	45	1	54.21 ppb	0.47	110899	50	108.4	90 - 110	
65 Cu	45	1	55.28 ppb	0.56	148119	50	110.6	90 - 110	Fail
66 Zn	45	1	53.66 ppb	0.21	56484	50	107.3	90 - 110	
75 As	115	1	47.28 ppb	0.40	34683	50	94.6	90 - 110	
78 Se	115	1	226.70 ppb	0.62	17111	250	90.7	90 - 110	
83 Kr	115	2	----- ppb	-----	511	50	#VALUE!	##### - #####	
95 Mo	115	2	49.27 ppb	0.53	281462	50	98.5	90 - 110	
107 Ag	115	2	47.84 ppb	0.65	749770	50	95.7	90 - 110	
111 Cd	115	2	49.44 ppb	0.57	157714	50	98.9	90 - 110	
121 Sb	115	2	48.51 ppb	1.16	563856	50	97.0	90 - 110	
137 Ba	159	2	49.54 ppb	0.64	222074	50	99.1	90 - 110	
205 Tl	165	2	51.13 ppb	0.49	1503571	50	102.3	90 - 110	
206 (Pb)	165	2	48.20 ppb	0.80	465869	50	96.4	90 - 110	
207 (Pb)	165	2	50.24 ppb	0.75	387577	50	100.5	90 - 110	
208 Pb	165	2	50.37 ppb	0.79	1907718	50	100.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93096	0.52	101496	91.7	80 - 120	
45 Sc	2	1525328	1.14	1448455	105.3	80 - 120	
115 In	1	599604	0.56	580519	103.3	80 - 120	
115 In	2	1777285	0.15	1694704	104.9	80 - 120	
159 Tb	1	1434514	1.96	1221266	117.5	80 - 120	
159 Tb	2	2381239	0.35	2236647	106.5	80 - 120	
165 Ho	1	1411621	0.96	1159933	121.7	80 - 120	ISFail
165 Ho	2	2314134	0.65	2164693	106.9	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\S112013A.b\002CALB.D\002CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
 1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S112013A.b\049_CCV.D\049_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\049_CCV.D\049_CCV.D#
 Date Acquired: Nov 20 2013 04:24 pm
 Operator: GK
 Sample Name: LLCCV V-176972
 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: Nov 20 2013 12:21 pm
 Sample Type: LL-CCV
 Total Dil Factor: 1.00

QC Summary:

Analytes: Pass

ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	0.50	ppb	5.14	1	99.2	70 - 130	
23 Na	45	1	249.50	ppb	0.45	250	99.8	70 - 130	
24 Mg	45	1	271.70	ppb	1.39	250	108.7	70 - 130	
27 Al	45	1	107.60	ppb	0.62	100	107.6	70 - 130	
39 K	45	1	241.80	ppb	0.54	250	96.7	70 - 130	
44 Ca	45	1	253.20	ppb	0.55	250	101.3	70 - 130	
51 V	45	1	1.05	ppb	2.83	1	105.1	70 - 130	
52 Cr	45	1	1.04	ppb	1.36	1	103.8	70 - 130	
55 Mn	45	1	3.03	ppb	1.15	3	101.1	70 - 130	
56 Fe	45	1	173.20	ppb	1.79	150	115.5	70 - 130	
59 Co	45	1	1.01	ppb	0.38	1	100.6	70 - 130	
60 Ni	45	1	1.61	ppb	0.39	2	107.2	70 - 130	
65 Cu	45	1	5.07	ppb	1.77	5	101.4	70 - 130	
66 Zn	45	1	10.42	ppb	0.78	10	104.2	70 - 130	
75 As	115	1	0.97	ppb	4.93	1	96.6	70 - 130	
78 Se	115	1	3.91	ppb	2.98	5	78.3	70 - 130	
83 Kr	115	2	-----	ppb	-----	1	#VALUE!	##### - #####	
95 Mo	115	2	0.98	ppb	2.54	1	98.0	70 - 130	
107 Ag	115	2	0.49	ppb	0.17	1	97.9	70 - 130	
111 Cd	115	2	0.96	ppb	0.73	1	95.9	70 - 130	
121 Sb	115	2	0.95	ppb	0.77	1	95.1	70 - 130	
137 Ba	159	2	2.36	ppb	2.41	3	94.3	70 - 130	
205 Tl	165	2	0.93	ppb	2.21	1	92.9	70 - 130	
206 (Pb)	165	2	1.37	ppb	1.88	2	91.1	70 - 130	
207 (Pb)	165	2	1.45	ppb	1.18	2	96.9	70 - 130	
208 Pb	165	2	1.37	ppb	2.02	2	91.3	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93432	0.27	101496	92.1	80 - 120	
45 Sc	2	1532512	1.79	1448455	105.8	80 - 120	
115 In	1	603836	0.56	580519	104.0	80 - 120	
115 In	2	1836856	1.47	1694704	108.4	80 - 120	
159 Tb	1	1417916	0.31	1221266	116.1	80 - 120	
159 Tb	2	2378274	0.09	2236647	106.3	80 - 120	
165 Ho	1	1389019	0.82	1159933	119.7	80 - 120	
165 Ho	2	2343070	0.60	2164693	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\S112013A.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\S112013A.b\050_CCB.D\050_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112013A.b\050_CCB.D\050_CCB.D#
 Date Acquired: Nov 20 2013 04:30 pm
 Operator: GK
 Sample Name: CCB V-176968
 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: Nov 20 2013 12:21 pm
 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	-0.008	ppb	37.21	166	0.50	
23 Na	45	1	-1.001	ppb	61.18	114173	250.00	
24 Mg	45	1	3.824	ppb	6.55	2986	250.00	
27 Al	45	1	26.580	ppb	0.72	8797	100.00	
39 K	45	1	-0.107	ppb	758.40	53747	250.00	
44 Ca	45	1	60.950	ppb	2.57	2046	250.00	
51 V	45	1	0.029	ppb	9.68	190	1.00	
52 Cr	45	1	0.048	ppb	7.63	885	1.00	
55 Mn	45	1	-0.001	ppb	446.39	444	3.00	
56 Fe	45	1	4.624	ppb	6.47	45242	150.00	
59 Co	45	1	-0.009	ppb	43.55	258	1.00	
60 Ni	45	1	0.015	ppb	40.99	117	1.50	
65 Cu	45	1	0.056	ppb	9.64	1395	5.00	
66 Zn	45	1	0.507	ppb	6.90	1243	10.00	
75 As	115	1	0.007	ppb	44.63	29	1.00	
78 Se	115	1	-0.706	ppb	4.31	140	5.00	
83 Kr	115	2	-----	ppb	-----	487	1.00	
95 Mo	115	2	0.004	ppb	185.27	208	1.00	
107 Ag	115	2	0.007	ppb	6.84	240	0.50	
111 Cd	115	2	0.011	ppb	27.67	85	1.00	
121 Sb	115	2	0.013	ppb	14.71	304	1.00	
137 Ba	159	2	0.066	ppb	5.48	601	2.50	
205 Tl	165	2	-0.025	ppb	6.87	870	1.00	
206 (Pb)	165	2	0.030	ppb	49.39	1143	1.50	
207 (Pb)	165	2	0.039	ppb	8.06	966	1.50	
208 Pb	165	2	0.036	ppb	6.53	4562	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93198	0.71	101496	91.8	80 - 120	
45 Sc	2	1515631	0.26	1448455	104.6	80 - 120	
115 In	1	598510	0.88	580519	103.1	80 - 120	
115 In	2	1823710	1.32	1694704	107.6	80 - 120	
159 Tb	1	1404418	0.82	1221266	115.0	80 - 120	
159 Tb	2	2395215	0.76	2236647	107.1	80 - 120	
165 Ho	1	1384253	2.31	1159933	119.3	80 - 120	
165 Ho	2	2332687	0.76	2164693	107.8	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\S112013A.b\002CALB.D\002CALB.D#

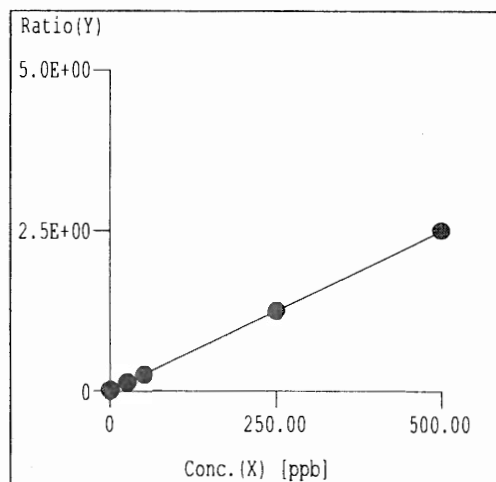
0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

Calibration - C:\MPCHEM\1\CALIB\6020AQ.C

=== Graph Detail ===

Step Mass Element ISTD Unit
(1) 78 Se 115 ppb



	Rct	Conc	Calc Conc	CPS/Count	Ratio	RSD [%]
1		0.000	-2.296E-01	170.0	1.172E-02	P 6.499
2		5.000E-01	2.405	352.0	2.483E-02	P 4.717
3		25.00	25.14	2010	1.380E-01	P 1.760
4		50.00	48.34	3921	2.536E-01	P 3.792E-01
5		250.0	249.4	1.948E+04	1.255E+00	P 1.246
6		500.0	500.5	3.808E+04	2.505E+00	P 1.206
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Curve Fit: $Y=aX+b$
 $r = 1.0000$
 $Y = 4.979E-003 \cdot X + 1.286E-002$
 $X = 2.008E+002 \cdot Y - 2.582E+000$
 $DL = 4.587E-01$ ppb
 $BEC = 2.582$ ppb

Weight: OFF
Min Conc: ---

File: H15687SW

3110620 0767

Method: HGC2 SWH20 (7470A)

Page 1

Date: 11/14/2013 12:22:43 PM

Paul 11/14/13 V-176740 11/14/13

Analysis Begun

Logged In Analyst: johns
Spectrometer Model: FIMS-100, S/N B050-9550

Technique: AA FIMS-MHS
Autosampler Model: AS-90

B-1587

QC-27402

Sample Information File: C:\data-AA\johns\Sample Information\H15687SW.sif
Batch ID: H15687SW
Results Data Set: H15687SW
Results Library: C:\data-AA\johns\Results\Results.mdb

Sequence No.: 1
Sample ID: Calibration Blank
Analyst:
Autosampler Location: 1
Date Collected: 11/14/2013 12:16:46 PM
Data Type: Original

Replicate Data: Calibration Blank

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.00]	0.0001	0.0003	0.0001	12:17:42	Yes
2		[0.00]	-0.0000	-0.0020	-0.0000	12:18:14	Yes
Mean:		[0.00]	0.0000				
SD:		0.00	0.0001				
%RSD:		0.00	287.45				

Auto-zero performed.

Sequence No.: 2
Sample ID: .2 PPB
Analyst:
Autosampler Location: 2
Date Collected: 11/14/2013 12:18:16 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		[0.2]	0.0015	0.0056	0.0016	12:19:11	Yes
2		[0.2]	0.0014	0.0036	0.0015	12:19:43	Yes
Mean:		[0.2]	0.0015				
SD:		0.0	0.0001				
%RSD:		0.0	3.99				

Standard number 1 applied. [0.2]

Correlation Coef.: 1.000000 Slope: 0.00743 Intercept: 0.00000

Sequence No.: 3
Sample ID: .5 PPB
Analyst:
Autosampler Location: 3
Date Collected: 11/14/2013 12:19:44 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		[0.5]	0.0037	0.0121	0.0037	12:20:40	Yes
2		[0.5]	0.0036	0.0117	0.0036	12:21:13	Yes
Mean:		[0.5]	0.0036				
SD:		0.0	0.0001				
%RSD:		0.0	2.08				

Standard number 2 applied. [0.5]

Correlation Coef.: 0.999955 Slope: 0.00727 Intercept: 0.00001

Sequence No.: 4
Sample ID: 1 PPB
Analyst:
Autosampler Location: 4
Date Collected: 11/14/2013 12:21:14 PM
Data Type: Original

Replicate Data: 1 PPB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[1]	0.0071	0.0241	0.0072	12:22:10	Yes
2		[1]	0.0072	0.0253	0.0073	12:22:42	Yes
Mean:		[1]	0.0072				
SD:		0	0.0001				
%RSD:		0	0.85				

Method: HGC2 SWH20 (7470A)

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Date: 11/14/2013 12:28:39 PM

Standard number 3 applied. [1]

Correlation Coef.: 0.999955 Slope: 0.00716 Intercept: 0.00003

Sequence No.: 5

Sample ID: 2 PPB

Analyst:

Autosampler Location: 5

Date Collected: 11/14/2013 12:22:43 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]	0.0139	0.0457	0.0139	12:23:39	Yes
2		[2]	0.0139	0.0458	0.0140	12:24:11	Yes
Mean:		[2]	0.0139				
SD:		0	0.0000				
%RSD:		0	0.25				

Standard number 4 applied. [2]

Correlation Coef.: 0.999857 Slope: 0.00695 Intercept: 0.00010

Sequence No.: 6

Sample ID: 5 PPB

Analyst:

Autosampler Location: 6

Date Collected: 11/14/2013 12:24:12 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]	0.0353	0.1163	0.0354	12:25:08	Yes
2		[5]	0.0359	0.1193	0.0359	12:25:40	Yes
Mean:		[5]	0.0356				
SD:		0	0.0004				
%RSD:		0	1.08				

Standard number 5 applied. [5]

Correlation Coef.: 0.999941 Slope: 0.00710 Intercept: 0.00001

Sequence No.: 7

Sample ID: 10 PPB

Analyst:

Autosampler Location: 7

Date Collected: 11/14/2013 12:25:41 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]	0.0697	0.2359	0.0697	12:26:36	Yes
2		[10]	0.0695	0.2376	0.0695	12:27:09	Yes
Mean:		[10]	0.0696				
SD:		0	0.0001				
%RSD:		0	0.18				

Standard number 6 applied. [10]

Correlation Coef.: 0.999937 Slope: 0.00697 Intercept: 0.00015

Sequence No.: 8

Sample ID: 25 PPB

Analyst:

Autosampler Location: 8

Date Collected: 11/14/2013 12:27:10 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]	0.1718	0.5925	0.1719	12:28:06	Yes
2		[25]	0.1693	0.5830	0.1693	12:28:38	Yes
Mean:		[25]	0.1706				
SD:		0	0.0018				
%RSD:		0	1.05				

Standard number 7 applied. [25]

Correlation Coef.: 0.999947 Slope: 0.00682 Intercept: 0.00047

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
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Method: HGC V2 SWH2O (7470A)

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Date: 11/14/2013 12:34:41 PM

Calibration Blank	0.0000	0	-0.069	0.00	287.4
.2 PPB	0.0015	0.2	0.149	0.00	4.0
.5 PPB	0.0036	0.5	0.465	0.00	2.1
1 PPB	0.0072	1.0	0.983	0.00	0.8
2 PPB	0.0139	2.0	1.972	0.00	0.2
5 PPB	0.0356	5.0	5.149	0.00	1.1
10 PPB	0.0696	10.0	10.129	0.00	0.2
25 PPB	0.1706	25.0	24.923	0.00	1.1

Correlation Coef.: 0.999947 Slope: 0.00682 Intercept: 0.00047

Sequence No.: 9

Sample ID: ICV (2)

Analyst:

Autosampler Location: 10

Date Collected: 11/14/2013 12:28:39 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	19.24	19.24	0.1318	0.4546	0.1318	12:29:38	Yes
2	19.21	19.21	0.1316	0.4518	0.1316	12:30:10	Yes
Mean:	19.22	19.22	0.1317				
SD:	0.020	0.020	0.0001				
%RSD:	0.106	0.106	0.11				

QC value within limits for Hg 253.7 Recovery = 96.12%
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICB

Analyst:

Autosampler Location: 1

Date Collected: 11/14/2013 12:30:11 PM

Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.029	-0.029	0.0003	0.0017	0.0003	12:31:07	Yes
2	-0.054	-0.054	0.0001	0.0008	0.0001	12:31:39	Yes
Mean:	-0.041	-0.041	0.0002				
SD:	0.018	0.018	0.0001				
%RSD:	43.46	43.46	66.40				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11

Sample ID: MB 27402 (1)

Analyst:

Autosampler Location: 11

Date Collected: 11/14/2013 12:31:41 PM

Data Type: Original

Replicate Data: MB 27402 (1)

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.059	-0.059	0.0001	-0.0004	0.0001	12:32:38	Yes
2	-0.054	-0.054	0.0001	0.0005	0.0001	12:33:10	Yes
Mean:	-0.057	-0.057	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	6.055	6.055	28.81				

Sequence No.: 12

Sample ID: LCSW 27402

Analyst:

Autosampler Location: 12

Date Collected: 11/14/2013 12:33:11 PM

Data Type: Original

Replicate Data: LCSW 27402

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.811	9.811	0.0674	0.2305	0.0675	12:34:07	Yes
2	9.773	9.773	0.0672	0.2294	0.0672	12:34:39	Yes
Mean:	9.792	9.792	0.0673				
SD:	0.027	0.027	0.0002				
%RSD:	0.276	0.276	0.27				

Sequence No.: 13

Autosampler Location: 13

Sample ID: LCSW MR 27402

Date Collected: 11/14/2013 12:34:40 PM

Analyst:

Data Type: Original

Replicate Data: LCSW MR 27402

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.713	9.713	0.0668	0.2293	0.0668	12:35:36	Yes
2	9.651	9.651	0.0663	0.2261	0.0664	12:36:09	Yes
Mean:	9.682	9.682	0.0665				
SD:	0.044	0.044	0.0003				
%RSD:	0.451	0.451	0.45				

Sequence No.: 14

Autosampler Location: 14

Sample ID: 75576-030

Date Collected: 11/14/2013 12:36:10 PM

Analyst:

Data Type: Original

Replicate Data: 75576-030

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.046	-0.046	0.0002	0.0005	0.0002	12:37:06	Yes
2	-0.041	-0.041	0.0002	0.0012	0.0002	12:37:38	Yes
Mean:	-0.044	-0.044	0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	8.168	8.168	14.25				

Sequence No.: 15

Autosampler Location: 15

Sample ID: 75576-030 MR

Date Collected: 11/14/2013 12:37:39 PM

Analyst:

Data Type: Original

Replicate Data: 75576-030 MR

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.051	-0.051	0.0001	0.0009	0.0002	12:38:35	Yes
2	-0.052	-0.052	0.0001	0.0003	0.0002	12:39:07	Yes
Mean:	-0.051	-0.051	0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	2.314	2.314	6.90				

Sequence No.: 16

Autosampler Location: 16

Sample ID: 75576-032 MS1

Date Collected: 11/14/2013 12:39:08 PM

Analyst:

Data Type: Original

Replicate Data: 75576-032 MS1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.756	9.756	0.0671	0.2279	0.0671	12:40:04	Yes
2	9.691	9.691	0.0666	0.2269	0.0666	12:40:37	Yes
Mean:	9.724	9.724	0.0668				
SD:	0.046	0.046	0.0003				
%RSD:	0.472	0.472	0.47				

Sequence No.: 17

Autosampler Location: 17

Sample ID: 75576-034 MS2

Date Collected: 11/14/2013 12:40:38 PM

Analyst:

Data Type: Original

Replicate Data: 75576-034 MS2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.406	9.406	0.0647	0.2206	0.0647	12:41:33	Yes
2	9.410	9.410	0.0647	0.2209	0.0647	12:42:06	Yes
Mean:	9.408	9.408	0.0647				
SD:	0.003	0.003	0.0000				
%RSD:	0.029	0.029	0.03				

Sequence No.: 18

Autosampler Location: 18

Sample ID: 75576-002

Date Collected: 11/14/2013 12:42:07 PM

Analyst:

Data Type: Original

Replicate Data: 75576-002

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.054	-0.054	0.0001	-0.0006	0.0001	12:43:02	Yes
2	-0.043	-0.043	0.0002	0.0005	0.0002	12:43:35	Yes
Mean:	-0.048	-0.048	0.0001				
SD:	0.007	0.007	0.0001				
%RSD:	15.25	15.25	36.86				

Sequence No.: 19

Autosampler Location: 19

Sample ID: 75576-004

Date Collected: 11/14/2013 12:43:36 PM

Analyst:

Data Type: Original

Replicate Data: 75576-004

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.056	-0.056	0.0001	-0.0000	0.0001	12:44:35	Yes
2	-0.069	-0.069	-0.0000	-0.0009	0.0000	12:45:07	Yes
Mean:	-0.063	-0.063	0.0000				
SD:	0.009	0.009	0.0001				
%RSD:	14.76	14.76	161.40				

Sequence No.: 20

Autosampler Location: 9

Sample ID: CCV

Date Collected: 11/14/2013 12:45:08 PM

Analyst:

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.842	9.842	0.0676	0.2340	0.0677	12:46:04	Yes
2	9.836	9.836	0.0676	0.2319	0.0676	12:46:37	Yes
Mean:	9.839	9.839	0.0676				
SD:	0.004	0.004	0.0000				
%RSD:	0.042	0.042	0.04				

QC value within limits for Hg 253.7 Recovery = 98.39%

All analyte(s) passed QC.

Sequence No.: 21

Autosampler Location: 1

Sample ID: CCB

Date Collected: 11/14/2013 12:46:38 PM

Analyst:

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.057	-0.057	0.0001	-0.0003	0.0001	12:47:34	Yes
2	-0.053	-0.053	0.0001	0.0009	0.0001	12:48:06	Yes
Mean:	-0.055	-0.055	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	5.141	5.141	21.67				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 22

Autosampler Location: 20

Sample ID: 75576-006

Date Collected: 11/14/2013 12:48:07 PM

Analyst:

Data Type: Original

Replicate Data: 75576-006

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.053	-0.053	0.0001	0.0004	0.0001	12:49:04	Yes
2	-0.042	-0.042	0.0002	0.0018	0.0002	12:49:36	Yes
Mean:	-0.047	-0.047	0.0001				
SD:	0.008	0.008	0.0001				
%RSD:	17.43	17.43	38.89				

Sequence No.: 23
 Sample ID: 75576-008
 Analyst:

Autosampler Location: 21
 Date Collected: 11/14/2013 12:49:37 PM
 Data Type: Original

Replicate Data: 75576-008

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.048	-0.048	0.0001	0.0008	0.0002	12:50:33	Yes
2	-0.057	-0.057	0.0001	0.0003	0.0001	12:51:05	Yes
Mean:	-0.053	-0.053	0.0001				
SD:	0.007	0.007	0.0000				
%RSD:	12.43	12.43	40.89				

Sequence No.: 24
 Sample ID: 75576-010
 Analyst:

Autosampler Location: 22
 Date Collected: 11/14/2013 12:51:06 PM
 Data Type: Original

Replicate Data: 75576-010

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.060	-0.060	0.0001	-0.0004	0.0001	12:52:01	Yes
2	-0.054	-0.054	0.0001	0.0006	0.0001	12:52:34	Yes
Mean:	-0.057	-0.057	0.0001				
SD:	0.005	0.005	0.0000				
%RSD:	8.106	8.106	39.94				

Sequence No.: 25
 Sample ID: 75576-012
 Analyst:

Autosampler Location: 23
 Date Collected: 11/14/2013 12:52:35 PM
 Data Type: Original

Replicate Data: 75576-012

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.055	-0.055	0.0001	0.0005	0.0001	12:53:31	Yes
2	-0.061	-0.061	0.0001	-0.0002	0.0001	12:54:03	Yes
Mean:	-0.058	-0.058	0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	6.607	6.607	37.03				

Sequence No.: 26
 Sample ID: 75576-014
 Analyst:

Autosampler Location: 24
 Date Collected: 11/14/2013 12:54:04 PM
 Data Type: Original

Replicate Data: 75576-014

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.044	-0.044	0.0002	0.0021	0.0002	12:54:59	Yes
2	-0.059	-0.059	0.0001	-0.0000	0.0001	12:55:32	Yes
Mean:	-0.051	-0.051	0.0001				
SD:	0.011	0.011	0.0001				
%RSD:	20.82	20.82	60.95				

Sequence No.: 27
 Sample ID: 75576-016
 Analyst:

Autosampler Location: 25
 Date Collected: 11/14/2013 12:55:33 PM
 Data Type: Original

Replicate Data: 75576-016

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.058	-0.058	0.0001	-0.0005	0.0001	12:56:28	Yes
2	-0.058	-0.058	0.0001	0.0003	0.0001	12:57:00	Yes
Mean:	-0.058	-0.058	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	0.082	0.082	0.45				

Sequence No.: 28
 Sample ID: 75576-018
 Analyst:

Autosampler Location: 26
 Date Collected: 11/14/2013 12:57:02 PM
 Data Type: Original

Replicate Data: 75576-018

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.053	-0.053	0.0001	0.0004	0.0001	12:57:58	Yes
2	-0.073	-0.073	-0.0000	-0.0013	0.0000	12:58:30	Yes
Mean:	-0.063	-0.063	0.0000				
SD:	0.014	0.014	0.0001				
%RSD:	22.08	22.08	247.59				

Sequence No.: 29
 Sample ID: 75576-020
 Analyst:

Autosampler Location: 27
 Date Collected: 11/14/2013 12:58:31 PM
 Data Type: Original

Replicate Data: 75576-020

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.041	-0.041	0.0002	0.0003	0.0002	12:59:26	Yes
2	-0.047	-0.047	0.0001	-0.0000	0.0002	12:59:59	Yes
Mean:	-0.044	-0.044	0.0002				
SD:	0.005	0.005	0.0000				
%RSD:	10.53	10.53	18.64				

Sequence No.: 30
 Sample ID: 75576-022
 Analyst:

Autosampler Location: 28
 Date Collected: 11/14/2013 1:00:00 PM
 Data Type: Original

Replicate Data: 75576-022

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.044	-0.044	0.0002	0.0008	0.0002	13:00:59	Yes
2	-0.031	-0.031	0.0003	0.0016	0.0003	13:01:31	Yes
Mean:	-0.037	-0.037	0.0002				
SD:	0.009	0.009	0.0001				
%RSD:	24.77	24.77	29.20				

Sequence No.: 31
 Sample ID: CCV
 Analyst:

Autosampler Location: 9
 Date Collected: 11/14/2013 1:01:32 PM
 Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.733	9.733	0.0669	0.2338	0.0669	13:02:29	Yes
2	9.771	9.771	0.0672	0.2340	0.0672	13:03:01	Yes
Mean:	9.752	9.752	0.0670				
SD:	0.027	0.027	0.0002				
%RSD:	0.273	0.273	0.27				

QC value within limits for Hg 253.7 Recovery = 97.52%
 All analyte(s) passed QC.

Sequence No.: 32
 Sample ID: CCB
 Analyst:

Autosampler Location: 1
 Date Collected: 11/14/2013 1:03:02 PM
 Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.003	0.003	0.0005	0.0044	0.0005	13:03:58	Yes
2	-0.064	-0.064	0.0000	-0.0012	0.0001	13:04:31	Yes
Mean:	-0.030	-0.030	0.0003				
SD:	0.047	0.047	0.0003				
%RSD:	154.7	154.7	123.49				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 33
 Sample ID: 75576-024
 Analyst:

Autosampler Location: 29
 Date Collected: 11/14/2013 1:04:32 PM
 Data Type: Original

Replicate Data: 75576-024

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.041	-0.041	0.0002	0.0012	0.0002	13:05:29	Yes
2	-0.054	-0.054	0.0001	0.0004	0.0001	13:06:02	Yes
Mean:	-0.048	-0.048	0.0001				
SD:	0.009	0.009	0.0001				
%RSD:	18.34	18.34	41.47				

Sequence No.: 34
 Sample ID: 75576-026
 Analyst:

Autosampler Location: 30
 Date Collected: 11/14/2013 1:06:03 PM
 Data Type: Original

Replicate Data: 75576-026

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	0.0002	0.0010	0.0002	13:06:58	Yes
2	-0.020	-0.020	0.0003	0.0012	0.0004	13:07:30	Yes
Mean:	-0.032	-0.032	0.0002				
SD:	0.018	0.018	0.0001				
%RSD:	55.55	55.55	49.17				

Sequence No.: 35
 Sample ID: 75576-028
 Analyst:

Autosampler Location: 31
 Date Collected: 11/14/2013 1:07:32 PM
 Data Type: Original

Replicate Data: 75576-028

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.032	-0.032	0.0002	0.0006	0.0003	13:08:27	Yes
2	-0.069	-0.069	-0.0000	-0.0009	0.0000	13:09:00	Yes
Mean:	-0.051	-0.051	0.0001				
SD:	0.026	0.026	0.0002				
%RSD:	51.62	51.62	144.56				

Sequence No.: 36
 Sample ID: 75670-001
 Analyst:

Autosampler Location: 32
 Date Collected: 11/14/2013 1:09:01 PM
 Data Type: Original

Replicate Data: 75670-001

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.046	-0.046	0.0002	0.0011	0.0002	13:09:57	Yes
2	-0.039	-0.039	0.0002	0.0012	0.0002	13:10:29	Yes
Mean:	-0.043	-0.043	0.0002				
SD:	0.005	0.005	0.0000				
%RSD:	10.60	10.60	17.33				

Sequence No.: 37
 Sample ID: 75670-002
 Analyst:

Autosampler Location: 33
 Date Collected: 11/14/2013 1:10:30 PM
 Data Type: Original

Replicate Data: 75670-002

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.047	-0.047	0.0001	0.0014	0.0002	13:11:26	Yes
2	-0.036	-0.036	0.0002	0.0016	0.0003	13:11:58	Yes
Mean:	-0.042	-0.042	0.0002				
SD:	0.008	0.008	0.0001				
%RSD:	18.49	18.49	28.57				

Sequence No.: 38
Sample ID: 75670-003
Analyst:

Autosampler Location: 34
Date Collected: 11/14/2013 1:11:59 PM
Data Type: Original

Replicate Data: 75670-003

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.027	-0.027	0.0003	0.0015	0.0003	13:12:55	Yes
2	-0.056	-0.056	0.0001	-0.0003	0.0001	13:13:27	Yes
Mean:	-0.042	-0.042	0.0002				
SD:	0.020	0.020	0.0001				
%RSD:	48.66	48.66	76.01				

Sequence No.: 39
Sample ID: CCV
Analyst:

Autosampler Location: 9
Date Collected: 11/14/2013 1:13:29 PM
Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	10.11	10.11	0.0695	0.2415	0.0695	13:14:27	Yes
2	10.02	10.02	0.0688	0.2410	0.0689	13:14:59	Yes
Mean:	10.07	10.07	0.0692				
SD:	0.066	0.066	0.0005				
%RSD:	0.659	0.659	0.65				

QC value within limits for Hg 253.7 Recovery = 100.66%
All analyte(s) passed QC.

Sequence No.: 40
Sample ID: CCB
Analyst:

Autosampler Location: 1
Date Collected: 11/14/2013 1:15:01 PM
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.044	-0.044	0.0002	0.0019	0.0002	13:15:57	Yes
2	-0.065	-0.065	0.0000	-0.0001	0.0001	13:16:29	Yes
Mean:	-0.055	-0.055	0.0001				
SD:	0.014	0.014	0.0001				
%RSD:	26.02	26.02	101.14				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Metal Data
Digestion Logbook Data

Hampton-Clarke/Veritech

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B (6020) 200.7/200.8 OTHER

Batch No.: 15686

Analyst: JY

QC Number: 27401

Prep Date: 11/13/13

Matrix: JY 11/13/13 Scott SW846

Reviewed By: JY

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ul	50ul	10ul	20ul		--	
LCS						--	
LCSD						--	
1. AC75576-029							
MR 75576-029							
MS 75576-031							
MSD 75576-033							
2. 75576-001							
3. 75576-003							
4. 75576-005							
5. 75576-007							
6. 75576-009							
7. 75576-011							
8. 75576-013							
9. 75576-015							
10. 75576-017							(Fw)
11. 75576-019							
12. 75576-021							
13. 75576-023							
14. 75576-025							
15. 75576-027							
16. 75676-001							
17. 75677-004	10ul	✓	10ul	20ul			
18.							
19.							
20.							

Hot Plate Temperature: 94.2° C (90-95° C)

	Volume mL	Lot #
LCS, LCSD	0.5ul	V-7685,7686
LLCS, LLLCSD		V-
MS, MSD	0.5ul	V-7685,7686
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO ₃	3	V-8123
HCl		V-
H ₂ O ₂		V-

Acid	Vol mL	Lot#
1:1 HNO ₃		V-
1:1 HCl	5	V-166179

Relinquished By: JY Date: 11/13/13

Received By: JY Date: 11/13/13

0082

HG SAMPLE PREPARATION LOG

3110620 0778
hampton-clark-veritech

ANALYTICAL METHOD: 245.1 7470A 7471A OTHER

Batch No.: 15686

Analyst: 11/13/13 JH

QC Number: 27401

Prep Date:

Matrix: SW846

Review By: M

LAB ID#	MERCURY		COMMENTS
	INITIAL	FINAL	
Method blank	25ul	25ul	
LCS			
LCSD			
1 AC 75576-029			
MR 75576-029			
MS 75576-031			
MSD 75576-033			
2 75576-001			
3 75576-003			
4 75576-005			
5 75576-007			
6 75576-009			
7 75576-011			
8 75576-013			
9 75576-015			
10 75576-017			(F)
11 75576-019			
12 75576-021			
13 75576-023			
14 75576-025			
15 75576-027			
16 75676-001			
17 75677-004	5ul		
18			
19			
20			

Lot Numbers	Acid	Volume (mL)	Lot #
KmnO ₄ : V- 173707	HNO ₃	0.625ul	V- 8123
K ₂ S ₂ O ₈ : V- 166616	HCl		V-
NH ₂ OH: V- 172727	H ₂ SO ₄	1.25ul	V- 8131
	Aqua Regia		V-

**Block Temp.: 94.0°C
Time In Block: 16:00
Time Out of Block: 18:00
** Required range = 92-98°C

Spike Volume & Lot #

☐ LCS V- 176620 0.15ul (0.25 ml)

☐ MS V- 176628 0.250 ml

☐ Standards/Control Batch B- 16548

Relinquished By: JH

*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 Veriprolog using the standard batch number and the corresponding V #s.

Hampton-Clarke/Veritech

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B (6020) 200.7/200.8 OTHER _____Batch No.: 15687Analyst: SMQC Number: 27402Prep Date: 11/13/13Matrix: SW646Reviewed By: SB

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ul	50ul	10ul	20ul		--	
LCS						--	
LCSD	✓	✓				--	
1. AC75576-030	100ul	100ul					
MR 75576-030	50ul	50ul					
MS 75576-032							
MSD 75576-034							
2. 75576-002							
3. 75576-004							
4. 75576-006							
5. 75576-008							
6. 75576-010							
7. 75576-012							
8. 75576-014							
9. 75576-016							
10. 75576-018							
11. 75576-020							
12. 75576-022							
13. 75576-024							
14. 75576-026							
15. 75576-028			✓	✓			
16. 75670-001							
17. 75670-002	✓	✓					
18. 75670-003							
19.							
20.							

Hot Plate Temperature: 93.8° C (90-95° C)

	Volume mL	Lot #
LCS, LCSD	0.5ul	V-7685, 7686
LLCS, LLCSD		V-
MS, MSD	0.5ul	V-7685, 7686
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO ₃	3	V-8123
HCl		V-
H ₂ O ₂		V-

Acid	Vol mL	Lot#
1:1 HNO ₃		V-
1:1 HCl	5	V-166179

Relinquished By: SM Date: 11/13/13Received By: SM Date: 11/13/13

HG SAMPLE PREPARATION LOG

3110620 0780
Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 7470A 7471A OTHER _____

Batch No.: 15687

Analyst: JW

QC Number: 27402

Prep Date: 11/13/13

Matrix: SW846

Review By: m

LAB ID#	MERCURY		COMMENTS
	INITIAL	FINAL	
Method blank	25ul	25ul	
LCS			
LCSD			
1 AC 75576-030			
MR 75576-030			
MS 75576-032			
MSD 75576-034			
2 75576-002			
3 75576-004			
4 75576-006			
5 75576-008			
6 75576-010			
7 75576-012			
8 75576-014			
9 75576-016			
10 75576-018			(K13)
11 75576-020			
12 75576-022			
13 75576-024			
14 75576-026			
15 75576-028			
16 75670-001			
17 75670-002			
18 75670-003	✓	✓	
19			
20			

Lot Numbers	Acid	Volume (mL)	Lot #
KmnO ₄ : V- 173707	HNO ₃	0.625ul	V- 18123
K ₂ S ₂ O ₈ : V- 166616	HCl		V-
NH ₂ OH: V- 172727	H ₂ SO ₄	1.25ul	V- 8131
	Aqua Regia		V-

**Block Temp.: 92.8°C
Time In Block: 16:00
Time Out of Block: 18:00
** Required range = 92-98°C

Spike Volume & Lot #

☐ LCS v. 176628 0.15g / 0.25 ml

☐ MS v. 176628 0.250 ml

☐ Standards/Control Batch B- 16547

Relinquished By: JW

*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