



Environment

Prepared for:
Superfund Standby Program
NYSDEC
Albany, NY

Prepared by:
AECOM
Chestnut Ridge, NY
60277021
May 2014

Groundwater Sampling Report (November 2013 Sampling Event) Dzus Fasteners Site Site #1-52-033 Work Assignment No. D007626-17

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A handwritten signature in cursive script, reading "Paul Kareth", positioned above a horizontal line.

Prepared By: Paul Kareth

A handwritten signature in cursive script, reading "Robert Montione", positioned above a horizontal line.

Reviewed By: Robert Montione, Quality Assurance Officer

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1.0 Introduction

AECOM Technical Services Northeast, Inc., (AECOM) has prepared this Groundwater Monitoring Report for the Dzus Fasteners facility (Site) in West Islip, New York (Site No. 1-52-033). This work was performed for the New York State Department of Environmental Conservation (NYSDEC) under Work Assignment D007626-17. Previous sampling rounds (2006 through 2011) were conducted under Work Assignment D004445-14. This groundwater monitoring report provides the results of the groundwater sampling data collected in November 2013.

AECOM collects groundwater samples from selected monitoring wells and surface water/sediment samples from Willetts Creek and Lake Capri at five-quarter (15 month) intervals as part of the Site's long-term monitoring plan. Four rounds of fish tissue samples were also collected from Lake Capri in July 2006, May 2007, October 2010 and September 2012. Fish tissue data results were documented in separate reports, the most recent of which was submitted in January 2013 for the September 2012 sampling event. Previous groundwater sampling was conducted in June 2006, August 2007, November 2008, March 2010, May 2011 and August 2012. This report presents the results from the latest round of sampling conducted in November 2013.

2.0 Background Information

The Dzus Fasteners Superfund site is located at 425 Union Boulevard, West Islip, Suffolk County, New York (Figure 1). The Site is bounded to the north by railroad tracks and Union Boulevard to the south and east. The Site is bounded to the west by Beach Street and commercial properties. On the southeast side of Union Boulevard is a shopping plaza and southeast of the shopping plaza is Willetts Creek (a Class A surface water body). Willetts Creek flows south, paralleling Everdell Avenue past the Beach Street Middle School and West Islip Senior High School, eventually discharging into Lake Capri approximately 4,500 ft south of the Site.

The Dzus Fastener facility, a manufacturer of fastener and springs since 1932, was responsible for the release of oils, heavy metals, and salts via onsite leaching pools used for the disposal of hazardous waste and formal discharge into Upper Willetts Creek. These operations led to soil and groundwater contamination at the Dzus facility and downstream groundwater, sediment, and surface water contamination of nearby Willetts Creek and Lake Capri, an 8-acre man-made lake.

An initial site inspection took place in August 1983. Contamination was discovered and a preliminary site assessment was completed in September 1984. A phase I investigation was completed and a phase II investigation was submitted by Dzus in August of 1990. Dzus then completed an Interim Remedial Measure (IRM) in October 1990. During the IRM, a leach field on the eastern side of the site was removed. A remedial investigation / feasibility study (RI/FS) was initiated at the site in 1992. The site was then broken up into the two Operable Units (OU), OU1, the Dzus facility; and OU2, the offsite localities including Willetts Creek and Lake Capri. A Record of Decision (ROD) for OU1 was issued for the site in March 1995, and a ROD for OU2 was issued for the site in October 1997.

In response to the ROD for OU1, the remedy for contaminated groundwater in the vicinity of the Dzus facility consisted of source removal and ongoing natural attenuation.

The eastern parking lot at the Dzus facility was paved with asphalt to eliminate the potential for direct human contact with the underlying contaminated soils at the site, and to eliminate or reduce the mobility of soil contaminants that would cause further groundwater degradation. The selected remedy consisted of the following:

- In-situ stabilization/solidification for soils containing cadmium at concentrations greater than 10 parts per million (ppm). Three areas on the western portion of the facility were excavated and mixed with the soils to be treated on the eastern portion of the Site;
- Design and installation of a final topsoil/asphalt cover at the eastern portion of the Site, which would protect the treatment cells from erosion;
- Implementation of institutional controls, such as deed restrictions at the Site.

The second operable unit, Operable Unit 2 (OU2) consisted of offsite contamination, including sediment and water contamination of Willetts Creek and Lake Capri. A ROD for OU2 was issued for the Site by NYSDEC in October 1997.

The selected remedy consisted of the following:

- The fish population of Lake Capri was eradicated using Rotenone, a NYSDEC approved fish eradicator, in July 1999 prior to dredging operations;
- Dredging, dewatering and off-site disposal of contaminated sediments from Lake Capri;
- Excavation and off-site disposal of approximately 100 cubic yards of sediment from Willetts Creek, corresponding to levels of cadmium exceeding 9 ppm (currently, the highest effects guidance value);
- Riprap was used to cover portions identified as having deeper zones of contamination in order to prevent future erosion;
- A long-term monitoring program to evaluate the effectiveness of the on-site remedy and to verify that existing groundwater plume does not impact public health or environment; and,
- The lake was restocked with silversides, bluegill (*Lepomis macrochirus*), and largemouth bass (*Microptera salmoides*) after completion of the remedial activities in 2000.

An Operation, Maintenance and Monitoring (OM&M) program for the Site was based on NYSDEC Draft DER-10 – Technical Guidance for Site Investigation and Remediation (December 2002). As part of the OM&M, a long-term monitoring plan (LTMP) was developed for OU1 and OU2 with regard to monitoring of groundwater, surface water, sediment, and the asphalt cover (engineering control) in the manufacturing facility's eastern parking lot. The Final Sampling and Analysis Plan (SAP), dated June 2007, outlines the most recent sample collection procedures. At the request of NYSDEC, the monitoring well sampling protocol was changed for the August 2012 sampling event. Sampling events 1 through 5 utilized the volumetric method for purging and groundwater samples were collected using Teflon bailers. For sampling events 6 and 7, low flow techniques were used for purging and sampling.

The primary contaminant of concern at the Site is cadmium, but several other metals including antimony, arsenic, chromium, iron, lead, manganese, sodium, and thallium have been found in exceedance of published standards in soil and groundwater at the Dzus facility and in the water and sediments of nearby Willetts Creek and Lake Capri.

A total of 14 wells and six surface water/sediment sample locations were identified for long term monitoring at the Site (Figure 2).

3.0 Field Activities

Groundwater sampling activities occurred on November 5, 6 and 7, 2013. Surface water and sediment sampling occurred on September 17 and 18, 2012. Sampling was conducted in accordance with the Sampling and Analysis Plan (SAP) prepared by Earth Tech (now AECOM) (June, 2007). At the request of the NYSDEC Project Manager, groundwater samples were collected using low flow techniques during the August 2012 sampling event; previous samples were collected using the volumetric method. 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.

NYSDEC Monitoring Well Field Inspection Logs were prepared for each well and are presented in Appendix A. Monitoring well MW-1 could not be located and according to personnel at the Site was destroyed in December 2007 during snow removal.

3.1 Groundwater Level Survey

A summary of well construction data is presented in Table 1. Prior to the start of sampling, a synoptic round of water levels was collected from the 14 monitoring wells selected for sampling. Groundwater elevation readings were recorded on the Well Sampling Forms. Well Sampling Forms are provided in Appendix B. Groundwater elevation data are presented on Table 2. A groundwater contour map was prepared for the November 5, 2013 synoptic event and is presented on Figure 3. As shown on the figure, the general direction of groundwater flow at the Site is to the south. The gradient was calculated as 0.0016, a very shallow gradient.

3.2 Groundwater Sampling

The 14 wells identified for long term monitoring at the Dzus Site are: MW-1, MW-2, MW-3, MW-9, MW-9B, MW-13A, MW-13B, MW-15A, MW-15B, MW-18, MW-22A, MW-22B, MW-23A and MW-23B. MW-1 was destroyed in 2008 and can no longer be sampled. In 2011, an attempt was made to locate MW-17, which is northeast of the Dzus facility (Figure 2), for inclusion in the long term sampling program. However, this monitoring well could not be located. As a result, 13 of the 14 existing long-term monitoring wells were sampled in November 2013.

Groundwater sampling occurred on November 5, 6, and 7, 2013. During previous sampling events, a Grundfos Redi-Flo 2 submersible pump was used to purge at least three casing volumes of water prior to sampling and samples were collected with dedicated Teflon bailers. At the request of NYSDEC, low-flow sampling techniques were utilized during the August 2012 and November 2013 sampling events. A peristaltic pump with poly tubing was used to purge each monitoring well. The flow rate was set between 200 and 400 mL per minute. At approximately five-minute intervals,

drawdown was measured. A flow cell was used to collect measurements of pH, dissolved oxygen (DO), specific conductance, oxygen reduction potential (ORP), temperature and turbidity. These readings were recorded on the Well Sampling Forms. Once the parameters had stabilized, a sample was collected directly from the discharge line. The sample was placed into laboratory supplied containers and packed in an ice-filled cooler. During this round, filtered metals samples were also collected. Groundwater samples were filtered in the field immediately upon collection using dedicated, disposable 0.45 micron Nalgene filters. Filtered groundwater was then poured into a laboratory supplied container and placed in an ice filled cooler. The samples were then transported to Spectrum Analytical (formerly Mitkem) via the laboratory's courier. Proper chain-of-custody procedures and requirements were maintained throughout the sampling event in accordance with the QAPP.

3.3 Surface Water / Sediment Sampling

Six paired surface water/sediment samples (plus a field duplicate for each matrix) were collected from Lake Capri on November 7, 2013. A small boat was used to gain access to the lake. Each surface water sample was collected by dipping laboratory-supplied bottles into the lake and then transferring the water to the laboratory supplied preserved bottles. At each surface water location, a co-located sediment sample was also collected. Sediment samples were collected using an Eckman dredge to reach the lake bottom sediments. Excess water was decanted from the sediment sample prior to placement in the sample jars. Sample forms are included in Appendix A.

4.0 Sampling Results

Groundwater, surface water, and sediment samples were analyzed for target analyte list (TAL) metals using USEPA Method 6010/7401/7471. The analyses were performed by Hampton Clarke Veritech, Fairfield, New Jersey, a NYSDOH ELAP certified laboratory (ELAP certification number 11408). As specified in the work plan, formal data validation was not performed; however, an AECOM chemist provided a limited review of the data packages. The data quality evaluation for the Round 7 data is presented in Section 4.4.

4.1 Groundwater Data

Groundwater samples were collected from 13 monitoring wells during the November 2013 sampling event (as noted earlier, well MW-1 has been destroyed). During the first four sampling events, only total metals analyses were performed on the monitoring well samples. During the May 2011, August 2012, and November 2013 sampling events, samples for both total and dissolved metals analyses were collected from each monitoring well. The laboratory data summary packages are included in Appendix C. A summary of the detections from all seven long-term sampling events is presented in Table 3. A summary of the exceedances from all seven groundwater sampling events is presented on Figure 4.

Ten metals have been detected at concentrations above their Class GA criteria at least once during the six rounds of groundwater sampling at the Site. These metals include antimony, arsenic, cadmium, chromium, iron, lead, manganese, selenium, sodium, and thallium. Out of these metals, only cadmium, chromium, iron, manganese, and sodium were detected at concentrations above Class GA criteria in November 2013.

Antimony – Class GA criterion of 3 micrograms per liter (µg/L)

June 2006 – Detected in four of 14 monitoring wells; one exceedance: 3.2 µg/L at MW-23B.

August 2007 – Detected in four of 14 monitoring wells; four exceedances: maximum 7.3 µg/L in MW-2.

November 2008 – Detected in one of 13 monitoring wells; one exceedance: 5.1 µg/L in MW-18.

March 2010 – Detected in seven of 12 monitoring wells; seven exceedances: maximum of 13 in MW-22A.

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

August 2012 – Detected in two of 13 unfiltered monitoring well samples; two exceedances: maximum of 10.7 µg/L in MW-3. Not detected in any of the 13 filtered monitoring well samples.

November 2013 – Detected in one of 13 unfiltered monitoring well samples, no exceedances. Not detected in any of the 13 filtered monitoring well samples.

Arsenic – Class GA criterion of 25 µg/L

June 2006 – Detected in nine of 14 monitoring wells; one exceedance: 32.6 µg/L in MW-9.

August 2007 – Detected in five of 14 monitoring wells; no exceedances.

November 2008 – Detected in two of 13 monitoring wells; no exceedances.

March 2010 – Detected in seven of 12 monitoring wells; no exceedances.

May 2011 – Detected in 7 of 13 unfiltered samples and 5 of 13 filtered samples. No exceedances.

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

November 2013 – Detected in one of 13 unfiltered samples, no exceedances. Not detected in any of the thirteen filtered monitoring well samples.

Cadmium – Class GA criterion of 5 µg/L

June 2006 – Detected in all 14 monitoring wells; ten exceedances: maximum of 320 µg/L at MW-23B.

August 2007 – Detected in all 14 monitoring wells; ten exceedances: maximum 702 µg/L in MW-23A.

November 2008 – Detected in all 13 monitoring wells; eight exceedances: maximum of 1,080 µg/L in MW-23A.

March 2010 – Detected in 12 of 13 monitoring wells; nine exceedances: maximum of 704 µg/L in MW-23A.

May 2011 – Detected in nine of 13 unfiltered samples; seven exceedances: maximum of 924 µg/L in MW-23A. Detected in six of 13 filtered samples; six exceedances, maximum of 13.1 µg/L in MW-3.

August 2012 – Detected in seven of 13 unfiltered samples; five exceedances: maximum of 93.5 µg/L in MW-13A. Detected in seven of 13 filtered samples; four exceedances, maximum of 64.4 µg/L in MW-13A.

November 2013 – Detected in seven of 13 unfiltered samples; six exceedances, maximum concentration of 120 µg/L in MW-13A. Detected in seven of 13 filtered samples; five exceedances, maximum concentration of 120 µg/L in MW-13A.

Chromium – Class GA criterion of 50 µg/L

June 2006 – Detected in all 14 monitoring wells; two exceedances: maximum 125 µg/L in MW-9.

August 2007 – Detected all 14 monitoring wells; one exceedance: 62.2 µg/L in MW-9.

November 2008 – Detected in five of 13 monitoring wells; no exceedances.

March 2010 – Detected in all 12 monitoring wells; two exceedances: maximum of 62.7 µg/L in MW-9.

May 2011 – Detected in 12 of 13 unfiltered samples; one exceedance in MW-9 at 85.5 µg/L. Detected in five of 13 filtered samples, no exceedances.

August 2012 – detected in ten of 13 unfiltered samples; no exceedances. Detected in eight of 13 filtered samples; no exceedances.

November 2013 – detected in one of 13 unfiltered samples; one exceedance in MW-23B at 59 µg/L. Not detected in any of the 13 filtered samples.

Iron – Class GA criterion of 300 µg/L

June 2006 – Detected in all 14 monitoring wells; 14 exceedances: maximum 70,400 µg/L in MW-22A.

August 2007 – Detected in all 14 monitoring wells; 13 exceedances: maximum of 29,700 µg/L in MW-23A.

November 2008 – Detected in 12 of 13 monitoring wells; eight exceedances: maximum of 23,300 µg/L in MW-2.

March 2010 – Detected in all 12 monitoring wells; ten exceedances: maximum of 61,100 µg/L in MW-22A.

May 2011 – detected in all 13 unfiltered samples; ten exceedances, maximum of 88,900 µg/L in MW-2. Detected in seven of 12 usable filtered samples; six exceedances, maximum of 17,600 µg/L in MW-2. Note that the reported concentration of 36,100 µg/L in MW-23B is not considered usable (see discussion in Section 4.5).

August 2012 - detected in 11 of 13 unfiltered samples; six exceedances: maximum of 3,690 µg/L in MW-13A. Detected in six of 13 filtered samples; four exceedances: maximum of 2,690 µg/L in MW-22A.

November 2013 - detected in eight of 13 unfiltered samples; eight exceedances, maximum of 7,300 µg/L in MW-13A. Detected in four of 13 filtered samples; four exceedances, maximum of 6,400 µg/L in MW-13A.

Lead – Class GA criterion of 25 µg/L

June 2006 – Detected in ten of 14 monitoring wells; one exceedance: 35.7 µg/L in MW-23B.

August 2007 – Detected in 13 of 14 monitoring wells; no exceedances.

November 2008 – Detected in eight of 13 monitoring wells; no exceedances.

March 2010 – Detected in ten of 12 monitoring wells; one exceedance: 43.9 µg/L in MW-23B.

May 2011 – Detected in five of 23 unfiltered samples, no exceedances. Detected below the criterion in one filtered sample.

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

November 2013 – detected in three of 13 unfiltered samples, no exceedances. Not detected in any of the 13 filtered monitoring well samples.

Manganese – Class GA criterion of 300 µg/L

June 2006 – Detected in all 14 monitoring wells; ten exceedances: maximum 9,560 µg/L in MW-13A.

August 2007 – Detected in all 14 monitoring wells; 11 exceedances: maximum 8,040 µg/L in MW-13A.

November 2008 – Detected in all 13 monitoring wells; seven exceedances: maximum 16,400 µg/L in MW-13A.

March 2010 – Detected in all 12 monitoring wells; nine exceedances: maximum of 33,900 µg/L in MW-13A.

May 2011 – Detected in all 13 unfiltered samples; eight exceedances, maximum of 61,600 µg/L in MW-13A. Detected in nine of 13 filtered samples; four exceedances, maximum of 1,720 µg/L in MW-13A.

August 2012 – Detected in 12 of 13 unfiltered samples; maximum of 6,190 µg/L in MW-13A. Detected in ten of 13 filtered samples; four exceedances: maximum of 3,430 µg/L in MW-13A.

November 2013 – Detected in ten of 13 unfiltered samples; maximum of 2,100 µg/L in MW-15A. Detected in eight of 13 filtered samples; four exceedances, maximum of 1,700 µg/L in MW-13A.

Selenium – Class GA criterion of 10 µg/L

June 2006 – Detected in four of 14 monitoring wells; no exceedances.

August 2007 – Detected in five of 14 monitoring wells; no exceedances.

November 2008 – Not detected in any of the 13 monitoring wells.

March 2010 – Detected in seven of 12 monitoring wells; seven exceedances: maximum 24.3 µg/L in MW-22A.

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 14 monitoring wells; eight exceedances: maximum 95,200 µg/L in MW-22A.

August 2007 – Detected in all 14 monitoring wells; ten exceedances: maximum 77,500 µg/L in MW-13A.

November 2008 – Detected in all 13 monitoring wells; five exceedances: maximum 43,900 µg/L in MW-15B.

March 2010 – Detected in all 12 monitoring wells; six exceedances: maximum 247,000 µg/L in MW-15B.

May 2011 – Detected in all 13 unfiltered samples; seven exceedances, maximum of 100,000 µg/L in MW-22A. Detected in all 13 filtered samples; seven exceedances, maximum of 134,000 µg/L in MW-22A.

August 2012 - Detected in all 13 unfiltered samples; seven exceedances, maximum of 74,100 µg/L in MW-23A. Detected in all 13 filtered samples; seven exceedances, maximum of 73,400 µg/L in MW-23A.

November 2013 - Detected in all 13 unfiltered samples; nine exceedances, maximum of 43,000 µg/L in MW-3 and MW-22A. Detected in all 13 filtered samples; eight exceedances, maximum of 45,000 µg/L in MW-3.

Thallium – Class GA criterion of 0.5 µg/L

June 2006 – Detected in eight of 14 monitoring wells. Eight exceedances: maximum 44 µg/L in MW-13A.

August 2007 – Detected in four of 14 monitoring wells. Four exceedances: maximum 6.3 µg/L in MW-2.

November 2008 – Detected in one of 13 monitoring wells. One exceedance: 11.7 µg/L in MW-13.

March 2010 – Detected in five of 12 monitoring wells. Five exceedances: maximum 88.2 µg/L in MW-13A.

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

August 2012 – Detected in one of 13 unfiltered samples. One exceedance: 9.2 µg/L in MW-13A. Not detected in any of the 13 filtered samples.

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

4.2 Filtered versus Unfiltered Metals Groundwater Samples

Concentrations of total metals in groundwater samples at the Site tended to be highly variable between 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, both total metals (unfiltered) and dissolved metals (field filtered) groundwater samples were collected during this sampling event to evaluate the effect of turbidity on the metals concentrations.

The NYSDEC criterion for filtering groundwater samples is provided in DER-10 Section 2.1(g). At the Dzus Fasteners Site, the turbidity was below 50 nephelometric units (NTU) at the time of sampling in all 13 samples (Table 4). The turbidity was zero NTUs in eight samples and between 27.6 and 41.2 NTUs in the other five.

Table 4 presents a comparison of the total metals and the dissolved metals data for the 13 filtered/unfiltered sample pairs collected at the Dzus Fasteners Site. The “percent dissolved” shown on the table is the ratio of the filtered sample concentration to the total (unfiltered) sample concentration. Where a metal was not detected in the filtered sample, no calculation was made.

It was expected that the concentrations of total metals that are highly associated with particles (e.g., aluminum) would tend to be higher in the more turbid samples. However, there was no clear relationship between turbidity (ranging from 0 to 41.25 NTUs) and total metals concentrations, likely due to the relatively low turbidities (i.e., less than 50 NTUs). Aluminum, which is strongly associated with particles, was not detected in any of the filtered samples, while it was detected in five of the unfiltered samples. Iron and cadmium, which can be found as either dissolved or bound to particles, were to varying degrees found to be either about equal in filtered/unfiltered pairs, or lower in the filtered samples.

As expected, concentrations of metals that typically exist primarily in the dissolved phase (sodium, potassium, and calcium) were generally similar in the filtered and unfiltered samples, regardless of the sample turbidity.

4.3 Surface Water Samples

Five surface water samples were collected from Lake Capri and Willetts Creek at the locations shown on Figure 2. The SW-6 Willetts Creek sampling location was dry during the November 2013 sampling event; consequently, a surface water sample was not collected. A summary of the detections is presented in Table 5. The results were compared to the NYSDEC Class A surface water criteria. The full laboratory data packages for the November 2013 sampling event are included in presented in Appendix C. A summary of the exceedances is presented on Figure 5. Detections and criteria exceedances for the seven sampling events are summarized below. During the November 2013 sampling, iron, manganese and sodium exceeded surface water criteria at all sampling locations.

Surface water sample SW-1 was collected on the north end of Lake Capri near the mouth of Willetts Creek. Four metals, including antimony, iron, manganese and sodium, were detected at concentrations above the Class A criteria during at least one of the seven sampling events.

- Antimony was only detected in the Round 3 sample at a concentration of 6 µg/L, which exceeded the Class A criterion of 3 µg/L.
- Iron was detected in all seven samples at concentrations ranging from 172 µg/L to 1,100 µg/L, six of which exceeded the Class A criterion of 300 µg/L.
- Manganese was detected in all seven samples at concentrations ranging from 552 µg/L to 1,700 µg/L, all of which exceeded the criterion of 300 µg/L.
- Sodium was detected in all seven samples at concentrations ranging from 15,800 µg/L to 25,000 µg/L, three of which exceeded the Class A criterion of 20,000 µg/L).
- **November 2013 sampling event: exceedances of iron (1,100 µg/L), manganese (1,700 µg/L), and sodium 25,000 µg/L.**

Surface water sample SW-2 was collected on the north end of Lake Capri near the mouth of Willetts Creek (south of SW-1). Five metals, including antimony, iron, manganese, sodium and thallium, were

detected at concentrations above the Class A criteria during at least one of the seven sampling events.

- Antimony was detected during Rounds 4 and 7 at concentrations of 5.7 µg/L and an estimated 0.58 µg/L, one of which exceeded the Class A criterion of 3 µg/L.
- Iron was detected in all seven samples at concentrations ranging from 176 µg/L to 819 µg/L, six of which exceeded the Class A criterion of 300 µg/L.
- Manganese was detected in all seven samples at concentrations ranging from 564 µg/L to 1,560 µg/L, all of which exceeded the criterion of 300 µg/L.
- Sodium was detected in all seven samples at concentrations ranging from 16,200 µg/L to 23,800 µg/L, three of which exceeded the Class A criterion of 20,000 µg/L.
- Thallium was detected during Rounds 4 and 7 at concentrations of 7.2 µg/L and an estimated 0.74 µg/L, both of which exceeded the criterion of 0.5 µg/L.
- **November 2013 sampling event: exceedances of iron (680 µg/L), manganese (1,300 µg/L), sodium (21,000 µg/L), and thallium (0.74 µg/L).**

Surface water sample SW-3 was collected on the south end of Lake Capri just west of the spillway. Five metals, including antimony, iron, manganese, sodium and thallium were detected at concentrations above the Class A criteria during at least one of the seven sampling events.

- Antimony was only detected during Round 4 at a concentration 7.2 µg/L which exceeded the criterion of 3 µg/L.
- Iron was detected in all seven samples at concentrations ranging from 144 µg/L to 788 µg/L, five of which exceeded the criterion of 300 µg/L.
- Manganese was detected in all seven samples at concentrations ranging from 73.9 µg/L to 1,790 µg/L, six of which (all except Round 2) exceed the criterion of 300 µg/L.
- Sodium was detected during all seven sampling events at concentrations ranging from 17,700 µg/L to 23,500 µg/L, three of which exceeded the criterion of 20,000 µg/L).
- Thallium was only detected during Round 4 at a concentration of 5.9 µg/L which exceeded the criterion of 0.5 µg/L.
- **November 2013 sampling event: exceedances of iron (590 µg/L), manganese (940 µg/L) and sodium (23,000 µg/L).**

Surface water sample SW-4 was collected on the south end of Lake Capri just east of the spillway. Three metals, including iron, manganese and sodium were detected at concentrations above the Class A criteria during at least one of the seven sampling events.

- Iron was detected in all seven samples at concentrations ranging from 152 µg/L to 741 µg/L, six of which (all except Round 6) exceeded the 300 µg/L criterion.
- Manganese was detected in all seven samples at concentrations ranging from 135 µg/L to 1,630 µg/L, six of which (all except Round 2) exceeded the 300 µg/L criterion.

- Sodium was detected in all seven samples at concentrations ranging from 16,600 µg/L to 23,900 µg/L, three of which exceeded the criterion of 20,000 µg/L).
- **November 2013 sampling event: exceedances of iron (450 µg/L), manganese (910 µg/L) and sodium (22,000 µg/L).**

Surface water sample SW-5 was collected from Willetts Creek just north of the footbridge behind the middle school. Five metals, including antimony, cadmium, iron, manganese and sodium were detected at concentrations above the Class A criteria during at least one of the seven sampling events.

- Antimony was detected during Rounds 1, 2 and 7 at concentrations of 1.5 µg/L, 4.4 µg/L, and 0.54 µg/L but only the Round 2 concentration exceeded the Class A criterion of 3 µg/L.
- Cadmium was detected in all seven samples at concentrations ranging from 3 µg/L to 15 µg/L, five of which (all except Round 3 and 6) exceeded the Class A criterion of 5 µg/L.
- Iron was detected above the Class A criterion of 300 µg/L during all seven sampling events at concentrations ranging from 599 µg/L to 14,000 µg/L.
- Manganese was detected above the Class A criterion of 300 µg/L during all seven sampling events at concentrations ranging from 450 µg/L to 3,000 µg/L.
- Sodium was detected during all seven sampling events at concentrations ranging from 18,100 µg/L to 28,100 µg/L, six of which (all except Round 3) exceeded the Class A criterion of 20,000 µg/L.
- **November 2013 sampling event: exceedances of cadmium (15 µg/L), iron (14,000 µg/L), manganese (3,000 µg/L), and sodium (22,000 µg/L).**

Surface water sample SW-6 was not collected during the November 2013 sampling event as the location in Willetts Creek was dry at the time of sampling. The sampling is usually collected from Willetts Creek just south of the Blockbuster Video store in the small shopping center. Six metals, including antimony, cadmium, iron, manganese, selenium and sodium, were detected at concentrations above the Class A criteria during at least one of the seven sampling events.

- Antimony was only detected during Round 2 at a concentration of 8 µg/L which exceeded the Class A criterion of 3 µg/L.
- Cadmium was detected during the first three sampling rounds but only exceeded the Class A criterion of 5 µg/L criterion during the Round 3 sampling event at a concentration of 75.4 µg/L.
- Iron (Class A criterion of 300 µg/L) was detected above the criterion during all six sampling events at concentrations ranging from 639 µg/L to 6,840 µg/L.
- Manganese (Class A criterion of 300 µg/L) was detected above the criterion during all six sampling events at concentrations ranging from 406 µg/L to 2,610 µg/L.
- Selenium was only detected during Round 4 at a concentration of 10.5 µg/L, which exceeded the Class A criterion of 10 µg/L.

- Sodium (Class A criterion of 20,000) was detected above the criterion during all six sampling events at concentrations ranging from 20,500 µg/L, 33,800 µg/L.
- **November 2013 sampling event: no sample collected.**

4.4 Sediment Samples

Six co-located sediment samples were collected at the same locations as the surface water samples as shown on Figure 2. The data presented in Table 6 were compared to the NYSDEC Technical Guidance for Sediment Criteria lowest effects values. The laboratory data summary packages are also included in Appendix C. A summary of the exceedances is presented on Figure 6.

Sample SED-1 was collected on the north end of Lake Capri near the mouth of Willetts Creek. Twelve metals, including antimony, arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, silver and zinc, were detected at concentrations above the lowest effects guidance values.

- Antimony was detected during four of seven sampling events, and the Round 3 (2.2 mg/kg) and Round 4 (6.4 mg/kg) concentrations exceeded the guidance value of 2 mg/kg.
- Arsenic was detected during six of seven sampling events at concentrations ranging from 1.5 mg/kg to 18.1 mg/kg, five of which (all except Round 2) exceeded the guidance value of 6.0 mg/kg.
- Cadmium exceeded the guidance value of 0.6 mg/kg during all seven sampling events at concentrations ranging from 11.6 mg/kg to 89.8 mg/kg.
- Chromium was detected during six of seven sampling events at concentrations ranging from 2.8 mg/kg to 57.4 mg/kg, four of which exceeded the guidance value of 26 mg/kg.
- Copper was detected above the guidance value of 16 mg/kg during all seven sampling events at concentrations ranging from 38.6 mg/kg to 144 mg/kg.
- Iron was detected during all seven sampling events at concentrations ranging from 3,880 mg/kg to 44,600 mg/kg, three of which exceeded the guidance value of 20,000 mg/kg.
- Lead was detected during all seven sampling events at concentrations ranging from 19.3 mg/kg to 289 mg/kg, six of which (all except Round 2) exceeded the guidance value of 31 mg/kg.
- Manganese was detected during all seven sampling events at concentrations ranging from 181 mg/kg to 22,600 mg/kg, six of which (all except Round 3) exceeded the guidance value of 460 mg/kg.
- Mercury was detected during six of seven sampling events at concentrations ranging from 0.0071 mg/kg to 0.52 mg/kg, five of which (all except Round 2) exceeded the guidance value of 0.15 mg/kg).
- Nickel was detected during six of seven sampling events at concentrations ranging from 3 mg/kg to 27.3 mg/kg, four of which exceeded the guidance value of 16 mg/kg.

- Silver was only detected during the Round 5 sampling event at a concentration of 2.7 mg/kg, which exceeded the criterion of 1.0 mg/kg.
- Zinc was detected during all seven sampling events at concentrations ranging from 71.6 mg/kg to 642 mg/kg, six of which (all except Round 2) exceeded the guidance value of 120 mg/kg.
- **November 2013 sampling event: exceedances of cadmium (63 mg/kg), copper (61 mg/kg), lead (110 mg/kg), manganese (3,600 mg/kg), and zinc (210 mg/kg).**

Sample SED-2 was collected on the north end of Lake Capri near the mouth of Willetts Creek, just south of SED-1. Ten metals, including arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, and zinc, were detected at concentrations above the guidance values at least once during the seven sampling events.

- Arsenic was detected during six of seven sampling events at concentrations ranging from 1.8 mg/kg to 20.2 mg/kg, four of which exceeded the guidance value of 6 mg/kg.
- Cadmium was detected above the guidance value of 0.6 mg/kg during all seven sampling events at concentrations ranging from 12.5 mg/kg to 133 mg/kg.
- Chromium was detected during all seven sampling events at concentrations ranging from 6.5 mg/kg to 49.4 mg/kg, five of which exceeded the guidance value of 26 mg/kg.
- Copper was detected during all seven sampling events at concentrations ranging from 15.6 mg/kg to 210 mg/kg, six of which exceeded the guidance value of 16 mg/kg.
- Iron was detected during all seven sampling events at concentrations ranging from 3,850 mg/kg to 42,000 mg/kg, four of which exceeded the guidance value of 20,000 mg/kg.
- Lead was detected during all seven sampling events at concentrations ranging from 25.8 mg/kg to 408 mg/kg, six of which (all except Round 3) exceeded the guidance value of 31 mg/kg.
- Manganese was detected during all seven sampling events at concentrations ranging from 153 mg/kg to 6,800 mg/kg, six of which (all except Round 1) exceeded the guidance value of 460 mg/kg.
- Mercury was detected during six of seven sampling events at concentrations ranging from 0.18 mg/kg to 0.5 mg/kg, four of which exceeded the guidance value of 0.15 mg/kg.
- Nickel was detected during six of seven sampling events at concentrations ranging from 3.2 mg/kg to 22 mg/kg, four of which exceeded the guidance value of 16 mg/kg.
- Zinc was detected during all seven sampling events at concentrations ranging from 67.9 mg/kg to 550 mg/kg, six of which exceeded the guidance value of 120 mg/kg.
- **November 2013 sampling event: exceedances of cadmium (96 mg/kg), chromium (45 mg/kg), copper (130 mg/kg), iron (42,000 mg/kg), lead (280 mg/kg), manganese (6,800 mg/kg), and zinc (550 mg/kg).**

Sample SED-3 was collected on the south end of Lake Capri just west of the spillway. Five metals have been detected above the guidance values including cadmium, copper, lead, manganese and zinc at least once during the seven sampling events.

- Cadmium was detected above the guidance value of 0.6 mg/kg during all seven sampling events at concentrations ranging from 1.5 mg/kg to 53.0 mg/kg.
- Copper was detected during all seven sampling events at concentrations ranging from 2.7 mg/kg to 57.0 mg/kg, four of which exceeded the guidance value of 16 mg/kg.
- Lead was detected during all seven sampling events at concentrations ranging from 9.2 mg/kg to 130 mg/kg, five of which exceeded the guidance value of 31 mg/kg.
- Manganese was detected during all seven sampling events at concentrations ranging from 89.9 mg/kg to 1,600 mg/kg, four of which exceeded the guidance value of 460 mg/kg.
- Zinc was detected in all seven sampling events at concentrations ranging from 10 mg/kg to 220 mg/kg, one of which exceeded the guidance value of 120 mg/kg.
- **November 2013 sampling event: exceedances of cadmium (53 mg/kg), copper (57 mg/kg), lead (130 mg/kg), manganese (1,600 mg/kg), and zinc (220 mg/kg).**

Sample SED-4 was collected on the south end of Lake Capri just east of the spillway. Ten metals were detected at concentrations that exceed the guidance values including arsenic, cadmium, chromium, copper, lead, manganese, mercury, nickel, silver, and zinc at least once during the seven sampling events.

- Arsenic was detected in six of seven sampling events at concentrations ranging from 1.9 µg/L to 6.2 µg/L, one of which exceeded the guidance value of 6 µg/L.
- Cadmium was detected above the guidance value of 0.6 mg/kg during all seven sampling events at concentrations ranging from 14.8 mg/kg to 98.0 mg/kg.
- Chromium was detected in all seven sampling events at concentrations ranging from 6.8 µg/L to 47.0 µg/L, two of which exceeded the guidance value of 26 µg/L.
- Copper was detected above the guidance value of 16 mg/kg during all seven sampling events at concentrations ranging from 17.1 mg/kg to 140 mg/kg.
- Lead was detected above the guidance value of 31 mg/kg during all seven sampling events at concentrations ranging from 60.6 to 310 mg/kg.
- Manganese was detected during all seven sampling events at concentrations ranging from 272 mg/kg to 11,700 mg/kg, six of which (all except Round 4) exceeded the guidance value of 460 mg/kg.
- Mercury was detected in six of seven sampling events at concentrations of 0.21 mg/kg and 0.39 mg/kg, three of which exceeded the guidance value of 0.15 µg/L.
- Silver was only detected during Round 3 at a concentration of 1.1 mg/kg which exceeded the guidance value of 1 mg/kg.

- Zinc was detected during all seven sampling events at concentrations ranging from 71.3 mg/kg to 330 mg/kg, five of which exceeded the guidance value of 120 mg/kg.
- **November 2013 sampling event: exceedances of cadmium (98 mg/kg), chromium (47 mg/kg), copper (140 mg/kg), lead (310 mg/kg), manganese (2,300 mg/kg), and zinc (330 mg/kg).**

Sample SED-5 was collected from Willetts Creek approximately 30 feet north of the footbridge behind the middle school. Ten metals have been detected above the guidance values at this location, including arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, and zinc at least once during the seven sampling events.

- Arsenic was detected during six of seven sampling events at concentrations ranging from 0.52 mg/kg to 9.3 mg/kg, three of which exceeded the guidance value of 6 mg/kg.
- Cadmium was detected during all seven sampling events at concentrations ranging from 0.43 mg/kg to 73.5 mg/kg, six of which (all except Round 1) exceeded the guidance value of 0.6 mg/kg.
- Chromium was detected in six of seven sampling events at concentrations ranging from 2.7 to 44 mg/kg, but only exceeded the guidance value of 26 mg/kg during Rounds 3 and 5 at concentrations of 33.3 mg/kg and 44 mg/kg.
- Copper was detected during all seven sampling events at concentrations ranging from 4.7 mg/kg to 166 mg/kg, four of which exceeded the guidance value of 16 mg/kg.
- Iron was detected during all seven sampling events at concentrations ranging from 3,400 mg/kg to 39,900 mg/kg, three of which exceeded the guidance value of 20,000 mg/kg.
- Lead was detected during all seven sampling events at concentrations ranging from 4.9 mg/kg to 229 mg/kg, four of which exceeded the guidance value of 31 mg/kg.
- Manganese was detected during all seven sampling events at concentrations ranging from 174 mg/kg to 3,750 mg/kg, four of which exceeded the guidance value of 460 mg/kg.
- Mercury was detected in six of seven sampling events at concentrations ranging from 0.0055 mg/kg to 0.48 mg/kg, three of which exceeded the guidance value of 0.15 mg/kg.
- Nickel was detected in six of seven sampling events at concentrations ranging from 1.0 mg/kg to 22.5 mg/kg but only exceeded the guidance value of 16 mg/kg during Rounds 3 and 5 at concentrations of 19.2 mg/kg and 22.5 mg/kg.
- Zinc was detected during all seven sampling events at concentrations ranging from 13.2 mg/kg to 440 mg/kg, three of which exceeded the guidance value of 120 mg/kg.
- **November 2013 sampling event: exceedances of cadmium(7.1 mg/kg), copper (42 mg/kg), lead (37 mg/kg), manganese (610 mg/kg).**

Sample SED-6 was collected from Willetts Creek just south of the Blockbuster Video store in the small shopping center. Eleven metals were detected above the guidance values at this location, including

antimony, arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel and zinc at least once during the seven sampling events.

- Antimony was detected in five of seven sampling events at concentrations ranging from 0.076 mg/kg to 2.6 mg/kg but only exceeded the guidance value of 2 mg/kg during Round 3 at a concentration of 2.6 mg/kg.
- Arsenic was detected in six of seven sampling events at concentrations ranging from 0.79 mg/kg to 6.4 mg/kg but only exceeded the guidance value of 6 mg/kg during Round 3 at a concentration of 6.4 mg/kg.
- Cadmium was detected during five of the seven sampling events at concentrations ranging from not detected to 101 mg/kg but only exceeded the guidance value of 0.6 mg/kg during Round 3 at a concentration of 101 mg/kg.
- Chromium was detected in six of seven sampling events at concentrations ranging from 2.4 mg/kg to 41.8 mg/kg but only exceeded the guidance value of 26 during Round 3 at a concentration of 41.8 mg/kg.
- Copper was detected during all seven sampling events at concentrations ranging from 6.3 mg/kg to 77.3 mg/kg, three of which exceeded the guidance value of 16 mg/kg.
- Iron was detected during all seven sampling events at concentrations ranging from 2,120 to 36,900 mg/kg, three of which exceeded the guidance value of 20,000 mg/kg.
- Lead was detected during all seven sampling events at concentrations ranging from 7.9 mg/kg to 109 mg/kg, three of which exceeded the guidance value of 31 mg/kg.
- Manganese was detected during all seven sampling events at concentrations ranging from 16.2 to 978 mg/kg, two of which exceeded the guidance value of 460 mg/kg.
- Mercury was detected in four of the seven sampling events. Three samples were less than the guidance value and the Round 3 sample equaled the guidance value of 0.15 mg/kg.
- Nickel was detected in six of seven sampling events at concentrations ranging from 1.8 mg/kg to 17.2 mg/kg, but only exceeded the guidance value of 16 mg/kg during Round 3 at a concentration of 17.2 mg/kg.
- Zinc was detected during all seven sampling events at concentrations ranging from 17.2 mg/kg to 409 mg/kg, but only exceeded the guidance value of 120 mg/kg during Round 3 at a concentration of 409 mg/kg.
- **November 2013 sampling event: exceedances of iron (27,000 mg/kg), lead (88 mg/kg), and manganese (610 mg/kg).**

4.5 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.

Groundwater

Filtered and unfiltered groundwater samples were collected from 13 monitoring wells on November 6 and 7, 2013 and received in good condition by the laboratory (Hampton Clarke Veritech, Fairfield, NJ) on November 8, 2013, although the laboratory noted that there were no custody seals on the cooler.

Samples were analyzed for target analyte list (TAL) metals as sample delivery group AC75646. Samples MW-15B (filtered) and (unfiltered) were designated as the QC samples (spike and duplicate analysis). Laboratory QC limits were met for holding times, initial and continuing calibrations, blanks, laboratory control sample (LCS) recovery, laboratory spike recovery, and laboratory duplicate recovery. The serial dilutions were outside of QC limits for some calcium, magnesium, and manganese, suggesting matrix inference for those metals.

One filtered/unfiltered site-specific field duplicate groundwater sample pair (MW-2U and 2F/MW-52U and 52F) was collected from the Dzus site in Round 7. Precision for the field duplicates is presented in Table 7. In the unfiltered sample pair (9U/59U), relative percent difference (RPD) ranged from 0.0 to 8.3 percent for calcium, manganese, and sodium, but was 74.6 percent for iron which was detected at very high levels. Precision for the filtered duplicate pair (9F/59F) had a RPD for sodium of 6.2 percent, and RPDs for calcium, cobalt, iron, and manganese, all greater than 20 percent with iron at 107 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 (i.e., the data would be flagged “J”, for estimated), and if the filtered sample result exceeds the unfiltered sample result by more than 50 percent, the data may be unusable (flagged “R”, rejected). There were no exceedances of the 20 percent threshold.

Surface Water

Surface water samples were collected from five locations (co-located with sediment samples, discussed below) on November 8, 2013 and received in good condition by the laboratory (Hampton Clarke Veritech, Fairfield, NJ) on November 11, 2013.

Surface water samples were analyzed for TAL metals as sample delivery group AC75648. Sample SW-2 was designated as the QC samples (spike and duplicate analysis). Laboratory QC limits were met for holding times, initial and continuing calibrations, blanks, LCS recovery, and laboratory spike recovery. The serial dilutions for calcium and magnesium were outside the QC limits suggesting

matrix interference. The RPDs for the method replicate for arsenic, lead, and cadmium were outside control limits, but RPDs for other duplicates (e.g., LCS) were acceptable.

One site-specific field duplicate pair (SW-4 and SWZZ) was collected in Round 7. Precision for the field duplicate (see Table 8) had RPDs ranging from 0.8 to 85.7 percent for the 8 detected metals. Several of these were at or below the reporting limit, although iron at 83.9 percent and manganese at 55 percent were detected at well above the reporting limits.

Sediment

Sediment samples were collected from six locations (co-located with surface water samples, discussed above) on November 8, 2013 and received in good condition by the laboratory (Hampton Clarke Veritech, Fairfield, NJ) on November 11, 2013.

Sediment samples were analyzed for TAL metals as sample delivery group AC75648. Sample SED-2 was designated as the QC samples (spike and duplicate analysis). Laboratory QC limits were met for holding times, initial and continuing calibrations, blanks, and LCS recovery. The matrix spike duplicate had recoveries outside limits for aluminum, cadmium, and antimony, although the matrix spike only had exceedances for antimony, and other spikes (e.g., LCS) were within limits. The RPD between the MS/MSD for calcium and lead were outside of limits.

One site-specific field duplicate pair (SED-6 and SED XZ) was collected in Round 7. Precision for that sample pair (see Table 9) had RPDs ranging from 2 to 29.6 percent. Six of the 9 detected metals were above 20 percent RPD.

Overall Round 6 Data Quality Assessment

Field and laboratory-reported QC associated with the two Dzus sample delivery groups (SDGs) (AC75648 for surface water/sediment, and AC75646 for groundwater) was acceptable for the groundwater and surface water samples. Laboratory QC was acceptable for the sediment samples. Data quality was acceptable and the data are considered usable for their intended purpose.

5.0 Summary and Recommendations for Future Site Remediation Activities

5.1 Groundwater

The first four sampling events collected only unfiltered groundwater samples. During the Round 5, 6 and 7 sampling events, both unfiltered and field filtered samples were collected to determine the percentage of each dissolved metals compared to the total metals.

Cadmium has been detected in the majority of unfiltered samples collected during the seven sampling events with exceedances of New York Class GA Groundwater criteria noted in 11 samples during Round 1, ten samples during Round 2, eight samples during Round 3, nine samples in Round 4, seven unfiltered samples during Round 5, five unfiltered samples in Round 6, and six unfiltered samples in Round 7. Six filtered samples exceeded the criteria during Round 5, with the highest concentration at 13.3 µg/L (criterion is 5 µg/L). Four filtered samples exceeded the criterion in Round 6, with the highest concentration noted at MW-13A (64.4 µg/L). Five filtered samples exceeded the criterion during Round 7, with the highest concentration noted at MW-13A (120 µg/L). The majority of the exceedances are concentrated along the eastern side of the Site in wells MW-3, MW-9, MW-13A, MW-15A, MW-22A, MW-23A, and MW-23B. The majority of the samples (both unfiltered and filtered) collected from these seven wells during the previous seven sampling events have exceeded the criterion as shown on Figure 7.

During Round 5, six samples had concentrations of cadmium in both the filtered and unfiltered samples allowing for a comparison of the results. The percent dissolved phase ranged from 1 percent to 50.8 percent. Filtering only changed one result from exceeding the 5 µg/L criterion to less than the criterion. However, the degree of exceedance is significantly lower in the filtered samples, as the filtered sample concentrations exceeding the criterion ranged from 6 to 1 µg/L in the filtered samples. During Round 6, the percent dissolved phase ranged from 10.4 percent to 92.6 percent. Filtering changed one result from exceeding to less than the criterion. During Round 7, the percent dissolved phase ranged from 12.2 to 108.3 percent in the seven samples with concentrations in both the unfiltered and filtered samples. Filtering changed one result from exceeding to less than the criterion.

Chromium has been detected in the majority of samples collected at the Site during the seven sampling rounds but has only exceeded the 50 µg/L criterion in two wells, MW-9 (four of seven samples) and MW-23B (three of seven samples). Based on three sets of filtered versus unfiltered data, the percent dissolved in MW-9 was 3.4, 89.8 percent (ND during Round 7) and in MW-23B was 67.5 and 72.9 percent (ND for filtered sample in Round 7).

Concentrations of iron, manganese, and sodium have exceeded the criterion in numerous wells but these compounds are typically found in groundwater on Long Island and are most likely representative of background conditions and not Site-related. There have been sporadic exceedances of antimony, arsenic, lead, selenium and thallium but the concentrations and locations of the exceedances have not been replicated during the six sampling events and are most likely a result of entrained sediment in the samples and are not representative of the dissolved groundwater concentrations. The Round 5, 6 and 7 filtered sample data suggest that field-measured turbidity is not a good predictor of the fraction of metals detected in a sample which are in the dissolved phase in a sample (i.e., concentration detected in the filtered sample).

The only metal of concern found consistently in off-site wells above the Class GA criteria is cadmium. Dissolved concentrations in off-site wells ranged from 9.7 µg/L at MW-15A (200 ft south of the Site) to 3.3 µg/L in shallow well MW-23A and 33.1 µg/L in deep well MW-23B (approximately 1,200 ft south of the Site). An isoconcentration map of the dissolved cadmium groundwater values from the November 2013 sampling event is shown on Figure 8.

5.2 Surface Water

Seven metals have been detected at concentrations above their Class A Surface Water criteria including antimony, cadmium, iron, manganese, selenium, sodium and thallium.

Antimony has been sporadically detected during the seven sampling events in five of six surface water samples, with most detections exceeding the 3 µg/L criterion. However, the exceedances have not been duplicated in any sample. Antimony concentrations do not appear to be Site related.

Cadmium was detected in three of six sampling events in Willetts Creek sample SW-6. However, the only exceedance was during Round 3, which was anomalously high at 75.4 µg/L. Cadmium was not detected during Rounds 4, 5 and 6 and the location was dry during Round 7. Cadmium was detected in all seven samples from Willetts Creek sample SED-5, six of which exceeded the criterion. Cadmium was detected in all seven rounds in Willetts Creek sample SW-5 and slightly exceeded the criterion in five samples. The highest concentration detected was 15 µg/L during Round 7. As noted in Section 4.4, cadmium is present in the co-located sediment samples at SW-5 (7.1 µg/L, above the 5 µg/L criterion) and SED-5 (exceedance at 15 mg/kg). It is possible that the cadmium in surface water samples is a result of sediment leaching and not a result of contaminants migrating off-site from the Dzus facility. Cadmium concentrations did not exceed the criterion in any of the four Lake Capri surface water samples during the seven sampling events; however, the sediment samples all exceeded the criterion.

With a few exceptions, iron and manganese were detected in all seven surface water samples above the criterion during all seven sampling events. This is most likely a result of natural conditions in Willetts Creek and not Site related.

During the seven sampling rounds, selenium has been detected twice in two surface water samples with one exceedance. The selenium concentration in Willetts Creek surface water sample SW-6 slightly exceeded the criterion during Round 4.

Sodium concentrations have exceeded the criterion in the two Willetts Creek samples (SW-5 and SW-6) in the majority of the samples. Sodium concentrations in the four Lake Capri samples were below the criterion during rounds 1, 2, 3 and 5 but all four exceeded the criterion during Rounds 4, 6 and 7.

5.3 Sediments

The sediment sample data indicate that the surficial sediments in Lake Capri and Willetts Creek remain contaminated with metals concentrations above the applicable NYSDEC Technical Guidance for Sediment Criteria. Cadmium has been detected above the lowest effects criterion in 35 of 49 samples collected during the seven rounds of sampling and above the highest effects level in 30 of 49 samples as shown on Figure 9. The four lake samples indicate that cadmium is still a contaminant of concern for the lake bottom sediments. The lower Willetts Creek sample (SED-5) indicates that cadmium contamination is still present in the lower reach of the creek. The sediment sample nearest the Site, SED-6, has mostly been below the guidance values.

Copper has been detected above the lowest effects criterion in 31 of 49 samples collected. Of these, eight were above the highest effects level. Copper results are shown on Figure 10. The highest concentrations appear to be along the southern end of the lake (SED-1 and SED-2).

Lead has been detected above the lowest effects criterion in 31 of 49 samples collected as shown on Figure 11. Of these, 15 were above the highest effects level. The highest concentrations appear to be along the southern end of the lake (SED-1 and SED-2).

Several other metals including antimony, arsenic, chromium, iron, manganese, mercury, nickel, and zinc, have been detected sporadically at concentrations exceeding the criteria during the seven sampling events.

Sediment sampling in Willetts Creek and Lake Capri indicated the presence of elevated levels of cadmium in sediment. In order to establish whether previous remedial dredging operations were successful, the creek and lake were re-sampled in April 2013. The entire length of Willetts Creek from Union Boulevard to Lake Capri was surveyed. Sediment samples were collected approximately every 100 ft to assess cadmium concentrations in the creek. Five east-west transects were established in Lake Capri to collect samples to assess cadmium concentrations in the lake sediment. The transects were positioned evenly between the weir on Sunset Boulevard and the mouth of Willetts Creek. Five samples were collected along each transect.

Based on the April 2013 sediment results, additional samples were collected in Willetts Creek in November 2013. Sixteen transects were sampled adjacent to the high school athletics fields. The results of the sediment sampling in Willetts Creek will be summarized in a separate report.

5.4 Recommendations

Upgradient monitoring well MW-17 could not be located by the field crew during the May 2011 sampling event. Additional effort is needed to locate this well and access it for sampling or to properly abandon it. MW-1 should also be properly abandoned and replaced with a new monitoring well.

The collection of filtered metals samples can be discontinued for the next sampling round.

Incorporate the findings of the Willetts Creek sediment sampling into the long term monitoring program. Select new sampling locations in Willetts Creek and Lake Capri for long term monitoring.

The next five-quarter sampling event is scheduled for February 2015.

Tables

TABLE 1
DZUS FASTENERS SITE (1-52-033)
WELL CONSTRUCTION DATA

Well Number	Latitude	Longitude	Ground Elevation	Top of Riser Elevation	Top of Casing Elevation	Total Depth of Well
MW-1	40° 42.49	73° 18.10	22.44	22.03	22.44	15.3
MW-2	40° 42.45	73° 18.10	22.16	21.42	22.16	14.3
MW-3	40° 42.49	73° 18.02	20.23	19.71	20.23	15.0
MW-9	40° 42.50	73° 18.02	19.14	18.83	19.14	11.5
MW-9B	40° 42.49	73° 18.01	19.08	18.75	19.08	44.5
MW-13A	40° 42.44	73° 17.100	16.34	16.02	16.34	10.7
MW-13B	40° 42.43	73° 17.99	16.14	15.82	16.14	44.3
MW-15A	40° 42.49	73° 17.97	19.45	19.09	19.45	28.8
MW-15B	40° 42.50	73° 17.96	19.35	19.06	19.35	84.7
MW-17						
MW-18			14.69	14.31	14.66	13.5
MW-22A	40° 42.491	73° 17.941	20.49	20.09	20.49	14.4
MW-22B	40° 42.491	73° 17.941	20.35	19.95	20.35	44.5
MW-23A	40° 42.402	73° 17.991	17.57	17.34	17.57	14.3
MW-23B	40° 42.403	73° 17.987	17.54	17.29	17.54	44.5

Notes:

All elevations and depths are in feet

Vertical datum: on-site benchmark from previous survey.

Latitude / Longitude taken from a previous report

Survey performed by YEC, Inc., on April 18, 2007

TABLE 2
DZUS FASTENERS SITE (1-52-033)
GROUNDWATER ELEVATIONS

Well #	Reference Elevation	Date	Depth To Water	Water Table Elevation	Comments
MW-1	22.03	6/8/06	8.00	14.03	could not be located, damaged during snow removal
		8/22/07	8.62	13.41	
		11/11/08	NC		
		3/10/10	NC		
		5/25/11	NC		
		8/22/12	NC		
		11/5/13	NC		
MW-2	21.42	6/8/06	8.15	13.27	
		8/22/07	8.50	12.92	
		11/11/08	8.30	13.12	
		3/10/10	7.43	13.99	
		5/25/11	7.77	13.65	
		8/22/12	8.33	13.09	
		11/5/13	9.66	11.76	
MW-3	19.71	6/8/06	5.77	13.94	
		8/22/07	6.30	13.41	
		11/11/08	6.25	13.46	
		3/10/10	5.36	14.35	
		5/25/11	5.62	14.09	
		8/22/12	6.23	13.48	
		11/5/13	7.53	12.18	
MW-9	18.83	6/8/06	4.59	14.24	
		8/22/07	5.15	13.68	
		11/11/08	5.01	13.82	
		3/10/10	4.19	14.64	
		5/25/11	4.45	14.38	
		8/22/12	5.05	13.78	
		11/5/13	6.50	12.33	
MW-9B	18.75	6/8/06	4.50	14.25	
		8/22/07	5.05	13.70	
		11/11/08	4.93	13.82	
		3/10/10	4.11	14.64	
		5/25/11	4.36	14.39	
		8/22/12	5.00	13.75	
		11/5/13	5.52	13.23	
MW-13A	16.02	6/8/06	2.59	13.43	
		8/22/07	3.02	13.00	
		11/11/08	2.90	13.12	
		3/10/10	2.27	13.75	
		5/25/11	2.51	13.51	
		8/22/12	2.93	13.09	
		11/5/13	4.41	11.61	

TABLE 2
DZUS FASTENERS SITE (1-52-033)
GROUNDWATER ELEVATIONS

Well #	Reference Elevation	Date	Depth To Water	Water Table Elevation	Comments
MW-13B	15.82	6/8/06	2.39	13.43	
		8/22/07	2.85	12.97	
		11/11/08	2.69	13.13	
		3/10/10	2.08	13.74	
		5/25/11	2.32	13.50	
		8/22/12	2.77	13.05	
		11/5/13	4.35	11.47	
MW-15A	19.09	6/7/06	5.48	13.61	
		8/22/07	5.80	13.29	
		11/11/08	5.64	13.45	
		3/10/10	4.95	14.14	
		5/25/11	5.15	13.94	
		8/22/12	5.69	13.40	
		11/5/13	5.34	13.75	
MW-15B	19.06	6/7/06	5.35	13.71	
		8/22/07	5.70	13.36	
		11/11/08	5.58	13.48	
		3/10/10	NC		
		5/25/11	5.10	13.96	
		8/22/12	5.65	13.41	
		11/5/13	5.21	13.85	
MW-17		5/25/11			
		11/5/13			
MW-18	14.31	6/8/06	7.93	6.38	
		8/23/07	5.05	9.26	
		11/11/08	4.98	9.33	
		3/10/10	4.52	9.79	
		5/25/11	4.70	9.61	
		8/22/12	4.92	9.39	
		11/5/13	5.41	8.90	
MW-22A	20.09	6/7/06	6.00	14.09	
		8/22/07	6.44	13.65	
		11/11/08	6.38	13.71	
		3/10/10	5.78	14.31	
		5/25/11	5.92	14.17	
		8/22/12	6.45	13.64	
		11/5/13	7.70	12.39	

TABLE 2
DZUS FASTENERS SITE (1-52-033)
GROUNDWATER ELEVATIONS

Well #	Reference Elevation	Date	Depth To Water	Water Table Elevation	Comments
MW-22B	19.95	6/7/06	5.82	14.13	
		8/22/07	6.30	13.65	
		11/11/08	6.20	13.75	
		3/10/10	5.61	14.34	
		5/25/11	5.74	14.21	
		8/22/12	6.28	13.67	
		11/5/13	5.65	14.30	
MW-23A	17.34	6/7/06	4.59	12.75	
		8/22/07	4.80	12.54	
		11/11/08	4.62	12.72	
		3/10/10	4.16	13.18	
		5/25/11	4.38	12.96	
		8/22/12	5.30	12.04	
		11/5/13	5.72	11.62	
MW-23B	17.29	6/7/06	4.51	12.78	
		8/22/07	5.05	12.24	
		11/11/08	4.59	12.70	
		3/10/10	4.06	13.23	
		5/25/11	4.31	12.98	
		8/22/12	4.62	12.67	
		11/5/13	6.51	10.78	

Notes:

All measurements in feet from top of casing
 Vertical data NGVD

TABLE 3
DZUS FASTENERS SITE (1-52-033)
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-1 MW-1 E0773-05A 6/8/06 Unfiltered conc. Q	MW-1 DMW-1 F1193-01A 8/22/07 Unfiltered conc. Q	MW-1 DMW-1 destroyed 11/11/08 conc. Q	MW-1 DMW-1 destroyed 3/10/10 conc. Q	MW-1 DMW-1 destroyed 5/25/11 conc. Q	MW-1 DMW-1 destroyed 8/22/12 conc. Q	MW-1 DMW-1 destroyed 11/5/13 conc. Q	
Aluminum	NC	4,180	3,160	NA	NA	NA	NA	NA	
Antimony	3	ND	ND	NA	NA	NA	NA	NA	
Arsenic	25	4.3 B	3.8 B	NA	NA	NA	NA	NA	
Barium	1,000	80.2 B	73.3 B	NA	NA	NA	NA	NA	
Beryllium	3	0.42 B	0.25 B	NA	NA	NA	NA	NA	
Cadmium	5	23.9	5.1	NA	NA	NA	NA	NA	
Calcium	NC	8,790	7,150	NA	NA	NA	NA	NA	
Chromium	50	8.0 B	5.0 B	NA	NA	NA	NA	NA	
Cobalt	NC	5.1 B	6.9 BE	NA	NA	NA	NA	NA	
Copper	200	18.3 B	16.0 B	NA	NA	NA	NA	NA	
Iron	300	13,200	12,600	NA	NA	NA	NA	NA	
Lead	25	3.9 B	9.8 B	NA	NA	NA	NA	NA	
Magnesium	35,000	3,010	2,420	NA	NA	NA	NA	NA	
Manganese	300	210	158	NA	NA	NA	NA	NA	
Mercury	0.7	ND	ND	NA	NA	NA	NA	NA	
Nickel	100	8.7 B	8.7 B	NA	NA	NA	NA	NA	
Potassium	NC	1,760	1,680	NA	NA	NA	NA	NA	
Selenium	10	ND	5.4 B	NA	NA	NA	NA	NA	
Silver	50	ND	ND	NA	NA	NA	NA	NA	
Sodium	20,000	22,500	23,100	NA	NA	NA	NA	NA	
Thallium	0.5	1.9 B	5.5 B	NA	NA	NA	NA	NA	
Vanadium	NC	7.8 B	8.2 B	NA	NA	NA	NA	NA	
Zinc	2,000	244	196	NA	NA	NA	NA	NA	

Notes: All values in µg/L
BOLD/Italics - exceeds criterion
 B - Estimated value (greater than MDL but less than RL)
 N - Matrix spike recovery falls outside of the control limit

NC - No Criteria
 NA - Not analyzed
 E - Estimated due to matrix interference
 * - Replicate RPDs were not within QC limits

ND - Not Detected

TABLE 3
DZUS FASTENERS SITE (1-52-033)
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-2 MW-2 E0773-10A 6/7/06 Unfiltered conc. Q	MW-2 DMW-2 F1193-04A 8/22/07 Unfiltered conc. Q	MW-2 DMW-2 G2114-01 11/11/08 Unfiltered conc. Q	MW-2 DMW-2 J0429-10A 3/10/10 Unfiltered conc. Q	MW-2 DMW-2 K0942-01 5/25/11 Unfiltered conc. Q	MW-2 DMW-2 K0942-02 5/25/11 Filtered conc. Q	MW-2 DMW-2 L1807-19 8/22/12 Unfiltered conc. Q	MW-2 DMW-2F L1808-15 8/22/12 Filtered conc. Q	MW-2 DMW-2 AC75646-005 11/6/13 Unfiltered conc. Q	MW-2 DMW-2F AC75646-006 11/6/13 Filtered conc. Q
Aluminum	NC	7,090	1,580	242	3,880 E	1,500	ND	328	ND	300	ND
Antimony	3	ND	7.3 B	ND	9.4 B	ND	ND	ND	ND	ND	ND
Arsenic	25	3.9 B	6.3 B	ND	7.7 B	12.4 B	5.0 B	ND	ND	3	ND
Barium	1,000	96.5 B	212	38.7 B	47.9 B	51.1 B	34.2 B	20.4 B	18.4 B	ND	ND
Beryllium	3	0.4 B	0.71 B	0.27 B	0.51 B	0.33 B	ND	ND	ND	ND	ND
Cadmium	5	4.2 B	8.6	2.7 B	10.4	ND	ND	ND	ND	ND	ND
Calcium	NC	15,500	28,200	14,500	11,100	38,700	34,500	12,500 E	12,300	15,000	14,000
Chromium	50	8.8 B	3.1 B	ND	6.8 B	2.2 B	ND	0.73 B	ND	ND	ND
Cobalt	NC	18.3 B	27 BE	13.8 B	9.3 B	11.4 B	7.6 B	1.2 B	1.0 B	2.6	ND
Copper	200	19.3 B	8.3 B	12.6 B	34.9	7.9 B	ND	ND	ND	ND	ND
Iron	300	14,900	25,200	23,300	12,000 N	88,900	17,600	1,590 E	1,060	9,200	3,300
Lead	25	14.7	4.2 B	5.2 B	6.9 B	7.5 B	ND	ND	ND	ND	ND
Magnesium	35,000	3,740	4,690	2,700	2,810	3,690	3,510	1,850	1,790	ND	ND
Manganese	300	518	989	2,150	768	882	655	124	115	170	150
Mercury	0.7	ND	ND	ND	0.084 B	ND	ND	ND	ND	ND	ND
Nickel	100	13.3 B	9.0 B	4.7 B	13.5 B	6.5 B	2.8 B	1.7 B	1.3 B	ND	ND
Potassium	NC	2,140	2,780	1,880	1,450	2,470	2,410	1,440	1,430	ND	ND
Selenium	10	1.4 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	21,500	66,200	18,600	18,200	25,200	24,100	24,400 E	23,500	25,000	22,000
Thallium	0.5	2.3 B	6.3 B	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	11.9 B	4.0 B	ND	16.2 B	2.5 B	ND	ND	ND	ND	ND
Zinc	2,000	138	82.8	64.3	109	111	30.5 B	18.4 B	5.2 B	ND	ND

Notes: All values in µg/L

BOLD/Italics - exceeds criterion

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

N - Matrix spike recovery falls outside of the control limit

NC - No Criteria

ND - Not Detected

NA - Not analyzed

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TABLE 3
DZUS FASTENERS SITE (1-52-033)
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-3 MW-3 E0773-07A 6/8/06 Unfiltered conc. Q	MW-3 DMW-3 F1193-07A 8/22/07 Unfiltered conc. Q	MW-3 DMW-3 G2114-04 11/11/08 Unfiltered conc. Q	MW-3 DMW-3 J0429-11A 3/10/10 Unfiltered conc. Q	MW-3 DMW-3 K0942-03 5/25/11 Unfiltered conc. Q	MW-3 DMW-3 K0942-04 5/25/11 Filtered conc. Q	MW-3 DMW-3 L1807-20 8/22/12 Unfiltered conc. Q	MW-3 DMW-3F L1808-17 8/22/12 Filtered conc. Q	MW-3 DMW-3 AC75646-011 11/6/13 Unfiltered conc. Q	MW-3 DMW-3F AC75646-012 11/6/13 Filtered conc. Q
Aluminum	NC	5,650	620	314	2,890 E	8,520	ND	ND	ND	330	ND
Antimony	3	ND	ND	ND	7.2 B	ND	ND	10.7 B	ND	ND	ND
Arsenic	25	2.9 B	ND	ND	3.2 B	7.1 B	6.3 B	ND	ND	ND	ND
Barium	1,000	90.9 B	37.2 B	28.3 B	35.3 B	59.7 B	20.3 B	29.0 B	28.0 B	ND	ND
Beryllium	3	0.26 B	ND	ND	0.25 B	0.7 B	ND	ND	ND	ND	ND
Cadmium	5	77.4	74.4	70.8	98.4	73.5	13.1	16.3	15.1	12.0	13.0
Calcium	NC	17,800	17,200	11,800	10,600	11,000	9,750	11,100 E	10,700	9,000	9,700
Chromium	50	9.2 B	1.6 B	ND	6.4 B	11.4 B	ND	ND	0.90 B	ND	ND
Cobalt	NC	4.4 B	1.6 BE	ND	2.2 B	4.7 B	ND	ND	ND	ND	ND
Copper	200	16.1 B	5.4 B	ND	6.8 B	9.7 B	ND	ND	ND	ND	ND
Iron	300	4,430	649	253	3,680 N	7,430	ND	50.5 B	ND	ND	ND
Lead	25	ND	3.8 B	2.7 B	3.9 B	7.5 B	ND	ND	ND	ND	ND
Magnesium	35,000	4,160	3,820	2,650	2,670	2,890	1,970	2,220	2,180	ND	ND
Manganese	300	423	301	262	553	980	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	0.067 B	0.057 B	ND	ND	ND	ND	ND
Nickel	100	6.8 B	2.1 B	1.6 B	7.4 B	5.0 B	ND	0.92 B	ND	ND	ND
Potassium	NC	2,630	2,050	1,420	1,500	2,170	1,790	2,420	2,400	ND	ND
Selenium	10	ND	8.4 B	ND	10.6 B	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.5 B	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	27,700	31,000	25,000	20,700	20,400	19,400	23,400 E	23,000	43,000	45,000
Thallium	0.5	2.5 B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	8.1 B	1.1 B	ND	4 B	9.6 B	ND	ND	ND	ND	ND
Zinc	2,000	87.0	29.4 B	26.2 B	29.0 B	34.0 B	18.9 B	ND	7.1 B	ND	ND

Notes: All values in µg/L

BOLD/Italics - exceeds criterion

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

N - Matrix spike recovery falls outside of the control limit

NC - No Criteria

ND - Not Detected

NA - Not analyzed

E - Estimated due to matrix interference

* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
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-9 MW-9 E0773-09A 6/8/06 Unfiltered conc. Q	MW-9 DMW-9 F1193-06A 8/22/07 Unfiltered conc. Q	MW-9 DMW-9 G2114-02 11/11/08 Unfiltered conc. Q	MW-9 DMW-9 J0429-12A 3/10/10 Unfiltered conc. Q	MW-9 DMW-9 K0942-05 5/25/11 Unfiltered conc. Q	MW-9 DMW-9 K0942-06 5/25/11 Filtered conc. Q	MW-9 DMW-9 L1807-21 8/22/12 Unfiltered conc. Q	MW-9 DMW-9F L1808-19 8/22/12 Filtered conc. Q	MW-9 DMW-9 AC75646-031 11/7/13 Unfiltered conc. Q	MW-9 DMW-9F AC75646-032 11/7/13 Filtered conc. Q
Aluminum	NC	16,800	3,520	611	2,300 E	2,850	ND	163 B	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	9.5 B	ND	ND	ND
Arsenic	25	32.6	16.2 B	ND	11.4 B	11.5 B	4.9 B	ND	ND	ND	ND
Barium	1,000	102 B	44.7 B	30.2 B	39.2 B	71.0 B	49.2 B	17.8 B	17.0 B	ND	ND
Beryllium	3	0.63 B	ND	0.21 B	0.29 B	0.42 B	ND	ND	ND	ND	ND
Cadmium	5	32.8	22.4	15.5	17.5	18.7	9.5	4.9 B	4.4 B	3.4	3.0
Calcium	NC	16,000	15,100	10,800	21,900	29,000	25,600	13,900 E	13,700	12,000	12,000
Chromium	50	125	62.2	35.3	62.7	85.5	2.9 B	8.3 B	4.0 B	ND	ND
Cobalt	NC	5.2 B	4.9 BE	1.5 B	2.0 B	2.5 B	ND	ND	ND	ND	ND
Copper	200	62.3	41.4	17.3 B	32.5	41.1	ND	ND	ND	ND	ND
Iron	300	21,600	12,400	3,670	11,300 N	11,600	1,760	556 E	ND	ND	ND
Lead	25	11.6	10.6	5.9 B	8.1 B	9.9 B	ND	ND	ND	ND	ND
Magnesium	35,000	3,170	1,550	2,690	4,210	4,110	3,900	3,300	3,220	ND	ND
Manganese	300	151	117	62.6	124	149	15.3 B	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	0.088 B	ND	ND	ND	ND	ND	ND
Nickel	100	18.3 B	7.3 B	3.3 B	8.0 B	6.5 B	2.4 B	1.4 B	2.3 B	ND	ND
Potassium	NC	3,270	4,830	1,720	3,950	6,310	5,210	1,420	1,390	ND	ND
Selenium	10	2.7 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	25,500	52,100	16,100	29,100	72,800	68,700	26,300 E	25,900	11,000	11,000
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	33.1 B	13.4 B	5.5 B	10.4 B	12.8 B	ND	ND	ND	ND	ND
Zinc	2,000	170	73.1	55.9	82.8	90.9	36.6 B	12.9 B	11.8 B	ND	ND

Notes: All values in µg/L

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TABLE 3
DZUS FASTENERS SITE (1-52-033)
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-9B MW-9B E0773-08A 6/8/06 Unfiltered conc. Q	MW-9B DMW-9B F1193-05A 8/22/07 Unfiltered conc. Q	MW-9B DMW-9B G2114-03 11/11/08 Unfiltered conc. Q	MW-9B DMW-9B J0429-14A 3/10/10 Unfiltered conc. Q	MW-9B DMW-9B K0942-07 5/25/11 Unfiltered conc. Q	MW-9B DMW-9B K0942-08 5/25/11 Filtered conc. Q	MW-9B DMW-9B L1807-22 8/22/12 Unfiltered conc. Q	MW-9B DMW-9BF L1808-18 8/22/12 Filtered conc. Q	MW-9B DMW-9B AC75646-013 11/6/13 Unfiltered conc. Q	MW-9B DMW-9BF AC75646-014 11/6/13 Filtered conc. Q
Aluminum	NC	213	177 B	ND	49.5 BE	99.1 B	ND	ND	ND	ND	ND
Antimony	3	1.8 B	4.6 B	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	6.2 B	ND	ND	ND	ND
Barium	1,000	45.5 B	25.5 B	27.1 B	17.1 B	14.4 B	12.8 B	22.2 B	21.1 B	ND	ND
Beryllium	3	ND	ND	ND	0.051 B	ND	ND	ND	ND	ND	ND
Cadmium	5	2.9 B	1.2 B	0.23 B	3.6 B	ND	ND	ND	ND	ND	ND
Calcium	NC	10,800	11,900	8,180	6,950	8,580	8,480	9,300 E	8,330	11,000	10,000
Chromium	50	2.2 B	3.4 B	ND	2.4 B	1.4 B	ND	0.82 B	ND	ND	ND
Cobalt	NC	2.6 B	1.5 BE	ND	ND	ND	ND	ND	ND	ND	ND
Copper	200	28.8 B	14.8 B	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	561	429	134 B	286 N	528	31.8 B	39.5 B	ND	ND	ND
Lead	25	ND	6.0 B	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	1,640	1,630	1,330	1,380	1,490	1,430	1,680	1,480	ND	ND
Manganese	300	211	306	171	69.5	92.4	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	8.6 B	2.9 B	ND	1.9 B	1.8 B	0.88 B	ND	ND	ND	ND
Potassium	NC	2,140	2,050	1,940	1,950	1,910	1,670	1,800	1,790	ND	ND
Selenium	10	ND	ND	ND	12.7 B	ND	ND	ND	ND	ND	ND
Silver	50	ND	2.2 B	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	8,070	10,100	11,800	7,660	6,730	6,650	21,400 E	19,700	10,000	9,000
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.83 B	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	83.7	36.0 B	35.3 B	23.3 B	27.1 B	25.4 B	ND	ND	ND	ND

Notes: All values in µg/L

BOLD/Italics - exceeds criterion

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

N - Matrix spike recovery falls outside of the control limit

NC - No Criteria

ND - Not Detected

NA - Not analyzed

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TABLE 3
DZUS FASTENERS SITE (1-52-033)
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-13A MW-13A E0773-13A 6/8/06 Unfiltered conc. Q	MW-13A DMW-13A F1193-14A 8/22/07 Unfiltered conc.	MW-13A DMW-13A F1193-14A 11/12/08 Unfiltered conc.	MW-13A DMW-13A J0429-15A 3/10/10 Unfiltered conc.	MW-13A DMW-13A K0942-17 5/25/11 Unfiltered conc.	MW-13A DMW-13A K0942-18 5/25/11 Filtered conc.	MW-13A DMW-13A L1807-15 8/22/12 Unfiltered conc.	MW-13A DMW-13AF L1808-25 8/22/12 Filtered conc.	MW-13A DMW-13A AC75646-021 11/7/13 Unfiltered conc.	MW-13A DMW-13AF AC75646-022 11/7/13 Filtered conc.
Aluminum	NC	15,000	2,560	258	529 E	2,100	ND	204	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	5.7 B	ND	ND	ND	13.1 B	ND	ND	ND	ND	ND
Barium	1,000	176 B	94.0 B	185 B	605	886	20.5 B	77.9 B	31.4 B	ND	ND
Beryllium	3	0.53 B	ND	ND	0.073 B	ND	ND	ND	ND	ND	ND
Cadmium	5	174	94.1	67.7	267	373	10.3	93.5	64.4	120	120
Calcium	NC	37,900	23,300	19,900	43,700	27,500	24,900	7,850	7,800	14,000	13,000
Chromium	50	12.9 B	2.7 B	ND	3.9 B	22.1	ND	2.8 B	1.9 B	ND	ND
Cobalt	NC	55.8	45.4 BE	35.4 B	144	268	1.1 B	33.7 B	15.1 B	16.0	17.0
Copper	200	34.3	ND	ND	17.9 B	20.8 B	ND	6.7 B	ND	ND	ND
Iron	300	12,700	3,490	300	749 N	2,310	ND	3,690	1,580	7,300	6,400
Lead	25	5.7 B	2.5 B	ND	5.3 B	ND	ND	ND	ND	ND	ND
Magnesium	35,000	5,580	3,640	2,630	4,570	3,820	3,340	936	960	ND	ND
Manganese	300	9,560	8,040	16,400	33,900	61,600	1,720	6,190	3,430	1,700	1,700
Mercury	0.7	ND	ND	ND	0.063 B	ND	ND	ND	ND	ND	ND
Nickel	100	9.4 B	2.1 B	ND	2.6 B	3.3 B	ND	1.1 B	2.7 B	ND	ND
Potassium	NC	7,430	6,390	3,680	7,510	6,700 E	5,990 E	2,250 E	2,140	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.5 B	ND	ND	12.1 B	ND	ND	ND	ND	ND
Sodium	20,000	94,500	77,500	21,700	247,000	38,400	37,500	47,000	46,900	31,000	31,000
Thallium	0.5	44	ND	11.7 B	88.2	ND	ND	9.2 B	ND	ND	ND
Vanadium	NC	17.6 B	3.7 B	ND	2.7 B	6.4 B	ND	ND	ND	ND	ND
Zinc	2,000	53.3	16.8 B	20.8 B	27.4 B	36.1 B	18.0 B	9.5 B	ND	ND	ND

Notes: All values in µg/L

BOLD/Italics - exceeds criterion

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

N - Matrix spike recovery falls outside of the control limit

NC - No Criteria

ND - Not Detected

NA - Not analyzed

E - Estimated due to matrix interference

* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B
Sample ID	Class GA	MW-13B	DMW-13B	DMW-13B	DMW-13B	DMW-13B	DMW-13B	DMW-13B	DMW-13BF	DMW-13B	DMW-13BF
Laboratory ID	Ground	E0773-14A	F1193-13A	G2114-13	J0429-16A	K0942-19	K0942-20	L1807-27	L1808-23	AC75646-023	AC75646-024
Sample Date	Water	6/8/06	8/22/07	11/12/08	3/10/10	5/25/11	5/25/11	8/22/12	8/22/12	11/7/13	11/7/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	330	133 B	ND	114 BE	106 B	ND	ND	ND	1,800	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	54.3 B	29.0 B	33.4 B	21.5 B	14.4 B	12.6 B	23.1 B	22.4 B	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	15	9.8	2.3 B	4.2 B	2.2 B	ND	1.5 B	1.1 B	10.0	2.3
Calcium	NC	10,700	9,840	11,700	8,880	10,900	10,900	11,300 E	10,600	29,000	12,000
Chromium	50	27.8	27.2	22.3	17.8 B	11.7 B	10.7 B	21.2	21.4	ND	ND
Cobalt	NC	3.9 B	1.9 BE	ND	ND	ND	ND	ND	ND	3.1	ND
Copper	200	19.3 B	13.8 B	ND	ND	6.5 B	ND	ND	ND	57.0	ND
Iron	300	614	404	106 B	286 N	469	ND	ND	ND	4,900	ND
Lead	25	ND	7.7 B	3.1 B	ND	ND	ND	ND	ND	13.0	ND
Magnesium	35,000	1,710	1,600	1,910	1,350	1,560	1,530	1,630	1,550	9,000	ND
Manganese	300	621	426	153	243	148	ND	54.3	19.7 B	240	57.0
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	9.8 B	4.2 B	ND	1.3 B	1.5 B	ND	ND	ND	ND	ND
Potassium	NC	2,410	1,820	2,100	1,570	1,910 E	1,680 E	1,340	1,360	9,400	ND
Selenium	10	ND	6.2 B	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	2.3 B	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	7,880	6,710	9,280	8,060	6,720	6,880	9,260 E	8,950	22,000	13,000
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	1.3 B	0.96 B	ND	0.54 B	ND	ND	ND	ND	ND	ND
Zinc	2,000	45.9 B	33.2 B	24.3 B	24.3 B	32.7 B	32.5 B	ND	ND	350	ND

Notes: All values in µg/L

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TABLE 3
DZUS FASTENERS SITE (1-52-033)
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-15A MW-15A E0773-03A 6/7/06 Unfiltered conc. Q	MW-15A DMW-15A F1193-15A 8/22/07 Unfiltered conc. Q	MW-15A DMW-15A G2114-08 11/12/08 Unfiltered conc. Q	MW-15A DMW-15A J0429-17A 3/9/10 Unfiltered conc. Q	MW-15A DMW-15A K0942-21 5/25/11 Unfiltered conc. Q	MW-15A DMW-15A K0942-22 5/25/11 Filtered conc. Q	MW-15A DMW-15A L1807-25 8/22/12 Unfiltered conc. Q	MW-15A DMW-15AF L1808-21 8/22/12 Filtered conc. Q	MW-15A DMW-15A AC75646-009 11/6/13 Unfiltered conc. Q	MW-15A DMW-15AF AC75646-010 11/6/13 Filtered conc. Q
Aluminum	NC	773	ND	ND	335 E	ND	ND	ND	ND	810	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	53.7 B	15.5 B	20.1 B	30.8 B	23.1 B	16.4 B	15.9 B	15.0 B	ND	ND
Beryllium	3	ND	ND	ND	0.074 B	ND	ND	ND	ND	ND	ND
Cadmium	5	28.8	29.1	33.9	62.3	63.0	12.2	16.8	9.7	73.0	8.9
Calcium	NC	18,900	13,700	12,100	14,800	16,300	16,600	13,500 E	13,400	14,000	14,000
Chromium	50	3.0 B	0.45 B	ND	4.6 B	1.3 B	ND	ND	1.2 B	ND	ND
Cobalt	NC	3.2 B	1.3 BE	ND	0.9 B	ND	ND	ND	ND	ND	ND
Copper	200	38.0	4.8 B	ND	8.4 B	9.8 B	ND	ND	ND	ND	ND
Iron	300	2,320	158 B	ND	1,000 N	164 B	ND	ND	ND	1,200	ND
Lead	25	9.9 B	1.7 B	ND	5.2 B	ND	ND	ND	ND	7.9	ND
Magnesium	35,000	3,170	2,240	1,890	2,780	2,410	2,380	2,460	2,440	ND	ND
Manganese	300	370	929	895	2,850	1,510	55.7	238	41.1 B	2,100	59.0
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	7.1 B	0.85 B	ND	3.6 B	1.7 B	ND	ND	1.1 B	ND	ND
Potassium	NC	2,090	1,960	1,610	2,140	2,290 E	2,290 E	2,110	2,230	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.4 B	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	18,000	13,300	9,040	17,100	19,500	19,800	20,400 E	20,400	21,000	21,000
Thallium	0.5	1.9 B	ND	ND	7.3 B	ND	ND	ND	ND	ND	ND
Vanadium	NC	2.6 B	ND	ND	0.69 B	ND	ND	ND	ND	ND	ND
Zinc	2,000	155	18.8 B	24.3 B	33.5 B	31.7 B	25.9 B	ND	ND	ND	ND

Notes: All values in µg/L

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TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B
Sample ID	Class GA	MW-15B	DMW-15B	DMW-15B	DMW-15B	DMW-15B	DMW-15B	DMW-15B	DMW-15BF	DMW-15B	DMW-15BF
Laboratory ID	Ground	E0773-04A	F1193-10A	G2114-07	Inaccessible	K0942-23	K0942-24	L1807-24	L1808-20	AC75646-001	AC75646-002
Sample Date	Water	6/7/06	8/22/07	11/12/08	3/10/10	5/25/11	5/25/11	8/22/12	8/22/12	11/6/13	11/6/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	224	58.6 B	ND	NA	ND	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
Arsenic	25	1.7 B	ND	ND	NA	5.5 B	4.8 B	ND	4.3 B	ND	ND
Barium	1,000	83.6 B	40.6 B	45.0 B	NA	34.6 B	34.4 B	32.4 B	29.4 B	ND	ND
Beryllium	3	ND	ND	0.19 B	NA	ND	ND	ND	ND	ND	ND
Cadmium	5	3.6 B	0.54 B	0.29 B	NA	ND	ND	ND	ND	ND	ND
Calcium	NC	16,400	13,700	13,700	NA	12,000	11,900	12,200 E	11,500	12,000	12,000
Chromium	50	2.1 B	0.56 B	ND	NA	ND	ND	ND	ND	ND	ND
Cobalt	NC	5.5 B	2.7 BE	1.9 B	NA	1.4 B	1.2 B	1.5 B	1.4 B	ND	ND
Copper	200	20.4 B	2.5 B	ND	NA	ND	ND	ND	18.1 B	ND	ND
Iron	300	4,780	1,320	875	NA	1,410	1,130	1,510 E	48.4 B	3,300	ND
Lead	25	3.3 B	ND	3.6 B	NA	ND	ND	ND	ND	ND	ND
Magnesium	35,000	5,930	5,290	5,240	NA	4,860	4,920	4,700	4,490	ND	ND
Manganese	300	239	228	267	NA	182	182	189	174	170	140
Mercury	0.7	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
Nickel	100	11.5 B	1.4 B	2.2 B	NA	1.9 B	2.0 B	1.5 B	2.7 B	ND	ND
Potassium	NC	2,450	1,500	1,980	NA	1,890 E	1,860 E	1,470	1,510	ND	ND
Selenium	10	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND
Silver	50	ND	2.5 B	1.0 B	NA	ND	ND	ND	ND	ND	ND
Sodium	20,000	46,600	45,200	43,900	NA	40,600	40,600	40,800 E	39,100	40,000	40,000
Thallium	0.5	3.0 B	ND	ND	NA	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.72 B	ND	ND	NA	ND	ND	ND	ND	ND	ND
Zinc	2,000	129	16.8 B	38.9 B	NA	37.3 B	33.7 B	12.1 B	23.7 B	ND	ND

Notes: All values in µg/L

BOLD/Italics - exceeds criterion

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TABLE 3
DZUS FASTENERS SITE (1-52-033)
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-18 MW-18 E0773-06A 6/8/06 Unfiltered conc. Q	MW-18 DMW-18 F1193-16A 8/23/07 Unfiltered conc. Q	MW-18 DMW-18 G2114-06 11/11/08 Unfiltered conc. Q	MW-18 DMW-18 J0429-18A 3/9/10 Unfiltered conc. Q	MW-18 DMW-18 K0942-25 5/25/11 Unfiltered conc. Q	MW-18 DMW-18 K0942-26 5/25/11 Filtered conc. Q	MW-18 DMW-18 L1807-18 8/23/12 Unfiltered conc. Q	MW-18 DMW-18F L1808-28 8/23/12 Filtered conc. Q	MW-18 DMW-18 AC75646-015 11/6/13 Unfiltered conc. Q	MW-18 DMW-18F AC75646-016 11/6/13 Filtered conc. Q
Aluminum	NC	1,430	829	88.1 B	2,270	3,280	ND	ND	ND	ND	ND
Antimony	3	ND	ND	5.1 B	12.2 B	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND U	ND	5.9 B	7.0 B	ND	ND	ND	ND	ND
Barium	1,000	168 B	71.3 B	166 B	283	109 B	13.4 B	19.7 B	17.0 B	ND	ND
Beryllium	3	ND	ND	ND	0.31 B	0.29 B	ND	ND	ND	ND	ND
Cadmium	5	3.0 B	1.2 B	9.8	18.1	1.3 B	ND	ND	ND	ND	ND
Calcium	NC	13,900	9,790	12,600	27,000	19,000	18,400	14,000	14,300	22,000	21,000
Chromium	50	2.2 B	0.63 B	ND	5 B	3.9 B	ND	0.75 B	ND	ND	ND
Cobalt	NC	7.3 B	5.5 BE	2.0 B	11.6 B	9.2 B	ND	ND	ND	ND	ND
Copper	200	17.7 B	3.5 B	11.1 B	112	12.2 B	ND	ND	ND	ND	ND
Iron	300	1,150	1,320	114 B	4,620	2,890	ND	35.3 B	ND	ND	ND
Lead	25	ND	1.9 B	ND	19	ND	ND	ND	ND	ND	ND
Magnesium	35,000	2,340	1,550	2,440	4,130	3,300	3,070	2,360	2,410	ND	ND
Manganese	300	6,270	4,490	2,870	10,100 *	3,450	ND	113	23.4 B	450	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	17.5 B	13.0 B	29.3 B	48.0 BE	15.7 B	ND	ND	ND	ND	ND
Potassium	NC	1,520	1,180	1,540	4,120 E	2,050 E	1,860 E	2,310 E	2,410	ND	ND
Selenium	10	ND	ND	ND	16.4 B	ND	ND	ND	ND	ND	ND
Silver	50	ND	1.5 B	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	7,870	6,020	12,100	10,600	16,800	17,300	17,900	18,700	26,000	25,000
Thallium	0.5	26.5	ND	ND	64.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	2.6 B	1.4 B	ND	5.0 B	3.9 B	ND	ND	ND	ND	ND
Zinc	2,000	235	89.0	265	366	192	22.2 B	ND	ND	ND	ND

Notes: All values in µg/L

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TABLE 3
DZUS FASTENERS SITE (1-52-033)
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-22A MW-22A E0773-11A 6/7/06 Unfiltered conc. Q	MW-22A DMW-22A F1193-09A 8/22/07 Unfiltered conc. Q	MW-22A DMW-22A G2114-09 11/12/08 Unfiltered conc. Q	MW-22A DMW-22A J0429-19A 3/9/10 Unfiltered conc. Q	MW-22A DMW-22A K0942-11 5/25/11 Unfiltered conc. Q	MW-22A DMW-22A K0942-12 5/25/11 Filtered conc. Q	MW-22A DMW-22A L1807-17 8/23/12 Unfiltered conc. Q	MW-22A DMW-22AF L1808-27 8/23/12 Filtered conc. Q	MW-22A DMW-22A AC75646-019 11/7/13 Unfiltered conc. Q	MW-22A DMW-22AF AC75646-020 11/7/13 Filtered conc. Q
Aluminum	NC	4,320	2,870	2,620	1,060	159 B	ND	ND	ND	ND	ND
Antimony	3	1.7 B	5.2 B	ND	13.0 B	ND	ND	ND	ND	ND	ND
Arsenic	25	16.0 B	3.8 B	7.2 B	15.4 B	7.5 B	4.5 B	ND	ND	ND	ND
Barium	1,000	167 B	76.9 B	69.6 B	109 B	106 B	111 B	36.1 B	37.8 B	ND	ND
Beryllium	3	0.15 B	ND	0.21 B	0.19 B	ND	ND	ND	ND	ND	ND
Cadmium	5	38.9	22.1	13.5	13.7	6.8	ND	ND	ND	ND	ND
Calcium	NC	52,100	37,500	55,700	104,000	114,000	96,400	27,600	28,200	33,000	30,000
Chromium	50	18.0 B	12.8 B	13.0 B	8.8 B	2.8 B	0.76 B	2.2 B	1.7 B	ND	ND
Cobalt	NC	2.2 B	5.2 BE	ND	1.4 B	ND	ND	ND	ND	ND	ND
Copper	200	32.3	24.0 B	19.3 B	21.5 B	7.9 B	ND	ND	ND	ND	ND
Iron	300	70,400	22,400	22,000	61,100	16,700	2,260	2,700	2,690	2,800	2,100
Lead	25	8.6 B	13.1	11.3	12.4	ND	ND	ND	ND	ND	ND
Magnesium	35,000	8,300	5,580	7,860	13,800	15,600	13,100	4,060	4,210	ND	ND
Manganese	300	1,280	1,190	1,030	912 *	683	780	437	443	440	380
Mercury	0.7	ND	ND	ND	0.094 B	ND	ND	ND	ND	ND	ND
Nickel	100	6.0 B	3.7 B	2.6 B	4.7 BE	2.4 B	1.4 B	ND	ND	ND	ND
Potassium	NC	4,560	3,530	3,980	3,430 E	4,520 E	5,120 E	2,980 E	3,040	ND	ND
Selenium	10	8.7 B	ND	ND	24.3 B	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	95,200	69,400	39,900	57,800	100,000	134,000	59,700	61,000	43,000	41,000
Thallium	0.5	ND	2.8 B	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	17.4 B	9.2 B	7.0 B	6.3 B	3.1 B	ND	ND	ND	ND	ND
Zinc	2,000	1,650	1,170	714	1,360	1,000	546	16.9 B	16.1 B	ND	ND

Notes: All values in µg/L

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TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B
Sample ID	Class GA	MW-22B	DMW-22B	DMW-22B	DMW-22B	DMW-22B	DMW-22B	DMW-22B	DMW-22BF	DMW-22B	DMW-22BF
Laboratory ID	Ground	E0773-12A	F1193-08A	G2114-11	J0429-20A	k0942-13	k0942-13	L1807-16	L1808-26	AC75646-029	AC75646-030
Sample Date	Water	6/7/06	8/22/07	11/12/08	3/9/10	5/25/11	5/25/11	8/23/12	8/23/12	11/7/13	11/7/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	763 B	151 B	ND	56.3 B	ND	ND	ND	ND	ND	ND
Antimony	3	ND	4.7 B	ND	8.7 B	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	76.6 B	48.2 B	41.3 B	57.6 B	43.3 B	35.6 B	39.6 B	40.5 B	ND	ND
Beryllium	3	ND	ND	ND	0.039 B	ND	ND	ND	ND	ND	ND
Cadmium	5	29.0 B	4.4 B	1.2 B	1.7 B	ND	ND	ND	ND	ND	ND
Calcium	NC	12,800	20,400	27,200	21,400	19,500	19,700	22,400	22,500	26,000	27,000
Chromium	50	7.9 B	1.5 B	ND	1.6 B	0.66 B	ND	ND	ND	ND	ND
Cobalt	NC	17.4 B	3.9 BE	1.5 B	1.0 B	ND	ND	ND	ND	ND	ND
Copper	200	118 B	4.0 B	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	4,600	1,120	518	358	164 B	ND	110 B	ND	ND	ND
Lead	25	8.6 B	3 B	2.4 B	3.3 B	ND	ND	ND	ND	ND	ND
Magnesium	35,000	2,660 B	3,130	5,090	3,510	3,230	3,300	3,860	3,950	ND	ND
Manganese	300	2,310	2,440	775	940 *	589	342	748	726	610	600
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	28.0 B	2.7 B	6.5 B	2.0 BE	0.85 B	ND	ND	ND	ND	ND
Potassium	NC	3,000 B	2,500	1,910	4,220 E	4,740 E	4,260 E	4,470 E	4,270	ND	ND
Selenium	10	ND	ND	ND	19.0 B	ND	ND	ND	ND	ND	ND
Silver	50	ND	4.2 B	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	8,170 B	17,100	11,300	14,400	12,700	13,600	19,200	19,000	13,000	13,000
Thallium	0.5	20.1 B	3.5 B	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.49 B	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000	194 B	39.4 B	29.8 B	34.6 B	20.1 B	17.6 B	5.7 B	ND	ND	ND

Notes: All values in µg/L

BOLD/Italics - exceeds criterion

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

N - Matrix spike recovery falls outside of the control limit

NC - No Criteria

ND - Not Detected

NA - Not analyzed

E - Estimated due to matrix interference

* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
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-23A MW-23A E0773-01A 6/7/06 Unfiltered conc. Q	MW-23A DMW-23A F1193-12A 8/22/07 Unfiltered conc. Q	MW-23A DMW-23A G2114-14 11/12/08 Unfiltered conc. Q	MW-23A DMW-23A J0429-21A 3/10/10 Unfiltered conc. Q	MW-23A DMW-23A K0942-15 5/25/11 Unfiltered conc. Q	MW-23A DMW-23A K0942-16 5/25/11 Filtered conc. Q	MW-23A DMW-23A L1807-28 8/22/12 Unfiltered conc. Q	MW-23A DMW-23AF L1808-24 8/22/12 Filtered conc. Q	MW-23A DMW-23A AC75646-027 11/7/13 Unfiltered conc. Q	MW-23A DMW-23AF AC75646-028 11/7/13 Filtered conc. Q
Aluminum	NC	941	2,440	3,200	3,790	5,060	ND	161 B	ND	ND	ND
Antimony	3	1.8 B	5.8 B	ND	9.5 B	ND	ND	ND	ND	ND	ND
Arsenic	25	2.0 B	4.1 B	5.8 B	7.9 B	7.4 B	ND	ND	ND	ND	ND
Barium	1,000	87.5 B	51.2 B	40.1 B	47.8 B	47.4 B	34.6 B	28.0 B	27.3 B	ND	ND
Beryllium	3	ND	ND	0.29 B	0.23 B	ND	ND	ND	ND	ND	ND
Cadmium	5	110	702	1,080	704	924	9.5	31.7	3.3 B	24.0	13.0
Calcium	NC	34,200	40,900	31,000	38,600	29,300	27,800	26,700 E	26,400	20,000	20,000
Chromium	50	3.6 B	4.9 B	3.6 B	6.4 B	6.4 B	0.97 B	1.2 B	4.0 B	ND	ND
Cobalt	NC	3.2 B	6.1 BE	ND	0.76 B	ND	ND	ND	ND	ND	ND
Copper	200	33.2	35.9	47.6	137	190	ND	6.7 B	ND	ND	ND
Iron	300	10,300	29,700	13,100	11,500	15,200	2,030	1,860 E	602	900	650
Lead	25	ND	6.6 B	9.5 B	11.2	5.6 B	ND	ND	ND	ND	ND
Magnesium	35,000	6,660	6,280	9,020	8,010	5,160	5,100	4,950	4,750	ND	ND
Manganese	300	1,100	612	1,390	1,410 *	1,600	1,480	1,110	1,170	980	1,000
Mercury	0.7	0.065 B	ND	ND	0.12 B	0.035 B	ND	ND	ND	ND	ND
Nickel	100	9.3 B	7.1 B	2.2 B	6.3 BE	3.7 B	1.2 B	ND	2.0 B	ND	ND
Potassium	NC	7,070	5,200	6,780	6,930 E	6,270 E	6,420 E	5,770	5,790	ND	ND
Selenium	10	1.3 B	6.1 B	ND	13.5 B	ND	ND	ND	ND	ND	ND
Silver	50	0.92 B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	60,200	32,400	37,800	64,600	67,900	70,800	74,100 E	73,400	27,000	29,000
Thallium	0.5	9.3 B	ND	ND	11.3 B	ND	ND	ND	ND	ND	ND
Vanadium	NC	5.5 B	12.6 B	20.5 B	11.4 B	16.4 B	ND	1.1 B	ND	ND	ND
Zinc	2,000	181	26.9 B	42.7 B	48.3 B	70.5	15.6 B	ND	5.9 B	ND	ND

Notes: All values in µg/L

BOLD/Italics - exceeds criterion

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

N - Matrix spike recovery falls outside of the control limit

NC - No Criteria

ND - Not Detected

NA - Not analyzed

E - Estimated due to matrix interference

* - Replicate RPDs were not within QC limits

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B
Sample ID	Class GA	MW-23B	DMW-23B	DMW-23B	DMW-23B	DMW-23B	DMW-23B	DMW-23B	DMW-23BF	DMW-23B	DMW-23BF
Laboratory ID	Ground	E0773-02A	F1193-11A	G2114-15	J0429-22A	K0942-27	K0942-28	L1807-26	L1808-22	AC75646-025	AC75646-026
Sample Date	Water	6/7/06	8/22/07	11/12/08	3/10/10	5/25/11	5/25/11	8/22/12	8/22/12	11/7/13	11/7/13
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	2,450	632	406	2,820	1,810	ND	103 B	ND	1,100	ND
Antimony	3	3.2 B	ND	ND	6.2 B	ND	ND	ND	ND	ND	ND
Arsenic	25	4.1 B	ND	ND	6.7 B	ND	ND	ND	ND	ND	ND
Barium	1,000	215	86.4 B	64.6 B	77.4 B	64.8 B	150 B	29.0 B	26.8 B	ND	ND
Beryllium	3	0.21 B	ND	0.13 B	0.3 B	ND	ND	ND	ND	ND	ND
Cadmium	5	320	60.0	42.2	43.8	40.1	5.8	69.6	33.1	45.0	35.0
Calcium	NC	21,500	25,100	15,700	24,400	24,800	21,700	18,100 E	17,700	11,000	12,000
Chromium	50	74.9	13.9 B	4.3 B	61.6	12.6 B	8.5 B	10.7 B	7.8 B	59.0	ND
Cobalt	NC	4.8 B	2.4 BE	ND	3.5 B	1.7 B	0.91 B	ND	ND	ND	ND
Copper	200	94.6	19.8 B	24.6 B	54.8	25.6 B	13.9 B	4.1 B	ND	ND	ND
Iron	300	8,220	2,140	1,270	7,870	5,200	36,100	279 E	117 B	2,400	ND
Lead	25	35.7	10.3	17.7	43.9	22.6	ND	ND	ND	8.3	ND
Magnesium	35,000	1,890	1,290	1,590	2,730	4,150	2,460	2,950	2,910	ND	ND
Manganese	300	548	508	52.1	398 *	126	169	138	135	52.0	ND
Mercury	0.7	0.11 B	ND	ND	0.11 B	ND	ND	ND	ND	ND	ND
Nickel	100	68.8	16.7 B	20.5 B	23.2 BE	14.8 B	10 B	2.4 B	1.3 B	ND	ND
Potassium	NC	2,400	1,970	1,660	1,650 E	2,450 E	2,110 E	1,760	1,820	ND	ND
Selenium	10	ND	8.6 B	ND	19.3 B	ND	ND	ND	ND	ND	ND
Silver	50	ND	5.0 B	0.81 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	2,390	3,870	2,200	84,400	18,900	18,500	15,000 E	14,700	11,000	11,000
Thallium	0.5	3.1 B	ND	ND	6.1 B	ND	ND	ND	ND	ND	ND
Vanadium	NC	17.7 B	9.0 B	5.9 B	12.1 B	12.9 B	ND	ND	ND	ND	ND
Zinc	2,000	417	145	198	376	410	47 B	17.7 B	ND	95.0	ND

Notes: All values in µg/L

BOLD/Italics - exceeds criterion

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

N - Matrix spike recovery falls outside of the control limit

NC - No Criteria

NA - Not analyzed

E - Estimated due to matrix interference

* - Replicate RPDs were not within QC limits

ND - Not Detected

TABLE 4
DZUS FASTENERS SITE (1-52-033)
NOVEMBER 2013 SAMPLING EVENT
TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered Metal	NYSDEC Class GA Ground Water Criteria	MW-2 DMW-2 AC75646-005 11/6/13 Unfiltered conc. Q	MW-2 DMW-2F AC75646-006 11/6/13 Filtered conc. Q	MW-2 Percent Dissolved	MW-3 DMW-3 AC75646-011 11/6/13 Unfiltered conc. Q	MW-3 DMW-3F AC75646-012 11/6/13 Filtered conc. Q	MW-3 Percent Dissolved	MW-9 DMW-9 AC75646-031 11/7/13 Unfiltered conc. Q	MW-9 DMW-9F AC75646-032 11/7/13 Filtered conc. Q	MW-9 Percent Dissolved
Aluminum	NC	300	ND	NC	330	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	3	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	12.0	13.0	108.3%	3.4	3.0	88.2%
Calcium	NC	15,000	14,000	93.3%	9,000	9,700	107.8%	12,000	12,000	100.0%
Chromium	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cobalt	NC	2.6	ND	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC	ND	ND	NC
Iron	300	9,200	3,300	35.9%	ND	ND	NC	ND	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	170	150	88.2%	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	25,000	22,000	88.0%	43,000	45,000	104.7%	11,000	11,000	100.0%
Thallium	0.5	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	50 NTU	0.0			0.0			34.1		

Notes: ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion

TABLE 4
DZUS FASTENERS SITE (1-52-033)
NOVEMBER 2013 SAMPLING EVENT
TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered Metal	NYSDEC Class GA Ground Water Criteria	MW-9B DMW-9B AC75646-013 11/7/13 Unfiltered conc. Q	MW-9B DMW-9BF AC75646-014 11/7/13 Filtered conc. Q	MW-9B Percent Dissolved	MW-13A DMW-13A AC75646-021 11/7/13 Unfiltered conc.	MW-13A DMW-13AF AC75646-022 11/7/13 Filtered conc.	MW-13A Percent Dissolved	MW-13B DMW-13B AC75646-023 11/7/13 Unfiltered conc. Q	MW-13B DMW-13BF AC75646-024 11/7/13 Filtered conc. Q	MW-13B Percent Dissolved
Aluminum	NC	ND	ND	NC	ND	ND	NC	1,800	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	2.9	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	120	120	100.0%	10.0	2.3	23.0%
Calcium	NC	11,000	10,000	90.9%	14,000	13,000	92.9%	29,000	12,000	41.4%
Chromium	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cobalt	NC	ND	ND	NC	16.0	17.0	106.3%	3.1	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC	57.0	ND	NC
Iron	300	ND	ND	NC	7,300	6,400	87.7%	4,900	ND	NC
Lead	25	ND	ND	NC	ND	ND	NC	13.0	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC	9,000	ND	NC
Manganese	300	ND	ND	NC	1,700	1,700	100.0%	240	57.0	23.8%
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	9,400	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	10,000	9,000	90.0%	31,000	31,000	100.0%	22,000	13,000	59.1%
Thallium	0.5	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	350	ND	NC
Turbidity	50 NTU	27.6			41.2			0.0		

Notes: ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion

TABLE 4
DZUS FASTENERS SITE (1-52-033)
NOVEMBER 2013 SAMPLING EVENT
TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered Metal	NYSDEC Class GA Ground Water Criteria	MW-15A DMW-15A AC75646-009 11/6/13 Unfiltered conc. Q	MW-15A DMW-15AF AC75646-010 11/6/13 Filtered conc. Q	MW-15A Percent Dissolved	MW-15B DMW-15B AC75646-001 11/6/13 Unfiltered conc. Q	MW-15B DMW-15BF AC75646-002 11/6/13 Filtered conc. Q	MW-15B Percent Dissolved	MW-18 DMW-18 AC75646-015 11/6/13 Unfiltered conc. Q	MW-18 DMW-18F AC75646-016 11/6/13 Filtered conc. Q	MW-18 Percent Dissolved
Aluminum	NC	810	ND	NC	ND	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Barium	1,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	73.0	8.9	12.2%	ND	ND	NC	ND	ND	NC
Calcium	NC	14,000	14,000	100.0%	12,000	12,000	100.0%	22,000	21,000	95.5%
Chromium	50	ND	ND	NC	ND	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	1,200	ND	NC	3,300	ND	NC	ND	ND	NC
Lead	25	7.9	ND	NC	ND	ND	NC	ND	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Manganese	300	2,100	59.0	2.8%	170	140	82.4%	450	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	21,000	21,000	100.0%	40,000	40,000	100.0%	26,000	25,000	96.2%
Thallium	0.5	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	50 NTU	0.0			32.3			0.0		

Notes: ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion

TABLE 4
DZUS FASTENERS SITE (1-52-033)
NOVEMBER 2013 SAMPLING EVENT
TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered Metal	NYSDEC Class GA Ground Water Criteria	MW-22A DMW-22A AC75646-019 11/7/13 Unfiltered conc. Q	MW-22A DMW-22AF AC75646-020 11/7/13 Filtered conc. Q	MW-22A Percent Dissolved	MW-22B DMW-22B AC75646-029 11/7/13 Unfiltered conc. Q	MW-22B DMW-22BF AC75646-030 11/7/13 Filtered conc. Q	MW-22B Percent 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	ND	ND	NC	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC
Calcium	NC	33,000	30,000	90.9%	26,000	27,000	103.8%
Chromium	50	ND	ND	NC	ND	ND	NC
Cobalt	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC
Iron	300	2,800	2,100	75.0%	ND	ND	NC
Lead	25	ND	ND	NC	ND	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC
Manganese	300	440	380	86.4%	610	600	98.4%
Mercury	0.7	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC
Sodium	20,000	43,000	41,000	95.3%	13,000	13,000	100.0%
Thallium	0.5	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	ND	ND	NC
Turbidity	50 NTU	35.2			0.0		

Notes: ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion

TABLE 4
DZUS FASTENERS SITE (1-52-033)
NOVEMBER 2013 SAMPLING EVENT
TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered Metal	NYSDEC Class GA Ground Water Criteria	MW-23A DMW-23A AC75646-027 11/7/13 Unfiltered conc. Q	MW-23A DMW-23AF AC75646-028 11/7/13 Filtered conc. Q	MW-23A Percent Dissolved	MW-23B DMW-23B AC75646-025 11/7/13 Unfiltered conc. Q	MW-23B DMW-23BF AC75646-026 11/7/13 Filtered conc. Q	MW-23B Percent Dissolved
Aluminum	NC	ND	ND	NC	1,100	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC
Barium	1,000	ND	ND	NC	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC
Cadmium	5	24.0	13.0	54.2%	45.0	35.0	77.8%
Calcium	NC	20,000	20,000	100.0%	11,000	12,000	109.1%
Chromium	50	ND	ND	NC	59.0	ND	NC
Cobalt	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC
Iron	300	900	650	72.2%	2,400	ND	NC
Lead	25	ND	ND	NC	8.3	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC
Manganese	300	980	1,000	102.0%	52.0	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC
Sodium	20,000	27,000	29,000	107.4%	11,000	11,000	100.0%
Thallium	0.5	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	95.0	ND	NC
Turbidity	50 NTU	0.0			0.0		

Notes: ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

Sample Location Sample ID Laboratory ID Sample Date	NYSDEC Class A Surface Water Criteria	Lake Capri SW-1 E0868-01A 6/21/06 conc. Q	Lake Capri SW-1 F1193-20A 8/23/07 conc. Q	Lake Capri SW-1 G2136-11 11/14/08 conc. Q	Lake Capri SW-1 J0376-01A 3/4/10 conc. Q	Lake Capri SW-1 K0911-08 5/22/11 conc. Q	Lake Capri SW-1 L1949-01 09/17/12 conc. Q	Lake Capri SW-1 AC75648-158 11/8/13 conc. Q
Aluminum	NC	31.9 B	40.1 B	ND	29.6 B	ND	ND	ND
Antimony	3	ND	ND	6.0 B	ND	ND	ND	ND
Arsenic	50	ND	ND	ND	ND	ND	ND	0.56 JB
Barium	1,000	13.2 B	23.1 B	31.8 B	22.4 B	13.6 B	20.8 B	ND
Beryllium	3	ND	ND	ND	ND	ND U	ND	ND
Cadmium	5	1.1 B	2.3 B	1.5 B	2.6 B	1.6 B	ND	1.5 J
Calcium	NC	15,100	14,100	14,300	15,300	13,900	14,900	16,000
Chromium	50	0.6 B	0.95 B	ND	0.52 B	1.3 B	ND	ND
Cobalt	NC	0.94 B	1.4 BE	ND	0.76 B	0.77 B	ND	0.80 J
Copper	200	8.9 B	3.1 B	ND	ND	ND	ND	ND
Iron	300	691	738	598	387	416	172 B	1,100
Lead	50	ND	2.1 B	ND	ND	ND	ND	3.2
Magnesium	35,000	3,500	2,860	3,570	3,420	2,960	3,420	ND
Manganese	300	1,050	862	1,610	996	1,000	552	1,700
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND
Nickel	100	1.3 B	0.6 B	ND	1.6 B	ND	ND	ND
Potassium	NC	2,000	1,930	2,250	2,070	2,040	2,300	ND
Selenium	10	ND	6 B	ND	ND	ND	ND	ND
Silver	50	1.8 B	2.8 B	0.98 B	ND	ND	ND	ND
Sodium	20,000	18,500	15,800	19,000	22,500	18,700	24,600	25,000
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.78 B	0.79 B	ND	2.6 B	ND	ND	ND
Zinc	2,000	22.4 B	22.8 B	22.3 B	38 B	22.3 B	10.1 B	ND

Notes: All values in µg/L
NC - No Criteria
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

Sample Location Sample ID Laboratory ID Sample Date	NYSDEC Class A Surface Water Criteria	Lake Capri SW-2 E0868-03A 6/21/06 conc. Q	Lake Capri SW-2 F1194-02A 8/23/07 conc. Q	Lake Capri SW-2 G2136-09 11/14/08 conc. Q	Lake Capri SW-2 J0376-02A 3/4/10 conc. Q	Lake Capri SW-2 K0911-09 5/22/11 conc. Q	Lake Capri SW-2 L1949-02 09/17/12 conc. Q	Lake Capri SW-2 AC75648-159 11/8/13 conc. Q
Aluminum	NC	16.8 B	98.4 B	ND	33.2 B	ND	ND	ND
Antimony	3	ND	ND	ND	5.7 B	ND	ND	0.58 J
Arsenic	50	ND	ND	ND	ND	ND	ND	1.1 JB
Barium	1,000	12.2 B	24.3 B	32.4 B	24.2 B	12.9 B	20.2 B	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	0.33 J
Cadmium	5	1.0 B	2.1 B	2.0 B	2.8 B	1.7 B	ND	0.82 J
Calcium	NC	14,900	13,300	14,300	16,100	13,900	14,700	15,000
Chromium	50	0.52 B	1.2 B	ND	0.86 B	0.72 B	ND	ND
Cobalt	NC	0.92 B	1 B	ND	1 B	ND	ND	0.97 J
Copper	200	ND	4.4 B	ND	6.2 B	ND	ND	ND
Iron	300	649	819	675	478	508	176 B	680
Lead	50	ND	3.1 B	2.4 B	ND	ND	ND	1.5 J
Magnesium	35,000	3,490	2,940	3,530	3,700	2,940	3,360	ND
Manganese	300	1,010	819 E	1,560	968	1,080	564	1,300
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND
Nickel	100	1.1 B	0.81 B	ND	2.4 B	ND	ND	ND
Potassium	NC	1,990	1,990	2,320	2,080	1,990	2,330	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND
Silver	50	1.6 B	3.1 B	ND	ND	ND	ND	ND
Sodium	20,000	18,100	16,200 E	19,500	22,000	18,600	23,800	21,000
Thallium	0.5	ND	ND	ND	7.2 B	ND	ND	0.74 J
Vanadium	NC	ND	0.88 B	1.1 B	3.3 B	ND	ND	ND
Zinc	2,000	15.6 B	27.4 B	21 B	34.5 B	20.3 B	5.3 B	ND

Notes: All values in µg/L
NC - No Criteria
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

Sample Location Sample ID Laboratory ID Sample Date	NYSDEC Class A Surface Water Criteria	Lake Capri SW-3 E0868-05A 6/21/06 conc. Q	Lake Capri SW-3 F1194-04A 8/23/07 conc. Q	Lake Capri SW-3 G2136-13 11/14/08 conc. Q	Lake Capri SW-3 J0376-03A 3/4/10 conc. Q	Lake Capri SW-3 K0911-10 5/22/11 conc. Q	Lake Capri SW-3 L1949-03 09/17/12 conc. Q	Lake Capri SW-3 AC75648-165 11/8/13 conc. Q
Aluminum	NC	69.5 B	37 U	ND	27 B	ND	ND	ND
Antimony	3	ND	ND	ND	7.2 B	ND	ND	ND
Arsenic	50	ND	ND	ND	ND	ND	ND	0.62 JB
Barium	1,000	7.9 B	12.6 B	38.6 B	19.6 B	10.1 B	17.2 B	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	1.9 B	0.32 B	0.97 B	2.8 B	1.4 B	ND	1.7 JB
Calcium	NC	15,200	13,100	14,000	15,000	13,900	14,500	16,000
Chromium	50	0.58 B	0.7 B	ND	0.59 B	0.67 B	ND	ND
Cobalt	NC	0.72 B	1.0 B	ND	ND	ND	ND	2.0
Copper	200	ND	3.9 B	ND	ND	ND	ND	ND
Iron	300	788	280	772	332	311	144 B	590
Lead	50	0.92 B	ND	ND	ND	ND	ND	3.5
Magnesium	35,000	3,540	2,990	3,440	3,380	3,030	3,310	ND
Manganese	300	882	73.9 E	1,790	911	990	355	940
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND
Nickel	100	0.96 B	ND	ND	1.3 B	ND	ND	ND
Potassium	NC	2,000	2,020	2,290	2,000	2,000	2,210	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND
Silver	50	1.3 B	3.4 B	0.64 B	ND	ND	ND	ND
Sodium	20,000	18,300	16,800 E	17,700	23,300	18,800	23,500	23,000
Thallium	0.5	ND	ND	ND	5.9 B	ND	ND	ND
Vanadium	NC	0.7 B	0.42 B	ND	2.8 B	ND	ND	ND
Zinc	2,000	21.5 B	14 B	16.4 B	33.4 B	18.9 B	ND	ND

Notes: All values in µg/L
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E - Estimated due to matrix interference
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TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

Sample Location Sample ID Laboratory ID Sample Date	NYSDEC Class A Surface Water Criteria	Lake Capri SW-4 E0868-07A 6/21/06 conc. Q	Lake Capri SW-4 F1194-06A 8/23/07 conc. Q	Lake Capri SW-4 G2136-15 11/14/08 conc. Q	Lake Capri SW-4 J0376-04A 3/4/10 conc. Q	Lake Capri SW-4 K0911-11 5/22/11 conc. Q	Lake Capri SW-4 L1949-04 09/17/12 conc. Q	Lake Capri SW-4 AC75648-164 11/8/13 conc. Q
Aluminum	NC	ND	ND	ND	27.4 B	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND
Arsenic	50	ND	ND	ND	ND	ND	ND	0.50 JB
Barium	1,000	5.7 B	14 B	31.9 B	20.2 B	9.8 B	19.6 B	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	0.89 B	0.77 B	0.63 B	2.6 B	1.4 B	ND	0.93 J
Calcium	NC	14,600	12,900	14,000	15,300	13,700	13,900	15,000
Chromium	50	ND	0.88 B	ND	0.51 B	0.75 B	ND	ND
Cobalt	NC	0.37 B	1.2 B	ND	ND	ND	ND	0.44 J
Copper	200	11.7 B	4.9 B	ND	ND	ND	ND	ND
Iron	300	610	609	741	344	322	152 B	450
Lead	50	ND	2.2 B	ND	ND	ND	ND	2.4 J
Magnesium	35,000	3,510	2,950	3,490	3,420	2,980	3,190	ND
Manganese	300	786	135 E	1,630	943	918	463	910
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND
Nickel	100	0.6 B	ND	ND	0.88 B	ND	ND	ND
Potassium	NC	1,950	2,040	2,310	1,980	1,960	2,150	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	2.8 B	ND	ND	ND	ND	ND
Sodium	20,000	18,100	16,600 E	17,800	22,900	18,700	23,900	22,000
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	2 B	ND	ND	ND
Zinc	2,000	20.2 B	18 B	9.7 B	31.9 B	18.9 B	5.3 B	ND

Notes: All values in µg/L
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B - Estimated value (greater than MDL but less than RL)
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

Sample Location Sample ID Laboratory ID Sample Date	NYSDEC Class A Surface Water Criteria	Willetts Creek SW-5 E0868-09A 6/21/06 conc. Q	Willetts Creek SW-5 F1193-18A 8/23/07 conc. Q	Willetts Creek SW-5 G2114-20 11/12/08 conc. Q	Willetts Creek SW-5 J0376-05A 3/4/10 conc. Q	Willetts Creek SW-5 K0911-12 5/22/11 conc. Q	Willetts Creek SW-5 L1949-05 09/18/12 conc. Q	Willetts Creek SW-5 AC75648-163 11/8/13 conc. Q
Aluminum	NC	15.3 B	ND	ND	79.3 B	305	ND	1,200
Antimony	3	1.5 B	4.4 B	ND	ND	ND	ND	0.54 J
Arsenic	50	ND	ND	ND	5.2 B	ND	ND	3.7 B
Barium	1,000	36.9 B	36.4 B	26.2 B	24.6 B	40.7 B	31.4 B	71.0
Beryllium	3	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	5.7	5.6	3.0 B	5.1	8.8	4.1 B	15.0
Calcium	NC	14,400	16,100	12,500	17,800	19,200	15,200	12,000
Chromium	50	ND	0.39 B	ND	0.99 B	2.6 B	ND	ND
Cobalt	NC	0.82 B	1.9 BE	ND	ND	1.8 B	ND	5.4
Copper	200	ND	1.7 B	ND	5.6 B	11.3 B	3.8 B	ND
Iron	300	632	599	1,060	959	4,080	690	14,000
Lead	50	ND	ND	ND	ND	10.2	ND	38.0
Magnesium	35,000	3,550	3,420	3,100	3,960	4,020	3,510	ND
Manganese	300	1,420	1,110	956	450	923	519	3,000
Mercury	0.7	ND	ND	ND	ND	ND	ND	0.16 J
Nickel	100	0.98 B	0.85 B	ND	1.1 B	1.4 B	ND	ND
Potassium	NC	2,080	2,040	1,780	2,070	2,340	2,240	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.1 B	ND	ND	ND	ND	ND
Sodium	20,000	21,100	21,800	18,100	20,300	26,900	28,100	22,000
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	0.99 B	12.1 B	6.9 B	ND	ND
Zinc	2,000	22 B	21.2 B	10.4 B	38.5 B	98.7	15.9 B	78.0

Notes: All values in µg/L
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* - Replicate RPDs were not within QC limits

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

Sample Location Sample ID Laboratory ID Sample Date	NYSDEC Class A Surface Water Criteria	Willetts Creek SW-6 E0868-11A 6/21/06 conc. Q	Willetts Creek SW-6 F1194-08A 8/23/07 conc. Q	Willetts Creek SW-6 G2114-16 11/12/08 conc. Q	Willetts Creek SW-6 J0376-06 3/4/10 conc. Q	Willetts Creek SW-6 K0911-13 5/22/11 conc. Q	Willetts Creek SW-6 L1949-06 09/17/12 conc. Q	Willetts Creek SW-6 11/8/13 conc. Q
Aluminum	NC	40.5 B	ND	190 B	63.9 B	103 B	84.4 B	creekbed was dry at the time of sampling
Antimony	3	ND	8.0 B	ND	ND	ND	ND	
Arsenic	50	ND	ND	ND	ND	ND	ND	
Barium	1,000	35.5 B	40.6 B	37.7 B	22.8 B	27.8 B	23.6 B	
Beryllium	3	ND	ND	ND	ND	ND	ND	
Cadmium	5	0.55 B	2.8 B	75.4	ND	ND	ND	
Calcium	NC	26,700	27,200	20,100	19,200	25,100	21,400	
Chromium	50	0.99 B	0.88 B	7.2 B	1.5 B	0.73 B	1.7 B	
Cobalt	NC	3.1 B	2.8 B	ND	ND	ND	ND	
Copper	200	ND	2.8 B	ND	ND	ND	ND	
Iron	300	5,400	2,170	4,010	639	2,280	6,840	
Lead	50	ND	2.5 B	9.8 B	ND	ND	ND	
Magnesium	35,000	5,130	5,290	4,080	4,320	4,960	4,860	
Manganese	300	2,610	1,510 E	1,040	406	869	1,160	
Mercury	0.7	ND	ND	ND	ND	ND	ND	
Nickel	100	1.4 B	1.5 B	ND	1.8 B	ND	0.91 B	
Potassium	NC	2,230	2,480	2,830	2,250	2,810	2,460	
Selenium	10	ND	ND	ND	10.5 B	ND	ND	
Silver	50	ND	5.9 B	ND	ND	ND	ND	
Sodium	20,000	29,200	33,600 E	26,000	20,500	33,800	32,100	
Thallium	0.5	ND	ND	ND	ND	ND	ND	
Vanadium	NC	1.1 B	0.63 B	1.6 B	1.6 B	ND	ND	
Zinc	2,000	35.6 B	32.2 B	48.2 B	43.3 B	35.8 B	21.3 B	

Notes: All values in µg/L
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E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

TABLE 6
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

Sample Location	NYSDEC Technical Guidance for Sediment Criteria		Lake Capri SED-1	Lake Capri SED-1	Lake Capri SED-1	Lake Capri SED-1	Lake Capri SED-1	Lake Capri SED-1	Lake Capri SED-1
Laboratory ID	Lowest Effect		E0868-02A	F1193-19A	G2136-10	J0376-09A	K0911-01	L1949-09	AC75648-012
Sample Date	Highest Effect		6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/17/12	11/8/13
			conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	5,020	895	7630 *	6,730 E	9,620	10,800	4,200
Antimony	2.0	25	0.7 B	0.41 B	2.2 BN	6.4	ND	ND	ND
Arsenic	6.0	33	7.9	1.5	8.7	16.1	15.2 *	18.1	ND
Barium	NC	NC	81.2	31.9	67.7 B*E	175	445	203	73.0
Beryllium	NC	NC	0.5 B	0.074 B	0.64 B	0.75 BE	0.87 B	0.34 B	ND
Cadmium	0.6	9	47.8	11.6	61.4 N*E	69.2	81.2 *	89.8	63.0
Calcium	NC	NC	2,540	646	3,140 *	5,180 *	7,440 *	3,340	ND
Chromium	26	110	20.7	2.8	27.1 E	39.1 *	50.0 *	57.4	ND
Cobalt	NC	NC	7.6	3.7	20.2 E	20.9	29.4 E	19.7 B	ND
Copper	16	110	38.6	86.3	65.7	127 *	121 *	144	61.0
Iron	20,000	20,000	10,300	3,880	19,700 E	36,000	44,600 *	26,700	8,200
Lead	31	110	170	19.3	176 N*E	225	226 N*	289	110
Magnesium	NC	NC	1,300	217	1,260 *E	1,770	2,100 *E	2170	ND
Manganese	460	1,100	1,290	1,200	181 *	2,250	22,600 *	3,620	3,600
Mercury	0.15	1.3	0.21	0.0071 B	0.34	0.38	0.33 B	0.52	ND
Nickel	16	50	11.4	3.0	19.4	24.1 E	24.1 *	27.3	ND
Potassium	NC	NC	514	91.9	465 *	429	748	660	ND
Selenium	NC	NC	1.6 B	0.64 B	ND	5.0 B	ND	6.1 B	ND
Silver	1.0	2.2	ND	ND	ND	ND	2.7 B	ND	ND
Sodium	NC	NC	117	44.2 B	136 B	339	433	388 B	ND
Thallium	NC	NC	5.8	ND	ND	12.7	3.8 B	8.6 B	ND
Vanadium	NC	NC	29.4	5.1	39.9 E	78.7 E	99.2	90.5	ND
Zinc	120	270	215	71.6	445 *E	493 *	572 *	642	210

Notes: All values in mg/kg
NC - No Criteria
ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
BOLD/Italics - exceeds lowest effects criterion
E - Replicate RPDs were not within QC limits
* - Percent recovery for duplicates were not within QC limits
N - Spike recoveries were not within QC limits

TABLE 6
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

Sample Location	NYSDEC Technical Guidance for Sediment Criteria		Lake Capri SED-2	Lake Capri SED-2	Lake Capri SED-2	Lake Capri SED-2	Lake Capri SED-2	Lake Capri SED-2	Lake Capri SED-2
Sample ID	Laboratory ID		E0868-04A	F1194-01A	G2136-08	J0376-10A	K0911-02	L1949-10	AC75648-012
Sample Date	Lowest Effect	Highest Effect	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/17/12	11/8/13
			conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	15,500	1,850	2,800 *	9,050 E	8,310	8,300	9,100
Antimony	2.0	25	0.92 B	0.82 B	0.19 BN	1.3 B	ND	ND	ND
Arsenic	6.0	33	19.7	2 B	1.8	20.2	13.4 *	19.2	ND
Barium	NC	NC	89.8	57.9	40.8 *E	173	108	209	270
Beryllium	NC	NC	1.2	0.16 B	0.16 B	0.89 E	0.75 B	0.40 B	ND
Cadmium	0.6	9	133	21.2	12.5 N*E	111	96.6 *	122	96.0
Calcium	NC	NC	2,860	1,320	1,400 *	3,810 *	4,330 *	4,090	ND
Chromium	26	110	33.7	7.7	6.5 E	49.4 *	45.2 *	47.7	45.0
Cobalt	NC	NC	12.1	8.1	3 BE	17.8	11.1 E	16.5	20.0
Copper	16	110	210	19.6	15.6	97.7 *	80.2 *	91.0	130
Iron	20,000	20,000	20,300	8,940	3,850 E	27,500	17,300 *	25,400	42,000
Lead	31	110	315	40.7	25.8 N*E	375	315 N*	408	280
Magnesium	NC	NC	1,510	404	305 *E	1,690	1,360 *E	1,500	ND
Manganese	460	1,100	153	1,300	769 *	3,510	1,480 *	3,790	6,800
Mercury	0.15	1.3	0.45	0.047 BN	0.018 B	0.35	0.5	0.49	ND
Nickel	16	50	17.6	6.8 E	3.2 B	22.0 E	17.6 *	21.9	ND
Potassium	NC	NC	555	200 E	123 *	373	389	428	ND
Selenium	NC	NC	2.2 B	1.2 B	ND	ND	ND	6.2 B	ND
Silver	1.0	2.2	0.33 B	ND	ND	ND	ND	ND	ND
Sodium	NC	NC	143	92.5 B	46.5 B	200	219	228	ND
Thallium	NC	NC	0.39 B	ND	ND	20.5	2.5 B	9.8	ND
Vanadium	NC	NC	55.9	11.9	5.8 E	61.3 E	54.0	60.8	84.0
Zinc	120	270	402	138	67.9 *E	495 *	406 *	526	550

Notes: All values in mg/kg
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ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
BOLD/italics - exceeds lowest effects criterion
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* - Percent recovery for duplicates were not within QC limits
N - Spike recoveries were not within QC limits

TABLE 6
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

Sample Location	NYSDEC Technical Guidance for Sediment Criteria		Lake Capri SED-3	Lake Capri SED-3	Lake Capri SED-3	Lake Capri SED-3	Lake Capri SED-3	Lake Capri SED-3	Lake Capri SED-3
Sample ID			E0868-06A	F1194-03A	G2136-14	J0376-11A	K0911-03	L1949-11	AC75648-015
Laboratory ID			6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/17/12	11/8/13
Sample Date	Lowest Effect	Highest Effect	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	690	2,010	5,860 *	3,490 E	5,890	1,580	6,000
Antimony	2.0	25	ND	0.35 B	0.63 BN	ND	ND	ND	ND
Arsenic	6.0	33	0.31 B	3.1	4.2 B	2.4	5.7 *	2.3	ND
Barium	NC	NC	6.7	29.7	88.2 *E	23.1	65.1	10.2 B	62.0
Beryllium	NC	NC	0.047 B	0.18 B	0.30 B	0.29 BE	0.50	0.037 B	ND
Cadmium	0.6	9	1.5	27.7	1.7 N* E	22.3	16.1 *	14.1	53.0
Calcium	NC	NC	104	605	11,700 *	1,260 *	2,940 *	199	ND
Chromium	26	110	1.5	7.9	9.6 E	13.7 *	9.1 *	3.7	21.0
Cobalt	NC	NC	0.66 B	4.7	12.6 E	3.6	5.7 E	2.4 B	9.8
Copper	16	110	2.7	16.7	32.4	32.5 *	10.9 *	8.5	57.0
Iron	20,000	20,000	920	5,730	10,900 E	3,770	6,240 *	1,830	9,100
Lead	31	110	9.2	44.2	34.0 N* E	85.9	46.0 N*	21.4	130
Magnesium	NC	NC	121	326	4,200 *E	527	675 *E	158	ND
Manganese	460	1,100	89.8	568	908 *	357	1,090 *	132	1,600
Mercury	0.15	1.3	0.016 B	0.049 BN	0.074 B	0.11	0.061 B	0.032 B	ND
Nickel	16	50	1.6 B	5.0 E	8.5 B	7.4 E	5.8 *	2.4 B	ND
Potassium	NC	NC	115	168 E	1,010 *	173	254	68.7	ND
Selenium	NC	NC	0.2 B	1.2 B	ND	ND	ND	ND	ND
Silver	1.0	2.2	ND	ND	ND	ND	ND	ND	ND
Sodium	NC	NC	13.7 B	51.5 B	528	90.5	103	21.8 B	ND
Thallium	NC	NC	0.33 B	ND	ND	1.7	1.1 B	0.36 B	ND
Vanadium	NC	NC	1.8	9.5	36.4 E	12.5 E	10.7	3.3	ND
Zinc	120	270	10.0	110	71.3 *E	106 *	73.5 *	44.7	220

Notes: All values in mg/kg
NC - No Criteria
ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
BOLD/Italics - exceeds lowest effects criterion
E - Replicate RPDs were not within QC limits
* - Percent recovery for duplicates were not within QC limits
N - Spike recoveries were not within QC limits

TABLE 6
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

Sample Location	NYSDEC Technical Guidance for Sediment Criteria		Lake Capri SED-4	Lake Capri SED-4	Lake Capri SED-4	Lake Capri SED-4	Lake Capri SED-4	Lake Capri SED-4	Lake Capri SED-4
Sample ID	Guidance for		E0868-08A	F1194-05A	G2136-16	J0376-12A	K0911-04	L1949-12	AC75648-016
Laboratory ID	Sediment Criteria		6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/17/12	11/8/13
Sample Date	Lowest Effect	Highest Effect	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	2,730	3,290	1,790 *	2,170 E	5,850	11,700	13,000
Antimony	2.0	25	0.22 B	0.76 B	0.42 BN	0.3 B	ND	ND	ND
Arsenic	6.0	33	3.4	4.0	3.9	1.9	4.4 *	6.2 B	ND
Barium	NC	NC	41.5	47.8	177 *E	18.7	64.8	103	110
Beryllium	NC	NC	0.2 B	0.22 B	0.13 B	0.19 BE	0.45 B	0.36 B	ND
Cadmium	0.6	9	32.3	32.3	15.8 N* E	14.8	47.3 *	79.5	98.0
Calcium	NC	NC	588	1,240	8,090 *	758 *	2,560 *	3,200	ND
Chromium	26	110	8.6	12.5	6.8 E	8.1 *	21.7 *	45.4	47.0
Cobalt	NC	NC	4.9	10.0	7.0 E	3.1	9.5 E	13.3 B	ND
Copper	16	110	21.6	35.7	17.1	22.6 *	49.5 *	117	140
Iron	20,000	20,000	4,450	9,330	7,280 E	2,540	9,170 *	12,800	17,000
Lead	31	110	71.2	193	34.3 N* E	60.6	129 N*	297	310
Magnesium	NC	NC	352	519	653 *E	304	868 *E	1,650	ND
Manganese	460	1,100	837	845	11,700 *	272	1,150 *	1,820	2,300
Mercury	0.15	1.3	0.096	0.059 BN	0.21	0.082	0.18	0.39	ND
Nickel	16	50	6.0	10.7 E	6.3	4.8 E	13 *	25.3	ND
Potassium	NC	NC	145	236 E	281 *	103	383	623	ND
Selenium	NC	NC	0.76 B	1.9 B	3.3	ND	ND	4.6 B	ND
Silver	1.0	2.2	ND	ND	1.1 B	ND	ND	ND	ND
Sodium	NC	NC	35.4 B	87.0	131	56 B	145 B	312 B	ND
Thallium	NC	NC	3.7	ND	2.8	1.6	1.7 B	4.6 B	ND
Vanadium	NC	NC	9.2	16.9	7.4 E	7.2 E	26.6	41.2	ND
Zinc	120	270	122	186	110 *E	71.3 *	232 *	323	330

Notes: All values in mg/kg
NC - No Criteria
ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
BOLD/Italics - exceeds lowest effects criterion
E - Replicate RPDs were not within QC limits
* - Percent recovery for duplicates were not within QC limits
N - Spike recoveries were not within QC limits

TABLE 6
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

Sample Location	NYSDEC Technical Guidance for Sediment Criteria		Willetts Creek SED-5	Willetts Creek SED-5	Willetts Creek SED-5	Willetts Creek SED-5	Willetts Creek SED-5	Willetts Creek SED-5	Willetts Creek SED-5
Sample ID			E0868-10A	F1193-17A	G2114-21	J0376-13A	K0911-05	L1949-13	AC75648-017
Laboratory ID									
Sample Date	Lowest Effect	Highest Effect	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/18/12	11/8/13
			conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	1,060	552	5,150	2,540 E	6,300	345	820
Antimony	2.0	25	0.074 B	0.27 B	1.1 BN	0.68 B	1.4 BN	ND	ND
Arsenic	6.0	33	0.6 B	0.52 B	8.2	6.5	9.3 *	1.6	ND
Barium	NC	NC	12.1	13.6	96.6	84.6	114	15.1	ND
Beryllium	NC	NC	0.083 B	0.03 B	0.34 B	0.24 BE	0.57 B	0.010 B	ND
Cadmium	0.6	9	0.43	1.6	52.0	28.8	73.5 *	1.7	7.1
Calcium	NC	NC	228	1,430	4,150	3,470 *	7,960 *	330	ND
Chromium	26	110	3.8	2.7	33.3	18.5 *	44.0 *	3.5	ND
Cobalt	NC	NC	1.2 B	1.1 B	7.8	7.4	13.3 E	1.1 B	ND
Copper	16	110	4.7	4.7	103	54.0 *	166 *	9.0	42.0
Iron	20,000	20,000	3,400	3,410	23,900	25,800	39,900 *	4,180	5,100
Lead	31	110	7.9	4.9	215 E	83.3	229 N*	9.4	37.0
Magnesium	NC	NC	604	864	1,370	701	1,370 *E	75.8	ND
Manganese	460	1,100	174	291	2,140	3,750	1,210 *	417	610
Mercury	0.15	1.3	0.016 B	0.0055 B	0.48	0.26	0.37	0.023 B	ND
Nickel	16	50	1.6	1.0 B	19.2	8.0 E	22.5 *	1.9 B	ND
Potassium	NC	NC	135	58.3	320	188	360	29.6 B	ND
Selenium	NC	NC	0.28 B	0.56 B	ND	2.3 B	ND	0.87 B	ND
Silver	1.0	2.2	ND	ND	ND	0.52 B	ND	0.084 B	ND
Sodium	NC	NC	18.3 B	102	204	141	323	11.7 B	ND
Thallium	NC	NC	0.56 B	ND	2.1 B	20.1	1.9 B	0.76 B	ND
Vanadium	NC	NC	5.6	4.5	54.2	44.6 E	175	7.8	27.0
Zinc	120	270	13.2	26.2	290 E	171 *	440 *	24.2	78.0

Notes: All values in mg/kg
NC - No Criteria
ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
BOLD/Italics - exceeds lowest effects criterion
E - Replicate RPDs were not within QC limits
* - Percent recovery for duplicates were not within QC limits
N - Spike recoveries were not within QC limits

TABLE 6
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH NOVEMBER 2013 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

Sample Location	NYSDEC Technical Guidance for Sediment Criteria		Willetts Creek SED-6	Willetts Creek SED-6	Willetts Creek SED-6	Willetts Creek SED-6	Willetts Creek SED-6	Willetts Creek SED-6	Willetts Creek SED-6
Sample ID			E0868-12A	F1194-07A	G2114-17	J0376-14	K0911-06	L1949-14	AC75648-018
Laboratory ID									
Sample Date	Lowest Effect	Highest Effect	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/18/12	11/8/13
			conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	1,030	775	7,700	802 E	1,370	574	1,000
Antimony	2.0	25	0.076	0.38 B	2.6 N	0.38 B	0.44 BN	ND	ND
Arsenic	6.0	33	0.97	0.84 B	6.4	0.79	2.7 *	0.64 B	ND
Barium	NC	NC	7.4	4.7 B	89.7	3.6 B	10.4	2.7 B	ND
Beryllium	NC	NC	0.094	0.049 B	0.36 B	0.069 BE	0.11 B	ND	ND
Cadmium	0.6	9	0.23	0.31	101	0.31	ND	0.30	ND
Calcium	NC	NC	4,760	599	7,690	2,450 *	4,670 *	299	ND
Chromium	26	110	2.4	3.4	41.8	4.4 *	15.9 *	5.4	ND
Cobalt	NC	NC	1.8	0.77 B	8.1	0.65 B	1.9 BE	0.50 B	3.3
Copper	16	110	28.3	6.3	77.3	9.4 *	21.5 *	8.0	11.0
Iron	20,000	20,000	3,290	2,900	25,600	2,810	36,900 *	2,120	27,000
Lead	31	110	7.9	10.3	109 E	9.5	39.7 N*	8.7	88.0
Magnesium	NC	NC	2,930	468	1,980	1,410	1,290 *E	263	ND
Manganese	460	1,100	102	30.4	978	21.3	118 *	16.2	610
Mercury	0.15	1.3	0.036 B	ND	0.15	ND	0.019 B	0.011 B	ND
Nickel	16	50	1.8	1.9 BE	17.2	1.8 BE	10.1 *	2.0 B	ND
Potassium	NC	NC	118	122 E	528	66.4	97.5	54.2 B	ND
Selenium	NC	NC	ND	0.69 B	ND	ND	ND	ND	ND
Silver	1.0	2.2	ND	ND	ND	ND	ND	0.080 B	ND
Sodium	NC	NC	24.9 B	70.7	414	47.7	51.8	22.0 B	ND
Thallium	NC	NC	0.25 B	0.36 B	0.98 B	ND	ND	ND	ND
Vanadium	NC	NC	9.9	6.0	42.4	4.2 E	8.5	3.2	18.0
Zinc	120	270	17.2	24.2	409 E	31.0 *	68.9 *	38.9	66.0

Notes: All values in mg/kg
NC - No Criteria
ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
BOLD/Italics - exceeds lowest effects criterion
E - Replicate RPDs were not within QC limits
* - Percent recovery for duplicates were not within QC limits
N - Spike recoveries were not within QC limits

TABLE 7
DZUS FASTENERS SITE (1-52-033)
NOVEMBER 2013 (ROUND 7) SAMPLING EVENT
GROUNDWATER FIELD DUPLICATE DATA SUMMARY

Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered Metal	MW-2 DMW-2 AC75646-005 11/6/13 Unfiltered conc. Q	MW-2 DMW-52 AC75646-007 11/6/13 Unfiltered conc. Q	Precision as Relative Percent Difference (RPD)	DMW-2F DMW-52F AC75646-006 11/6/13 Filtered conc. Q	MW-2 DMW-52F AC75646-008 11/6/13 Filtered conc. Q	Precision as Relative Percent Difference (RPD)
Aluminum	300	ND	NC	ND	ND	NC
Antimony	ND	ND	NC	ND	ND	NC
Arsenic	3.0	ND	NC	ND	ND	NC
Barium	ND	ND	NC	18.4 B	ND	NC
Beryllium	ND	ND	NC	ND	ND	NC
Cadmium	ND	ND	NC	ND	ND	NC
Calcium	15,000	15,000	0.0%	12,300	16,000	26.1%
Chromium	ND	ND	NC	ND	ND	NC
Cobalt	2.6	2.1	21.3%	1 B	2.2	75.0%
Copper	ND	ND	NC	ND	ND	NC
Iron	9,200	4,200	74.6%	1,060	3,500	107.0%
Lead	ND	ND	NC	ND	ND	NC
Magnesium	ND	ND	NC	1,790	ND	NC
Manganese	170	160	6.1%	115	170	38.6%
Mercury	ND	ND	NC	ND	ND	NC
Nickel	ND	ND	NC	1.3 B	ND	NC
Potassium	ND	ND	NC	1,430	ND	NC
Selenium	ND	ND	NC	ND	ND	NC
Silver	ND	ND	NC	ND	ND	NC
Sodium	25,000	23,000	8.3%	23,500	25,000	6.2%
Thallium	ND	ND	NC	ND	ND	NC
Vanadium	ND	ND	NC	ND	ND	NC
Zinc	ND	ND	NC	5.2 B	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.

BOLD/Italics - exceeds criterion

TABLE 8
DZUS FASTENERS SITE (1-52-033)
NOVEMBER 2013 (ROUND 7) SAMPLING EVENT
SURFACE WATER FIELD DUPLICATE DATA SUMMARY

Sample Location Sample ID Laboratory ID Sample Date	Willetts Creek SW-4 AC75648-164 11/8/13	Willetts Creek SWZZ AC75648-162 11/8/13	Precision as Relative Percent Difference (RPD)
Metal	conc. Q	conc. Q	
Aluminum	ND	ND	NC
Antimony	ND	ND	NC
Arsenic	0.50 JB	0.51 JB	2.0%
Barium	ND	ND	NC
Beryllium	ND	ND	NC
Cadmium	0.93 J	1.4 J	40.3%
Calcium	15,000	15,000	0.0%
Chromium	ND	ND	NC
Cobalt	0.44 J	1.1 J	85.7%
Copper	ND	ND	NC
Iron	450	1,100	83.9%
Lead	2.4 J	3.1	25.5%
Magnesium	ND	ND	NC
Manganese	910	1600	55.0%
Mercury	ND	ND	NC
Nickel	ND	ND	NC
Potassium	ND	ND	NC
Selenium	ND	ND	NC
Silver	ND	ND	NC
Sodium	22,000	24,000	8.7%
Thallium	ND	ND	NC
Vanadium	ND	ND	NC
Zinc	ND	ND	NC

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.

BOLD/Italics - exceeds criterion

TABLE 9
DZUS FASTENERS SITE (1-52-033)
NOVEMBER 2013 (ROUND 7) SAMPLING EVENT
SEDIMENT FIELD DUPLICATE DATA SUMMARY

Sample Location	Willetts Creek	Willetts Creek	Precision as
Field Sample ID	SED-6	SED XZ	Relative
Laboratory ID	AC75648-016	AC75648-019	Percent
Sample Date	11/8/13	11/8/13	Difference
Metal	conc. Q	conc. Q	(RPD)
Aluminum	13,000	16,000	20.7%
Antimony	ND	ND	NC
Arsenic	ND	ND	NC
Barium	110	140	24.0%
Beryllium	ND	ND	NC
Cadmium	98.0	100	2.0%
Calcium	ND	ND	NC
Chromium	47.0	58.0	21.0%
Cobalt	ND	ND	NC
Copper	140	170	19.4%
Iron	17,000	19,000	11.1%
Lead	310	380	20.3%
Magnesium	ND	ND	NC
Manganese	2,300	3,100	29.6%
Mercury	ND	ND	NC
Nickel	ND	ND	NC
Potassium	ND	ND	NC
Selenium	ND	ND	NC
Silver	ND	ND	NC
Sodium	ND	ND	NC
Thallium	ND	ND	NC
Vanadium	ND	ND	NC
Zinc	330	430	26.3%

All values in mg/kg dry weight.

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

N - Laboratory spike recovery outside control limit

* - Laboratory Replicate RPDs were not within QC limits

BOLD/Italics - exceeds criterion

Figures



USGS NY Bay Shore West
Quadrangle

U.S.G.S. 1:24 000 SCALE
TOPOGRAPHIC MAP

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Prepared by:

AECOM

Prepared for:



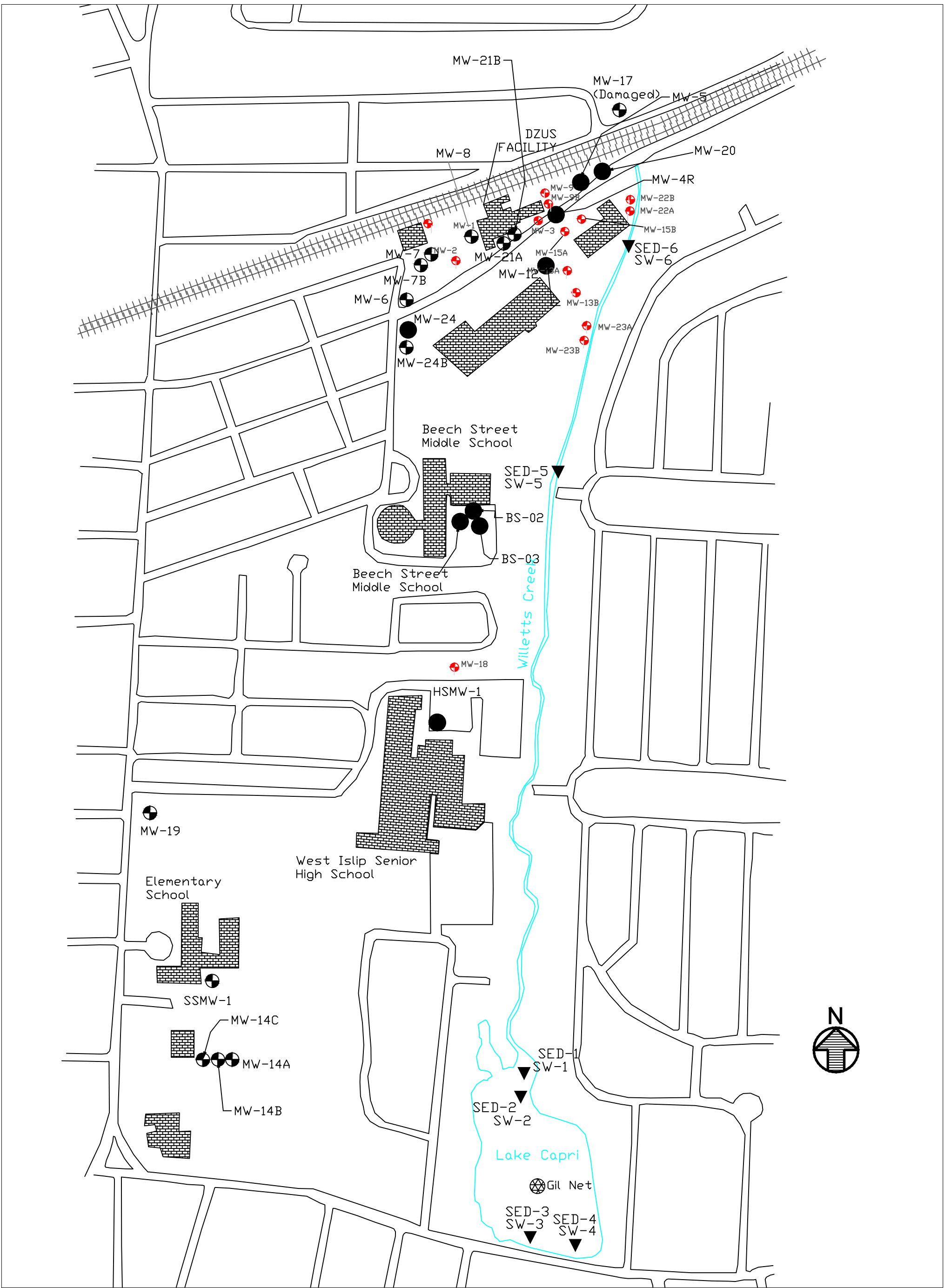
Multi Site G
Operation, Maintenance & Monitoring

Site Location
Dzus Fasteners Site





Date:
January 2013

Scale:
1 inch = 2,500 feet

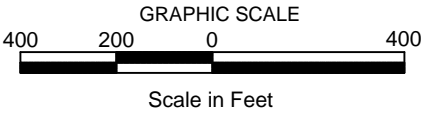
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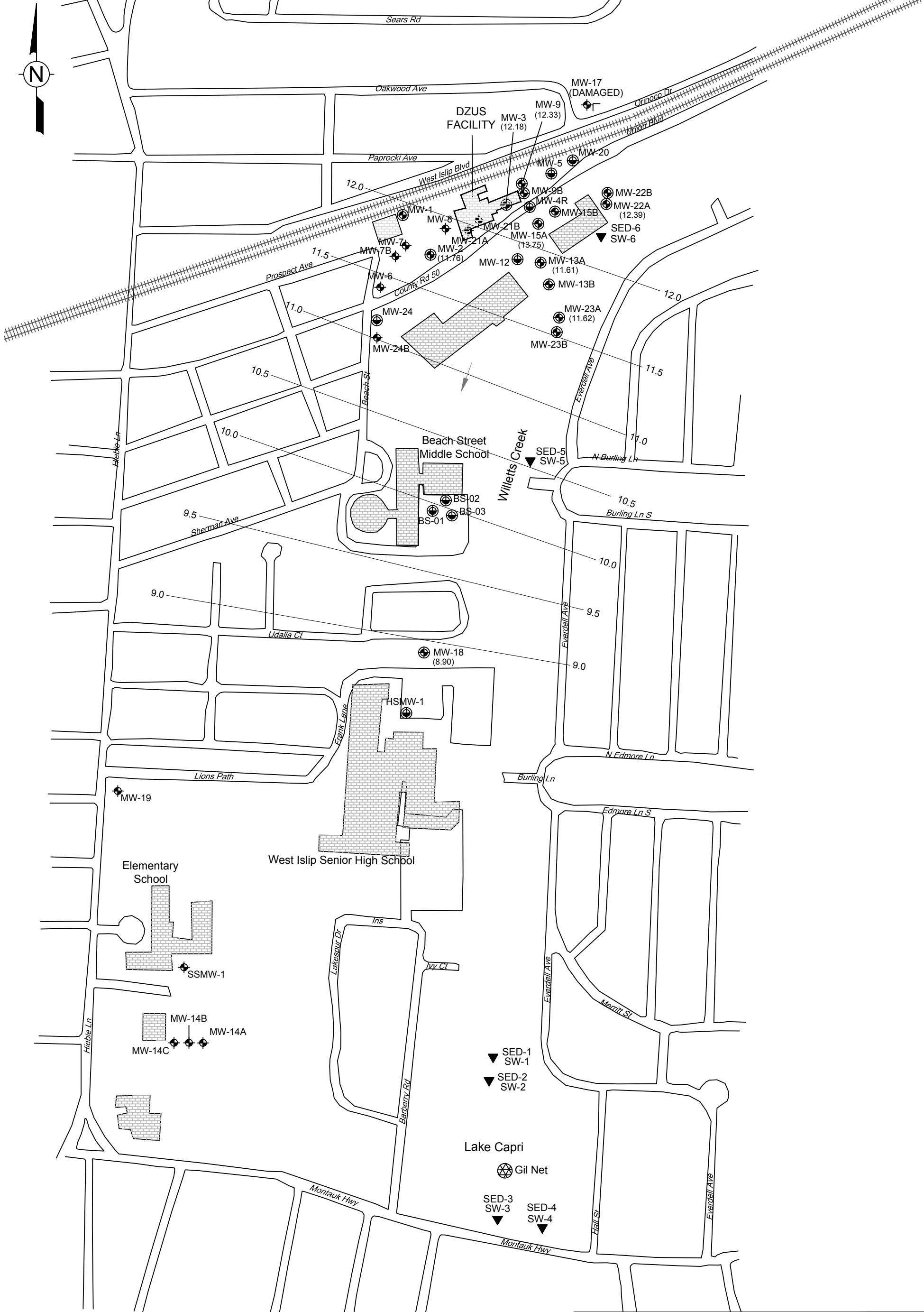
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-  EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007.)
-  MISSING MONITORING WELLS
-  SURFACE WATER AND SEDIMENT SAMPLE LOCATION

 RAILROAD TRACKS



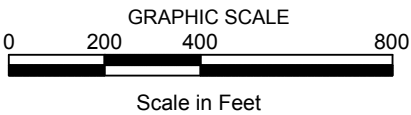
Prepared by :			
			
SUBMITTED BY :		<div>MULTI SITE G - Dzus Fasteners</div> <div>SITE NO. 1-52-033</div> <div>SITE PLAN</div>	
PK			
DRAWN BY :			
SC			
APPROVED BY :			
PK		DATE : JUNE 2010	SCALE : AS SHOWN
		DRAWING NO. :	2

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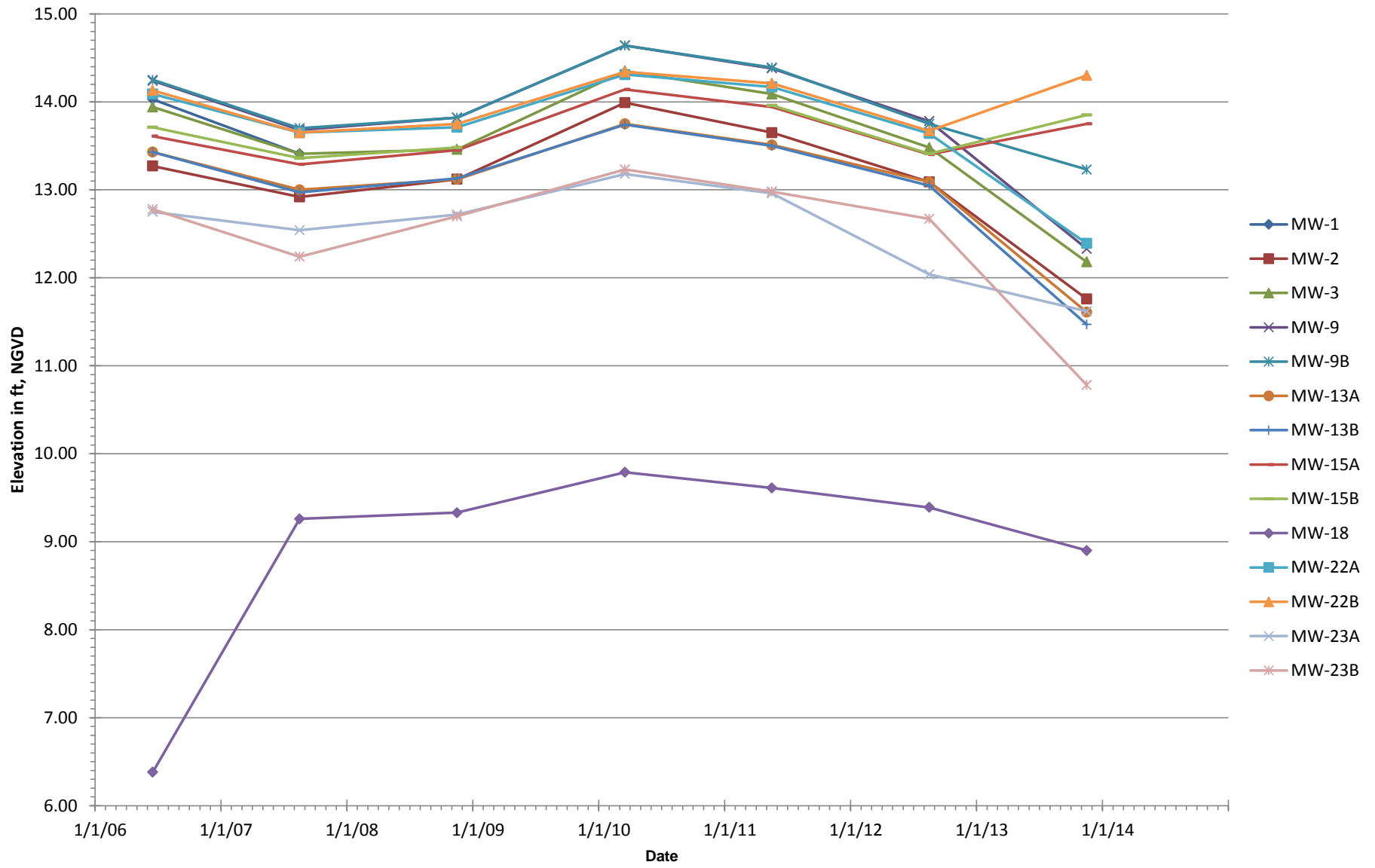
LEGEND:

- EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007).
- (8.90) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 9.0 GROUNDWATER ISOPLETH CONTOUR INTERVAL - 0.5 ft
- DIRECTION OF GROUNDWATER FLOW
- RAILROAD TRACKS

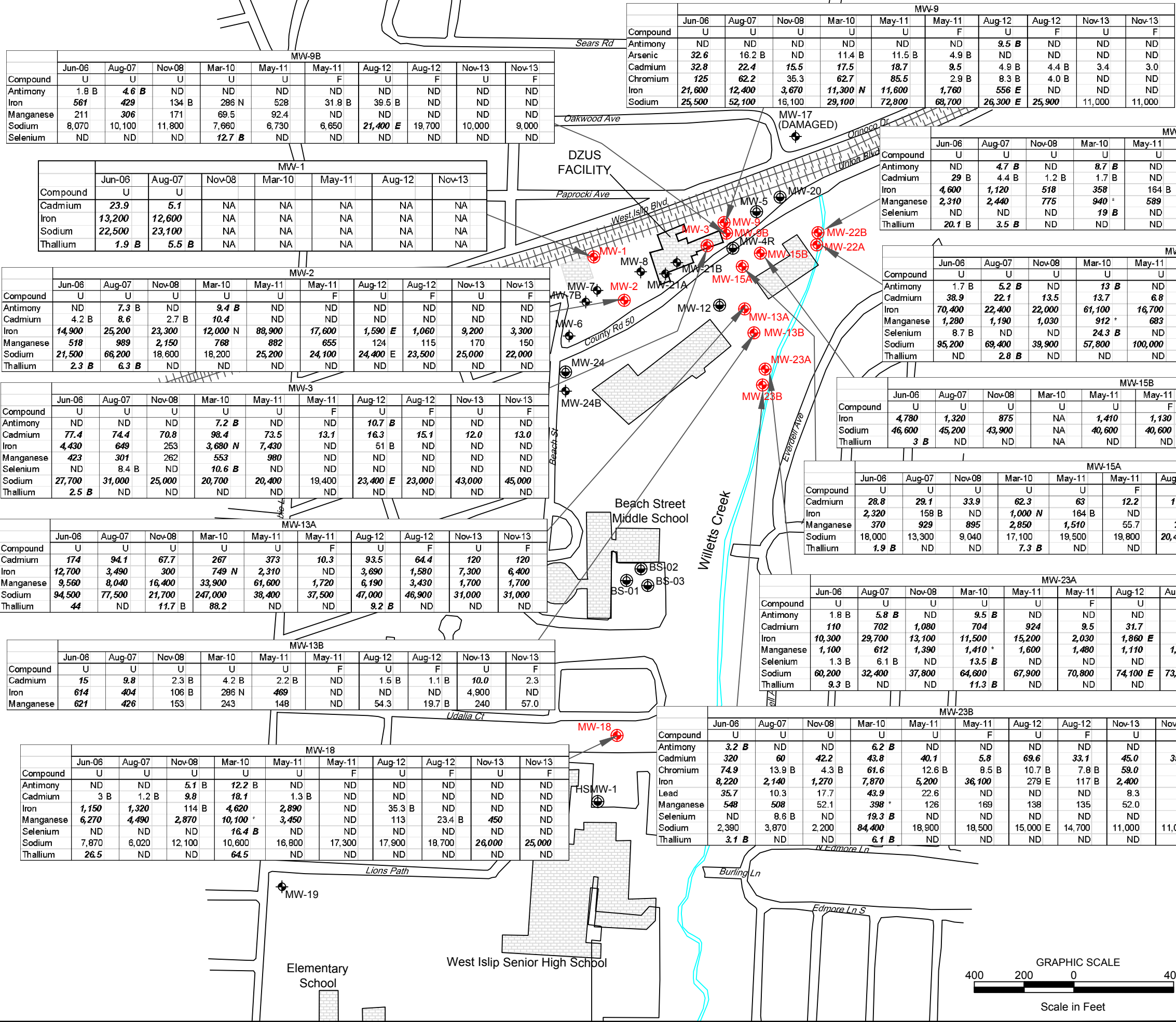


Prepared by : AECOM		
SUBMITTED BY : PK	MULTI SITE G - Dzus Fasteners SITE NO. 1-52-033	
DRAWN BY : JK	GROUNDWATER CONTOUR MAP NOVEMBER 2013	
APPROVED BY :	DATE : NOVEMBER 2013	DRAWING NO. : AS SHOWN
		3

Figure 3A
Dzus Fasteners (1-52-077)
Groundwater Hydrograph



MW-1 was destroyed in December 2007



Compound	NYSDEC Criteria
Antimony	3
Arsenic	25
Cadmium	5
Chromium	50
Iron	300
Lead	25
Manganese	300
Selenium	10
Sodium	20,000
Thallium	0.5
U - Unfiltered sample F - Filtered sample	

- LEGEND:**
- EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007).
 - EXISTING MONITORING WELLS
 - MISSING MONITORING WELLS
 - ALL CONCENTRATIONS IN mg/Kg
 - BOLD RESULTS EXCEED CRITERION
 - RAILROAD TRACKS

SUBMITTED BY :

PK

DRAWN BY :

SC/jk

APPROVED BY :

PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

**SUMMARY OF TAL
METALS IN
GROUNDWATER
NOVEMBER 2013**

DATE :

NOVEMBER 2013

SCALE :

AS SHOWN

DRAWING NO. :

4

File: J:\Project\Dzus\Cadd\Drawings\SurfW tal Metal-2014-01-14.dwg Layout: Fiq5 User: karchi1 Plotted: Jan 14, 2014 - 3:45pm

SW-5							
Compound	Jun-06	Aug-07	Nov-08	Mar-10	May-11	Sep-12	Nov-13
Antimony	1.5 B	4.4 B	ND	ND	ND	ND	0.54 J
Cadmium	5.7	5.6	3 B	5.1	8.8	4.1 B	15
Iron	632	599	1,060	959	4,080	690	14,000
Manganese	1,420	1,110	956	450	923	519	3,000
Sodium	21,100	21,800	18,100	20,300	26,900	28,100	22,000

SW-6							
Compound	Jun-06	Aug-07	Nov-08	Mar-10	May-11	Sep-12	Nov-13
Antimony	ND	8 B	ND	ND	ND	ND	
Cadmium	0.55 B	2.8 B	75.4	ND	ND	ND	creekbed
Iron	5,400	2,170	4,010	639	2,280	6,840	was dry at
Manganese	2,610	1,510 E	1,040	406	869	1,160	the time of
Selenium	ND	ND	ND	10.5 B	ND	ND	sampling
Sodium	29,200	33,600 E	26,000	20,500	33,800	32,100	

SW-3							
Compound	Jun-06	Aug-07	Nov-08	Mar-10	May-11	Sep-12	Nov-13
Antimony	ND	ND	ND	7.2 B	ND	ND	ND
Iron	788	280	772	332	311	144 B	590
Manganese	882	73.9 E	1,790	911	990	355	940
Sodium	18,300	16,800 E	17,700	23,300	18,800	23,500	23,000
Thallium	ND	ND	ND	5.9 B	ND	ND	ND

SW-1							
Compound	Jun-06	Aug-07	Nov-08	Mar-10	May-11	Sep-12	Nov-13
Antimony	ND	ND	6 B	ND	ND	ND	ND
Iron	691	738	598	387	416	172 B	1,100
Manganese	1,050	862	1,610	996	1,000	552	1,700
Sodium	18,500	15,800	19,000	22,500	18,700	24,600	25,000

SW-2							
Compound	Jun-06	Aug-07	Nov-08	Mar-10	May-11	Sep-12	Nov-13
Antimony	ND	ND	ND	5.7 B	ND	ND	0.58 J
Iron	649	819	675	478	508	176 B	680
Manganese	1,010	819 E	1,560	968	1,080	564	1,300
Sodium	18,100	16,200 E	19,500	22,000	18,600	23,800	21,000
Thallium	ND	ND	ND	7.2 B	ND	ND	0.74 J

SW-4							
Compound	Jun-06	Aug-07	Nov-08	Mar-10	May-11	Sep-12	Nov-13
Iron	610	609	741	344	322	152 B	450
Manganese	786	135 E	1,630	943	918	463	910
Sodium	18,100	16,600 E	17,800	22,900	18,700	23,900	22,000

LEGEND:

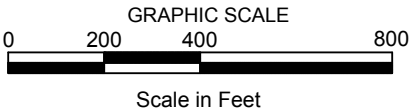
⊕ EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007).

▼ SURFACE WATER, SEDIMENT SAMPLE LOCATION

ALL CONCENTRATIONS IN mg/Kg

BOLD RESULTS EXCEED CRITERION

+++++ RAILROAD TRACKS



Compound	Surface Water Criteria
Antimony	3
Cadmium	5
Iron	300
Lead	50
Manganese	300
Selenium	10
Sodium	20,000
Thallium	0.5

Prepared by :

AECOM

SUBMITTED BY :

PK

DRAWN BY :

JK

APPROVED BY :

MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

SUMMARY OF TAL METALS
IN SURFACE WATER
NOVEMBER 2013

DATE :
NOVEMBER 2013

SCALE :
AS SHOWN

DRAWING NO. :

5

File: J:\Project\Dzus\Cadd\Drawings\Sed_tal Metal-2014-02-11.dwg Layout: Fig6 User: karchi1 Plotted: Feb 11, 2014 - 9:36am

SED-6							
Compound	Jun-06	Aug-07	Nov-08	Mar-10	May-11	Sep-12	Nov-13
Antimony	0.076	0.38 B	2.6 N	0.38 B	0.44 BN	ND	ND
Arsenic	0.97	0.84 B	6.4	0.79	2.7 *	0.64 B	ND
Cadmium	0.23	0.31	101	0.31	ND	0.30	ND
Chromium	2.4	3.4	41.8	4.4 *	15.9 *	5.4	ND
Copper	28.3	6.3	77.3	9.4 *	21.5 *	8.0	11.0
Iron	3,290	2,900	25,600	2,810	36,900 *	2,120	27,000
Lead	7.9	10.3	109 E	9.5	39.7 N*	8.7	88.0
Manganese	102	30.4	978	21.3	118 *	16.2	610
Mercury	0.036 B	ND	0.15	ND	0.019 B	0.011 B	ND
Nickel	1.8	1.9 BE	17.2	1.8 BE	10.1 *	2.0 B	ND
Zinc	17.2	24.2	409 E	31 *	68.9 *	38.9	66.0

SED-5							
Compound	Jun-06	Aug-07	Nov-08	Mar-10	May-11	Sep-12	Nov-13
Arsenic	0.6 B	0.52 B	8.2	6.5	9.3 *	1.6	ND
Cadmium	0.43	1.6	52	28.8	73.5 *	1.7	7.1
Chromium	3.8	2.7	33.3	18.5 *	44 *	3.5	ND
Copper	4.7	4.7	103	54 *	166 *	9.0	42.0
Iron	3,400	3,410	23,900	25,800	39,900 *	4,180	5,100
Lead	7.9	4.9	215 E	83.3	229 N*	9.4	37.0
Manganese	174	291	2,140	3,750	1,210 *	417	610
Mercury	0.016 B	0.0055 B	0.48	0.26	0.37	0.023 B	ND
Nickel	1.6	1 B	19.2	8 E	22.5 *	1.9	ND
Zinc	13.2	26.2	290 E	171 *	440 *	24.2	78.0

SED-1							
Compound	Jun-06	Aug-07	Nov-08	Mar-10	May-11	Sep-12	Nov-13
Antimony	0.7 B	0.41 B	2.2 BN	6.4	ND	ND	ND
Arsenic	7.9	1.5	8.7	16.1	15.2 *	18.1	ND
Cadmium	47.8	11.6	61.4 N*E	69.2	81.2 *	89.8	63.0
Chromium	20.7	2.8	27.1 E	39.1 *	50 *	57.4	ND
Copper	38.6	86.3	65.7	127 *	121 *	144	61.0
Iron	10,300	3,880	19,700 E	36,000	44,600 *	26,700	8,200
Lead	170	19.3	176 N*E	225	226 N*	289	110
Manganese	1,290	1,200	181 *	2,250	22,600 *	3,620	3,600
Mercury	0.21	0.0071 B	0.34	0.38	0.33 B	0.52	ND
Nickel	11.4	3.0	19.4	24.1 E	24.1 *	27.3	ND
Silver	ND	ND	ND	ND	2.7 B	ND	ND
Zinc	215	71.6	445 *E	493 *	572 *	642	210

SED-2							
Compound	Jun-06	Aug-07	Nov-08	Mar-10	May-11	Sep-12	Nov-13
Arsenic	19.7	2 B	1.8	20.2	13.4 *	19.2	ND
Cadmium	133	21.2	12.5 N*E	111	96.6 *	122	96.0
Chromium	33.7	7.7	6.5 E	49.4 *	45.2 *	47.7	45.0
Copper	210	19.6	15.6	97.7 *	80.2 *	91.0	130
Iron	20,300	8,940	3,850 E	27,500	17,300 *	25,400	42,000
Lead	315	40.7	25.8 N*E	375	315 N*	408	280
Manganese	153	1,300	769 *	3,510	1,480 *	3,790	6,800
Mercury	0.45	0.047 BN	0.018 B	0.35	0.50	0.49	ND
Nickel	17.6	6.8 E	3.2 B	22 E	17.6 *	21.9	ND
Zinc	402	138	67.9 *E	495 *	406 *	526	550

SED-3							
Compound	Jun-06	Aug-07	Nov-08	Mar-10	May-11	Sep-12	Nov-13
Cadmium	1.5	27.7	1.7 N*E	22.3	16.1 *	14.1	53.0
Copper	2.7	16.7	32.4	32.5 *	10.9 *	8.5	57.0
Lead	9.2	44.2	34 N*E	85.9	46 N*	21.4	130
Manganese	89.8	568	908 *	357	1,090 *	132	1,600
Zinc	10	110	71.3 *E	106 *	73.5 *	44.7	220

SED-4							
Compound	Jun-06	Aug-07	Nov-08	Mar-10	May-11	Sep-12	Nov-13
Arsenic	3.4	4.0	3.9	1.9	4.4 *	6.2 B	ND
Cadmium	32.3	32.3	15.8 N*E	14.8	47.3 *	79.5	98.0
Chromium	8.6	12.5	6.8 E	8.1 *	21.7 *	45.4	47.0
Copper	21.6	35.7	17.1	22.6 *	49.5 *	117	140
Lead	71.2	193	34.3 N*E	60.6	129 N*	297	310
Manganese	837	845	11,700 *	272	1,150 *	1,820	2,300
Mercury	0.096	0.059 BN	0.21	0.082	0.18	0.39	ND
Silver	ND	ND	1.1 B	ND	ND	ND	ND
Zinc	122	186	110 *E	71.3 *	232 *	323	330

LEGEND:

EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007).

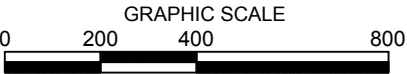
SURFACE WATER, SEDIMENT SAMPLE LOCATION

ALL CONCENTRATIONS IN mg/Kg

BOLD RESULTS EXCEED CRITERION

RAILROAD TRACKS

NYSDEC Sediment Criteria	
Compound	Lowest Effect Highest Effect
Antimony	20 25
Arsenic	60 33
Cadmium	0.6 9
Chromium	26 110
Copper	16 110
Iron	20,000 20,000
Lead	31 110
Manganese	480 1,100
Mercury	0.15 1.3
Nickel	16 50
Zinc	120 270



Prepared by :

AECOM

SUBMITTED BY :

PK

DRAWN BY :

JK

APPROVED BY :

MULTISITE G - Dzus Fasteners
SITE NO. 1-52-033

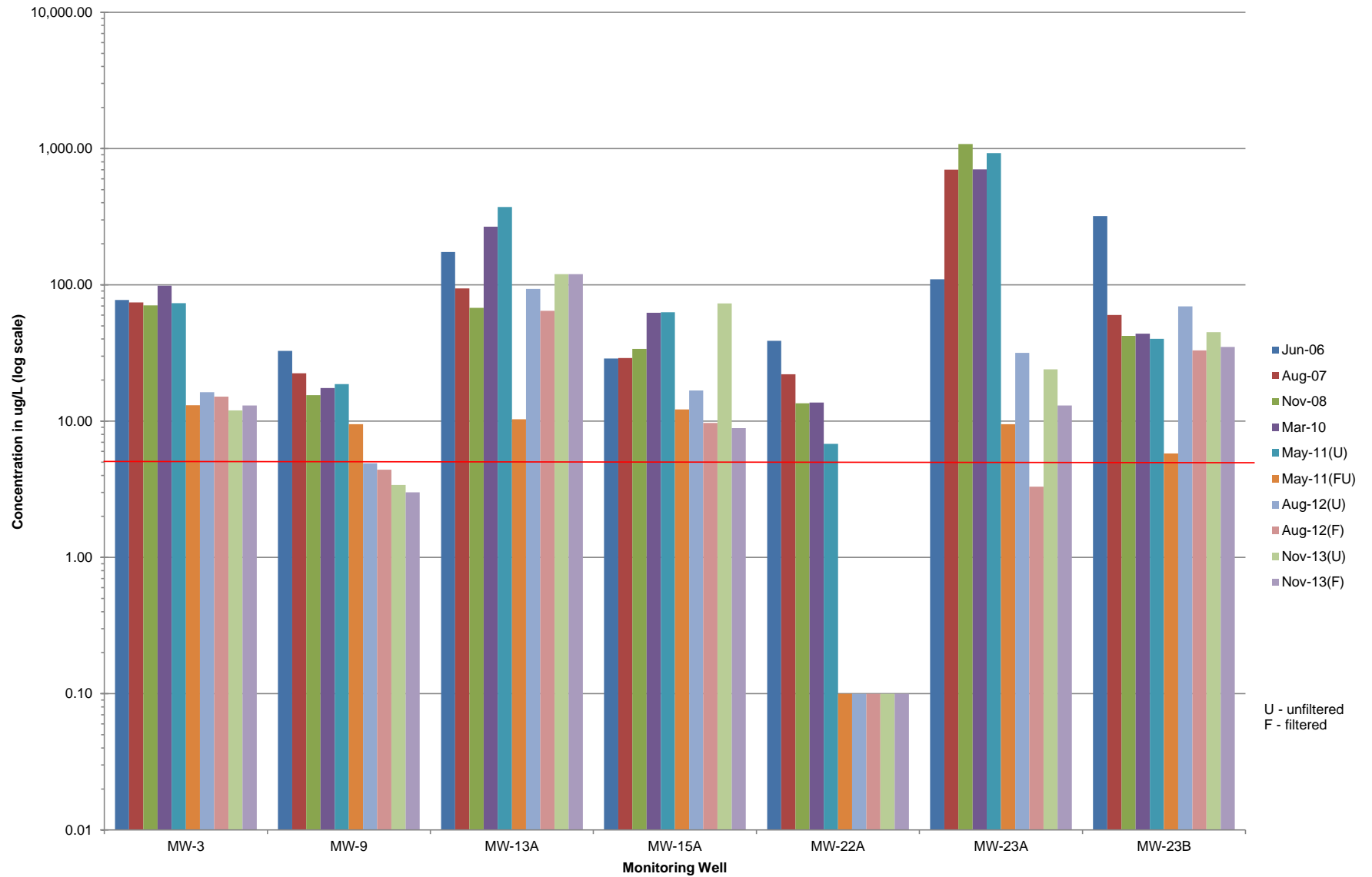
SUMMARY OF TAL METALS IN SEDIMENT
NOVEMBER 2013

DATE :
NOVEMBER 2013

SCALE :
AS SHOWN

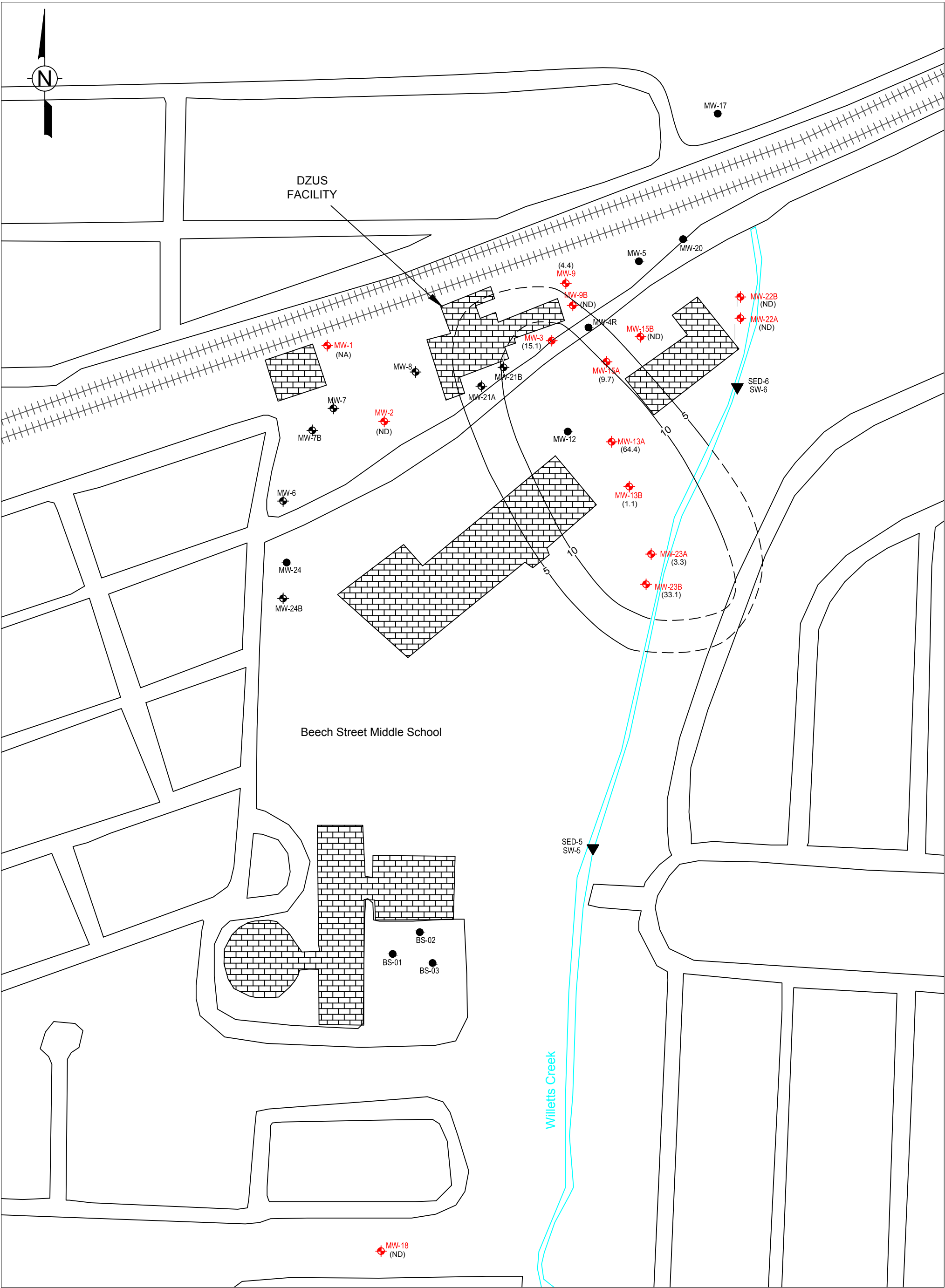
DRAWING NO. :
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**FIGURE 7
CADMIUM CONCENTRATIONS IN SELECTED MONITORING WELLS
DZUS FASTENERS SITE (1-52-033)**



Cadmium Class GA criterion is 5 ug/L
 ND values shown as 0.10 ug/L for plotting purposes

File: J:\Project\Dzus\Cadd\Drawings\FiltCadmiumIsoMap-2012-11-14.dwg Layout: Fig8 User: karchj1 Plotted: Jan 14, 2014 - 3:56pm



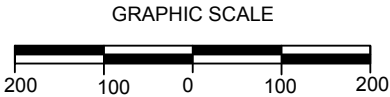
LEGEND:

- EXISTING WELLS INCLUDED IN LONG TERM MONITORING (MW-1 was damaged in December 2007.)
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- NA NOT ANALYZED
- ND NOT DETECTED

(9.7) FILTERED CADMIUM CONCENTRATION IN ug/L

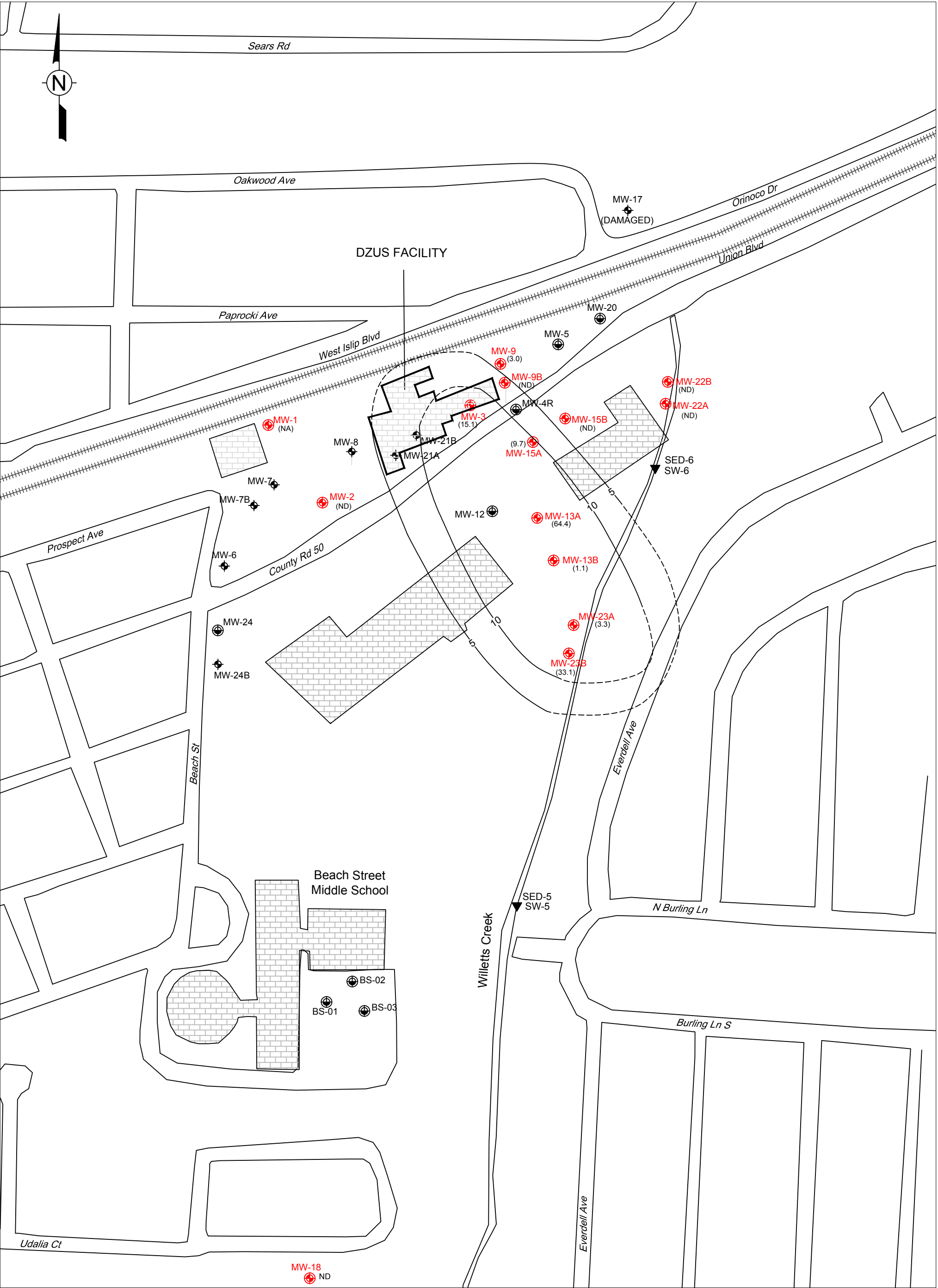
10 CADMIUM ISOCONCENTRATION LINE. CONTOUR INTERVAL IS 5ug/L. DASHED WHERE INFERRED

RAILROAD TRACKS



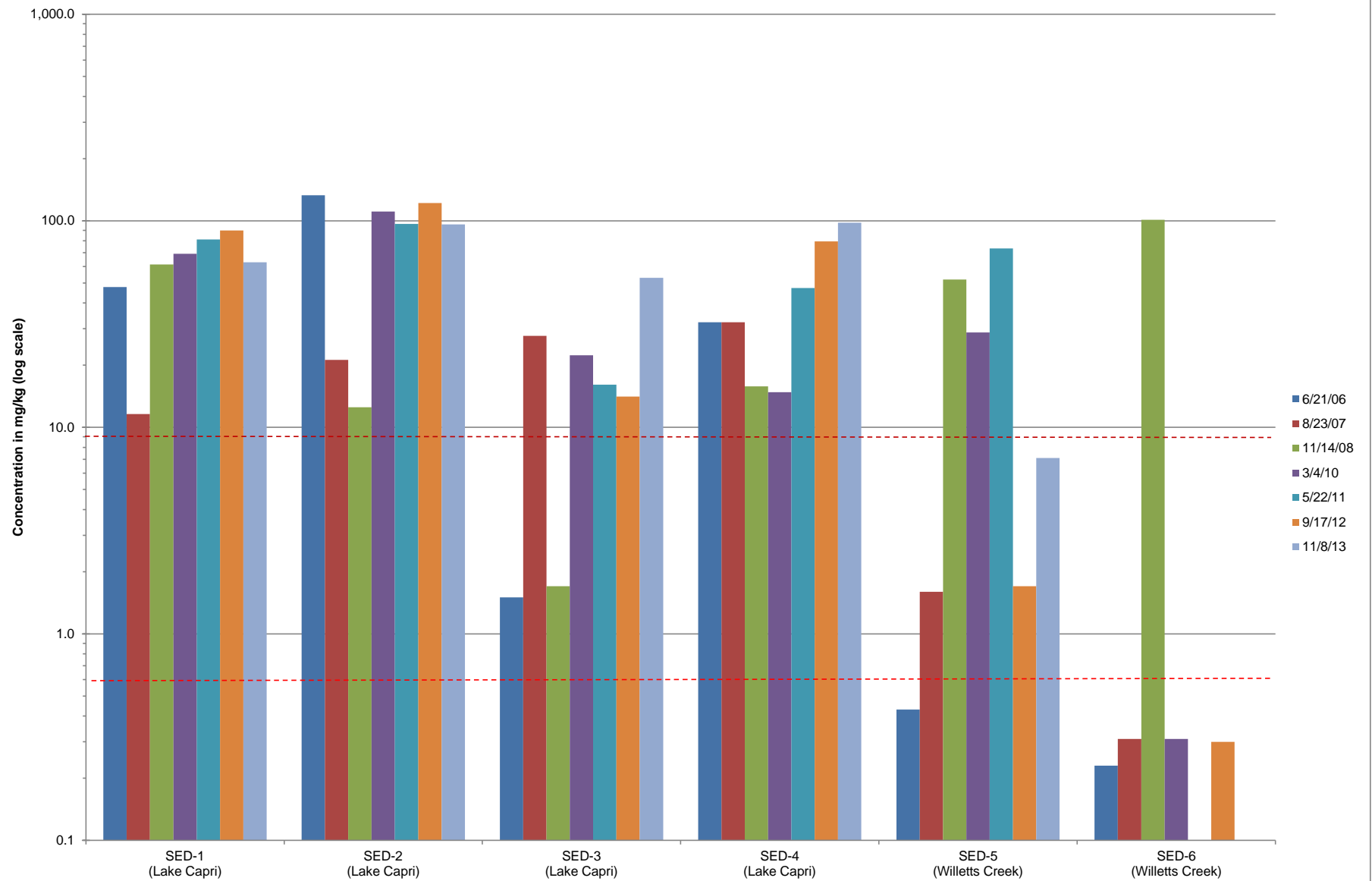
Prepared by : AECOM		
SUBMITTED BY : PK	MULTI SITE G - Dzus Fasteners SITE NO. 1-52-033	
DRAWN BY : SC/jk	FILTERED CADMIUM ISOCONCENTRATION MAP AUGUST 2012	
APPROVED BY : PK	DATE : NOVEMBER 2012	SCALE : AS SHOWN
	DRAWING NO. : 8	

File: J:\Project\Dzus\Cadd\Drawings\FitCadmiumIsoMap-2014-01-14.dwg Layout: FitCadmiumIsoMap-2014-01-14.dwg User: karchi1 Plotted: Jan 14, 2014 - 3:53pm



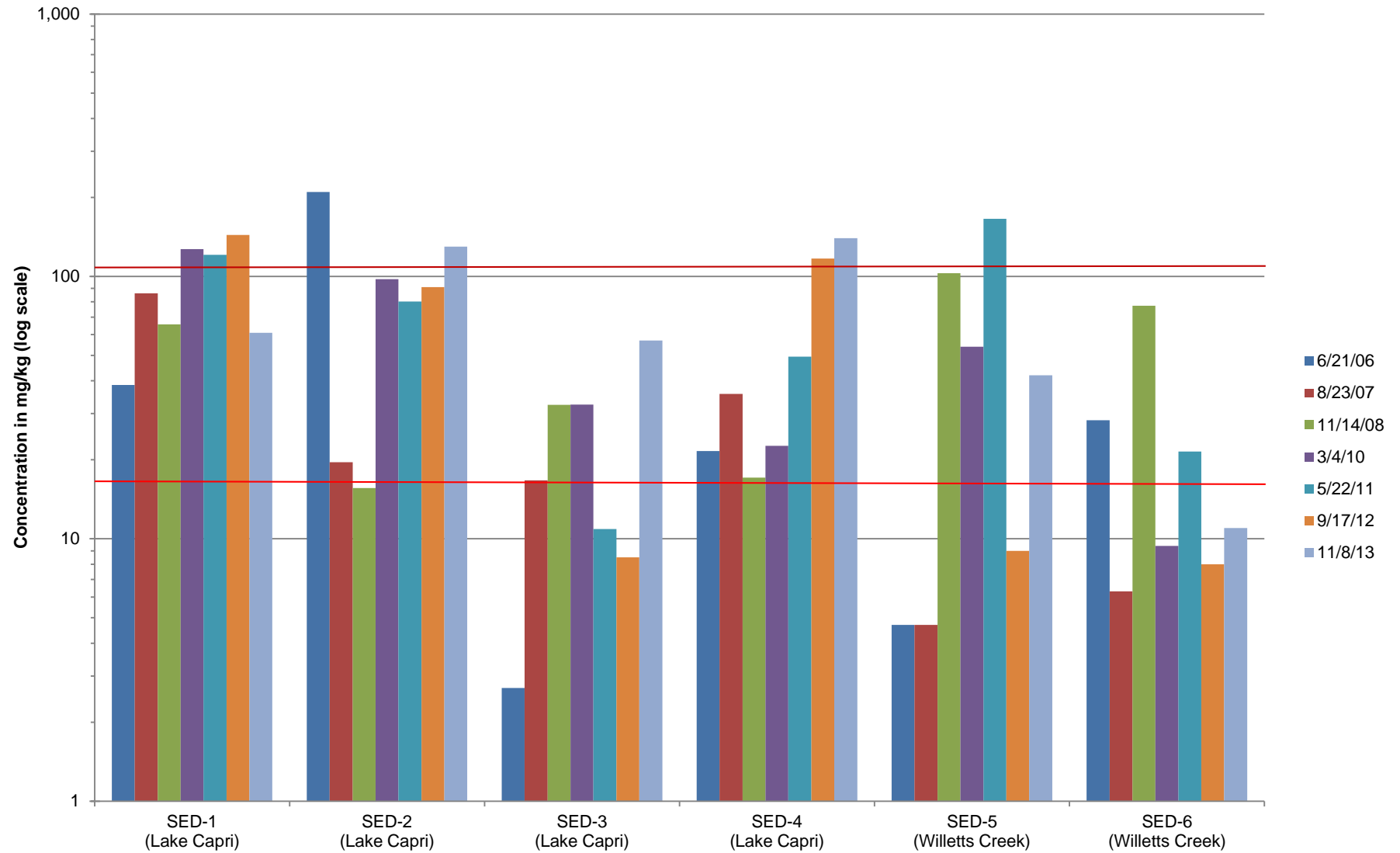
Prepared by :		
AECOM		
SUBMITTED BY :	MULTI SITE G - Dzus Fasteners SITE NO. 1-52-033	
PK		
DRAWN BY :		
JK		
APPROVED BY :		
DATE :	SCALE :	DRAWING NO. :
NOVEMBER 2013	AS SHOWN	8A

FIGURE 9
CADMIUM CONCENTRATIONS IN LAKE CAPRI AND WILLETTS CREEK SEDIMENT SAMPLES
DZUS FASTENERS SITE (1-52-033)



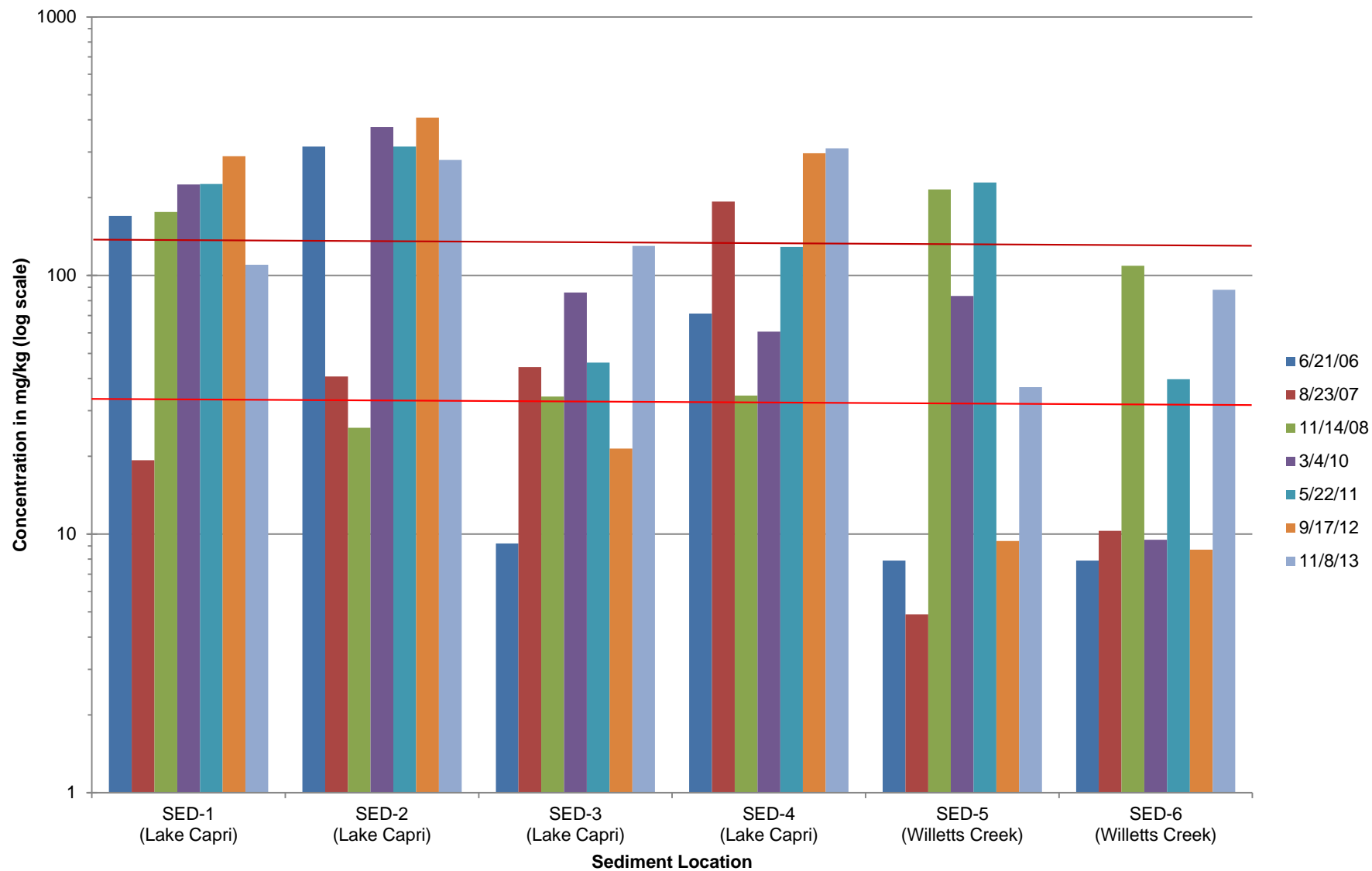
Cadmium Lowest effects level is 0.6 mg/kg
 Highest effects level is 9 mg/kg (ROD cleanup criteria)

FIGURE 10
COPPER CONCENTRATIONS IN LAKE CAPRI & WILLETTS CREEK SEDIMENT SAMPLES
DZUS FASTENERS SITE (1-52-033)



Copper lowest effects level is 16 mg/kg
 Copper highest effects level is 110 mg/kg

FIGURE 11
LEAD CONCENTRATIONS IN LAKE CAPRI & WILLETTS CREEK SEDIMENT SAMPLES
DZUS FASTENERS SITE (1-52-033)



Lead lowest effects level is 31 mg/kg
Lead highest effects level is 110 mg/kg

Appendix A

NYSDEC Monitoring Well Field Inspection Logs

SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/06/2013 1100

WELL ID.: MW-01

WELL VISIBLE? (If not, provide directions below)

YES	NO
	x

WELL COORDINATES? Latitude: 40° 42.49 Longitude: 73° 18.10

See Report

PDOP Reading from Trimble pathfinder:

Satelites:

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	x

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

	x
--	---

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

SURFACE SEAL PRESENT?

YES	NO
	x

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

	x
--	---

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

	x
--	---

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000

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

PROTECTIVE CASING MATERIAL TYPE:

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

LOCK PRESENT?

YES	NO
	x

LOCK FUNCTIONAL?

	x
--	---

DID YOU REPLACE THE LOCK?

	x
--	---

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

	x
--	---

WELL MEASURING POINT VISIBLE?

	x
--	---

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

NA

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

NA

MEASURE WELL DIAMETER (Inches):

NA

WELL CASING MATERIAL:

NA

PHYSICAL CONDITION OF VISIBLE WELL CASING:

NA

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

NA

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

- NA

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

Monitoring well was damaged in December 2007 during snow removal, location is no longer visible.

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.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

REMARKS:

The well was apparently destroyed during snow removal operations in 12/2007.

MONITORING WELL INSPECTION LOG

SKETCH

[illegible]

SITE NAME: Dzus Fasteners

SITE ID.: 1-52-033

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/06/2013 1015

WELL ID.: MW-2

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 42.49 Longitude: 73° 18.10

See Report

PDOP Reading from Trimble pathfinder:

Satellites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

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

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

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000

0.0 PID

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

Flushmount

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):

14.4

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

9.66

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. Well is located along buildings west wall.

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 grassy area between parking lot and fence along Union Ave.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

on-site

REMARKS:

1/4" poly tubing left in well

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Dzus Fasteners

SITE ID.: 1-52-033

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/06/2013 1200

WELL ID.: MW-3

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 42.49 Longitude: 73° 18.02

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:

N/A

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: Mini RAE 2000

0.0 PID

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

Flushmount

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):

15.0

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

7.53

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.

In a grassy area on Dzus property along Union Blvd

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

-

REMARKS:

1/4" poly tubing left in well

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Dzus Fasteners

SITE ID.: 1-52-033

INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/06/2013 1330

WELL ID.: MW-9

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 42.50 Longitude: 73° 18.02

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: N/A wrongly numbered on road

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: Mini RAE 2000

0.0 PID

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

Flushmount

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):

12.0

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

6.5

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.

pavement along east side of Dzus building, by the exit

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

REMARKS:

1/4" poly tubing left in well

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Dzus Fasteners

SITE ID.: 1-52-033

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/06/2013 1425

WELL ID.: MW-9B

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 42.49 Longitude: 73° 18.01

See Report

PDOP Reading from Trimble pathfinder:

Satelites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back) Move back 30 ft

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: N/A written on road

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: Mini RAE 2000

0.0 PID

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

Flushmount

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):

44.0

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

5.52

MEASURE WELL DIAMETER (Inches):

2

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

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

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

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

Accessible by truck mounted rig

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

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Located on pavement on the east of building, near exit

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

REMARKS:

1/4" poly tubing left in well, bolts are stripped

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Dzus Fasteners

SITE ID.: 1-52-033

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/07/2013 0940

WELL ID.: MW-13A

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 42.44 Longitude: 73° 17.100 See Report
PDOP Reading from Trimble pathfinder: _____ Satellites: _____
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? On pavement (spray paint)

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)

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000

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

PROTECTIVE CASING MATERIAL TYPE:

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

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): 10.7

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 4.41

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.

In parking lot across the street from the site, near the liquor store.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

REMARKS:

1/4" OD poly tubing left in well

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Dzus Fasteners

SITE ID.: 1-52-033

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/07/2013 1005

WELL ID.: MW-13B

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 42.43 Longitude: 73° 17.99

See Report

PDOP Reading from Trimble pathfinder:

Satelites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE? On pavement (spray paint)

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: Mini RAE 2000

0.0 PID

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

Flushmount

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):

44.4

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

4.35

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.

In parking lot across the street from the site, near liquor store.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

-

REMARKS:

1/4" OD poly tubing left in well

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Dzus Fasteners

SITE ID.: 1-52-033

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/06/2013 1125

WELL ID.: MW-15A

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 42.49 Longitude: 73° 17.97

See Report

PDOP Reading from Trimble pathfinder:

Satelites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE? On pavement (spray paint)

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: Mini RAE 2000

0.0 PID

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

Flushmount

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):

28.7

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

5.34

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.

Asphalt parking lot in front of ACE hardware store toward Union Blvd.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

-

REMARKS:

Well lid missing, 1/4" OD poly tubing left in well.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Dzus Fasteners

SITE ID.: 1-52-033
INSPECTOR: RP/SW
DATE/TIME: 11/06/2013 1015
WELL ID.: MW-15B

MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? Latitude: 40° 42.50 Longitude: 73° 17.96 See Report
PDOP Reading from Trimble pathfinder: _____ Satellites: _____
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? On asphalt pavement (spray paint)

YES	NO
X	

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

YES	NO
X	

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

SURFACE SEAL PRESENT?

YES	NO
X	

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

YES	NO
X	

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

YES	NO
X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000 0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) Flushmount
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

LOCK PRESENT?

YES	NO
X	

LOCK FUNCTIONAL?

YES	NO
	X

DID YOU REPLACE THE LOCK?

YES	NO
	X

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

YES	NO
	X

WELL MEASURING POINT VISIBLE?

YES	NO
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 84.71
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 5.21
MEASURE WELL DIAMETER (Inches): 2
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES -

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

Accessible by truck mounted rig

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.

Asphalt parking lot in front of ACE hardware store toward Union Blvd.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

-

REMARKS:

1/4" OD poly tubing left in well.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Dzus Fasteners

SITE ID.: 1-52-033

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/06/2013 1345

WELL ID.: MW-18

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: _____ Longitude: _____

See Report

PDOP Reading from Trimble pathfinder: _____ Satellites: _____

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? On pavement (spray paint)

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:

X

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: Mini RAE 2000

0.0 PID

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

Flushmount

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):

8.2

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

5.41

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.

Behind the high school, near the bushes across from the street light,

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

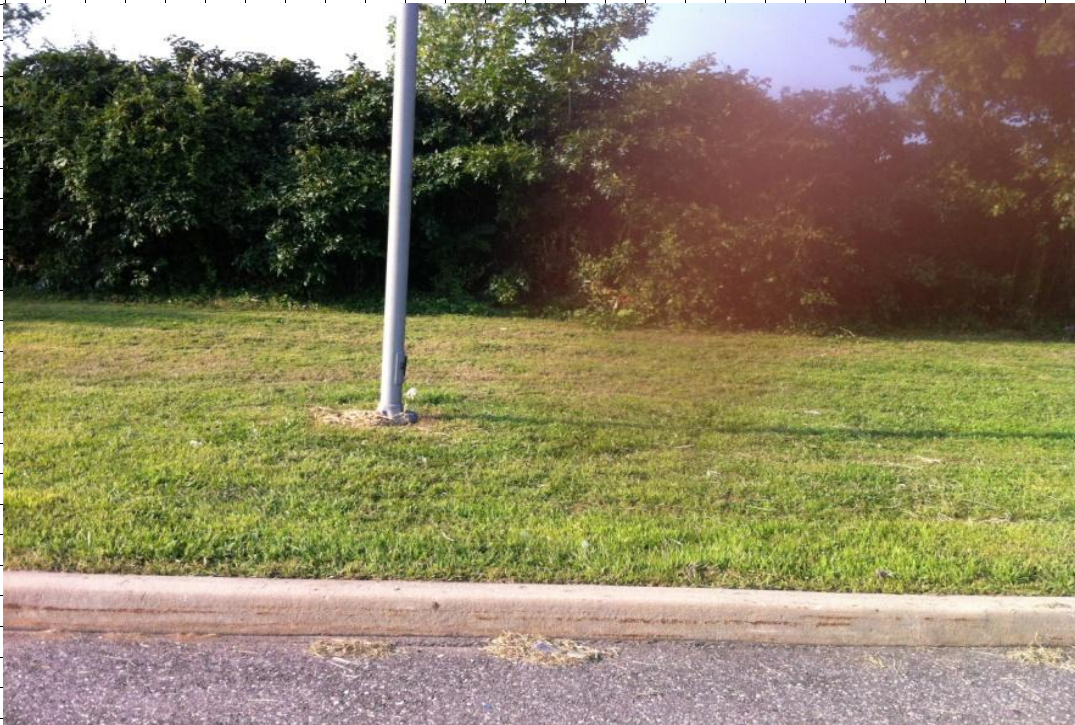
none evident

REMARKS:

1/4" OD poly tubing

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/07/2013 0825

WELL ID.: MW-22 A

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 42.491 Longitude: 73° 17.941 See Report
PDOP Reading from Trimble pathfinder: _____ Satellites: _____
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE? On concrete pad (spray paint)

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)

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000

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

PROTECTIVE CASING MATERIAL TYPE:

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

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

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.

In the grassy area east of laundromat

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

REMARKS:

1/4" OD poly tubing left in well

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/07/2013 1340

WELL ID.: MW-22 B

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 42.491 Longitude: 73° 17.941

See Report

PDOP Reading from Trimble pathfinder:

Satelites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE? On concrete pad

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

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

N/A	
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: Mini RAE 2000

0.0 PID

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

Flushmount

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

6

LOCK PRESENT?

YES	NO
X	

LOCK FUNCTIONAL?

	X
--	---

DID YOU REPLACE THE LOCK?

	X
--	---

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

	X
--	---

WELL MEASURING POINT VISIBLE?

X	
---	--

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

44.5

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

5.65

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.

In the grassy area east of laundromat

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

-

REMARKS:

1/4" OD poly tubing, bolts stripped

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Dzus Fasteners

SITE ID.: 1-52-033

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/07/2013 1220

WELL ID.: MW-23A

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 42.402 Longitude: 73° 17.991

See Report

PDOP Reading from Trimble pathfinder:

Satelites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE? On asphalt pavement (spray paint)

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: Mini RAE 2000

0.0 PID

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

Flushmount

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):

14.4

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

5.72

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.

pavement behind building (liquor store).

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

-

REMARKS:

1/4" OD poly tubing left in well, bolts stripped

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Dzus Fasteners

SITE ID.: 1-52-033

INSPECTOR: RP/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 11/07/2013 1229

WELL ID.: MW-23B

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 42.403

CF, 73° 17.987

See Report

PDOP Reading from Trimble pathfinder:

03/es:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE? On asphalt pavement (spray paint)

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

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

X	
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: Mini RAE 2000

0.0 PID

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

Flushmount

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):

44.5

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

6.51

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.

Pavement behind building (liquor store).

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

-

REMARKS:

1/4" OD poly tubing, bolts stripped.

MONITORING WELL INSPECTION LOG

SKETCH



Appendix B

Well and Surface Water Sampling Forms



WELL NO.

MW-2

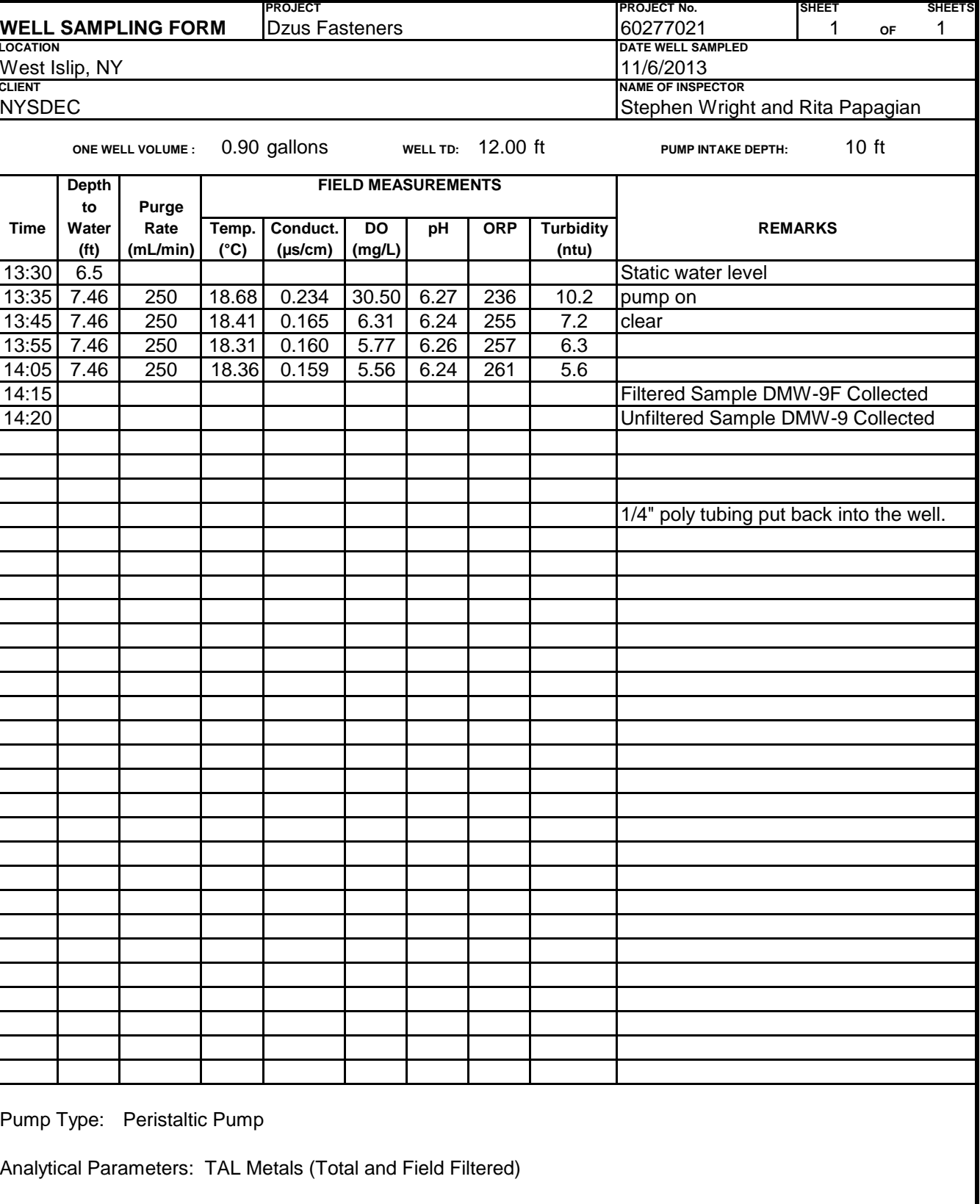
[illegible]



WELL NO.

MW-3

[illegible]





WELL NO.

MW-9B

[illegible]



WELL NO.

MW-13A

[illegible]



WELL NO.

MW-13B

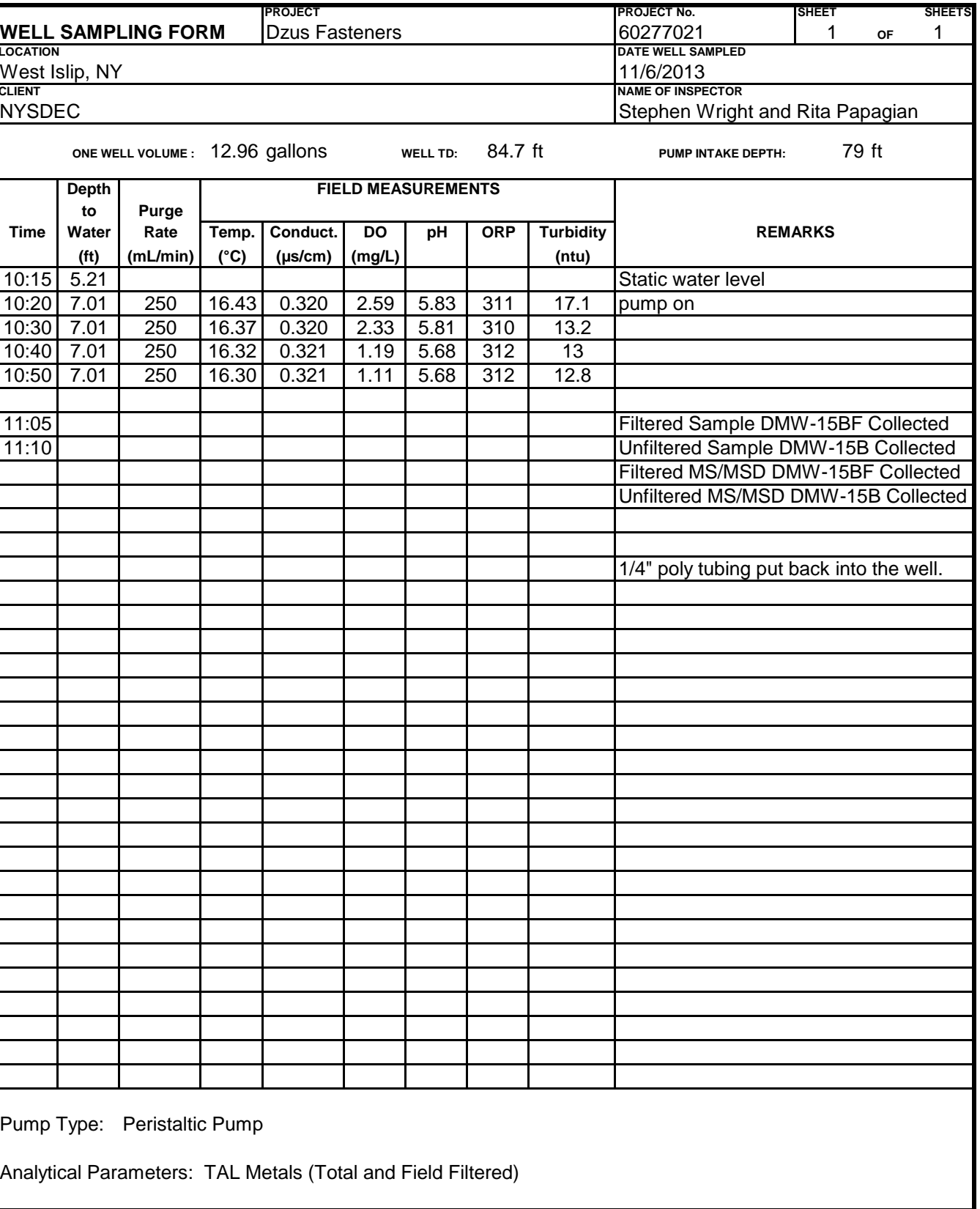
[illegible]

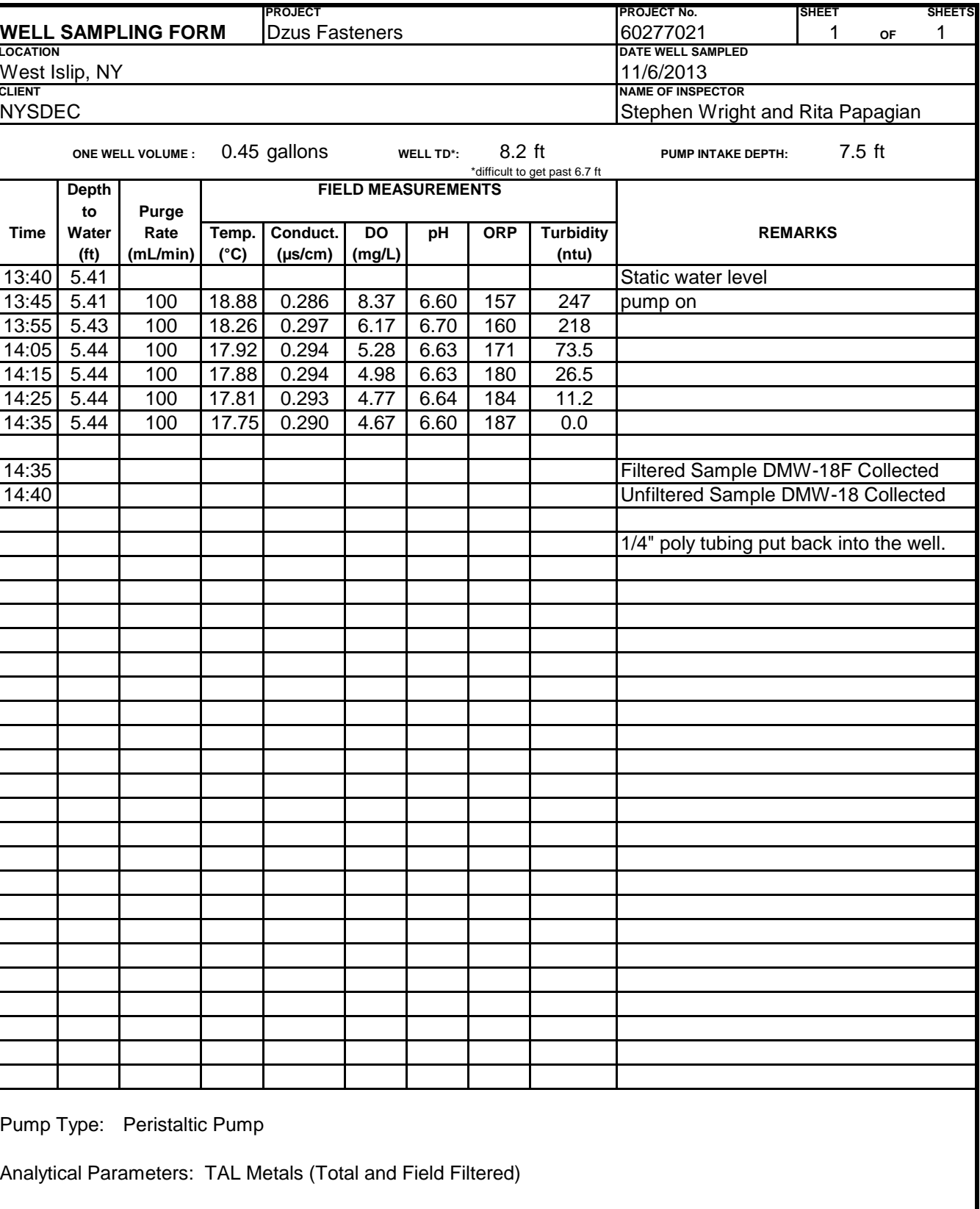


WELL NO.

MW-15A

[illegible]







WELL NO.

MW-22A

[illegible]



WELL NO.

MW-22B

[illegible]



WELL NO.

MW-23A

[illegible]



WELL NO.

MW-23B

[illegible]

Appendix C

Laboratory Data Packages

Project: Dzus

Client PO: Not Available

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

Attn: Paul Kareth

Received Date: 11/8/2013

Report Date: 12/12/2013

Deliverables: NYDOH-CATB

Lab ID: AC75646

Lab Project No: 3110835

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 NELAP 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: Dzus

HCV Project: 3110835

Hampton-Clarke/Veritech (HC-V) received the following samples on November 8, 2013:

<u>Client ID</u>	<u>HCV Sample ID</u>	<u>Matrix</u>	<u>Analysis</u>
DMW-15B	AC75464-001	Aqueous	Metals (6010C, 6020A/7470A)
DMW-15BF	AC75464-002	Aqueous	Metals (6010C, 6020A/7470A)
DMW-15B MS	AC75464-003	Aqueous	Metals (6010C, 6020A/7470A)
DMW-15BF MS	AC75464-004	Aqueous	Metals (6010C, 6020A/7470A)
DMW-2	AC75464-005	Aqueous	Metals (6010C, 6020A/7470A)
DMW-2F	AC75464-006	Aqueous	Metals (6010C, 6020A/7470A)
DMW-52	AC75464-007	Aqueous	Metals (6010C, 6020A/7470A)
DMW-52F	AC75464-008	Aqueous	Metals (6010C, 6020A/7470A)
DMW-15A	AC75464-009	Aqueous	Metals (6010C, 6020A/7470A)
DMW-15AF	AC75464-010	Aqueous	Metals (6010C, 6020A/7470A)
DMW-3	AC75464-011	Aqueous	Metals (6010C, 6020A/7470A)
DMW-3F	AC75464-012	Aqueous	Metals (6010C, 6020A/7470A)
DMW-9B	AC75464-013	Aqueous	Metals (6010C, 6020A/7470A)
DMW-9BF	AC75464-014	Aqueous	Metals (6010C, 6020A/7470A)
DMW-18	AC75464-015	Aqueous	Metals (6010C, 6020A/7470A)
DMW-18F	AC75464-016	Aqueous	Metals (6010C, 6020A/7470A)
DFB-11713	AC75464-017	Aqueous	Metals (6010C, 6020A/7470A)
DFB-11713F	AC75464-018	Aqueous	Metals (6010C, 6020A/7470A)
DMW-22A	AC75464-019	Aqueous	Metals (6010C, 6020A/7470A)
DMW-22AF	AC75464-020	Aqueous	Metals (6010C, 6020A/7470A)
DMW-13A	AC75464-021	Aqueous	Metals (6010C, 6020A/7470A)
DMW-13AF	AC75464-022	Aqueous	Metals (6010C, 6020A/7470A)
DMW-13B	AC75464-023	Aqueous	Metals (6010C, 6020A/7470A)
DMW-13BF	AC75464-024	Aqueous	Metals (6010C, 6020A/7470A)
DMW-23B	AC75464-025	Aqueous	Metals (6010C, 6020A/7470A)
DMW-23BF	AC75464-026	Aqueous	Metals (6010C, 6020A/7470A)
DMW-23A	AC75464-027	Aqueous	Metals (6010C, 6020A/7470A)
DMW-23AF	AC75464-028	Aqueous	Metals (6010C, 6020A/7470A)
DMW-22B	AC75464-029	Aqueous	Metals (6010C, 6020A/7470A)
DMW-22BF	AC75464-030	Aqueous	Metals (6010C, 6020A/7470A)
DMW-9	AC75464-031	Aqueous	Metals (6010C, 6020A/7470A)
DMW-9F	AC75464-032	Aqueous	Metals (6010C, 6020A/7470A)
DMW-15B MSD	AC75464-033	Aqueous	Metals (6010C, 6020A/7470A)
DMW-15BF MSD	AC75464-034	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 27441 and 27442 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

12/13/2013

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 #: 3110835

Project: Dzus

Sample ID: DMW-15B
 Lab#: AC75646-001
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

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	3300
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	170
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	40000
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: DMW-15BF
 Lab#: AC75646-002
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

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	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	140
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	40000
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: DMW-15B MS
 Lab#: AC75646-003
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.70	9.6

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5000
Barium	1	ug/l	50	530
Calcium	1	ug/l	5000	63000
Chromium	1	ug/l	50	490
Copper	1	ug/l	50	490
Iron	1	ug/l	300	8300
Magnesium	1	ug/l	5000	55000
Manganese	1	ug/l	40	670
Nickel	1	ug/l	50	490
Potassium	1	ug/l	5000	51000
Silver	1	ug/l	20	96
Sodium	1	ug/l	5000	90000
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	500
Arsenic	1	ug/l	2.0	480
Beryllium	1	ug/l	1.0	480
Cadmium	1	ug/l	2.0	480
Cobalt	1	ug/l	2.0	460
Lead	1	ug/l	3.0	470
Selenium	1	ug/l	10	470
Thallium	1	ug/l	2.0	440

Sample ID: DMW-15BF MS
 Lab#: AC75646-004
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

Mercury (Water) 7470A

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

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5000
Barium	1	ug/l	50	530
Calcium	1	ug/l	5000	62000
Chromium	1	ug/l	50	490
Copper	1	ug/l	50	490
Iron	1	ug/l	300	5000
Magnesium	1	ug/l	5000	54000
Manganese	1	ug/l	40	640
Nickel	1	ug/l	50	490
Potassium	1	ug/l	5000	51000
Silver	1	ug/l	20	95
Sodium	1	ug/l	5000	91000
Vanadium	1	ug/l	50	480
Zinc	1	ug/l	50	500

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	520
Arsenic	1	ug/l	2.0	530
Beryllium	1	ug/l	1.0	510
Cadmium	1	ug/l	2.0	500
Cobalt	1	ug/l	2.0	510
Lead	1	ug/l	3.0	490
Selenium	1	ug/l	10	510
Thallium	1	ug/l	2.0	460

Sample ID: DMW-2
 Lab#: AC75646-005
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

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	300
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	15000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	9200
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	170
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
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	3.0
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	2.6
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-2F
 Lab#: AC75646-006
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

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	14000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	3300
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	150
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: DMW-52
 Lab#: AC75646-007
 Matrix: Aqueous

Collection Date: 11/6/2013

Receipt Date: 11/8/2013

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	15000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	4200
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	160
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	23000
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	2.1
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-52F
 Lab#: AC75646-008
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

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	3500
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	170
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
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	2.2
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-15A
 Lab#: AC75646-009
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

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	14000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	1200
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	2100
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	73
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	7.9
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-15AF
 Lab#: AC75646-010
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

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	14000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	59
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	8.9
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: DMW-3
 Lab#: AC75646-011
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

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	330
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	9000
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	43000
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	12
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: DMW-3F
 Lab#: AC75646-012
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

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	9700
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	45000
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	13
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: DMW-9B
 Lab#: AC75646-013
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

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	10000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	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: DMW-9BF
 Lab#: AC75646-014
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

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	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	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	9000
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: DMW-18
 Lab#: AC75646-015
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

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	22000
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	450
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	26000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	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: DMW-18F
 Lab#: AC75646-016
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

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	21000
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	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: DFB-11713
 Lab#: AC75646-017
 Matrix: Aqueous

Collection Date: 11/7/2013
 Receipt Date: 11/8/2013

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: DFB-11713F
 Lab#: AC75646-018
 Matrix: Aqueous

Collection Date: 11/7/2013
 Receipt Date: 11/8/2013

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: DMW-22A
 Lab#: AC75646-019
 Matrix: Aqueous

Collection Date: 11/7/2013
 Receipt Date: 11/8/2013

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	33000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	2800
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	440
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	43000
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: DMW-22AF
 Lab#: AC75646-020
 Matrix: Aqueous

Collection Date: 11/7/2013
 Receipt Date: 11/8/2013

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	2100
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	380
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	41000
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: DMW-13A
 Lab#: AC75646-021
 Matrix: Aqueous

Collection Date: 11/7/2013
 Receipt Date: 11/8/2013

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	14000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	7300
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	1700
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	31000
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	120
Cobalt	1	ug/l	2.0	16
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-13AF
 Lab#: AC75646-022
 Matrix: Aqueous

Collection Date: 11/7/2013

Receipt Date: 11/8/2013

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	13000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	6400
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	1700
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	31000
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	120
Cobalt	1	ug/l	2.0	17
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-13B
 Lab#: AC75646-023
 Matrix: Aqueous

Collection Date: 11/7/2013
 Receipt Date: 11/8/2013

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	1800
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	29000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	57
Iron	1	ug/l	300	4900
Magnesium	1	ug/l	5000	9000
Manganese	1	ug/l	40	240
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	9400
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	22000
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	350

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	2.9
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	10
Cobalt	1	ug/l	2.0	3.1
Lead	1	ug/l	3.0	13
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-13BF
 Lab#: AC75646-024
 Matrix: Aqueous

Collection Date: 11/7/2013
 Receipt Date: 11/8/2013

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	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	57
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	2.3
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: DMW-23B
 Lab#: AC75646-025
 Matrix: Aqueous

Collection Date: 11/7/2013
 Receipt Date: 11/8/2013

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	1100
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	11000
Chromium	1	ug/l	50	59
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	2400
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	52
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	95

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	45
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	8.3
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-23BF
 Lab#: AC75646-026
 Matrix: Aqueous

Collection Date: 11/7/2013
 Receipt Date: 11/8/2013

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	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	35
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: DMW-23A
 Lab#: AC75646-027
 Matrix: Aqueous

Collection Date: 11/7/2013

Receipt Date: 11/8/2013

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	20000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	900
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	980
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	27000
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	24
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: DMW-23AF
 Lab#: AC75646-028
 Matrix: Aqueous

Collection Date: 11/7/2013
 Receipt Date: 11/8/2013

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	20000
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	650
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	1000
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	29000
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	13
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: DMW-22B
 Lab#: AC75646-029
 Matrix: Aqueous

Collection Date: 11/7/2013
 Receipt Date: 11/8/2013

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	26000
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	610
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: DMW-22BF
 Lab#: AC75646-030
 Matrix: Aqueous

Collection Date: 11/7/2013

Receipt Date: 11/8/2013

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	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	600
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: DMW-9
 Lab#: AC75646-031
 Matrix: Aqueous

Collection Date: 11/7/2013
 Receipt Date: 11/8/2013

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	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	3.4
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-9F
 Lab#: AC75646-032
 Matrix: Aqueous

Collection Date: 11/7/2013
 Receipt Date: 11/8/2013

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	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	3.0
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: DMW-15B MSD
 Lab#: AC75646-033
 Matrix: Aqueous

Collection Date: 11/6/2013

Receipt Date: 11/8/2013

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	5000
Barium	1	ug/l	50	530
Calcium	1	ug/l	5000	62000
Chromium	1	ug/l	50	500
Copper	1	ug/l	50	490
Iron	1	ug/l	300	8100
Magnesium	1	ug/l	5000	54000
Manganese	1	ug/l	40	650
Nickel	1	ug/l	50	500
Potassium	1	ug/l	5000	51000
Silver	1	ug/l	20	98
Sodium	1	ug/l	5000	88000
Vanadium	1	ug/l	50	490
Zinc	1	ug/l	50	510

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	2.0	520
Arsenic	1	ug/l	2.0	500
Beryllium	1	ug/l	1.0	500
Cadmium	1	ug/l	2.0	500
Cobalt	1	ug/l	2.0	490
Lead	1	ug/l	3.0	480
Selenium	1	ug/l	10	490
Thallium	1	ug/l	2.0	450

Sample ID: DMW-15BF MSD
 Lab#: AC75646-034
 Matrix: Aqueous

Collection Date: 11/6/2013
 Receipt Date: 11/8/2013

Mercury (Water) 7470A

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

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5000
Barium	1	ug/l	50	530
Calcium	1	ug/l	5000	62000
Chromium	1	ug/l	50	500
Copper	1	ug/l	50	490
Iron	1	ug/l	300	5100
Magnesium	1	ug/l	5000	55000
Manganese	1	ug/l	40	630
Nickel	1	ug/l	50	490
Potassium	1	ug/l	5000	52000
Silver	1	ug/l	20	97
Sodium	1	ug/l	5000	89000
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	500
Arsenic	1	ug/l	2.0	470
Beryllium	1	ug/l	1.0	480
Cadmium	1	ug/l	2.0	480
Cobalt	1	ug/l	2.0	440
Lead	1	ug/l	3.0	470
Selenium	1	ug/l	10	450
Thallium	1	ug/l	2.0	450

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-001
 Client Id: DMW-15B
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/8/2013

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	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7439-89-6	Iron	300	3300	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7439-96-5	Manganese	40	170	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	14	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	100	100	11/21/13	27441	SW15726A	14	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-23-5	Sodium	5000	40000	1	100	100	11/21/13	27441	SW15726A	14	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	11/22/13	27441	W15726A2	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: AC75646-001
 Client Id: DMW-15B
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/8/2013

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	11/21/13	27441	S112113A	19	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	11/22/13	27441	S112213A	19	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	11/21/13	27441	S112113A	19	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	11/21/13	27441	S112113A	19	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	11/22/13	27441	S112213A	19	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	11/21/13	27441	S112113A	19	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	11/22/13	27441	S112213A	19	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	11/21/13	27441	S112113A	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: AC75646-002
 Client Id: DMW-15BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	56	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7439-96-5	Manganese	40	140	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	14	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	100	100	11/22/13	27442	SW15727A	14	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7440-23-5	Sodium	5000	40000	1	100	100	11/22/13	27442	SW15727A	14	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	11/22/13	27442	W15727C2	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: AC75646-002
 Client Id: DMW-15BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	11/22/13	27442	S112213B	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: AC75646-003
 Client Id: DMW-15B MS
 Matrix: AQUEOUS
 Level: LOW

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

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	5000	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-39-3	Barium	50	530	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-70-2	Calcium	5000	63000	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-47-3	Chromium	50	490	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-50-8	Copper	50	490	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7439-89-6	Iron	300	8300	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7439-95-4	Magnesium	5000	55000	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7439-96-5	Manganese	40	670	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7439-97-6	Mercury	0.70	9.6	1	25	25	11/20/13	27441	H15726SW	16	CV	HGCV2A
7440-02-0	Nickel	50	490	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-09-7	Potassium	5000	51000	1	50	50	11/21/13	27441	SW15726A	16	P	PEICPRAD1A
7440-22-4	Silver	20	96	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-23-5	Sodium	5000	90000	1	50	50	11/21/13	27441	SW15726A	16	P	PEICPRAD1A
7440-62-2	Vanadium	50	490	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-66-6	Zinc	50	500	1	50	50	11/22/13	27441	W15726A2	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: AC75646-003
 Client Id: DMW-15B MS
 Matrix: AQUEOUS
 Level: LOW

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

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	500	1	50	100	11/21/13	27441	S112113A	22	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	480	1	50	100	11/22/13	27441	S112213A	22	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	480	1	50	100	11/21/13	27441	S112113A	22	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	480	1	50	100	11/21/13	27441	S112113A	22	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	460	1	50	100	11/22/13	27441	S112213A	22	MS	MS2_7500SWA
7439-92-1	Lead	3.0	470	1	50	100	11/21/13	27441	S112113A	22	MS	MS2_7500SWA
7782-49-2	Selenium	10	470	1	50	100	11/22/13	27441	S112213A	22	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	440	1	50	100	11/21/13	27441	S112113A	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: AC75646-004
 Client Id: DMW-15BF MS
 Matrix: AQUEOUS
 Level: LOW

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

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	5000	1	50	50	11/25/13	27442	W15727E2	17	P	PEICP2A
7440-39-3	Barium	50	530	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7440-70-2	Calcium	5000	62000	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7440-47-3	Chromium	50	490	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7440-50-8	Copper	50	490	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7439-89-6	Iron	300	5000	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7439-95-4	Magnesium	5000	54000	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7439-96-5	Manganese	40	640	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7439-97-6	Mercury	0.70	9.8	1	25	25	11/22/13	27442	H15727SW	16	CV	HGCV2A
7440-02-0	Nickel	50	490	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7440-09-7	Potassium	5000	51000	1	50	50	11/22/13	27442	SW15727A	16	P	PEICPRAD1A
7440-22-4	Silver	20	95	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7440-23-5	Sodium	5000	91000	1	50	50	11/22/13	27442	SW15727A	16	P	PEICPRAD1A
7440-62-2	Vanadium	50	480	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7440-66-6	Zinc	50	500	1	50	50	11/22/13	27442	W15727C2	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: AC75646-004
 Client Id: DMW-15BF MS
 Matrix: AQUEOUS
 Level: LOW

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

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	520	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	530	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	510	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	500	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	510	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7439-92-1	Lead	3.0	490	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7782-49-2	Selenium	10	510	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	460	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA

Comments: _____

Flag Codes:

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

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-005
 Client Id: DMW-2
 Matrix: AQUEOUS
 Level: LOW

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

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	300	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-70-2	Calcium	5000	15000	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7439-89-6	Iron	300	9200	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7439-96-5	Manganese	40	170	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	18	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/13	27441	SW15726A	23	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-23-5	Sodium	5000	25000	1	50	50	11/21/13	27441	SW15726A	23	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	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: AC75646-005
 Client Id: DMW-2
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	29	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	3.0	1	50	100	11/22/13	27441	S112213A	29	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	29	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	29	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	2.6	1	50	100	11/22/13	27441	S112213A	29	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	29	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	29	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-006
 Client Id: DMW-2F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	28	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7439-89-6	Iron	300	3300	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7439-96-5	Manganese	40	150	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	18	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727A	23	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7440-23-5	Sodium	5000	22000	1	50	50	11/22/13	27442	SW15727A	23	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-006
 Client Id: DMW-2F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	29	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	29	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	29	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	29	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	29	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	29	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	29	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-007
 Client Id: DMW-52
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-70-2	Calcium	5000	15000	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7439-89-6	Iron	300	4200	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7439-96-5	Manganese	40	160	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	19	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/13	27441	SW15726A	24	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-23-5	Sodium	5000	23000	1	50	50	11/21/13	27441	SW15726A	24	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A

Comments: _____

Flag Codes:

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

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-007
 Client Id: DMW-52
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	2.1	1	50	100	11/22/13	27441	S112213A	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-008
 Client Id: DMW-52F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	29	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7439-89-6	Iron	300	3500	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7439-96-5	Manganese	40	170	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	19	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727A	24	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7440-23-5	Sodium	5000	25000	1	50	50	11/22/13	27442	SW15727A	24	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A

Comments: _____

Flag Codes:

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

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-008
 Client Id: DMW-52F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	2.2	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA

Comments: _____

Flag Codes:

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

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-009
 Client Id: DMW-15A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7439-89-6	Iron	300	1200	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7439-96-5	Manganese	40	2100	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	22	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/13	27441	SW15726A	25	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-23-5	Sodium	5000	21000	1	50	50	11/21/13	27441	SW15726A	25	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	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: AC75646-009
 Client Id: DMW-15A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	31	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	31	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	31	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	73	1	50	100	11/21/13	27441	S112113A	31	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	31	MS	MS2_7500SWA
7439-92-1	Lead	3.0	7.9	1	50	100	11/21/13	27441	S112113A	31	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	31	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-010
 Client Id: DMW-15AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	30	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7439-96-5	Manganese	40	59	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	22	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727A	25	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7440-23-5	Sodium	5000	21000	1	50	50	11/22/13	27442	SW15727A	25	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A

Comments: _____

Flag Codes:

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

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-010
 Client Id: DMW-15AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	8.9	1	50	100	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	31		MSMS2_7500SWA

Comments: _____

Flag Codes:

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

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-011
 Client Id: DMW-3
 Matrix: AQUEOUS
 Level: LOW

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

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	330	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-70-2	Calcium	5000	9000	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	23	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	11	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-23-5	Sodium	5000	43000	1	50	50	11/22/13	27441	SW15726B	11	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	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: AC75646-011
 Client Id: DMW-3
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	12	1	50	100	11/21/13	27441	S112113A	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-012
 Client Id: DMW-3F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	31	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7440-70-2	Calcium	5000	9700	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	23	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727A	26	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7440-23-5	Sodium	5000	45000	1	50	50	11/22/13	27442	SW15727A	26	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-012
 Client Id: DMW-3F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	13	1	50	100	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-013
 Client Id: DMW-9B
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	24	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	12	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-23-5	Sodium	5000	10000	1	50	50	11/22/13	27441	SW15726B	12	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	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: AC75646-013
 Client Id: DMW-9B
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	33	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	33	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	33	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	33	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	33	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	33	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	33	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-014
 Client Id: DMW-9BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	32	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7440-70-2	Calcium	5000	10000	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	24	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727A	27	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7440-23-5	Sodium	5000	9000	1	50	50	11/22/13	27442	SW15727A	27	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-014
 Client Id: DMW-9BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-015
 Client Id: DMW-18
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-70-2	Calcium	5000	22000	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7439-96-5	Manganese	40	450	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	25	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	13	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-23-5	Sodium	5000	26000	1	50	50	11/22/13	27441	SW15726B	13	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A

Comments: _____

Flag Codes:

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

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-015
 Client Id: DMW-18
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	34	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	34	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	34	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	34	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	34	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	34	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	34	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-016
 Client Id: DMW-18F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	33	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7440-70-2	Calcium	5000	21000	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	25	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	11	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7440-23-5	Sodium	5000	25000	1	50	50	11/22/13	27442	SW15727B	11	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A

Comments: _____

Flag Codes:

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

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-016
 Client Id: DMW-18F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	34		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	34		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	34		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	34		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	34		MSMS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	34		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	34		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	34		MSMS2_7500SWA

Comments: _____

Flag Codes:

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

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-017
 Client Id: DFB-11713
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	26	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	14	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	11/22/13	27441	SW15726B	14	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	35	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: AC75646-017
 Client Id: DFB-11713
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	35	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	35	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	35	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	35	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	35	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	35	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	35	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-018
 Client Id: DFB-11713F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	34	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	26	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	12	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	11/22/13	27442	SW15727B	12	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	30	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: AC75646-018
 Client Id: DFB-11713F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-019
 Client Id: DMW-22A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-70-2	Calcium	5000	33000	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7439-89-6	Iron	300	2800	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7439-96-5	Manganese	40	440	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	27	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	15	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-23-5	Sodium	5000	43000	1	50	50	11/22/13	27441	SW15726B	15	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	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: AC75646-019
 Client Id: DMW-22A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-020
 Client Id: DMW-22AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	40	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7440-70-2	Calcium	5000	30000	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7439-89-6	Iron	300	2100	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7439-96-5	Manganese	40	380	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	27	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	13	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7440-23-5	Sodium	5000	41000	1	50	50	11/22/13	27442	SW15727B	13	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-020
 Client Id: DMW-22AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	36	MS	MS2_7500SWA

Comments:

Flag Codes:

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

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-021
 Client Id: DMW-13A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7439-89-6	Iron	300	7300	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7439-96-5	Manganese	40	1700	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	28	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	16	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-23-5	Sodium	5000	31000	1	50	50	11/22/13	27441	SW15726B	16	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	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: AC75646-021
 Client Id: DMW-13A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	37	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	37	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	37	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	120	1	50	100	11/21/13	27441	S112113A	37	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	16	1	50	100	11/22/13	27441	S112213A	37	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	37	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	37	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	37	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: AC75646-022
 Client Id: DMW-13AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	41	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7439-89-6	Iron	300	6400	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7439-96-5	Manganese	40	1700	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	28	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	14	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7440-23-5	Sodium	5000	31000	1	50	50	11/22/13	27442	SW15727B	14	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-022
 Client Id: DMW-13AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	120	1	50	100	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	17	1	50	100	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-023
 Client Id: DMW-13B
 Matrix: AQUEOUS
 Level: LOW

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

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	1800	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-70-2	Calcium	5000	29000	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-50-8	Copper	50	57	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7439-89-6	Iron	300	4900	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7439-95-4	Magnesium	5000	9000	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7439-96-5	Manganese	40	240	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	29	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-09-7	Potassium	5000	9400	1	50	50	11/22/13	27441	SW15726B	20	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-23-5	Sodium	5000	22000	1	50	50	11/22/13	27441	SW15726B	20	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-66-6	Zinc	50	350	1	50	50	11/22/13	27441	W15726A2	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: AC75646-023
 Client Id: DMW-13B
 Matrix: AQUEOUS
 Level: LOW

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

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	2.9	1	50	100	11/21/13	27441	S112113A	42	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	42	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	42	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	10	1	50	100	11/21/13	27441	S112113A	42	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	3.1	1	50	100	11/22/13	27441	S112213A	42	MS	MS2_7500SWA
7439-92-1	Lead	3.0	13	1	50	100	11/21/13	27441	S112113A	42	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	42	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-024
 Client Id: DMW-13BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	42	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7439-96-5	Manganese	40	57	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	29	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	15	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	11/22/13	27442	SW15727B	15	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-024
 Client Id: DMW-13BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	42	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	42	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	42	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	2.3	1	50	100	11/22/13	27442	S112213B	42	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	42	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	42	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	42	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-025
 Client Id: DMW-23B
 Matrix: AQUEOUS
 Level: LOW

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

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	1100	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-47-3	Chromium	50	59	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7439-89-6	Iron	300	2400	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7439-96-5	Manganese	40	52	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	30	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	21	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/22/13	27441	SW15726B	21	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-66-6	Zinc	50	95	1	50	50	11/22/13	27441	W15726A2	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: AC75646-025
 Client Id: DMW-23B
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	43	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	43	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	43	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	45	1	50	100	11/21/13	27441	S112113A	43	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	43	MS	MS2_7500SWA
7439-92-1	Lead	3.0	8.3	1	50	100	11/21/13	27441	S112113A	43	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	43	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	43	MS	MS2_7500SWA

Comments: _____

Flag Codes:

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

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-026
 Client Id: DMW-23BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	43	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	30	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	19	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/22/13	27442	SW15727B	19	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-026
 Client Id: DMW-23BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	35	1	50	100	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-027
 Client Id: DMW-23A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-70-2	Calcium	5000	20000	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7439-89-6	Iron	300	900	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7439-96-5	Manganese	40	980	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	33	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	22	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-23-5	Sodium	5000	27000	1	50	50	11/22/13	27441	SW15726B	22	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A

Comments: _____

Flag Codes:

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

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-027
 Client Id: DMW-23A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	44	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	44	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	44	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	24	1	50	100	11/21/13	27441	S112113A	44	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	44	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	44	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	44	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-028
 Client Id: DMW-23AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	44	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7440-70-2	Calcium	5000	20000	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7439-89-6	Iron	300	650	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7439-96-5	Manganese	40	1000	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	33	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	20	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7440-23-5	Sodium	5000	29000	1	50	50	11/22/13	27442	SW15727B	20	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A

Comments: _____

Flag Codes:

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

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-028
 Client Id: DMW-23AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	13	1	50	100	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	44	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: AC75646-029
 Client Id: DMW-22B
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-70-2	Calcium	5000	26000	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7439-96-5	Manganese	40	610	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	34	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	23	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	11/22/13	27441	SW15726B	23	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A

Comments:

Flag Codes:

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

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-029
 Client Id: DMW-22B
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	45	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	45	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	45	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	45	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	45	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	45	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	45	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-030
 Client Id: DMW-22BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	45	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7440-70-2	Calcium	5000	27000	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7439-96-5	Manganese	40	600	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	34	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	21	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	11/22/13	27442	SW15727B	21	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A

Comments:

Flag Codes:

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

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-030
 Client Id: DMW-22BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	45	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: AC75646-031
 Client Id: DMW-9
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	35	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	24	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/22/13	27441	SW15726B	24	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A

Comments: _____

Flag Codes:

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

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-031
 Client Id: DMW-9
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	46	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	46	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	46	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.4	1	50	100	11/21/13	27441	S112113A	46	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	46	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	46	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	46	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-032
 Client Id: DMW-9F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	46	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	35	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	22	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/22/13	27442	SW15727B	22	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A

Comments: _____

Flag Codes:

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

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-032
 Client Id: DMW-9F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	46	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	46	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	46	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.0	1	50	100	11/22/13	27442	S112213B	46	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	46	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	46	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	46	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-033
 Client Id: DMW-15B MSD
 Matrix: AQUEOUS
 Level: LOW

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

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	5000	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-39-3	Barium	50	530	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-70-2	Calcium	5000	62000	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-47-3	Chromium	50	500	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-50-8	Copper	50	490	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7439-89-6	Iron	300	8100	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7439-95-4	Magnesium	5000	54000	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7439-96-5	Manganese	40	650	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7439-97-6	Mercury	0.70	9.7	1	25	25	11/20/13	27441	H15726SW	17	CV	HGCV2A
7440-02-0	Nickel	50	500	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-09-7	Potassium	5000	51000	1	50	50	11/21/13	27441	SW15726A	17	P	PEICPRAD1A
7440-22-4	Silver	20	98	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-23-5	Sodium	5000	88000	1	50	50	11/21/13	27441	SW15726A	17	P	PEICPRAD1A
7440-62-2	Vanadium	50	490	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-66-6	Zinc	50	510	1	50	50	11/22/13	27441	W15726A2	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: AC75646-033
 Client Id: DMW-15B MSD
 Matrix: AQUEOUS
 Level: LOW

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

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	520	1	50	100	11/21/13	27441	S112113A	23	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	500	1	50	100	11/22/13	27441	S112213A	23	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	500	1	50	100	11/21/13	27441	S112113A	23	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	500	1	50	100	11/21/13	27441	S112113A	23	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	490	1	50	100	11/22/13	27441	S112213A	23	MS	MS2_7500SWA
7439-92-1	Lead	3.0	480	1	50	100	11/21/13	27441	S112113A	23	MS	MS2_7500SWA
7782-49-2	Selenium	10	490	1	50	100	11/22/13	27441	S112213A	23	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	450	1	50	100	11/21/13	27441	S112113A	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: AC75646-034
 Client Id: DMW-15BF MSD
 Matrix: AQUEOUS
 Level: LOW

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

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	5000	1	50	50	11/25/13	27442	W15727E2	18	P	PEICP2A
7440-39-3	Barium	50	530	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7440-70-2	Calcium	5000	62000	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7440-47-3	Chromium	50	500	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7440-50-8	Copper	50	490	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7439-89-6	Iron	300	5100	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7439-95-4	Magnesium	5000	55000	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7439-96-5	Manganese	40	630	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7439-97-6	Mercury	0.70	9.8	1	25	25	11/22/13	27442	H15727SW	17	CV	HGCV2A
7440-02-0	Nickel	50	490	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7440-09-7	Potassium	5000	52000	1	50	50	11/22/13	27442	SW15727A	17	P	PEICPRAD1A
7440-22-4	Silver	20	97	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7440-23-5	Sodium	5000	89000	1	50	50	11/22/13	27442	SW15727A	17	P	PEICPRAD1A
7440-62-2	Vanadium	50	490	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7440-66-6	Zinc	50	500	1	50	50	11/22/13	27442	W15727C2	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: AC75646-034
 Client Id: DMW-15BF MSD
 Matrix: AQUEOUS
 Level: LOW

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

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	500	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	470	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	480	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	480	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	440	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7439-92-1	Lead	3.0	470	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7782-49-2	Selenium	10	450	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	450	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA

Comments: _____

Flag Codes:

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

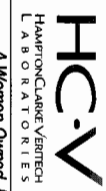
P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Chain of Custody Forms

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



CHAIN OF CUSTODY RECORD

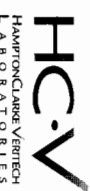
3) Reporting Requirements (Please Circle)

Customer Information		Project Information		Turnaround		Report Type		Electronic Deliv.	
1a) Customer:	AECOM	2a) Project:	D35	24 Hours (100%)	Data Summary	HazMat/CSV			
Address:	100 Red Schoolhouse Rd Chestnut Ridge, NY 10977	2b) Project Mgr:	Paul Kaseeth	48 Hours (75%)	Waste	Equis 4-File / EZ / NYS			
1b) Email/Cell/Fax/Ph:	Paul.Kaseeth@aecom.com	2c) Project Location (City/State):	West Islip, NY	72 Hours (50%)	Red - NJ / NY / PA	Equis EPA Region 2 or 5			
1c) Send Invoice to:	Paul Kaseeth			4 Days (35%; TPH)	CLP	Excel - NJ Regulatory			
1d) Send Report to:	"			1 Week (25%; EPH)	Full / Category B	Excel - NY Regulatory			
				10 Days (10%)	Category A	Excel - PA Regulatory			
		2d) Quote/PO # (if Applicable):		Other: <u>2 Weeks</u>	Other: _____	PDF			
Expedited TAT Not Always Available. Please Check with Lab.									

FOR LAB USE ONLY		Check If Contingent ==>				7) Analysis Request										Check If Contingent							
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)																	
AC75646							IAC metals																
Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample																				
			Date	Time																			
-001	DHW-15B	GW	11-6-13	1005	X	X																	
-002	DHW-15BF	GW		1110	X	X																	
-003	DHW-15B MS/MSd	GW		1115	X	X																	
-004	DHW-15BFMS/MSd	GW		1120	X	X																	
-005	DHW-2	GW	11-6-13	1115	X	X																	
-006	DHW-2F	GW		1120	X	X																	
-007	DHW-52F	GW			X	X																	
-008	DHW-52F	GW			X	X																	
-009	DHW-15A	GW		1210	X	X																	
-010	DHW-15AF	GW		1215	X	X																	
					None																		
					MeOH																		
					En Core																		
					NaOH																		
					HCl																		
					H2SO4																		
					HNO3																		
					Other:																		
					9) Comments																		

10) Relinquished by:	Accepted by:	Date	Time	Comments, Notes, Special Requirements, HAZARDS				
		11/8/13	1415	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 NLSRP Project				
Additional Notes				Cooler Temperature	3-012-8			
				11) Sampler (print name):	Date: 11-6-13			
				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 activated for any analysis.				

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056



CHAIN OF CUSTODY
RECORD

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

Customer Information

1a) Customer: Aecom
Address: 1000 Red Schoolhouse Rd
Chestnut Ridge, NY
1b) Email/Cell/Fax/Ph: Paul.Kaseth@acem.com
1c) Send Invoice to: Paul Kaseth
1d) Send Report to: "

Project Information

2a) Project: DZUS
2b) Project Mgr: Paul Kaseth
2c) Project Location (City/State): West Islip, NY
2d) Quote/PO # (if Applicable):

Turnaround	Report Type	Electronic Deliv.
24 Hours (100%)	Data Summary	HazSite/CSV
48 Hours (75%)	Waste	EQUS 4-File / EZ / NYS
72 Hours (50%)	Red - NJ / NY / PA	EQUS EPA Region 2 or 5
4 Days (35%) - TPH	CLP	Excel - NJ Regulatory
1 Week (25%) - EPH	Full / Category B	Excel - NY Regulatory
10 Days (10%)	Category A	Excel - PA Regulatory
2 Weeks	Other: <u></u>	PDF
Other: <u></u>		Other: <u></u>

Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY

Batch # AC78646
Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

Lab Sample # 4) Customer Sample ID 5) Matrix 6) Sample Date Time

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	Time	Composite (C)	Grab (G)	7) Analysis Request	8) # of Bottles	9) Comments
-011	DMW-3	GW	11-6-13	1305	X	X		1	
-012	DMW-3F	GW	11-6-13	1310	X	X		1	
-013	DMW-9B DMW-9B	GW	11-6-13	1520	X	X		1	
-014	DMW-9BF	GW	11-6-13	1525	X	X		1	
-015	DMW-18	GW	11-6-13	1435	X	X		1	
-016	DMW-18F	GW	11-6-13	1440	X	X		1	
-017	DFB-11713	GW	11-7-13	0945	X	X		1	
-018	DFB-11713F	GW	11-7-13	0838	X	X		1	
-019	DMW-22A	GW	11-7-13	0910	X	X		1	
-020	DMW-22AF	GW	11-7-13	0915	X	X		1	

10) Relinquished by: Paul Kaseth

Accepted by: Paul Kaseth

Date: 11/8/13 Time: 1515

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

Additional Notes

11) Sampler (print name): Paul Kaseth / Stephen Wright Date: 11-6-13
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 for any analysis.

Cooler Temperature
3.6/2.8

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056



CHAIN OF CUSTODY
RECORD

A Women-Owned, Disadvantaged, Small Business Enterprise
NEAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124

Customer Information		Project Information	
1a) Customer:	ACCOM	2a) Project:	DEUS
Address:	100 Red School house Rd	2b) Project Mgr:	Paul Kaseh
	Chestnut Ridge, NY 10972	2c) Project Location (City/State):	West Nyack, NY
1b) Email/Cell/Fax/Ph:	Paul.Kaseh@accom	2d) Quote/PO # (if Applicable):	
1c) Send Invoice to:	Paul Kaseh		
1d) Send Report to:			

FOR LAB USE ONLY		Check If Contingent ==>				7) Analysis Request										<=== Check If Contingent																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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	Grab (G)	Composite (C)	T	A	L	M	E	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T</

10) Relinquished by: Accepted by: Date: Time:

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

Additional Notes	11) Sampler (print name): Rita Razayan	Date: 11-7-13	Cooler Temperature
	Please note NUMBERED items. If not completed your analytical work may be delayed.		3.0, 2.8
	A fee of \$5/sample will be assessed for storage should sample not be activated for any analysis.		

PROJECT MODIFICATIONS

Client: AECOM-CRNY

HCV Project #: 3110835

Project: Dzus

joy192.168.1.31
11/11/2013 1:08:53 PM

Per Paul Kareth add samples DMW-9 and DMW-9F to COC and analyze for TAL Metals 11/11/13 sd

joy192.168.1.31
11/13/2013 1:34:17 PM

Per Paul Kareth samples DMW-9 and DMW-9F both collected 11/6/13 11/13/13 sd

CONDITION UPON RECEIPT

Batch Number AC75646

Entered By: maxwell

Date Entered 11/8/2013 5:03:00 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)
3.0,2.8 |
| 5 | Yes | Are the samples refrigerated (where required)/have they arrived on ice? |
| 6 | Yes | Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples: |
| 7 | Yes | Are all of the sample bottles intact? If no, specify sample numbers broken/leaking |
| 8 | Yes | Are all of the sample labels or numbers legible? If no specify: |
| 9 | Yes | Do the contents match the COC? If no, specify |
| 10 | NO | Is there enough sample sent for the analyses listed on the COC? If no, specify:
SAMPLE ID DMW-9 AND DMW-9F RECEIVED NOT ON COC |
| 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 | YES | Corrective actions (Specify item number and corrective action taken).
9. Per Paul Kareth add DMW-9 and DMW-9F to COC and analyze for TAL Metals 11/11/13 sd |

PRESERVATION DOCUMENT

Batch Number AC75646

Entered By: maxwell

Date Entered 11/8/2013 5:03:00 PM

Lab#:	Container Siz	Container Typ	Paramete	Preservative	PH
AC75646-001	1L	P	METALS	HNO3	1
AC75646-002	1L	P	METALS	HNO3	1
AC75646-003	1L	P	METALS	HNO3	1
AC75646-004	1L	P	METALS	HNO3	1
AC75646-005	1L	P	METALS	HNO3	1
AC75646-006	1L	P	METALS	HNO3	1
AC75646-007	1L	P	METALS	HNO3	1
AC75646-008	1L	P	METALS	HNO3	1
AC75646-009	1L	P	METALS	HNO3	1
AC75646-010	1L	P	METALS	HNO3	1
AC75646-011	1L	P	METALS	HNO3	1
AC75646-012	1L	P	METALS	HNO3	1
AC75646-013	1L	P	METALS	HNO3	1
AC75646-014	1L	P	METALS	HNO3	1
AC75646-015	1L	P	METALS	HNO3	1
AC75646-016	1L	P	METALS	HNO3	1
AC75646-017	1L	P	METALS	HNO3	1
AC75646-018	1L	P	METALS	HNO3	1
AC75646-019	1L	P	METALS	HNO3	1
AC75646-020	1L	P	METALS	HNO3	1
AC75646-021	1L	P	METALS	HNO3	1
AC75646-022	1L	P	METALS	HNO3	1
AC75646-023	1L	P	METALS	HNO3	1
AC75646-024	1L	P	METALS	HNO3	1
AC75646-025	1L	P	METALS	HNO3	1
AC75646-026	1L	P	METALS	HNO3	1
AC75646-027	1L	P	METALS	HNO3	1
AC75646-028	1L	P	METALS	HNO3	1
AC75646-029	1L	P	METALS	HNO3	1
AC75646-030	1L	P	METALS	HNO3	1
AC75646-031	1L	P	METALS	HNO3	1
AC75646-032	1L	P	METALS	HNO3	1

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AC75646-001	11/08/13 16:15	MAXW	0	M	Received
AC75646-001	11/08/13 17:02	MAXW	0	M	Login
AC75646-001	11/08/13 17:23	R12	1	A	NONE
AC75646-001	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-001	11/19/13 14:07	R12	1	A	NONE
AC75646-002	11/08/13 16:15	MAXW	0	M	Received
AC75646-002	11/08/13 17:02	MAXW	0	M	Login
AC75646-002	11/08/13 17:23	R12	1	A	NONE
AC75646-002	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-002	11/21/13 12:36	R12	1	A	NONE
AC75646-003	11/08/13 16:15	MAXW	0	M	Received
AC75646-003	11/08/13 17:02	MAXW	0	M	Login
AC75646-003	11/08/13 17:23	R12	1	A	NONE
AC75646-003	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-003	11/19/13 14:07	R12	1	A	NONE
AC75646-004	11/08/13 16:15	MAXW	0	M	Received
AC75646-004	11/08/13 17:02	MAXW	0	M	Login
AC75646-004	11/08/13 17:23	R12	2	A	NONE
AC75646-004	11/21/13 10:26	JU	2	A	tdwi-hg
AC75646-004	11/21/13 12:36	R12	2	A	NONE
AC75646-005	11/08/13 16:15	MAXW	0	M	Received
AC75646-005	11/08/13 17:02	MAXW	0	M	Login
AC75646-005	11/08/13 17:23	R12	1	A	NONE
AC75646-005	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-005	11/19/13 14:07	R12	1	A	NONE
AC75646-006	11/08/13 16:15	MAXW	0	M	Received
AC75646-006	11/08/13 17:02	MAXW	0	M	Login
AC75646-006	11/08/13 17:23	R12	1	A	NONE
AC75646-006	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-006	11/21/13 12:36	R12	1	A	NONE
AC75646-007	11/08/13 16:15	MAXW	0	M	Received
AC75646-007	11/08/13 17:02	MAXW	0	M	Login
AC75646-007	11/08/13 17:23	R12	1	A	NONE
AC75646-007	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-007	11/19/13 14:07	R12	1	A	NONE
AC75646-008	11/08/13 16:15	MAXW	0	M	Received
AC75646-008	11/08/13 17:02	MAXW	0	M	Login
AC75646-008	11/08/13 17:23	R12	1	A	NONE
AC75646-008	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-008	11/21/13 12:36	R12	1	A	NONE
AC75646-009	11/08/13 16:15	MAXW	0	M	Received
AC75646-009	11/08/13 17:02	MAXW	0	M	Login
AC75646-009	11/08/13 17:23	R12	1	A	NONE
AC75646-009	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-009	11/19/13 14:07	R12	1	A	NONE
AC75646-010	11/08/13 16:15	MAXW	0	M	Received
AC75646-010	11/08/13 17:02	MAXW	0	M	Login
AC75646-010	11/08/13 17:23	R12	1	A	NONE
AC75646-010	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-010	11/21/13 12:36	R12	1	A	NONE
AC75646-011	11/08/13 16:15	MAXW	0	M	Received
AC75646-011	11/08/13 17:02	MAXW	0	M	Login
AC75646-011	11/08/13 17:23	R12	1	A	NONE
AC75646-011	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-011	11/19/13 14:07	R12	1	A	NONE
AC75646-012	11/08/13 16:15	MAXW	0	M	Received
AC75646-012	11/08/13 17:02	MAXW	0	M	Login
AC75646-012	11/08/13 17:23	R12	1	A	NONE
AC75646-012	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-012	11/21/13 12:36	R12	1	A	NONE
AC75646-013	11/08/13 16:15	MAXW	0	M	Received
AC75646-013	11/08/13 17:02	MAXW	0	M	Login
AC75646-013	11/08/13 17:23	R12	1	A	NONE
AC75646-013	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-013	11/19/13 14:07	R12	1	A	NONE
AC75646-014	11/08/13 16:15	MAXW	0	M	Received
AC75646-014	11/08/13 17:02	MAXW	0	M	Login
AC75646-014	11/08/13 17:23	R12	1	A	NONE
AC75646-014	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-014	11/21/13 12:36	R12	1	A	NONE
AC75646-015	11/08/13 16:15	MAXW	0	M	Received
AC75646-015	11/08/13 17:02	MAXW	0	M	Login
AC75646-015	11/08/13 17:23	R12	1	A	NONE
AC75646-015	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-015	11/19/13 14:07	R12	1	A	NONE

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AC75646-016	11/08/13 16:15	MAXW	0	M	Received
AC75646-016	11/08/13 17:02	MAXW	0	M	Login
AC75646-016	11/08/13 17:23	R12	1	A	NONE
AC75646-016	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-016	11/21/13 12:36	R12	1	A	NONE
AC75646-017	11/08/13 16:15	MAXW	0	M	Received
AC75646-017	11/08/13 17:02	MAXW	0	M	Login
AC75646-017	11/08/13 17:23	R12	1	A	NONE
AC75646-017	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-017	11/19/13 14:07	R12	1	A	NONE
AC75646-018	11/08/13 16:15	MAXW	0	M	Received
AC75646-018	11/08/13 17:02	MAXW	0	M	Login
AC75646-018	11/08/13 17:23	R12	1	A	NONE
AC75646-018	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-018	11/21/13 12:36	R12	1	A	NONE
AC75646-019	11/08/13 16:15	MAXW	0	M	Received
AC75646-019	11/08/13 17:02	MAXW	0	M	Login
AC75646-019	11/08/13 17:23	R12	1	A	NONE
AC75646-019	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-019	11/19/13 14:07	R12	1	A	NONE
AC75646-020	11/08/13 16:15	MAXW	0	M	Received
AC75646-020	11/08/13 17:02	MAXW	0	M	Login
AC75646-020	11/08/13 17:23	R12	1	A	NONE
AC75646-020	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-020	11/21/13 12:36	R12	1	A	NONE
AC75646-021	11/08/13 16:15	MAXW	0	M	Received
AC75646-021	11/08/13 17:02	MAXW	0	M	Login
AC75646-021	11/08/13 17:23	R12	1	A	NONE
AC75646-021	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-021	11/19/13 14:07	R12	1	A	NONE
AC75646-022	11/08/13 16:15	MAXW	0	M	Received
AC75646-022	11/08/13 17:02	MAXW	0	M	Login
AC75646-022	11/08/13 17:23	R12	1	A	NONE
AC75646-022	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-022	11/21/13 12:36	R12	1	A	NONE
AC75646-023	11/08/13 16:15	MAXW	0	M	Received
AC75646-023	11/08/13 17:02	MAXW	0	M	Login
AC75646-023	11/08/13 17:23	R12	1	A	NONE
AC75646-023	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-023	11/19/13 14:07	R12	1	A	NONE
AC75646-024	11/08/13 16:15	MAXW	0	M	Received
AC75646-024	11/08/13 17:02	MAXW	0	M	Login
AC75646-024	11/08/13 17:23	R12	1	A	NONE
AC75646-024	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-024	11/21/13 12:36	R12	1	A	NONE
AC75646-025	11/08/13 16:15	MAXW	0	M	Received
AC75646-025	11/08/13 17:02	MAXW	0	M	Login
AC75646-025	11/08/13 17:23	R12	1	A	NONE
AC75646-025	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-025	11/19/13 14:07	R12	1	A	NONE
AC75646-026	11/08/13 16:15	MAXW	0	M	Received
AC75646-026	11/08/13 17:02	MAXW	0	M	Login
AC75646-026	11/08/13 17:23	R12	1	A	NONE
AC75646-026	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-026	11/21/13 12:36	R12	1	A	NONE
AC75646-027	11/08/13 16:15	MAXW	0	M	Received
AC75646-027	11/08/13 17:02	MAXW	0	M	Login
AC75646-027	11/08/13 17:23	R12	1	A	NONE
AC75646-027	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-027	11/19/13 14:07	R12	1	A	NONE
AC75646-028	11/08/13 16:15	MAXW	0	M	Received
AC75646-028	11/08/13 17:02	MAXW	0	M	Login
AC75646-028	11/08/13 17:23	R12	1	A	NONE
AC75646-028	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-028	11/21/13 12:36	R12	1	A	NONE
AC75646-029	11/08/13 16:15	MAXW	0	M	Received
AC75646-029	11/08/13 17:02	MAXW	0	M	Login
AC75646-029	11/08/13 17:23	R12	1	A	NONE
AC75646-029	11/19/13 12:47	JU	1	A	tdwi-hg
AC75646-029	11/19/13 14:07	R12	1	A	NONE
AC75646-030	11/08/13 16:15	MAXW	0	M	Received
AC75646-030	11/08/13 17:02	MAXW	0	M	Login
AC75646-030	11/08/13 17:23	R12	1	A	NONE
AC75646-030	11/21/13 10:26	JU	1	A	tdwi-hg
AC75646-030	11/21/13 12:36	R12	1	A	NONE

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

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis	Lab#:	DateTime:	Loc or User	Bot Nu	A/ M	Analysis
AC75646-031	11/08/13 16:15	MAXW	0	M	Received						
AC75646-031	11/08/13 17:02	MAXW	0	M	Login						
AC75646-031	11/08/13 17:23	R12	1	A	NONE						
AC75646-031	11/19/13 12:47	JU	1	A	tdwi-hg						
AC75646-031	11/19/13 14:07	R12	1	A	NONE						
AC75646-032	11/08/13 16:15	MAXW	0	M	Received						
AC75646-032	11/08/13 17:02	MAXW	0	M	Login						
AC75646-032	11/08/13 17:23	R12	1	A	NONE						
AC75646-032	11/21/13 10:26	JU	1	A	tdwi-hg						
AC75646-032	11/21/13 12:36	R12	1	A	NONE						
AC75646-033	11/08/13 16:15	MAXW	0	M	Received						
AC75646-033	11/19/13 12:53	MAXW	0	M	Login						
AC75646-033	11/19/13 12:57	JU	1	A	tdwi-hg						
AC75646-033	11/19/13 14:07	R12	1	A	NONE						
AC75646-034	11/08/13 16:15	MAXW	0	M	Received						
AC75646-034	11/19/13 12:53	MAXW	0	M	Login						
AC75646-034	11/21/13 10:26	JU	1	A	tdwi-hg						
AC75646-034	11/21/13 12:36	R12	1	A	NONE						

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: AC75646-001
 Client Id: DMW-15B
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/8/2013

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	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7439-89-6	Iron	300	3300	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7439-96-5	Manganese	40	170	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	14	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	100	100	11/21/13	27441	SW15726A	14	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-23-5	Sodium	5000	40000	1	100	100	11/21/13	27441	SW15726A	14	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	100	100	11/22/13	27441	W15726A2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	11/22/13	27441	W15726A2	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: AC75646-001
 Client Id: DMW-15B
 Matrix: AQUEOUS
 Level: LOW

% Solid: 0
 Units: UG/L
 Date Rec: 11/8/2013

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	11/21/13	27441	S112113A	19		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	11/22/13	27441	S112213A	19		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	11/21/13	27441	S112113A	19		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	11/21/13	27441	S112113A	19		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	11/22/13	27441	S112213A	19		MSMS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	11/21/13	27441	S112113A	19		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	11/22/13	27441	S112213A	19		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	11/21/13	27441	S112113A	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: AC75646-002
 Client Id: DMW-15BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	56	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7439-96-5	Manganese	40	140	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	14	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	100	100	11/22/13	27442	SW15727A	14	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7440-23-5	Sodium	5000	40000	1	100	100	11/22/13	27442	SW15727A	14	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	100	100	11/22/13	27442	W15727C2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	11/22/13	27442	W15727C2	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: AC75646-002
 Client Id: DMW-15BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	11/22/13	27442	S112213B	19	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	11/22/13	27442	S112213B	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: AC75646-003
 Client Id: DMW-15B MS
 Matrix: AQUEOUS
 Level: LOW

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

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	5000	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-39-3	Barium	50	530	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-70-2	Calcium	5000	63000	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-47-3	Chromium	50	490	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-50-8	Copper	50	490	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7439-89-6	Iron	300	8300	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7439-95-4	Magnesium	5000	55000	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7439-96-5	Manganese	40	670	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7439-97-6	Mercury	0.70	9.6	1	25	25	11/20/13	27441	H15726SW	16	CV	HGCV2A
7440-02-0	Nickel	50	490	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-09-7	Potassium	5000	51000	1	50	50	11/21/13	27441	SW15726A	16	P	PEICPRAD1A
7440-22-4	Silver	20	96	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-23-5	Sodium	5000	90000	1	50	50	11/21/13	27441	SW15726A	16	P	PEICPRAD1A
7440-62-2	Vanadium	50	490	1	50	50	11/22/13	27441	W15726A2	17	P	PEICP2A
7440-66-6	Zinc	50	500	1	50	50	11/22/13	27441	W15726A2	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: AC75646-003
 Client Id: DMW-15B MS
 Matrix: AQUEOUS
 Level: LOW

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

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	500	1	50	100	11/21/13	27441	S112113A	22	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	480	1	50	100	11/22/13	27441	S112213A	22	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	480	1	50	100	11/21/13	27441	S112113A	22	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	480	1	50	100	11/21/13	27441	S112113A	22	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	460	1	50	100	11/22/13	27441	S112213A	22	MS	MS2_7500SWA
7439-92-1	Lead	3.0	470	1	50	100	11/21/13	27441	S112113A	22	MS	MS2_7500SWA
7782-49-2	Selenium	10	470	1	50	100	11/22/13	27441	S112213A	22	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	440	1	50	100	11/21/13	27441	S112113A	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: AC75646-004
 Client Id: DMW-15BF MS
 Matrix: AQUEOUS
 Level: LOW

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

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	5000	1	50	50	11/25/13	27442	W15727E2	17	P	PEICP2A
7440-39-3	Barium	50	530	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7440-70-2	Calcium	5000	62000	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7440-47-3	Chromium	50	490	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7440-50-8	Copper	50	490	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7439-89-6	Iron	300	5000	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7439-95-4	Magnesium	5000	54000	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7439-96-5	Manganese	40	640	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7439-97-6	Mercury	0.70	9.8	1	25	25	11/22/13	27442	H15727SW	16	CV	HGCV2A
7440-02-0	Nickel	50	490	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7440-09-7	Potassium	5000	51000	1	50	50	11/22/13	27442	SW15727A	16	P	PEICPRAD1A
7440-22-4	Silver	20	95	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7440-23-5	Sodium	5000	91000	1	50	50	11/22/13	27442	SW15727A	16	P	PEICPRAD1A
7440-62-2	Vanadium	50	480	1	50	50	11/22/13	27442	W15727C2	17	P	PEICP2A
7440-66-6	Zinc	50	500	1	50	50	11/22/13	27442	W15727C2	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: AC75646-004
 Client Id: DMW-15BF MS
 Matrix: AQUEOUS
 Level: LOW

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

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	520	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	530	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	510	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	500	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	510	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7439-92-1	Lead	3.0	490	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7782-49-2	Selenium	10	510	1	50	100	11/22/13	27442	S112213B	22	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	460	1	50	100	11/22/13	27442	S112213B	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: AC75646-005
 Client Id: DMW-2
 Matrix: AQUEOUS
 Level: LOW

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

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	300	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-70-2	Calcium	5000	15000	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7439-89-6	Iron	300	9200	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7439-96-5	Manganese	40	170	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	18	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/13	27441	SW15726A	23	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-23-5	Sodium	5000	25000	1	50	50	11/21/13	27441	SW15726A	23	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	24	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	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: AC75646-005
 Client Id: DMW-2
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	29	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	3.0	1	50	100	11/22/13	27441	S112213A	29	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	29	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	29	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	2.6	1	50	100	11/22/13	27441	S112213A	29	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	29	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	29	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-006
 Client Id: DMW-2F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	28	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7439-89-6	Iron	300	3300	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7439-96-5	Manganese	40	150	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	18	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727A	23	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7440-23-5	Sodium	5000	22000	1	50	50	11/22/13	27442	SW15727A	23	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	24	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	24	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: AC75646-006
 Client Id: DMW-2F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	29	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	29	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	29	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	29	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	29	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	29	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	29	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	29	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: AC75646-007
 Client Id: DMW-52
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-70-2	Calcium	5000	15000	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7439-89-6	Iron	300	4200	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7439-96-5	Manganese	40	160	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	19	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/13	27441	SW15726A	24	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-23-5	Sodium	5000	23000	1	50	50	11/21/13	27441	SW15726A	24	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	25	P	PEICP2A

Comments: _____

Flag Codes:

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

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-007
 Client Id: DMW-52
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	2.1	1	50	100	11/22/13	27441	S112213A	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-008
 Client Id: DMW-52F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	29	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7439-89-6	Iron	300	3500	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7439-96-5	Manganese	40	170	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	19	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727A	24	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7440-23-5	Sodium	5000	25000	1	50	50	11/22/13	27442	SW15727A	24	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	25	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-008
 Client Id: DMW-52F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	2.2	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	30	MS	MS2_7500SWA

Comments: _____

Flag Codes:

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

P - ICP-AES

CV - Cold Vapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-009
 Client Id: DMW-15A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7439-89-6	Iron	300	1200	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7439-96-5	Manganese	40	2100	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	22	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/13	27441	SW15726A	25	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-23-5	Sodium	5000	21000	1	50	50	11/21/13	27441	SW15726A	25	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	26	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	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: AC75646-009
 Client Id: DMW-15A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	31	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	31	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	31	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	73	1	50	100	11/21/13	27441	S112113A	31	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	31	MS	MS2_7500SWA
7439-92-1	Lead	3.0	7.9	1	50	100	11/21/13	27441	S112113A	31	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	31	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-010
 Client Id: DMW-15AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	30	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7439-96-5	Manganese	40	59	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	22	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727A	25	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7440-23-5	Sodium	5000	21000	1	50	50	11/22/13	27442	SW15727A	25	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	26	P	PEICP2A

Comments: _____

Flag Codes:

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

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-010
 Client Id: DMW-15AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	8.9	1	50	100	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	31		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-011
 Client Id: DMW-3
 Matrix: AQUEOUS
 Level: LOW

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

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	330	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-70-2	Calcium	5000	9000	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	23	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	11	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-23-5	Sodium	5000	43000	1	50	50	11/22/13	27441	SW15726B	11	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	27	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	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: AC75646-011
 Client Id: DMW-3
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	12	1	50	100	11/21/13	27441	S112113A	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-012
 Client Id: DMW-3F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	31	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7440-70-2	Calcium	5000	9700	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	23	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727A	26	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7440-23-5	Sodium	5000	45000	1	50	50	11/22/13	27442	SW15727A	26	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	27	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-012
 Client Id: DMW-3F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	13	1	50	100	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-013
 Client Id: DMW-9B
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	24	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	12	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-23-5	Sodium	5000	10000	1	50	50	11/22/13	27441	SW15726B	12	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	28	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	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: AC75646-013
 Client Id: DMW-9B
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	33	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	33	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	33	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	33	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	33	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	33	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	33	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-014
 Client Id: DMW-9BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	32	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7440-70-2	Calcium	5000	10000	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	24	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727A	27	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7440-23-5	Sodium	5000	9000	1	50	50	11/22/13	27442	SW15727A	27	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	28	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-014
 Client Id: DMW-9BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	33	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-015
 Client Id: DMW-18
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-70-2	Calcium	5000	22000	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7439-96-5	Manganese	40	450	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	25	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	13	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-23-5	Sodium	5000	26000	1	50	50	11/22/13	27441	SW15726B	13	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	29	P	PEICP2A

Comments: _____

Flag Codes:

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

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-015
 Client Id: DMW-18
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	34	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	34	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	34	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	34	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	34	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	34	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	34	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-016
 Client Id: DMW-18F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	33	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7440-70-2	Calcium	5000	21000	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	25	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	11	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7440-23-5	Sodium	5000	25000	1	50	50	11/22/13	27442	SW15727B	11	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	29	P	PEICP2A

Comments: _____

Flag Codes:

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

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-016
 Client Id: DMW-18F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	34	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	34	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	34	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	34	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	34	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	34	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	34	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	34	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: AC75646-017
 Client Id: DFB-11713
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	26	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	14	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	11/22/13	27441	SW15726B	14	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	35	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	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: AC75646-017
 Client Id: DFB-11713
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	35	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	35	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	35	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	35	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	35	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	35	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	35	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-018
 Client Id: DFB-11713F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	34	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	26	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	12	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	11/22/13	27442	SW15727B	12	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	30	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	30	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: AC75646-018
 Client Id: DFB-11713F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	35	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-019
 Client Id: DMW-22A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-70-2	Calcium	5000	33000	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7439-89-6	Iron	300	2800	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7439-96-5	Manganese	40	440	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	27	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	15	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-23-5	Sodium	5000	43000	1	50	50	11/22/13	27441	SW15726B	15	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	36	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	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: AC75646-019
 Client Id: DMW-22A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-020
 Client Id: DMW-22AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	40	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7440-70-2	Calcium	5000	30000	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7439-89-6	Iron	300	2100	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7439-96-5	Manganese	40	380	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	27	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	13	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7440-23-5	Sodium	5000	41000	1	50	50	11/22/13	27442	SW15727B	13	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	36	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-020
 Client Id: DMW-22AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-021
 Client Id: DMW-13A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7439-89-6	Iron	300	7300	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7439-96-5	Manganese	40	1700	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	28	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	16	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-23-5	Sodium	5000	31000	1	50	50	11/22/13	27441	SW15726B	16	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	37	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	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: AC75646-021
 Client Id: DMW-13A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	37	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	37	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	37	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	120	1	50	100	11/21/13	27441	S112113A	37	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	16	1	50	100	11/22/13	27441	S112213A	37	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	37	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	37	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-022
 Client Id: DMW-13AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	41	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7439-89-6	Iron	300	6400	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7439-96-5	Manganese	40	1700	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	28	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	14	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7440-23-5	Sodium	5000	31000	1	50	50	11/22/13	27442	SW15727B	14	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	37	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-022
 Client Id: DMW-13AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	120	1	50	100	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	17	1	50	100	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	37	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-023
 Client Id: DMW-13B
 Matrix: AQUEOUS
 Level: LOW

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

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	1800	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-70-2	Calcium	5000	29000	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-50-8	Copper	50	57	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7439-89-6	Iron	300	4900	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7439-95-4	Magnesium	5000	9000	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7439-96-5	Manganese	40	240	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	29	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-09-7	Potassium	5000	9400	1	50	50	11/22/13	27441	SW15726B	20	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-23-5	Sodium	5000	22000	1	50	50	11/22/13	27441	SW15726B	20	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	38	P	PEICP2A
7440-66-6	Zinc	50	350	1	50	50	11/22/13	27441	W15726A2	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: AC75646-023
 Client Id: DMW-13B
 Matrix: AQUEOUS
 Level: LOW

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

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	2.9	1	50	100	11/21/13	27441	S112113A	42	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	42	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	42	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	10	1	50	100	11/21/13	27441	S112113A	42	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	3.1	1	50	100	11/22/13	27441	S112213A	42	MS	MS2_7500SWA
7439-92-1	Lead	3.0	13	1	50	100	11/21/13	27441	S112113A	42	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	42	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-024
 Client Id: DMW-13BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	42	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7439-96-5	Manganese	40	57	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	29	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	15	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	11/22/13	27442	SW15727B	15	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	38	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-024
 Client Id: DMW-13BF
 Matrix: AQUEOUS
 Level: LOW

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

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	Mi	Instr
7440-36-0	Antimony	2.0	ND	1	50	100	11/22/13	27442	S112213B	42	MSMS2_7500SWA	
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	42	MSMS2_7500SWA	
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	42	MSMS2_7500SWA	
7440-43-9	Cadmium	2.0	2.3	1	50	100	11/22/13	27442	S112213B	42	MSMS2_7500SWA	
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	42	MSMS2_7500SWA	
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	42	MSMS2_7500SWA	
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	42	MSMS2_7500SWA	
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	42	MSMS2_7500SWA	

Comments: _____

Flag Codes:

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

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-025
 Client Id: DMW-23B
 Matrix: AQUEOUS
 Level: LOW

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

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	1100	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-47-3	Chromium	50	59	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7439-89-6	Iron	300	2400	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7439-96-5	Manganese	40	52	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	30	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	21	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/22/13	27441	SW15726B	21	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	39	P	PEICP2A
7440-66-6	Zinc	50	95	1	50	50	11/22/13	27441	W15726A2	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: AC75646-025
 Client Id: DMW-23B
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	43	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	43	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	43	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	45	1	50	100	11/21/13	27441	S112113A	43	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	43	MS	MS2_7500SWA
7439-92-1	Lead	3.0	8.3	1	50	100	11/21/13	27441	S112113A	43	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	43	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-026
 Client Id: DMW-23BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	43	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	30	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	19	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/22/13	27442	SW15727B	19	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	39	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	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: AC75646-026
 Client Id: DMW-23BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	35	1	50	100	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	43	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-027
 Client Id: DMW-23A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-70-2	Calcium	5000	20000	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7439-89-6	Iron	300	900	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7439-96-5	Manganese	40	980	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	33	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	22	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-23-5	Sodium	5000	27000	1	50	50	11/22/13	27441	SW15726B	22	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	40	P	PEICP2A

Comments: _____

Flag Codes:

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

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-027
 Client Id: DMW-23A
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	44	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	44	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	44	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	24	1	50	100	11/21/13	27441	S112113A	44	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	44	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	44	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	44	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-028
 Client Id: DMW-23AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	44	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7440-70-2	Calcium	5000	20000	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7439-89-6	Iron	300	650	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7439-96-5	Manganese	40	1000	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	33	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	20	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7440-23-5	Sodium	5000	29000	1	50	50	11/22/13	27442	SW15727B	20	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	40	P	PEICP2A

Comments: _____

Flag Codes:

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

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-028
 Client Id: DMW-23AF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	13	1	50	100	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	44	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-029
 Client Id: DMW-22B
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-70-2	Calcium	5000	26000	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7439-96-5	Manganese	40	610	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	34	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	23	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	11/22/13	27441	SW15726B	23	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	41	P	PEICP2A

Comments:

Flag Codes:

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

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-029
 Client Id: DMW-22B
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	45	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	45	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	45	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	45	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	45	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	45	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	45	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-030
 Client Id: DMW-22BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	45	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7440-70-2	Calcium	5000	27000	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7439-96-5	Manganese	40	600	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	34	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	21	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	11/22/13	27442	SW15727B	21	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	41	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	41	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: AC75646-030
 Client Id: DMW-22BF
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	45	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	45	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: AC75646-031
 Client Id: DMW-9
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	35	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27441	SW15726B	24	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/22/13	27441	SW15726B	24	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	W15726A2	42	P	PEICP2A

Comments: _____

Flag Codes:

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

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-031
 Client Id: DMW-9
 Matrix: AQUEOUS
 Level: LOW

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

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	11/21/13	27441	S112113A	46	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	46	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	46	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.4	1	50	100	11/21/13	27441	S112113A	46	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	46	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	46	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	46	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	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: AC75646-032
 Client Id: DMW-9F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/25/13	27442	W15727E2	46	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	35	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727B	22	P	PEICPRAD1A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7440-23-5	Sodium	5000	11000	1	50	50	11/22/13	27442	SW15727B	22	P	PEICPRAD1A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	W15727C2	42	P	PEICP2A

Comments:

Flag Codes:

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

P - ICP-AES

CV - ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: AC75646-032
 Client Id: DMW-9F
 Matrix: AQUEOUS
 Level: LOW

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

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	11/22/13	27442	S112213B	46		MSMS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	46		MSMS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	46		MSMS2_7500SWA
7440-43-9	Cadmium	2.0	3.0	1	50	100	11/22/13	27442	S112213B	46		MSMS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	46		MSMS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	46		MSMS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	46		MSMS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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: AC75646-033
 Client Id: DMW-15B MSD
 Matrix: AQUEOUS
 Level: LOW

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

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	5000	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-39-3	Barium	50	530	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-70-2	Calcium	5000	62000	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-47-3	Chromium	50	500	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-50-8	Copper	50	490	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7439-89-6	Iron	300	8100	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7439-95-4	Magnesium	5000	54000	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7439-96-5	Manganese	40	650	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7439-97-6	Mercury	0.70	9.7	1	25	25	11/20/13	27441	H15726SW	17	CV	HGCV2A
7440-02-0	Nickel	50	500	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-09-7	Potassium	5000	51000	1	50	50	11/21/13	27441	SW15726A	17	P	PEICPRAD1A
7440-22-4	Silver	20	98	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-23-5	Sodium	5000	88000	1	50	50	11/21/13	27441	SW15726A	17	P	PEICPRAD1A
7440-62-2	Vanadium	50	490	1	50	50	11/22/13	27441	W15726A2	18	P	PEICP2A
7440-66-6	Zinc	50	510	1	50	50	11/22/13	27441	W15726A2	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: AC75646-033
 Client Id: DMW-15B MSD
 Matrix: AQUEOUS
 Level: LOW

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

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	520	1	50	100	11/21/13	27441	S112113A	23	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	500	1	50	100	11/22/13	27441	S112213A	23	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	500	1	50	100	11/21/13	27441	S112113A	23	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	500	1	50	100	11/21/13	27441	S112113A	23	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	490	1	50	100	11/22/13	27441	S112213A	23	MS	MS2_7500SWA
7439-92-1	Lead	3.0	480	1	50	100	11/21/13	27441	S112113A	23	MS	MS2_7500SWA
7782-49-2	Selenium	10	490	1	50	100	11/22/13	27441	S112213A	23	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	450	1	50	100	11/21/13	27441	S112113A	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: AC75646-034
 Client Id: DMW-15BF MSD
 Matrix: AQUEOUS
 Level: LOW

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

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	5000	1	50	50	11/25/13	27442	W15727E2	18	P	PEICP2A
7440-39-3	Barium	50	530	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7440-70-2	Calcium	5000	62000	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7440-47-3	Chromium	50	500	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7440-50-8	Copper	50	490	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7439-89-6	Iron	300	5100	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7439-95-4	Magnesium	5000	55000	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7439-96-5	Manganese	40	630	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7439-97-6	Mercury	0.70	9.8	1	25	25	11/22/13	27442	H15727SW	17	CV	HGCV2A
7440-02-0	Nickel	50	490	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7440-09-7	Potassium	5000	52000	1	50	50	11/22/13	27442	SW15727A	17	P	PEICPRAD1A
7440-22-4	Silver	20	97	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7440-23-5	Sodium	5000	89000	1	50	50	11/22/13	27442	SW15727A	17	P	PEICPRAD1A
7440-62-2	Vanadium	50	490	1	50	50	11/22/13	27442	W15727C2	18	P	PEICP2A
7440-66-6	Zinc	50	500	1	50	50	11/22/13	27442	W15727C2	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: AC75646-034
 Client Id: DMW-15BF MSD
 Matrix: AQUEOUS
 Level: LOW

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

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	500	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	470	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	480	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	480	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	440	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7439-92-1	Lead	3.0	470	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7782-49-2	Selenium	10	450	1	50	100	11/22/13	27442	S112213B	23	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	450	1	50	100	11/22/13	27442	S112213B	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: 11/22/13
 Data File: SW15726A2
 Prep Batch: 27441
 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: 3110835

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- 32	Rec	CCV V- 173510- 45	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	10/5	5.02452	100	4.99677	100	4.97772	100	4.99624	100						
Barium	1/5	0.50505	101	0.50241	100	0.49728	99	0.49973	100						
Calcium	100/50	50.42240	101	49.90670	100	49.64020	99	50.12720	100						
Chromium	1/5	0.50464	101	0.50500	101	0.49936	100	0.49899	100						
Copper	1/5	0.49196	98	0.48716	97	0.48457	97	0.48553	97						
Iron	10/5	5.03642	101	5.01460	100	4.98533	100	4.99386	100						
Magnesium	100/50	51.16740	102	50.65510	101	50.36250	101	50.86320	102						
Manganese	1/5	0.49377	99	0.49061	98	0.48722	97	0.48840	98						
Nickel	1/5	0.50187	100	0.50023	100	0.49556	99	0.49740	99						
Silver	0.2/0.1	0.09872	99	0.09875	99	0.09750	97	0.09752	98						
Vanadium	1/5	0.49494	99	0.49160	98	0.48721	97	0.48904	98						
Zinc	1/5	0.49687	99	0.49476	99	0.49072	98	0.49275	99						

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105
 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: 11/22/13
 Data File: SW15726A2
 Prep Batch: 27441
 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: 3110835

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]-33	Rec	LLCCV V- 176606 [aq]-46	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	0.2/0.2	0.145079	73	0.151205	76	0.153080	77	0.160082	80					
Barium	0.05/0.05	0.0462236	92	0.0465752	93	0.0464826	93	0.0466639	93					
Calcium	5.0/5	4.57452	91	4.56038	91	4.56733	91	4.62117	92					
Chromium	0.05/0.05	0.0457270	91	0.0459635	92	0.0446484	89	0.0457519	92					
Copper	0.05/0.05	0.0457358	91	0.0469488	94	0.0472865	95	0.0476151	95					
Iron	0.3/0.3	0.256794	86	0.257695	86	0.257379	86	0.259451	86					
Magnesium	5.0/5	4.65060	93	4.67671	94	4.65106	93	4.69499	94					
Manganese	0.04/0.04	0.0353088	88	0.0355996	89	0.0353946	88	0.0357514	89					
Nickel	0.05/0.05	0.0460070	92	0.0464069	93	0.0464186	93	0.0472080	94					
Silver	0.02/0.02	0.0193435	97	0.0191877	96	0.0188994	94	0.0194346	97					
Vanadium	0.05/0.05	0.0451984	90	0.0454197	91	0.0451689	90	0.0462526	93					
Zinc	0.05/0.05	0.0456051	91	0.0460984	92	0.0458316	92	0.0466828	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: 11/21/13
 Data File: SW15726A
 Prep Batch: 27441
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 3110835

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

Analyte	ICV/CC V Amt	ICV V- 176789- 6	Rec	CCV V- 176789- 19	Rec	CCV V- 176789- 28	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	100/50	49.29850	99	49.78960	100	50.59090	101								
Sodium	100/50	49.70850	99	50.39170	101	51.18470	102								

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120)
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

CLP ICP ICV/CCV: 90-110
 CLP Hg ICV/CCV: 80-120

FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 11/21/13
 Data File: SW15726A
 Prep Batch: 27441
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 3110835

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

Analyte	LLICV/ LLCCV Amt	LLICV [aq] V- 176895- 7	Rec	LLCCV [aq] V- 176895- 20	Rec	LLCCV [aq] V- 176895- 29	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	5.0/5	4.55608	91	4.72787	95	4.75298	95							
Sodium	5.0/5	4.67891	94	4.83929	97	4.86747	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: 11/22/13
 Data File: SW15726B
 Prep Batch: 27441
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 3110835

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

Analyte	ICV/CC V Amt	ICV V- 176789- 6	Rec	CCV V- 176789- 17	Rec	CCV V- 176789- 27	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	100/50	50.03040	100	49.03560	98	49.91520	100								
Sodium	100/50	50.30710	101	49.51100	99	50.44600	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: 11/22/13
 Data File: SW15726B
 Prep Batch: 27441
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 3110835

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

Analyte	LLICV/ LLCCV Amt	LLICV [aq] V- 176895- 7	Rec	LLCCV [aq] V- 176895- 18	Rec	LLCCV [aq] V- 176895- 28	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	5.0/5	4.49861	90	4.51567	90	4.44979	89								
Sodium	5.0/5	4.55946	91	4.59015	92	4.55964	91								

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: 11/21/13
 Data File: S112113A
 Prep Batch: 27441
 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: 3110835

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	45.73000	91	49.98000	100	49.69000	99	49.57000	99	48.14000	96				
Beryllium	50/30	47.99000	96	49.19000	98	49.65000	99	48.78000	98	48.41000	97				
Cadmium	50/30	49.18000	98	51.05000	102	50.17000	100	50.32000	101	49.29000	99				
Lead	50/30	47.91000	96	49.73000	99	49.51000	99	48.20000	96	47.92000	96				
Thallium	50/30	47.64000	95	50.03000	100	50.74000	101	50.38000	101	49.53000	99				

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105 CLP ICP ICV/CCV: 90-110
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120) CLP Hg ICV/CCV: 80-120
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 11/21/13
 Data File: S112113A
 Prep Batch: 27441
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: MS2_7500SWA
 Units: All units in ppm except Hg and lcp-ms in ppb
 Project Number: 3110835

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	Rec
Antimony	1/1	1.097	110	9.617E-01	96	1.016	102	9.321E-01	93	9.588E-01	96				
Beryllium	0.5/0.5	4.706E-01	94	4.355E-01	87	5.157E-01	103	4.541E-01	91	4.664E-01	93				
Cadmium	1/1	9.745E-01	97	9.577E-01	96	1.042	104	9.733E-01	97	9.904E-01	99				
Lead	1.5/1.5	1.411	94	1.365	91	1.484	99	1.376	92	1.399	93				
Thallium	1/1	9.183E-01	92	8.821E-01	88	1.008	101	8.964E-01	90	9.115E-01	91				

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: 11/22/13
 Data File: S112213A
 Prep Batch: 27441
 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: 3110835

Lab Name: Veritech
 Lab Code:
 Contract:
 Nras No:
 Sdg No:
 Case No:
 ICV/CCV SOURCE: VH G 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
Arsenic	50/30	49.22000	98	54.27000	109	53.67000	107	52.29000	105	47.46000	95				
Cobalt	50/30	46.16000	92	53.59000	107	53.10000	106	52.74000	105	49.29000	99				
Selenium	50/30	50.58000	101	274.50000	110	269.80000	108	265.30000	106	236.50000	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: 11/22/13
 Data File: S112213A
 Prep Batch: 27441
 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: 3110835

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
Arsenic	1/1	1.040	104	1.017	102	1.022	102	9.108E-01	91	8.992E-01	90				
Cobalt	1/1	9.540E-01	95	9.671E-01	97	1.015	102	9.463E-01	95	9.136E-01	91				
Selenium	5/5	4.607	92	4.580	92	4.729	95	4.362	87	4.212	84				

Notes: a-indicates analyte failed the LLICV limits for 6010B, 6010C, 6020, 6020A
 c-indicates analyte failed the LLCCV limits for 6010B, 6010C, 6020, 6020A

Qc Limits: LLCCV- 6010B/6010C/6020/6020A (70-130)
 LLICV -6010B/6010C/6020/6020A :70-130

FORM 2 (ICV/CCV Summary)

Date Analyzed: 11/22/13
 Data File: SW15727C2
 Prep Batch: 27442
 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: 3110835

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

Analyte	ICV/CC V Amt	ICV V- 173510- 7	Rec	CCV V- 173510- 20	Rec	CCV V- 173510- 33	Rec	CCV V- 173510- 45	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Barium	1/5	0.50465	101	0.49942	100	0.50498	101	0.50336	101						
Calcium	100/50	50.03350	100	50.08220	100	49.91000	100	49.63350	99						
Chromium	1/5	0.50777	102	0.50194	100	0.50804	102	0.50501	101						
Copper	1/5	0.49088	98	0.48765	98	0.49263	99	0.49093	98						
Iron	10/5	5.06644	101	5.00788	100	5.07308	101	5.03421	101						
Magnesium	100/50	50.91350	102	50.93810	102	50.67030	101	50.27220	101						
Manganese	1/5	0.49451	99	0.48922	98	0.49461	99	0.49220	98						
Nickel	1/5	0.50358	101	0.49807	100	0.50411	101	0.50074	100						
Silver	0.2/0.1	0.09939	99	0.09805	98	0.09934	99	0.09889	99						
Vanadium	1/5	0.49495	99	0.48965	98	0.49526	99	0.49340	99						
Zinc	1/5	0.50006	100	0.49334	99	0.49566	99	0.49247	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: 11/22/13
 Data File: SW15727C2
 Prep Batch: 27442
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICP2A
 Units: All units in ppm except Hg and lcp-ms in ppb
 Project Number: 3110835

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

Analyte	LLICV/ LLCCV Amt	LLICV V- 177224 [aq]-8	Rec	LLCCV V-177224 [aq]-21	Rec	LLCCV V- 177224 [aq]-34	Rec	LLCCV V- 177224 [aq]-46	Rec	Rec	Rec	Rec	Rec	Rec
Barium	0.05/0.05	0.0461526	92	0.0466193	93	0.0459515	92	0.0464227	93					
Calcium	5.0/5	4.60660	92	4.60051	92	4.57221	91	4.57818	92					
Chromium	0.05/0.05	0.0460621	92	0.0467509	94	0.0458382	92	0.0467219	93					
Copper	0.05/0.05	0.0471245	94	0.0449210	90	0.0452776	91	0.0438456	88					
Iron	0.3/0.3	0.252747	84	0.254359	85	0.250990	84	0.255064	85					
Magnesium	5.0/5	4.70200	94	4.74683	95	4.63696	93	4.69924	94					
Manganese	0.04/0.04	0.0352974	88	0.0356401	89	0.0348501	87	0.0353690	88					
Nickel	0.05/0.05	0.0466273	93	0.0465938	93	0.0460149	92	0.0462708	93					
Silver	0.02/0.02	0.0193034	97	0.0198692	99	0.0191910	96	0.0195142	98					
Vanadium	0.05/0.05	0.0454827	91	0.0460002	92	0.0445795	89	0.0460578	92					
Zinc	0.05/0.05	0.0449846	90	0.0445587	89	0.0440952	88	0.0442415	88					

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: 11/25/13
 Data File: SW15727E2
 Prep Batch: 27442
 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: 3110835

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- 25	Rec	CCV V- 173510- 37	Rec	CCV V- 173510- 49	Rec	CCV V- 173510- 59	Rec	Rec	Rec	
Aluminum	10/5	4.99998	100	5.00784	100	4.88624	98	4.93224	99	4.93810	99	4.90163	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 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: 11/25/13
 Data File: SW15727E2
 Prep Batch: 27442
 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: 3110835

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

Analyte	LLICV/ LLCCV Amt	LLICV V- 177224 [aq]-8	Rec	LLCCV V-177224 [aq]-21	Rec	LLCCV V- 177224 [aq]-26	Rec	LLCCV V- 177224 [aq]-38	Rec	LLCCV V- 177224 [aq]-50	Rec	LLCCV V- 177224 [aq]-60	Rec	Rec	Rec
Aluminum	0.2/0.2	0.155279	78	0.156158	78	0.159482	80	0.165117	83	0.165162	83	0.164171	82		

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: 11/22/13
 Data File: SW15727A
 Prep Batch: 27442
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 3110835

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

Analyte	ICV/CC V Amt	ICV V- 176789- 6 Rec	CCV V- 176789- 19 Rec	CCV V- 176789- 30 Rec	CCV V- 176789- 38 Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	100/50	50.07390	100	51.50480	103	50.90050	102	-0.66510	-1.3 c								
Sodium	100/50	50.35570	101	51.61070	103	51.00450	102	-0.57738	-1.2 c								

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105 CLP ICP ICV/CCV: 90-110
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120) CLP Hg ICV/CCV: 80-120
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 11/22/13
 Data File: SW15727A
 Prep Batch: 27442
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 3110835

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

Analyte	LLICV/ LLCCV Amt	LLICV [aq] V- 176895- 7	Rec	LLCCV [aq] V- 176895- 20	Rec	LLCCV [aq] V- 176895- 31	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	5.0/5	4.66583	93	4.68843	94	4.55080	91							
Sodium	5.0/5	4.75429	95	4.80962	96	4.65408	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: 11/22/13
 Data File: SW15727B
 Prep Batch: 27442
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 3110835

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

Analyte	ICV/CC V Amt	ICV V- 176789- 6	Rec	CCV V- 176789- 16	Rec	CCV V- 176789- 25	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	100/50	49.54460	99	49.70770	99	50.71100	101							
Sodium	100/50	49.86470	100	50.33620	101	51.35970	103							

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: 11/22/13
 Data File: SW15727B
 Prep Batch: 27442
 Analytical Method: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 3110835

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

Analyte	LLICV/ LLCCV Amt	LLICV [aq] V- 176895- 7	Rec	LLCCV [aq] V- 176895- 17	Rec	LLCCV [aq] V- 176895- 26	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Potassium	5.0/5	4.60161	92	4.50774	90	4.54154	91								
Sodium	5.0/5	4.70007	94	4.62478	92	4.66994	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: 11/22/13
 Data File: S112213B
 Prep Batch: 27442
 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: 3110835

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	46.30000	93	48.54000	97	49.62000	99	49.16000	98	48.45000	97				
Arsenic	50/30	50.55000	101	51.31000	103	54.39000	109	50.79000	102	49.04000	98				
Beryllium	50/30	49.75000	100	48.70000	97	52.06000	104	50.85000	102	50.79000	102				
Cadmium	50/30	49.86000	100	50.29000	101	51.77000	104	50.63000	101	49.45000	99				
Cobalt	50/30	46.79000	94	49.98000	100	53.38000	107	50.20000	100	49.34000	99				
Lead	50/30	51.28000	103	49.90000	100	51.30000	103	51.14000	102	49.88000	100				
Selenium	50/30	51.14000	102	252.40000	101	269.50000	108	250.90000	100	244.00000	98				
Thallium	50/30	49.39000	99	50.52000	101	52.77000	106	52.02000	104	51.23000	102				

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120)
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

CLP ICP ICV/CCV: 90-110
 CLP Hg ICV/CCV: 80-120

FORM 2 (LLICV/LLCCV Summary)

Date Analyzed: 11/22/13
 Data File: S112213B
 Prep Batch: 27442
 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: 3110835

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	LLCCV V- 176972- 49 Rec	LLCCV V- 176972- 49 Rec	LLCCV V- 176972- 49 Rec	LLCCV V- 176972- 49 Rec	LLCCV V- 176972- 49 Rec	LLCCV V- 176972- 49 Rec	LLCCV V- 176972- 49 Rec	LLCCV V- 176972- 49 Rec	LLCCV V- 176972- 49 Rec	LLCCV V- 176972- 49 Rec
Antimony	1/1	1.119	112	9.912E-01	99	1.047	105	1.025	102	1.005	100					
Arsenic	1/1	1.037	104	1.069	107	1.173	117	1.067	107	9.819E-01	98					
Beryllium	0.5/0.5	5.114E-01	102	5.123E-01	102	5.789E-01	116	5.612E-01	112	5.267E-01	105					
Cadmium	1/1	1.019	102	1.041	104	1.077	108	1.022	102	1.035	104					
Cobalt	1/1	1.009	101	1.032	103	1.102	110	1.041	104	9.861E-01	99					
Lead	1.5/1.5	1.477	98	1.475	98	1.518	101	1.506	100	1.503	100					
Selenium	5/5	4.369	87	4.384	88	4.588	92	4.448	89	4.120	82					
Thallium	1/1	1.005	100	9.809E-01	98	1.066	107	9.957E-01	100	1.005	100					

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: H15726SW
 Prep Batch: 27441
 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: 3110835

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

Analyte	ICV (2)-9		CCV-20		CCV-31		CCV-36									
	ICV/CC V Amt	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Mercury	20/10	19.43000	97	9.88900	99	9.88900	99	9.64200	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
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120)
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

CLP ICP ICV/CCV: 90-110
 CLP Hg ICV/CCV: 80-120

FORM 2 (ICV/CCV Summary)

Date Analyzed: 11/22/13
 Data File: H15727SW
 Prep Batch: 27442
 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: 3110835

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

Analyte	ICV (2)-9		CCV-20		CCV-31		CCV-36											
	ICV/CC V Amt	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Mercury	20/10	19.14000	96	9.98000	100	9.89900	99	9.94600	99									

Notes: a-indicates analyte failed the ICV limits for 6010B/6010C, 6020/6020A
 b-indicates analyte failed the ICV limits for 200.7 or 200.8
 c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010B/6010C (Except Hg 7470/7470A,7471A/7471B),6020/6020A
 d-indicates analyte failed the CCV limits Hg 7470A/7471A/7471B

Qc Limits: ICV - 200.7 : 95-105 CLP ICP ICV/CCV: 90-110
 CCV- 200.7/200.8/6010B/6010C/245.1 : 90-110 (Except Hg 7470/7470A/ 7471A/7471B=80-120) CLP Hg ICV/CCV: 80-120
 ICV -6010B/6010C/6020/6020A/200.8 : 90-110

FORM 3

(ICB/CCB/MB Summary)

Date Analyzed: 11/22/13

Data File: SW15726A2

Prep Batch: 27441

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: 3110835

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666- 9	CCB-22	CCB-34	CCB-47	MB 27441 (1)- 12			
Aluminum	.2 U	.2 U	.2 U	.2 U	.2 U			
Barium	.05 U	.05 U	.05 U	.05 U	.05 U			
Calcium	5 U	5 U	5 U	5 U	5 U			
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U			
Copper	.05 U	.05 U	.05 U	.05 U	.05 U			
Iron	.3 U	.3 U	.3 U	.3 U	.3 U			
Magnesium	5 U	5 U	5 U	5 U	5 U			
Manganese	.04 U	.04 U	.04 U	.04 U	.04 U			
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U			
Silver	.02 U	.02 U	.02 U	.02 U	.02 U			
Vanadium	.05 U	.05 U	.05 U	.05 U	.05 U			
Zinc	.05 U	.05 U	.05 U	.05 U	.05 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3

(ICB/CCB/MB Summary)

Date Analyzed: 11/21/13

Data File: SW15726A

Prep Batch: 27441

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICPRAD1A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 3110835

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666- 8	CCB V-174666- 21	CCB V-174666- 30	MB 27441 (1)- 11				
Potassium	5 U	5 U	5 U	5 U				
Sodium	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: 11/22/13

Data File: SW15726B

Prep Batch: 27441

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICPRAD1A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 3110835

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666- 8	CCB V-174666- 19	CCB V-174666- 29					
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: 11/21/13
 Data File: S112113A
 Prep Batch: 27441
 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: 3110835

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 27441-16		
Antimony	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		
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: 11/22/13

Data File: S112213A

Prep Batch: 27441

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: 3110835

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 27441-16		
Arsenic	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		
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: 11/22/13

Data File: SW15727C2

Prep Batch: 27442

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: 3110835

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666- 9	CCB-22	CCB-35	CCB-47	MB 27442 (1)- 12			
Barium	.05 U	.05 U	.05 U	.05 U	.05 U			
Calcium	5 U	5 U	5 U	5 U	5 U			
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U			
Copper	.05 U	.05 U	.05 U	.05 U	.05 U			
Iron	.3 U	.3 U	.3 U	.3 U	.3 U			
Magnesium	5 U	5 U	5 U	5 U	5 U			
Manganese	.04 U	.04 U	.04 U	.04 U	.04 U			
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U			
Silver	.02 U	.02 U	.02 U	.02 U	.02 U			
Vanadium	.05 U	.05 U	.05 U	.05 U	.05 U			
Zinc	.05 U	.05 U	.05 U	.05 U	.05 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 11/25/13

Data File: SW15727E2

Prep Batch: 27442

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: 3110835

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666- 9	CCB-22	CCB-27	CCB-39	CCB-51	CCB-61	MB 27442 (1)- 12
Aluminum	.2 U	.2 U	.2 U	.2 U	.2 U	.2 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: 11/22/13

Data File: SW15727A

Prep Batch: 27442

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICPRAD1A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 3110835

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666- 8	CCB V-174666- 21	CCB V-174666- 32	MB 27442 (1)- 11				
Potassium	5 U	5 U	5 U	5 U				
Sodium	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: 11/22/13

Data File: SW15727B

Prep Batch: 27442

Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A

Instrument: PEICPRAD1A

Units: All units in ppm except Hg and icp-ms in ppb

Project Number: 3110835

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB V-174666- 8	CCB V-174666- 18	CCB V-174666- 27					
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: 11/22/13

Data File: S112213B

Prep Batch: 27442

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: 3110835

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 27442-16
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: H15726SW

Prep Batch: 27441

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: 3110835

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB-10	CCB-21	CCB-32	CCB-37	MB 27441 (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: 11/22/13

Data File: H15727SW

Prep Batch: 27442

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: 3110835

Lab Name: Veritech

Lab Code:

Contract:

Nras No:

Sdg No:

Case No:

Analyte	ICB-10	CCB-21	CCB-32	CCB-37	MB 27442 (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: 11/22/13
 Data File: SW15726A2
 Prep Batch: 27441
 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: 3110835

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-173614-30		ICSAB V-173231-31		ICSA V-173614-43		ICSAB V-173231-44		Rec	Rec
			Rec		Rec		Rec		Rec		Rec		Rec		
Aluminum	500	497.542	100	499.69300	100	501.285	100	500.97800	100	504.623	101	498.40700	100		
Barium	.5	U		0.53397	107	U		0.53611	107	U		0.53377	107		
Calcium	500	474.969	95	476.21700	95	478.261	96	478.17200	96	480.589	96	475.05900	95		
Chromium	.5	U		0.50372	101	U		0.50705	101	U		0.50275	101		
Copper	.5	U		0.53891	108	U		0.54218	108	U		0.53766	108		
Iron	200	186.89	93	187.06200	94	188.407	94	187.39900	94	187.477	94	185.97100	93		
Magnesium	500	505.723	101	506.75900	101	510.103	102	506.98000	101	507.378	101	503.80100	101		
Manganese	.5	U		0.48875	98	U		0.49258	99	U		0.48887	98		
Nickel	1	U		0.96376	96	U		0.97189	97	U		0.96343	96		
Silver	1	U		1.11860	112	U		1.12620	113	U		1.11480	111		
Vanadium	.5	U		0.50588	101	U		0.50854	102	U		0.50438	101		
Zinc	1	U		0.96281	96	U		0.96778	97	U		0.96658	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: 11/21/13
 Data File: SW15726A
 Prep Batch: 27441
 Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 3110835

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

Analyte	Spk Amt	ICSA V-175629-9		ICSAB V-175630-10		ICSA V-175629-26		ICSAB V-175630-27		Rec	Rec	Rec	Rec
			Rec		Rec		Rec		Rec				
Aluminum	500	504.14	101	519.23800	104	520.343	104	533.33100	107				
Calcium	500	480.565	96	495.03800	99	499.251	100	511.06600	102				
Iron	200	190.667	95	191.94800	96	196.874	98	195.81800	98				
Magnesium	500	498.402	100	514.32200	103	515.662	103	527.92800	106				

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: 11/22/13
 Data File: SW15726B
 Prep Batch: 27441
 Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 3110835

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

Analyte	Spk Amt	ICSA V- 175629-9		ICSAB V- 175630-10		ICSA V- 175629-25		ICSAB V- 175630-26		Rec	Rec	Rec	Rec
			Rec		Rec		Rec		Rec				
Aluminum	500	518.418	104	522.30800	104	518.489	104	519.67400	104				
Calcium	500	502.034	100	506.05700	101	507.726	102	508.46000	102				
Iron	200	195.953	98	193.79100	97	196.591	98	195.81400	98				
Magnesium	500	516.974	103	520.46400	104	519.011	104	520.37700	104				

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: 11/21/13
 Data File: S112113A
 Prep Batch: 27441
 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: 3110835

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	45530.00000	91												
Cadmium	100	1.103b		100.90000	101												
Calcium	150000	147400	98	39800.00000	93												
Iron	125000	119900	96	14000.00000	91												
Magnesium	50000	48500	97	46300.00000	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: 11/22/13
 Data File: S112213A
 Prep Batch: 27441
 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: 3110835

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	47410	95	47330.00000	95					
Arsenic	100	U		103.50000	104					
Calcium	150000	144500	96	44700.00000	96					
Cobalt	200	1.709b		186.90000	93					
Iron	125000	117900	94	18200.00000	95					
Magnesium	50000	48220	96	48400.00000	97					
Selenium	100	U		97.79000	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

FORM 4 **(ICSA/ICSAB Summary)**

Date Analyzed: 11/22/13
 Data File: SW15727C2
 Prep Batch: 27442
 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: 3110835

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

Analyte	Spk Amt	ICSA V-173614-10	Rec	ICSAB V-173231-11	Rec	ICSA V-173614-31	Rec	ICSAB V-173231-32	Rec	ICSA V-173614-43	Rec	ICSAB V-173231-44	Rec	Rec	Rec
Aluminum	500	492.914	99	495.82600	99	500.658	100	494.48500	99	493.816	99	497.69200	100		
Barium	.5	U		0.55599	111	U		0.52529	105	U		0.52398	105		
Calcium	500	492.316	98	510.95700	102	476.678	95	471.75300	94	469.799	94	473.17500	95		
Chromium	.5	U		0.52935	106	U		0.50085	100	U		0.49595	99		
Copper	.5	U		0.53403	107	U		0.53028	106	U		0.52930	106		
Iron	200	194.648	97	199.11600	100	186.488	93	185.33100	93	184.364	92	184.96300	92		
Magnesium	500	537.033	107	555.30000	111	503.38	101	499.97100	100	496.727	99	498.09100	100		
Manganese	.5	U		0.51394	103	U		0.48240	96	U		0.48001	96		
Nickel	1	U		1.05217	105	U		0.95212	95	U		0.94586	95		
Silver	1	U		1.12086	112	U		1.10677	111	U		1.10049	110		
Vanadium	.5	U		0.52382	105	U		0.49993	100	U		0.49543	99		
Zinc	1	U		1.11628	112	U		0.95324	95	U		0.93515	94		

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: 11/25/13
 Data File: SW15727E2
 Prep Batch: 27442
 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: 3110835

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- 173614-35		ICSAB V- 173231-36		ICSA V- 173614-47		ICSAB V- 173231-48		ICSA V- 173614-57		ICSAB V- 173231-58	
			Rec		Rec		Rec		Rec		Rec		Rec		Rec		Rec
Aluminum	500	489.627	98	498.11900	100	491.667	98	492.37700	98	492.203	98	493.18900	99	494.827	99	497.54100	100
Calcium	500	472.396	94	481.36800	96	475.774	95	474.90500	95	475.926	95	475.71800	95	477.406	95	482.14000	96
Iron	200	191.933	96	195.09500	98	193.116	97	191.74200	96	194.113	97	194.03300	97	191.536	96	195.66800	98
Magnesium	500	504.602	101	514.28800	103	509.328	102	506.22800	101	509.689	102	515.09200	103	509.285	102	517.28600	103

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: 11/22/13
 Data File: SW15727A
 Prep Batch: 27442
 Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 3110835

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

Analyte	Spk Amt	ICSA V- 175629-9		ICSAB V- 175630-10		ICSA V- 175629-28		ICSAB V- 175630-29		Rec	Rec	Rec	Rec
			Rec		Rec		Rec		Rec				
Aluminum	500	515.229	103	521.66600	104	513.088	103	520.11700	104				
Calcium	500	491.262	98	495.93600	99	494.179	99	500.01700	100				
Iron	200	196.435	98	194.37200	97	195.912	98	195.57400	98				
Magnesium	500	514.456	103	520.94000	104	515.678	103	521.78700	104				

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: 11/22/13
 Data File: SW15727B
 Prep Batch: 27442
 Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
 Instrument: PEICPRAD1A
 Units: All units in ppm except Hg and icp-ms in ppb
 Project Number: 3110835

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

Analyte	Spk Amt	ICSA V- 175629-9		ICSAB V- 175630-10		ICSA V- 175629-23		ICSAB V- 175630-24		Rec	Rec	Rec	Rec
Aluminum	500	490.165	98	491.48800	98	506.462	101	507.94500	102				
Calcium	500	461.605	92	462.22700	92	476.622	95	476.94400	95				
Iron	200	184.926	92	182.76200	91	190.836	95	186.47700	93				
Magnesium	500	481.59	96	483.95900	97	495.966	99	498.17800	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: 11/22/13
 Data File: S112213B
 Prep Batch: 27442
 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: 3110835

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	ICSAB V- 176970-12	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	47510	95	52530.00000	105					
Arsenic	100	U		116.20000	116					
Cadmium	100	1.195b		99.78000	100					
Calcium	150000	146000	97	33600.00000	109					
Cobalt	200	1.779b		212.00000	106					
Iron	125000	118500	95	31200.00000	105					
Magnesium	50000	49010	98	54060.00000	108					
Selenium	100	U		107.30000	107					

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: 27441

3110835 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 27441					
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27441	1	SW15726	13	5.0744	5.00	101	80	120	
Antimony	27441	1	SW15726	13	0.5047	0.500	101	80	120	
Arsenic	27441	1	SW15726	13	0.4867	0.500	97	80	120	
Barium	27441	1	SW15726	13	0.5083	0.500	102	80	120	
Beryllium	27441	1	SW15726	13	0.4882	0.500	98	80	120	
Cadmium	27441	1	SW15726	13	0.5019	0.500	100	80	120	
Calcium	27441	1	SW15726	13	49.9112	50.00	100	80	120	
Chromium	27441	1	SW15726	13	0.5088	0.500	102	80	120	
Cobalt	27441	1	SW15726	13	0.5038	0.500	101	80	120	
Copper	27441	1	SW15726	13	0.4980	0.500	100	80	120	
Iron	27441	1	SW15726	13	5.0685	5.00	101	80	120	
Lead	27441	1	SW15726	13	0.4965	0.500	99	80	120	
Magnesium	27441	1	SW15726	13	50.5457	50.00	101	80	120	
Manganese	27441	1	SW15726	13	0.4969	0.500	99	80	120	
Mercury	27441	1	H15726S	12	9.8320	10	98	80	120	
Nickel	27441	1	SW15726	13	0.5057	0.500	101	80	120	
Potassium	27441	1	SW15726	12	50.9720	50.00	102	80	120	
Selenium	27441	1	SW15726	13	0.4908	0.500	98	80	120	
Silver	27441	1	SW15726	13	0.0991	0.100	99	80	120	
Sodium	27441	1	SW15726	12	51.4864	50.00	103	80	120	
Thallium	27441	1	SW15726	13	0.5104	0.500	102	80	120	
Vanadium	27441	1	SW15726	13	0.4984	0.500	100	80	120	
Zinc	27441	1	SW15726	13	0.5014	0.500	100	80	120	

TxtQcType: LCSMR		Matrix: AQUEOUS			SampleID: LCSW MR 27441					
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27441	1	SW15726	14	4.9386	5.00	99	80	120	
Antimony	27441	1	SW15726	14	0.4925	0.500	98	80	120	
Arsenic	27441	1	SW15726	14	0.4794	0.500	96	80	120	
Barium	27441	1	SW15726	14	0.4952	0.500	99	80	120	
Beryllium	27441	1	SW15726	14	0.4844	0.500	97	80	120	
Cadmium	27441	1	SW15726	14	0.4891	0.500	98	80	120	
Calcium	27441	1	SW15726	14	49.5323	50.00	99	80	120	
Chromium	27441	1	SW15726	14	0.4957	0.500	99	80	120	
Cobalt	27441	1	SW15726	14	0.4925	0.500	98	80	120	
Copper	27441	1	SW15726	14	0.4864	0.500	97	80	120	
Iron	27441	1	SW15726	14	4.9597	5.00	99	80	120	
Lead	27441	1	SW15726	14	0.4849	0.500	97	80	120	
Magnesium	27441	1	SW15726	14	50.2355	50.00	100	80	120	
Manganese	27441	1	SW15726	14	0.4855	0.500	97	80	120	
Mercury	27441	1	H15726S	13	9.7570	10	98	80	120	
Nickel	27441	1	SW15726	14	0.4932	0.500	99	80	120	
Potassium	27441	1	SW15726	13	51.0801	50.00	102	80	120	
Selenium	27441	1	SW15726	14	0.4757	0.500	95	80	120	
Silver	27441	1	SW15726	14	0.0969	0.100	97	80	120	
Sodium	27441	1	SW15726	13	51.5548	50.00	103	80	120	
Thallium	27441	1	SW15726	14	0.5037	0.500	101	80	120	
Vanadium	27441	1	SW15726	14	0.4849	0.500	97	80	120	
Zinc	27441	1	SW15726	14	0.4905	0.500	98	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: 27441

3110835 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: AC75646-003								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27441	1	SW15726	17	SW15726	15	4.9936	0.2U	5.0	100		75	125
Antimony	27441	1	SW15726	17	SW15726	15	0.5018	0.02U	.5	100		75	125
Arsenic	27441	1	SW15726	17	SW15726	15	0.4894	0.02U	.5	98		75	125
Barium	27441	1	SW15726	17	SW15726	15	0.5290	0.05U	.5	106		75	125
Beryllium	27441	1	SW15726	17	SW15726	15	0.4876	0.012U	.5	98		75	125
Cadmium	27441	1	SW15726	17	SW15726	15	0.4904	0.012U	.5	98		75	125
Calcium	27441	1	SW15726	17	SW15726	15	62.6161	12.0590	50.0	101		75	125
Chromium	27441	1	SW15726	17	SW15726	15	0.4944	0.05U	.5	99		75	125
Cobalt	27441	1	SW15726	17	SW15726	15	0.4922	0.02U	.5	98		75	125
Copper	27441	1	SW15726	17	SW15726	15	0.4878	0.05U	.5	98		75	125
Iron	27441	1	SW15726	17	SW15726	15	8.2996	3.2537	5.0	101		75	125
Lead	27441	1	SW15726	17	SW15726	15	0.4833	0.012U	.5	97		75	125
Magnesium	27441	1	SW15726	17	SW15726	15	54.8289	5U	50	110		75	125
Manganese	27441	1	SW15726	17	SW15726	15	0.6668	0.1713	.5	99		75	125
Mercury	27441	1	H15726S	16	H15726S	14	9.6400	.70U	10	96		75	125
Nickel	27441	1	SW15726	17	SW15726	15	0.4901	0.05U	.5	98		75	125
Potassium	27441	1	SW15726	16	SW15726	14	51.0434	5U	50.00	102		75	125
Selenium	27441	1	SW15726	17	SW15726	15	0.4840	0.04U	.5	97		75	125
Silver	27441	1	SW15726	17	SW15726	15	0.0964	0.02U	.1	96		75	125
Sodium	27441	1	SW15726	16	SW15726	14	90.2878	39.5413	50.00	101		75	125
Thallium	27441	1	SW15726	17	SW15726	15	0.4981	0.02U	.5	100		75	125
Vanadium	27441	1	SW15726	17	SW15726	15	0.4871	0.05U	.5	97		75	125
Zinc	27441	1	SW15726	17	SW15726	15	0.5026	0.05U	.5	101		75	125

TxtQcType: MSD		Matrix: AQUEOUS			SampleID: AC75646-033								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27441	1	SW15726	18	SW15726	15	5.0424	0.2U	5.0	101		75	125
Antimony	27441	1	SW15726	18	SW15726	15	0.5081	0.02U	.5	102		75	125
Arsenic	27441	1	SW15726	18	SW15726	15	0.4931	0.02U	.5	99		75	125
Barium	27441	1	SW15726	18	SW15726	15	0.5329	0.05U	.5	107		75	125
Beryllium	27441	1	SW15726	18	SW15726	15	0.4870	0.012U	.5	97		75	125
Cadmium	27441	1	SW15726	18	SW15726	15	0.4964	0.012U	.5	99		75	125
Calcium	27441	1	SW15726	18	SW15726	15	61.6839	12.0590	50.0	99		75	125
Chromium	27441	1	SW15726	18	SW15726	15	0.4988	0.05U	.5	100		75	125
Cobalt	27441	1	SW15726	18	SW15726	15	0.4979	0.02U	.5	100		75	125
Copper	27441	1	SW15726	18	SW15726	15	0.4904	0.05U	.5	98		75	125
Iron	27441	1	SW15726	18	SW15726	15	8.1469	3.2537	5.0	98		75	125
Lead	27441	1	SW15726	18	SW15726	15	0.4881	0.012U	.5	98		75	125
Magnesium	27441	1	SW15726	18	SW15726	15	54.4886	5U	50	109		75	125
Manganese	27441	1	SW15726	18	SW15726	15	0.6548	0.1713	.5	97		75	125
Mercury	27441	1	H15726S	17	H15726S	14	9.6810	.70U	10	97		75	125
Nickel	27441	1	SW15726	18	SW15726	15	0.4962	0.05U	.5	99		75	125
Potassium	27441	1	SW15726	17	SW15726	14	50.7016	5U	50.0	101		75	125
Selenium	27441	1	SW15726	18	SW15726	15	0.4890	0.04U	.5	98		75	125
Silver	27441	1	SW15726	18	SW15726	15	0.0975	0.02U	.1	98		75	125
Sodium	27441	1	SW15726	17	SW15726	14	88.1772	39.5413	50	97		75	125
Thallium	27441	1	SW15726	18	SW15726	15	0.5005	0.02U	.5	100		75	125
Vanadium	27441	1	SW15726	18	SW15726	15	0.4924	0.05U	.5	98		75	125
Zinc	27441	1	SW15726	18	SW15726	15	0.5050	0.05U	.5	101		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: 27441

3110835 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 27441							
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim		
Antimony	27441	1	S112113A	17	258.7000	250	103		80	120		
Arsenic	27441	1	S112213A	17	245.9000	250	98		80	120		
Beryllium	27441	1	S112113A	17	257.2000	250	103		80	120		
Cadmium	27441	1	S112113A	17	252.2000	250	101		80	120		
Cobalt	27441	1	S112213A	17	241.2000	250	96		80	120		
Lead	27441	1	S112113A	17	247.5000	250	99		80	120		
Selenium	27441	1	S112213A	17	244.3000	250	98		80	120		
Thallium	27441	1	S112113A	17	232.4000	250	93		80	120		

TxtQcType: LCSMR			Matrix: AQUEOUS		SampleID: LCSW MR 27441							
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim		
Antimony	27441	1	S112113A	18	248.7000	250	99		80	120		
Arsenic	27441	1	S112213A	18	239.6000	250	96		80	120		
Beryllium	27441	1	S112113A	18	245.2000	250	98		80	120		
Cadmium	27441	1	S112113A	18	244.9000	250	98		80	120		
Cobalt	27441	1	S112213A	18	236.6000	250	95		80	120		
Lead	27441	1	S112113A	18	236.2000	250	94		80	120		
Selenium	27441	1	S112213A	18	236.3000	250	95		80	120		
Thallium	27441	1	S112113A	18	222.7000	250	89		80	120		

TxtQcType: MS			Matrix: AQUEOUS			SampleID: AC75646-003							
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	27441	1	S112113A	22	S112113A	19	247.8000	1U	250	99		75	125
Arsenic	27441	1	S112213A	22	S112213A	19	241.6000	1U	250	97		75	125
Beryllium	27441	1	S112113A	22	S112113A	19	241.8000	0.5U	250	97		75	125
Cadmium	27441	1	S112113A	22	S112113A	19	240.6000	1U	250	96		75	125
Cobalt	27441	1	S112213A	22	S112213A	19	230.5000	1U	250	92		75	125
Lead	27441	1	S112113A	22	S112113A	19	234.9000	1.5U	250	94		75	125
Selenium	27441	1	S112213A	22	S112213A	19	232.7000	5U	250	93		75	125
Thallium	27441	1	S112113A	22	S112113A	19	221.9000	1U	250	89		75	125

TxtQcType: MSD			Matrix: AQUEOUS			SampleID: AC75646-033							
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	27441	1	S112113A	23	S112113A	19	262.2000	1U	250	105		75	125
Arsenic	27441	1	S112213A	23	S112213A	19	251.0000	1U	250	100		75	125
Beryllium	27441	1	S112113A	23	S112113A	19	247.7000	0.5U	250	99		75	125
Cadmium	27441	1	S112113A	23	S112113A	19	251.7000	1U	250	101		75	125
Cobalt	27441	1	S112213A	23	S112213A	19	245.9000	1U	250	98		75	125
Lead	27441	1	S112113A	23	S112113A	19	239.1000	1.5U	250	96		75	125
Selenium	27441	1	S112213A	23	S112213A	19	244.6000	5U	250	98		75	125
Thallium	27441	1	S112113A	23	S112113A	19	227.1000	1U	250	91		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 27441

3110835 0236

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: AQUEOUS		SampleID: AC75646-001								
Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	S112113A	24	S112113A	19	50.3700	1U	50	101		80	120
Arsenic	1	S112213A	24	S112213A	19	50.9200	1U	50	102		80	120
Beryllium	1	S112113A	24	S112113A	19	50.7700	0.5U	50	102		80	120
Cadmium	1	S112113A	24	S112113A	19	49.9300	1U	50	100		80	120
Cobalt	1	S112213A	24	S112213A	19	51.9200	1U	50	104		80	120
Lead	1	S112113A	24	S112113A	19	47.4400	1.5U	50	95		80	120
Selenium	1	S112213A	24	S112213A	19	242.6000	5U	250	97		80	120
Thallium	1	S112113A	24	S112113A	19	49.7300	1U	50	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: 27442

3110835 0237

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 27442						
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27442	1	SW15727	13	5.0662	5.00	101		80	120
Antimony	27442	1	SW15727	13	0.5026	0.500	101		80	120
Arsenic	27442	1	SW15727	13	0.4914	0.500	98		80	120
Barium	27442	1	SW15727	13	0.5102	0.500	102		80	120
Beryllium	27442	1	SW15727	13	0.4964	0.500	99		80	120
Cadmium	27442	1	SW15727	13	0.5038	0.500	101		80	120
Calcium	27442	1	SW15727	13	50.8874	50.00	102		80	120
Chromium	27442	1	SW15727	13	0.5138	0.500	103		80	120
Cobalt	27442	1	SW15727	13	0.5114	0.500	102		80	120
Copper	27442	1	SW15727	13	0.4940	0.500	99		80	120
Iron	27442	1	SW15727	13	5.1295	5.00	103		80	120
Lead	27442	1	SW15727	13	0.4988	0.500	100		80	120
Magnesium	27442	1	SW15727	13	51.9358	50.00	104		80	120
Manganese	27442	1	SW15727	13	0.5005	0.500	100		80	120
Mercury	27442	1	H15727S	12	9.9970	10	100		80	120
Nickel	27442	1	SW15727	13	0.5130	0.500	103		80	120
Potassium	27442	1	SW15727	12	51.8594	50.00	104		80	120
Selenium	27442	1	SW15727	13	0.4889	0.500	98		80	120
Silver	27442	1	SW15727	13	0.0980	0.100	98		80	120
Sodium	27442	1	SW15727	12	52.0709	50.00	104		80	120
Thallium	27442	1	SW15727	13	0.5146	0.500	103		80	120
Vanadium	27442	1	SW15727	13	0.4986	0.500	100		80	120
Zinc	27442	1	SW15727	13	0.5133	0.500	103		80	120

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 27442						
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27442	1	SW15727	14	4.9759	5.00	100		80	120
Antimony	27442	1	SW15727	14	0.4913	0.500	98		80	120
Arsenic	27442	1	SW15727	14	0.4813	0.500	96		80	120
Barium	27442	1	SW15727	14	0.5015	0.500	100		80	120
Beryllium	27442	1	SW15727	14	0.4848	0.500	97		80	120
Cadmium	27442	1	SW15727	14	0.4944	0.500	99		80	120
Calcium	27442	1	SW15727	14	49.4710	50.00	99		80	120
Chromium	27442	1	SW15727	14	0.5061	0.500	101		80	120
Cobalt	27442	1	SW15727	14	0.5005	0.500	100		80	120
Copper	27442	1	SW15727	14	0.4891	0.500	98		80	120
Iron	27442	1	SW15727	14	5.0446	5.00	101		80	120
Lead	27442	1	SW15727	14	0.4876	0.500	98		80	120
Magnesium	27442	1	SW15727	14	50.2960	50.00	101		80	120
Manganese	27442	1	SW15727	14	0.4920	0.500	98		80	120
Mercury	27442	1	H15727S	13	9.2130	10	92		80	120
Nickel	27442	1	SW15727	14	0.5008	0.500	100		80	120
Potassium	27442	1	SW15727	13	49.9481	50.00	100		80	120
Selenium	27442	1	SW15727	14	0.4762	0.500	95		80	120
Silver	27442	1	SW15727	14	0.0968	0.100	97		80	120
Sodium	27442	1	SW15727	13	50.2195	50.00	100		80	120
Thallium	27442	1	SW15727	14	0.5085	0.500	102		80	120
Vanadium	27442	1	SW15727	14	0.4933	0.500	99		80	120
Zinc	27442	1	SW15727	14	0.4953	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: 27442

3110835 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: MS		Matrix: AQUEOUS			SampleID: AC75646-004								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27442	1	SW15727	17	SW15727	56	5.0419	0.2U	5.0	101		75	125
Antimony	27442	1	SW15727	17	SW15727	15	0.4955	0.02U	.5	99		75	125
Arsenic	27442	1	SW15727	17	SW15727	15	0.4837	0.02U	.5	97		75	125
Barium	27442	1	SW15727	17	SW15727	15	0.5254	0.05U	.5	105		75	125
Beryllium	27442	1	SW15727	17	SW15727	15	0.4840	0.012U	.5	97		75	125
Cadmium	27442	1	SW15727	17	SW15727	15	0.4890	0.012U	.5	98		75	125
Calcium	27442	1	SW15727	17	SW15727	15	61.7646	12.2108	50.0	99		75	125
Chromium	27442	1	SW15727	17	SW15727	15	0.4934	0.05U	.5	99		75	125
Cobalt	27442	1	SW15727	17	SW15727	15	0.4896	0.02U	.5	98		75	125
Copper	27442	1	SW15727	17	SW15727	15	0.4857	0.05U	.5	97		75	125
Iron	27442	1	SW15727	17	SW15727	15	5.0143	0.3U	5.0	100		75	125
Lead	27442	1	SW15727	17	SW15727	15	0.4805	0.012U	.5	96		75	125
Magnesium	27442	1	SW15727	17	SW15727	15	54.3859	5U	50	109		75	125
Manganese	27442	1	SW15727	17	SW15727	15	0.6365	0.1435	.5	99		75	125
Mercury	27442	1	H15727S	16	H15727S	14	9.8030	.70U	10	98		75	125
Nickel	27442	1	SW15727	17	SW15727	15	0.4879	0.05U	.5	98		75	125
Potassium	27442	1	SW15727	16	SW15727	14	50.8388	5U	50.00	102		75	125
Selenium	27442	1	SW15727	17	SW15727	15	0.4781	0.04U	.5	96		75	125
Silver	27442	1	SW15727	17	SW15727	15	0.0949	0.02U	.1	95		75	125
Sodium	27442	1	SW15727	16	SW15727	14	91.0337	40.4686	50.00	101		75	125
Thallium	27442	1	SW15727	17	SW15727	15	0.4964	0.02U	.5	99		75	125
Vanadium	27442	1	SW15727	17	SW15727	15	0.4848	0.05U	.5	97		75	125
Zinc	27442	1	SW15727	17	SW15727	15	0.4965	0.05U	.5	99		75	125

TxtQcType: MSD		Matrix: AQUEOUS			SampleID: AC75646-034								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	27442	1	SW15727	18	SW15727	56	4.9917	0.2U	5.0	100		75	125
Antimony	27442	1	SW15727	18	SW15727	15	0.5115	0.02U	.5	102		75	125
Arsenic	27442	1	SW15727	18	SW15727	15	0.4920	0.02U	.5	98		75	125
Barium	27442	1	SW15727	18	SW15727	15	0.5322	0.05U	.5	106		75	125
Beryllium	27442	1	SW15727	18	SW15727	15	0.4890	0.012U	.5	98		75	125
Cadmium	27442	1	SW15727	18	SW15727	15	0.4961	0.012U	.5	99		75	125
Calcium	27442	1	SW15727	18	SW15727	15	61.8235	12.2108	50.0	99		75	125
Chromium	27442	1	SW15727	18	SW15727	15	0.5016	0.05U	.5	100		75	125
Cobalt	27442	1	SW15727	18	SW15727	15	0.4967	0.02U	.5	99		75	125
Copper	27442	1	SW15727	18	SW15727	15	0.4895	0.05U	.5	98		75	125
Iron	27442	1	SW15727	18	SW15727	15	5.0862	0.3U	5.0	102		75	125
Lead	27442	1	SW15727	18	SW15727	15	0.4859	0.012U	.5	97		75	125
Magnesium	27442	1	SW15727	18	SW15727	15	54.7878	5U	50	110		75	125
Manganese	27442	1	SW15727	18	SW15727	15	0.6311	0.1435	.5	98		75	125
Mercury	27442	1	H15727S	17	H15727S	14	9.8360	.70U	10	98		75	125
Nickel	27442	1	SW15727	18	SW15727	15	0.4943	0.05U	.5	99		75	125
Potassium	27442	1	SW15727	17	SW15727	14	51.6094	5U	50.0	103		75	125
Selenium	27442	1	SW15727	18	SW15727	15	0.4920	0.04U	.5	98		75	125
Silver	27442	1	SW15727	18	SW15727	15	0.0975	0.02U	.1	97		75	125
Sodium	27442	1	SW15727	17	SW15727	14	89.0471	40.4686	50	97		75	125
Thallium	27442	1	SW15727	18	SW15727	15	0.4997	0.02U	.5	100		75	125
Vanadium	27442	1	SW15727	18	SW15727	15	0.4929	0.05U	.5	99		75	125
Zinc	27442	1	SW15727	18	SW15727	15	0.5022	0.05U	.5	100		75	125

a-Indicates Recovery Failed the criteria

b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 27442

3110835 0239

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS		Matrix: AQUEOUS		SampleID: LCSW 27442							
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim	
Antimony	27442	1	S112213B	17	264.2000	250	106	80	120		
Arsenic	27442	1	S112213B	17	262.3000	250	105	80	120		
Beryllium	27442	1	S112213B	17	256.1000	250	102	80	120		
Cadmium	27442	1	S112213B	17	258.7000	250	103	80	120		
Cobalt	27442	1	S112213B	17	243.4000	250	97	80	120		
Lead	27442	1	S112213B	17	251.0000	250	100	80	120		
Selenium	27442	1	S112213B	17	257.7000	250	103	80	120		
Thallium	27442	1	S112213B	17	234.3000	250	94	80	120		

TxtQcType: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 27442							
Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim	
Antimony	27442	1	S112213B	18	242.3000	250	97	80	120		
Arsenic	27442	1	S112213B	18	239.3000	250	96	80	120		
Beryllium	27442	1	S112213B	18	238.6000	250	95	80	120		
Cadmium	27442	1	S112213B	18	240.5000	250	96	80	120		
Cobalt	27442	1	S112213B	18	227.6000	250	91	80	120		
Lead	27442	1	S112213B	18	234.7000	250	94	80	120		
Selenium	27442	1	S112213B	18	235.0000	250	94	80	120		
Thallium	27442	1	S112213B	18	222.2000	250	89	80	120		

TxtQcType: MS		Matrix: AQUEOUS		SampleID: AC75646-004									
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	27442	1	S112213B	22	S112213B	19	261.5000	1U	250	105		75	125
Arsenic	27442	1	S112213B	22	S112213B	19	265.2000	1U	250	106		75	125
Beryllium	27442	1	S112213B	22	S112213B	19	253.1000	0.5U	250	101		75	125
Cadmium	27442	1	S112213B	22	S112213B	19	252.5000	1U	250	101		75	125
Cobalt	27442	1	S112213B	22	S112213B	19	253.8000	1U	250	102		75	125
Lead	27442	1	S112213B	22	S112213B	19	246.6000	1.5U	250	99		75	125
Selenium	27442	1	S112213B	22	S112213B	19	255.0000	5U	250	102		75	125
Thallium	27442	1	S112213B	22	S112213B	19	231.0000	1U	250	92		75	125

TxtQcType: MSD		Matrix: AQUEOUS			SampleID: AC75646-034								
Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	27442	1	S112213B	23	S112213B	19	250.8000	1U	250	100	75	125	
Arsenic	27442	1	S112213B	23	S112213B	19	236.3000	1U	250	95	75	125	
Beryllium	27442	1	S112213B	23	S112213B	19	240.7000	0.5U	250	96	75	125	
Cadmium	27442	1	S112213B	23	S112213B	19	241.8000	1U	250	97	75	125	
Cobalt	27442	1	S112213B	23	S112213B	19	222.5000	1U	250	89	75	125	
Lead	27442	1	S112213B	23	S112213B	19	236.9000	1.5U	250	95	75	125	
Selenium	27442	1	S112213B	23	S112213B	19	226.7000	5U	250	91	75	125	
Thallium	27442	1	S112213B	23	S112213B	19	224.5000	1U	250	90	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: 27442

3110835 0240

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS		Matrix: AQUEOUS		SampleID: AC75646-002								
Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	S112213B	24	S112213B	19	49.4800	1U	50	99		80	120
Arsenic	1	S112213B	24	S112213B	19	51.1800	1U	50	102		80	120
Beryllium	1	S112213B	24	S112213B	19	51.7000	0.5U	50	103		80	120
Cadmium	1	S112213B	24	S112213B	19	49.8200	1U	50	100		80	120
Cobalt	1	S112213B	24	S112213B	19	50.7200	1U	50	101		80	120
Lead	1	S112213B	24	S112213B	19	47.6500	1.5U	50	95		80	120
Selenium	1	S112213B	24	S112213B	19	242.8000	5U	250	97		80	120
Thallium	1	S112213B	24	S112213B	19	49.9000	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: 27441

3110835 0241

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 27441					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	27441	SW15726	14	SW15726	13	4.9386	5.0744	2.7	20
Antimony	27441	SW15726	14	SW15726	13	0.4925	0.5047	2.4	20
Arsenic	27441	SW15726	14	SW15726	13	0.4794	0.4867	1.5	20
Barium	27441	SW15726	14	SW15726	13	0.4952	0.5083	2.6	20
Beryllium	27441	SW15726	14	SW15726	13	0.4844	0.4882	.78	20
Cadmium	27441	SW15726	14	SW15726	13	0.4891	0.5019	2.6	20
Calcium	27441	SW15726	14	SW15726	13	49.5323	49.9112	.76	20
Chromium	27441	SW15726	14	SW15726	13	0.4957	0.5088	2.6	20
Cobalt	27441	SW15726	14	SW15726	13	0.4925	0.5038	2.3	20
Copper	27441	SW15726	14	SW15726	13	0.4864	0.4980	2.4	20
Iron	27441	SW15726	14	SW15726	13	4.9597	5.0685	2.2	20
Lead	27441	SW15726	14	SW15726	13	0.4849	0.4965	2.4	20
Magnesium	27441	SW15726	14	SW15726	13	50.2355	50.5457	.62	20
Manganese	27441	SW15726	14	SW15726	13	0.4855	0.4969	2.3	20
Mercury	27441	H15726S	13	H15726S	12	9.7570	9.8320	.77	20
Nickel	27441	SW15726	14	SW15726	13	0.4932	0.5057	2.5	20
Potassium	27441	SW15726	13	SW15726	12	51.0801	50.9720	.21	20
Selenium	27441	SW15726	14	SW15726	13	0.4757	0.4908	3.1	20
Silver	27441	SW15726	14	SW15726	13	0.0969	0.0991	2.2	20
Sodium	27441	SW15726	13	SW15726	12	51.5548	51.4864	.13	20
Thallium	27441	SW15726	14	SW15726	13	0.5037	0.5104	1.3	20
Vanadium	27441	SW15726	14	SW15726	13	0.4849	0.4984	2.7	20
Zinc	27441	SW15726	14	SW15726	13	0.4905	0.5014	2.2	20

TxtQcType: MR		Matrix: AQUEOUS		SampleID: AC75646-001					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	27441	SW15726	16	SW15726	15	0.2U	0.2U	---	20
Antimony	27441	SW15726	16	SW15726	15	0.02U	0.02U	---	20
Arsenic	27441	SW15726	16	SW15726	15	0.02U	0.02U	---	20
Barium	27441	SW15726	16	SW15726	15	0.05U	0.05U	---	20
Beryllium	27441	SW15726	16	SW15726	15	0.012U	0.012U	---	20
Cadmium	27441	SW15726	16	SW15726	15	0.012U	0.012U	---	20
Calcium	27441	SW15726	16	SW15726	15	12.0086	12.0590	0.42	20
Chromium	27441	SW15726	16	SW15726	15	0.05U	0.05U	---	20
Cobalt	27441	SW15726	16	SW15726	15	0.02U	0.02U	---	20
Copper	27441	SW15726	16	SW15726	15	0.05U	0.05U	---	20
Iron	27441	SW15726	16	SW15726	15	3.2456	3.2537	0.25	20
Lead	27441	SW15726	16	SW15726	15	0.012U	0.012U	---	20
Magnesium	27441	SW15726	16	SW15726	15	5U	5U	---	20
Manganese	27441	SW15726	16	SW15726	15	0.1706	0.1713	0.4	20
Mercury	27441	H15726S	15	H15726S	14	.70U	.70U	---	20
Nickel	27441	SW15726	16	SW15726	15	0.05U	0.05U	---	20
Potassium	27441	SW15726	15	SW15726	14	5U	5U	---	20
Selenium	27441	SW15726	16	SW15726	15	0.04U	0.04U	---	20
Silver	27441	SW15726	16	SW15726	15	0.02U	0.02U	---	20
Sodium	27441	SW15726	15	SW15726	14	39.1668	39.5413	0.95	20
Thallium	27441	SW15726	16	SW15726	15	0.02U	0.02U	---	20
Vanadium	27441	SW15726	16	SW15726	15	0.05U	0.05U	---	20
Zinc	27441	SW15726	16	SW15726	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

3110835 0242

RPD/%Difference Data

PREP BATCH: 27441

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: AC75646-033					
Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	27441	SW15726	18	SW15726	17	5.0424	4.9936	.97	20
Antimony	27441	SW15726	18	SW15726	17	0.5081	0.5018	1.2	20
Arsenic	27441	SW15726	18	SW15726	17	0.4931	0.4894	.76	20
Barium	27441	SW15726	18	SW15726	17	0.5329	0.5290	.73	20
Beryllium	27441	SW15726	18	SW15726	17	0.4870	0.4876	.12	20
Cadmium	27441	SW15726	18	SW15726	17	0.4964	0.4904	1.2	20
Calcium	27441	SW15726	18	SW15726	17	61.6839	62.6161	1.5	20
Chromium	27441	SW15726	18	SW15726	17	0.4988	0.4944	.89	20
Cobalt	27441	SW15726	18	SW15726	17	0.4979	0.4922	1.1	20
Copper	27441	SW15726	18	SW15726	17	0.4904	0.4878	.54	20
Iron	27441	SW15726	18	SW15726	17	8.1469	8.2996	1.9	20
Lead	27441	SW15726	18	SW15726	17	0.4881	0.4833	.99	20
Magnesium	27441	SW15726	18	SW15726	17	54.4886	54.8289	.62	20
Manganese	27441	SW15726	18	SW15726	17	0.6548	0.6668	1.8	20
Mercury	27441	H15726S	17	H15726S	16	9.6810	9.6400	.42	20
Nickel	27441	SW15726	18	SW15726	17	0.4962	0.4901	1.2	20
Potassium	27441	SW15726	17	SW15726	16	50.7016	51.0434	.67	20
Selenium	27441	SW15726	18	SW15726	17	0.4890	0.4840	1	20
Silver	27441	SW15726	18	SW15726	17	0.0975	0.0964	1.2	20
Sodium	27441	SW15726	17	SW15726	16	88.1772	90.2878	2.4	20
Thallium	27441	SW15726	18	SW15726	17	0.5005	0.4981	.48	20
Vanadium	27441	SW15726	18	SW15726	17	0.4924	0.4871	1.1	20
Zinc	27441	SW15726	18	SW15726	17	0.5050	0.5026	.48	20

TxtQcType: SD		Matrix: AQUEOUS		SampleID: AC75646-001					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq# DF	Result 1	Result 2	%Diff	Limit
Aluminum	27441	SW15726	23	SW15726	15 5	-0.0344	0.0614	---	10
Antimony	27441	SW15726	23	SW15726	15 5	-0.0030	-0.0027	---	10
Arsenic	27441	SW15726	23	SW15726	15 5	-0.0030	0.0006	---	10
Barium	27441	SW15726	23	SW15726	15 5	0.0007	0.0245	85 c	10
Beryllium	27441	SW15726	23	SW15726	15 5	-0.0029	-0.0028	---	10
Cadmium	27441	SW15726	23	SW15726	15 5	-0.0025	-0.0023	---	10
Calcium	27441	SW15726	23	SW15726	15 5	1.9734	12.0590	18 a	10
Chromium	27441	SW15726	23	SW15726	15 5	-0.0048	-0.0045	---	10
Cobalt	27441	SW15726	23	SW15726	15 5	-0.0049	-0.0042	---	10
Copper	27441	SW15726	23	SW15726	15 5	-0.0054	-0.0015	---	10
Iron	27441	SW15726	23	SW15726	15 5	0.6111	3.2537	6.1	10
Lead	27441	SW15726	23	SW15726	15 5	-0.0019	-0.0003	---	10
Magnesium	27441	SW15726	23	SW15726	15 5	0.3995	3.9292	49 a	10
Manganese	27441	SW15726	23	SW15726	15 5	0.0307	0.1713	11 a	10
Nickel	27441	SW15726	23	SW15726	15 5	-0.0050	-0.0038	---	10
Potassium	27441	SW15726	22	SW15726	14 5	-0.1338	1.0942	---	10
Selenium	27441	SW15726	23	SW15726	15 5	-0.0040	0.0006	---	10
Silver	27441	SW15726	23	SW15726	15 5	-0.0008	-0.0008	---	10
Sodium	27441	SW15726	22	SW15726	14 5	7.4406	39.5413	5.9	10
Thallium	27441	SW15726	23	SW15726	15 5	-0.0050	-0.0064	---	10
Vanadium	27441	SW15726	23	SW15726	15 5	-0.0047	-0.0015	---	10
Zinc	27441	SW15726	23	SW15726	15 5	-0.0011	0.0102	---	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: 27441

3110835 0243

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 27441					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	27441	S112113A	18	S112113A	17	248.7000	258.7000	3.9	20
Arsenic	27441	S112213A	18	S112213A	17	239.6000	245.9000	2.6	20
Beryllium	27441	S112113A	18	S112113A	17	245.2000	257.2000	4.8	20
Cadmium	27441	S112113A	18	S112113A	17	244.9000	252.2000	2.9	20
Cobalt	27441	S112213A	18	S112213A	17	236.6000	241.2000	1.9	20
Lead	27441	S112113A	18	S112113A	17	236.2000	247.5000	4.7	20
Selenium	27441	S112213A	18	S112213A	17	236.3000	244.3000	3.3	20
Thallium	27441	S112113A	18	S112113A	17	222.7000	232.4000	4.3	20

TxtQcType: MR		Matrix: AQUEOUS		SampleID: AC75646-001					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	27441	S112113A	20	S112113A	19	1U	1U	---	20
Arsenic	27441	S112213A	20	S112213A	19	1U	1U	---	20
Beryllium	27441	S112113A	20	S112113A	19	0.5U	0.5U	---	20
Cadmium	27441	S112113A	20	S112113A	19	1U	1U	---	20
Cobalt	27441	S112213A	20	S112213A	19	1U	1U	---	20
Lead	27441	S112113A	20	S112113A	19	1.5U	1.5U	---	20
Selenium	27441	S112213A	20	S112213A	19	5U	5U	---	20
Thallium	27441	S112113A	20	S112113A	19	1U	1U	---	20

TxtQcType: MSD		Matrix: AQUEOUS		SampleID: AC75646-033					
Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	27441	S112113A	23	S112113A	22	262.2000	247.8000	5.6	20
Arsenic	27441	S112213A	23	S112213A	22	251.0000	241.6000	3.8	20
Beryllium	27441	S112113A	23	S112113A	22	247.7000	241.8000	2.4	20
Cadmium	27441	S112113A	23	S112113A	22	251.7000	240.6000	4.5	20
Cobalt	27441	S112213A	23	S112213A	22	245.9000	230.5000	6.5	20
Lead	27441	S112113A	23	S112113A	22	239.1000	234.9000	1.8	20
Selenium	27441	S112213A	23	S112213A	22	244.6000	232.7000	5	20
Thallium	27441	S112113A	23	S112113A	22	227.1000	221.9000	2.3	20

TxtQcType: SD		Matrix: AQUEOUS		SampleID: AC75646-001						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Antimony	27441	S112113A	21	S112113A	19	5	0.0183	0.1620	44 c	10
Arsenic	27441	S112213A	21	S112213A	19	5	0.1218	0.6882	12 c	10
Beryllium	27441	S112113A	21	S112113A	19	5	-0.0091	0.1071	---	10
Cadmium	27441	S112113A	21	S112113A	19	5	0.0142	0.1191	40 c	10
Cobalt	27441	S112213A	21	S112213A	19	5	0.1323	0.8158	19 c	10
Lead	27441	S112113A	21	S112113A	19	5	0.0685	0.3795	9.7	10
Selenium	27441	S112213A	21	S112213A	19	5	-0.7614	-0.4511	---	10
Thallium	27441	S112113A	21	S112113A	19	5	0.0027	0.2928	---	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: 27442

3110835 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: LCSMR		Matrix: AQUEOUS		SampleID: LCSW MR 27442					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	27442	SW15727	14	SW15727	13	4.9759	5.0662	1.8	20
Antimony	27442	SW15727	14	SW15727	13	0.4913	0.5026	2.3	20
Arsenic	27442	SW15727	14	SW15727	13	0.4813	0.4914	2.1	20
Barium	27442	SW15727	14	SW15727	13	0.5015	0.5102	1.7	20
Beryllium	27442	SW15727	14	SW15727	13	0.4848	0.4964	2.4	20
Cadmium	27442	SW15727	14	SW15727	13	0.4944	0.5038	1.9	20
Calcium	27442	SW15727	14	SW15727	13	49.4710	50.8874	2.8	20
Chromium	27442	SW15727	14	SW15727	13	0.5061	0.5138	1.5	20
Cobalt	27442	SW15727	14	SW15727	13	0.5005	0.5114	2.2	20
Copper	27442	SW15727	14	SW15727	13	0.4891	0.4940	.98	20
Iron	27442	SW15727	14	SW15727	13	5.0446	5.1295	1.7	20
Lead	27442	SW15727	14	SW15727	13	0.4876	0.4988	2.3	20
Magnesium	27442	SW15727	14	SW15727	13	50.2960	51.9358	3.2	20
Manganese	27442	SW15727	14	SW15727	13	0.4920	0.5005	1.7	20
Mercury	27442	H15727S	13	H15727S	12	9.2130	9.9970	8.2	20
Nickel	27442	SW15727	14	SW15727	13	0.5008	0.5130	2.4	20
Potassium	27442	SW15727	13	SW15727	12	49.9481	51.8594	3.8	20
Selenium	27442	SW15727	14	SW15727	13	0.4762	0.4889	2.6	20
Silver	27442	SW15727	14	SW15727	13	0.0968	0.0980	1.2	20
Sodium	27442	SW15727	13	SW15727	12	50.2195	52.0709	3.6	20
Thallium	27442	SW15727	14	SW15727	13	0.5085	0.5146	1.2	20
Vanadium	27442	SW15727	14	SW15727	13	0.4933	0.4986	1.1	20
Zinc	27442	SW15727	14	SW15727	13	0.4953	0.5133	3.6	20

TxtQcType: MR		Matrix: AQUEOUS		SampleID: AC75646-002					
Analyte	BatchId	Data File	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	27442	SW15727	16	SW15727	56	0.2U	0.2U	---	20
Antimony	27442	SW15727	16	SW15727	15	0.02U	0.02U	---	20
Arsenic	27442	SW15727	16	SW15727	15	0.02U	0.02U	---	20
Barium	27442	SW15727	16	SW15727	15	0.05U	0.05U	---	20
Beryllium	27442	SW15727	16	SW15727	15	0.012U	0.012U	---	20
Cadmium	27442	SW15727	16	SW15727	15	0.012U	0.012U	---	20
Calcium	27442	SW15727	16	SW15727	15	11.7848	12.2108	3.6	20
Chromium	27442	SW15727	16	SW15727	15	0.05U	0.05U	---	20
Cobalt	27442	SW15727	16	SW15727	15	0.02U	0.02U	---	20
Copper	27442	SW15727	16	SW15727	15	0.05U	0.05U	---	20
Iron	27442	SW15727	16	SW15727	15	0.3U	0.3U	---	20
Lead	27442	SW15727	16	SW15727	15	0.012U	0.012U	---	20
Magnesium	27442	SW15727	16	SW15727	15	5U	5U	---	20
Manganese	27442	SW15727	16	SW15727	15	0.1369	0.1435	4.7	20
Mercury	27442	H15727S	15	H15727S	14	.70U	.70U	---	20
Nickel	27442	SW15727	16	SW15727	15	0.05U	0.05U	---	20
Potassium	27442	SW15727	15	SW15727	14	5U	5U	---	20
Selenium	27442	SW15727	16	SW15727	15	0.04U	0.04U	---	20
Silver	27442	SW15727	16	SW15727	15	0.02U	0.02U	---	20
Sodium	27442	SW15727	15	SW15727	14	38.8741	40.4686	4	20
Thallium	27442	SW15727	16	SW15727	15	0.02U	0.02U	---	20
Vanadium	27442	SW15727	16	SW15727	15	0.05U	0.05U	---	20
Zinc	27442	SW15727	16	SW15727	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

3110835 0245

RPD/%Difference Data

PREP BATCH: 27442

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: AC75646-034					
Analyte	BatchId	Data Fil	Seq#	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	27442	SW15727	18	SW15727	17	4.9917	5.0419	1	20
Antimony	27442	SW15727	18	SW15727	17	0.5115	0.4955	3.2	20
Arsenic	27442	SW15727	18	SW15727	17	0.4920	0.4837	1.7	20
Barium	27442	SW15727	18	SW15727	17	0.5322	0.5254	1.3	20
Beryllium	27442	SW15727	18	SW15727	17	0.4890	0.4840	1	20
Cadmium	27442	SW15727	18	SW15727	17	0.4961	0.4890	1.4	20
Calcium	27442	SW15727	18	SW15727	17	61.8235	61.7646	.095	20
Chromium	27442	SW15727	18	SW15727	17	0.5016	0.4934	1.6	20
Cobalt	27442	SW15727	18	SW15727	17	0.4967	0.4896	1.5	20
Copper	27442	SW15727	18	SW15727	17	0.4895	0.4857	.77	20
Iron	27442	SW15727	18	SW15727	17	5.0862	5.0143	1.4	20
Lead	27442	SW15727	18	SW15727	17	0.4859	0.4805	1.1	20
Magnesium	27442	SW15727	18	SW15727	17	54.7878	54.3859	.74	20
Manganese	27442	SW15727	18	SW15727	17	0.6311	0.6365	.85	20
Mercury	27442	H15727S	17	H15727S	16	9.8360	9.8030	.34	20
Nickel	27442	SW15727	18	SW15727	17	0.4943	0.4879	1.3	20
Potassium	27442	SW15727	17	SW15727	16	51.6094	50.8388	1.5	20
Selenium	27442	SW15727	18	SW15727	17	0.4920	0.4781	2.9	20
Silver	27442	SW15727	18	SW15727	17	0.0975	0.0949	2.6	20
Sodium	27442	SW15727	17	SW15727	16	89.0471	91.0337	2.2	20
Thallium	27442	SW15727	18	SW15727	17	0.4997	0.4964	.65	20
Vanadium	27442	SW15727	18	SW15727	17	0.4929	0.4848	1.7	20
Zinc	27442	SW15727	18	SW15727	17	0.5022	0.4965	1.1	20

TxtQcType: SD		Matrix: AQUEOUS		SampleID: AC75646-002					
Analyte	BatchId	Data Fil	Seq#	NS File	Seq# DF	Result 1	Result 2	%Diff	Limit
Aluminum	27442	SW15727	23	SW15727	56 5	-0.0310	-0.0183	---	10
Antimony	27442	SW15727	23	SW15727	15 5	-0.0012	-0.0027	---	10
Arsenic	27442	SW15727	23	SW15727	15 5	-0.0014	-0.0005	---	10
Barium	27442	SW15727	23	SW15727	15 5	0.0004	0.0237	91 c	10
Beryllium	27442	SW15727	23	SW15727	15 5	-0.0027	-0.0027	---	10
Cadmium	27442	SW15727	23	SW15727	15 5	-0.0025	-0.0022	---	10
Calcium	27442	SW15727	23	SW15727	15 5	2.0329	12.2108	17 a	10
Chromium	27442	SW15727	23	SW15727	15 5	-0.0048	-0.0049	---	10
Cobalt	27442	SW15727	23	SW15727	15 5	-0.0053	-0.0050	---	10
Copper	27442	SW15727	23	SW15727	15 5	-0.0062	-0.0040	---	10
Iron	27442	SW15727	23	SW15727	15 5	-0.0437	-0.0145	---	10
Lead	27442	SW15727	23	SW15727	15 5	-0.0017	-0.0002	---	10
Magnesium	27442	SW15727	23	SW15727	15 5	0.4095	4.0598	50 a	10
Manganese	27442	SW15727	23	SW15727	15 5	0.0242	0.1435	16 a	10
Nickel	27442	SW15727	23	SW15727	15 5	-0.0056	-0.0045	---	10
Potassium	27442	SW15727	22	SW15727	14 5	-0.1080	1.2151	---	10
Selenium	27442	SW15727	23	SW15727	15 5	-0.0041	0.0031	---	10
Silver	27442	SW15727	23	SW15727	15 5	-0.0007	-0.0005	---	10
Sodium	27442	SW15727	22	SW15727	14 5	7.4811	40.4686	7.6	10
Thallium	27442	SW15727	23	SW15727	15 5	-0.0050	-0.0029	---	10
Vanadium	27442	SW15727	23	SW15727	15 5	-0.0052	-0.0016	---	10
Zinc	27442	SW15727	23	SW15727	15 5	-0.0019	0.0070	---	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: 27442

3110835 0246

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 27442					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	27442	S112213B	18	S112213B	17	242.3000	264.2000	8.6	20
Arsenic	27442	S112213B	18	S112213B	17	239.3000	262.3000	9.2	20
Beryllium	27442	S112213B	18	S112213B	17	238.6000	256.1000	7.1	20
Cadmium	27442	S112213B	18	S112213B	17	240.5000	258.7000	7.3	20
Cobalt	27442	S112213B	18	S112213B	17	227.6000	243.4000	6.7	20
Lead	27442	S112213B	18	S112213B	17	234.7000	251.0000	6.7	20
Selenium	27442	S112213B	18	S112213B	17	235.0000	257.7000	9.2	20
Thallium	27442	S112213B	18	S112213B	17	222.2000	234.3000	5.3	20

TxtQcType: MR		Matrix: AQUEOUS		SampleID: AC75646-002					
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	27442	S112213B	20	S112213B	19	1U	1U	---	20
Arsenic	27442	S112213B	20	S112213B	19	1U	1U	---	20
Beryllium	27442	S112213B	20	S112213B	19	0.5U	0.5U	---	20
Cadmium	27442	S112213B	20	S112213B	19	1U	1U	---	20
Cobalt	27442	S112213B	20	S112213B	19	1U	1U	---	20
Lead	27442	S112213B	20	S112213B	19	1.5U	1.5U	---	20
Selenium	27442	S112213B	20	S112213B	19	5U	5U	---	20
Thallium	27442	S112213B	20	S112213B	19	1U	1U	---	20

TxtQcType: MSD		Matrix: AQUEOUS		SampleID: AC75646-034					
Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	27442	S112213B	23	S112213B	22	250.8000	261.5000	4.2	20
Arsenic	27442	S112213B	23	S112213B	22	236.3000	265.2000	12	20
Beryllium	27442	S112213B	23	S112213B	22	240.7000	253.1000	5	20
Cadmium	27442	S112213B	23	S112213B	22	241.8000	252.5000	4.3	20
Cobalt	27442	S112213B	23	S112213B	22	222.5000	253.8000	13	20
Lead	27442	S112213B	23	S112213B	22	236.9000	246.6000	4	20
Selenium	27442	S112213B	23	S112213B	22	226.7000	255.0000	12	20
Thallium	27442	S112213B	23	S112213B	22	224.5000	231.0000	2.9	20

TxtQcType: SD		Matrix: AQUEOUS		SampleID: AC75646-002						
Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff	Limit
Antimony	27442	S112213B	21	S112213B	19	5	0.0580	0.1441	101 c	10
Arsenic	27442	S112213B	21	S112213B	19	5	0.0930	0.3038	53 c	10
Beryllium	27442	S112213B	21	S112213B	19	5	0.0371	0.1071	73 c	10
Cadmium	27442	S112213B	21	S112213B	19	5	0.0481	0.1095	120 c	10
Cobalt	27442	S112213B	21	S112213B	19	5	0.1143	0.4415	29 c	10
Lead	27442	S112213B	21	S112213B	19	5	0.0761	0.0952	300 c	10
Selenium	27442	S112213B	21	S112213B	19	5	-0.8767	-0.7127	---	10
Thallium	27442	S112213B	21	S112213B	19	5	0.0761	0.3359	13 c	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 1
RADIAL

<u>ELEMENT</u>	<u>LINEAR RANGE</u>
	(PPM)
Al	720
Ca	900
Fe	900
Mg	630
Mn	45
K	900
Na	540
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

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

<u>ELEMENT</u>	<u>LINEAR RANGE</u>
	(ppb)
Al	*
Sb	2700
As	2250
Ba	*
Be	2700
Cd	2700
Cr	2700
Co	2700
Cu	2700
Pb	2700
Mn	2700
Mo	2700
Ni	2700
Se	2700
Ag	*
Tl	2700
V	2700
Zn	2700

INTERELEMENT CORRECTION SUMMARY
PEICP2

3110835 0252

	Interfering Elements							
	Al	Ca	Fe	Mg	Mn	Mo	Ti	Zn
Interfered Elements								
Al	N/A	0	0	0	0	16.5	0	0
Sb	-0.0151	0	-0.099	0.00581	0	-0.658	0	0
As	0.0651	0.0152	-0.0709	0.00803	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	-0.133	-0.000637	0.0962	0.0144	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	0.0412	0.0262	-0.217	0.00378	0.501	-0.267	-0.438	0
Ag	0	0	-0.0869	0	0	0	0	0
Tl	0.0491	-0.00526	-0.0251	0.0107	1.11	-4.71	-7.19	0
Sn	0.0302	-0.0226	0	-0.0105	0	0	-0.502	0
Ti	0	0	0	0	0	0	N/A	0
V	0	0	0.0373	0.132	-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 27441 (1)
 Client Id: MB 27441 (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	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-36-0	Antimony	20	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-38-2	Arsenic	20	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-41-7	Beryllium	12	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-43-9	Cadmium	12	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-48-4	Cobalt	20	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7439-92-1	Lead	12	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/20/13	27441	H15726SW	11	CV	HGCV2A
7439-98-7	Molybdenum	20	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/21/13	27441	SW15726A	11	P	PEICPRAD1A
7782-49-2	Selenium	40	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	11/21/13	27441	SW15726A	11	P	PEICPRAD1A
7440-28-0	Thallium	20	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-31-5	Tin	50	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-32-6	Titanium	50	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27441	SW15726A2	12	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27441	SW15726A2	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 27441
 Client Id: MB 27441
 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	11/21/13	27441	S112113A	16	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27441	S112213A	16	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/21/13	27441	S112113A	16	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/21/13	27441	S112113A	16	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27441	S112213A	16	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/21/13	27441	S112113A	16	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27441	S112213A	16	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/21/13	27441	S112113A	16	MS	MS2_7500SWA

Comments: _____

Flag Codes:

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

P - ICP-AES

CV -ColdVapor

MS - ICP-MS

Form1

Inorganic Analysis Data Sheet

Sample ID: MB 27442 (1)
 Client Id: MB 27442 (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	11/25/13	27442	SW15727E2	12	P	PEICP2A
7440-36-0	Antimony	20	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-38-2	Arsenic	20	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-41-7	Beryllium	12	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-43-9	Cadmium	12	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-48-4	Cobalt	20	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7439-92-1	Lead	12	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7439-97-6	Mercury	0.70	ND	1	25	25	11/22/13	27442	H15727SW	11	CV	HGCV2A
7439-98-7	Molybdenum	20	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-02-0	Nickel	50	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	11/22/13	27442	SW15727A	11	P	PEICPRAD1A
7782-49-2	Selenium	40	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-22-4	Silver	20	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	11/22/13	27442	SW15727A	11	P	PEICPRAD1A
7440-28-0	Thallium	20	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-31-5	Tin	50	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-32-6	Titanium	50	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-62-2	Vanadium	50	ND	1	50	50	11/22/13	27442	SW15727C2	12	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	11/22/13	27442	SW15727C2	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 27442
 Client Id: MB 27442
 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	11/22/13	27442	S112213B	16	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	11/22/13	27442	S112213B	16	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	11/22/13	27442	S112213B	16	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	11/22/13	27442	S112213B	16	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	11/22/13	27442	S112213B	16	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	11/22/13	27442	S112213B	16	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	11/22/13	27442	S112213B	16	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	11/22/13	27442	S112213B	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

ICPMS Internal Standard Summary Report

3110835 0258

TuneID: 1

Batch/FileID: S112113A Sample ID: CalBlk V-176961 Sample Date 11/21/13 Sample Time: 12:17

IS ID:	Area	Area Limit
Ho-1	1184067	828846.9 - 1776100.5
In-1	550573.4	385401.38 - 825860.1
Sc-1	91101.09	63770.763 - 136651.635
Tb-1	1206971	844879.7 - 1810456.5

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-176961	2	1184067	550573.4	91101.09	1206971				
SMP	Rinse	1	1032914	487293.0	85142.52	1076359				
CAL	CalStd1 V-17696	3	1194388	539729.8	86990.96	1221509				
CAL	CalStd2 V-17696	4	1217182	555288.1	89545.28	1245424				
CAL	CalStd3 V-17696	5	1231577	555899.8	89884.72	1258440				
CAL	CalStd4 V-17696	6	1253462	560257.0	88638.98	1264226				
CAL	CalStd5 V-17696	7	1170977	516400.3	83333.60	1195788				
ICV	ICV V-176967	8	1223932	538797.5	86308.20	1249719				
LLICV	LLICV V-176972	9	1302914	585909.2	94110.87	1329484				
ICB	ICB V-176968	10	1306974	586424.7	93701.25	1341351				
ICSA	ICSA V-176969	11	1211170	495568.1	83471.34	1215387				
ICSAB	ICSAB V-176970	12	1258466	532495.6	90110.31	1277083				
CCV	CCV V-176971	13	1203606	532551.6	86316.16	1233126				
LLCCV	LLCCV V-176972	14	1370277	626757.4	100359.6	1424425				
CCB	CCB V-176968	15	1325346	589980.1	94594.02	1358394				
MB	MB 27441	16	1274239	550212.8	88717.28	1296964				
LCS	LCSW 27441	17	1222734	516224.7	83010.16	1249028				
MR	LCSW MR 27441	18	1223961	501037.5	79907.28	1242784				
SMP	AC75646-001	19	1104744	469460.6	70890.70	1150612				
MR	AC75646-001	20	1129536	473887.8	72072.21	1153597				
SD	AC75646-001	21	1284922	542483.4	83335.54	1311410				
MS	AC75646-003	22	1221980	493168.8	78279.80	1250011				
MSD	AC75646-033	23	1229599	491199.1	77960.75	1261865				
PS	AC75646-001	24	1235618	505138.9	78787.24	1257662				
SMP	RINSE	25	1313818	557074.6	85071.34	1350989				
CCV	CCV V-176971	26	1300380	541456.8	84541.51	1322770				
LLCCV	LLCCV V-176972	27	1304507	556041.4	85395.21	1343801				
CCB	CCB V-176968	28	1201872	510204.5	78581.66	1229767				
SMP	AC75646-005	29	1161133	480419.4	72929.65	1191166				
SMP	AC75646-007	30	1178238	485412.1	74184.56	1212709				
SMP	AC75646-009	31	1229322	513053.0	78332.72	1264225				
SMP	AC75646-011	32	1248319	509536.8	77964.73	1277647				
SMP	AC75646-013	33	1259473	514582.0	77872.37	1282957				
SMP	AC75646-015	34	1238846	501539.3	76876.29	1261633				
SMP	AC75646-017	35	1250841	511398.6	77584.00	1277757				
SMP	AC75646-019	36	1272254	511262.0	77602.54	1287389				
SMP	AC75646-021	37	1248645	514304.9	78044.43	1281190				
SMP	RINSE	38	1349985	554829.1	84549.32	1378250				
CCV	CCV V-176971	39	1310118	547215.0	84447.07	1342778				
LLCCV	LLCCV V-176972	40	1314537	551520.7	84548.65	1342350				
CCB	CCB V-176968	41	1288843	534241.6	82255.08	1317650				
SMP	AC75646-023	42	1284848	521483.9	79269.04	1316877				
SMP	AC75646-025	43	1295203	526002.6	79938.31	1334858				
SMP	AC75646-027	44	1173417	474634.8	72009.18	1183965				
SMP	AC75646-029	45	1198375	489467.6	73062.98	1214555				
SMP	AC75646-031	46	1184989	484080.5	72648.54	1202510				
SMP	RINSE	47	1332383	549285.9	83763.43	1351180				
CCV	CCV V-176971	48	1217474	505790.2	77729.24	1261134				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110835 0259

TuneID: 1

LLCCV	LLCCV V-176972	49	1148201	485074.0	72912.13	1183599
CCB	CCB V-176968	50	1233288	511721.9	77869.09	1249516

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110835 0260

TuneID: 2

Batch/FileID: S112113A Sample ID: CalBlk V-176961 Sample Date 11/21/13 Sample Time: 12:17

IS ID:	Area	Area Limit
Ho-2	2128403	1489882.1 - 3192604.5
In-2	1674463	1172124.1 - 2511694.5
Sc-2	1409018	986312.6 - 2113527
Tb-2	2214207	1549944.9 - 3321310.5

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-176961	2	2128403	1674463	1409018	2214207				
SMP	Rinse	1	2069304	1592344	1328921	2155593				
CAL	CalStd1 V-17696	3	2104309	1597827	1361560	2142777				
CAL	CalStd2 V-17696	4	2027308	1567680	1339169	2106329				
CAL	CalStd3 V-17696	5	2171113	1677252	1421823	2239635				
CAL	CalStd4 V-17696	6	2051821	1543828	1325971	2126183				
CAL	CalStd5 V-17696	7	1978248	1510452	1296086	2050689				
ICV	ICV V-176967	8	2028536	1543136	1321007	2076305				
LLICV	LLICV V-176972	9	2188648	1701850	1446247	2269957				
ICB	ICB V-176968	10	2155506	1653015	1433625	2232066				
ICSA	ICSA V-176969	11	2016338	1481250	1360205	2072401				
ICSAB	ICSAB V-176970	12	1864040	1410189	1280882	1935176				
CCV	CCV V-176971	13	2173119	1681288	1469433	2257969				
LLCCV	LLCCV V-176972	14	2190554	1722674	1492169	2273897				
CCB	CCB V-176968	15	2187859	1705050	1468618	2270771				
MB	MB 27441	16	1983579	1529189	1353455	2051998				
LCS	LCSW 27441	17	1941089	1449593	1315901	2014967				
MR	LCSW MR 27441	18	1936057	1431206	1323851	1985523				
SMP	AC75646-001	19	1796144	1375370	1221544	1846260				
MR	AC75646-001	20	1862915	1403934	1247606	1918476				
SD	AC75646-001	21	2143453	1642621	1447455	2201333				
MS	AC75646-003	22	1936676	1452964	1336815	1989464				
MSD	AC75646-033	23	1967969	1425408	1329372	2002925				
PS	AC75646-001	24	1976937	1499868	1360035	2048625				
SMP	RINSE	25	2179332	1681650	1466054	2256275				
CCV	CCV V-176971	26	2133370	1642727	1423947	2227407				
LLCCV	LLCCV V-176972	27	2084676	1624212	1430034	2184980				
CCB	CCB V-176968	28	2073233	1626812	1379287	2143113				
SMP	AC75646-005	29	1881015	1433584	1265708	1934403				
SMP	AC75646-007	30	2042584	1541558	1375450	2096721				
SMP	AC75646-009	31	2002308	1520786	1363323	2052106				
SMP	AC75646-011	32	2019166	1526158	1351849	2083406				
SMP	AC75646-013	33	1922089	1472241	1303886	1987530				
SMP	AC75646-015	34	1984875	1506538	1323170	2057685				
SMP	AC75646-017	35	2075783	1564745	1396945	2136553				
SMP	AC75646-019	36	2003243	1532443	1338962	2069862				
SMP	AC75646-021	37	2018288	1569100	1384172	2100480				
SMP	RINSE	38	2184375	1689888	1456135	2280861				
CCV	CCV V-176971	39	2168173	1655471	1446278	2216526				
LLCCV	LLCCV V-176972	40	2167885	1686801	1438135	2217492				
CCB	CCB V-176968	41	2119912	1645258	1426481	2201094				
SMP	AC75646-023	42	2084633	1569823	1401122	2146189				
SMP	AC75646-025	43	2062759	1553667	1359162	2119358				
SMP	AC75646-027	44	1883858	1441191	1252765	1966025				
SMP	AC75646-029	45	1881212	1445886	1258997	1936101				
SMP	AC75646-031	46	1920068	1460963	1279308	1984586				
SMP	RINSE	47	2319091	1822339	1542696	2388768				
CCV	CCV V-176971	48	2161298	1665613	1421701	2235186				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110835 0261

TuneID: 2

LLCCV	LLCCV V-176972	49	2017992	1596031	1348983	2067524
CCB	CCB V-176968	50	2044150	1589099	1368545	2089747

ICPMS Internal Standard Summary Report

3110835 0262

TuneID: 1

Batch/FileID: S112213A Sample ID: CalBlk V-176961 Sample Date 11/22/13 Sample Time: 11:20

IS ID:	Area	Area Limit
Ho-1 1118583	783008.1	- 1677874.5
In-1 550731.9	385512.33	- 826097.85
Sc-1 96064.97	67245.479	- 144097.455
Tb-1 1168008	817605.6	- 1752012

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-176961	2	1118583	550731.9	96064.97	1168008				
SMP	Rinse	1	1081118	510622.5	92961.77	1101949				
CAL	CalStd1 V-17696	3	1115425	542470.0	93392.55	1135187				
CAL	CalStd2 V-17696	4	1154757	566964.1	98277.48	1200015				
CAL	CalStd3 V-17696	5	1234902	606285.8	107169.0	1284354				
CAL	CalStd4 V-17696	6	1204362	596958.4	104214.8	1231836				
CAL	CalStd5 V-17696	7	1231883	586431.8	102831.2	1259289				
ICV	ICV V-176967	8	1225960	587724.4	103295.7	1254997				
LLICV	LLICV V-176972	9	1265161	607214.1	106876.0	1294543				
ICB	ICB V-176968	10	1215386	587064.9	102479.4	1243494				
ICSA	ICSA V-176969	11	1163893	529449.1	95536.57	1202322				
ICSAB	ICSAB V-176970	12	1107693	492087.7	90190.91	1136608				
CCV	CCV V-176971	13	1119000	524827.3	91100.26	1153230				
LLCCV	LLCCV V-176972	14	1188695	574717.2	99298.88	1226491				
CCB	CCB V-176968	15	1199417	574525.4	100185.4	1261223				
MB	MB 27441	16	1120534	518255.8	89741.85	1149016				
LCS	LCSW 27441	17	1144495	515491.0	89513.45	1177250				
MR	LCSW MR 27441	18	1119704	506319.9	87430.51	1149253				
SMP	AC75646-001	19	1243291	562501.4	94460.34	1271017				
MR	AC75646-001	20	1230774	559399.5	93126.26	1241049				
SD	AC75646-001	21	1339690	614667.6	102841.0	1365375				
MS	AC75646-003	22	1253283	538194.3	94819.59	1274435				
MSD	AC75646-033	23	1172694	515661.7	89101.32	1204227				
PS	AC75646-001	24	1183098	527433.8	88608.78	1192342				
SMP	RINSE	25	1429932	660493.6	111890.3	1456095				
CCV	CCV V-176971	26	1278800	579275.8	100703.2	1308309				
LLCCV	LLCCV V-176972	27	1251020	570369.9	97163.62	1270863				
CCB	CCB V-176968	28	1264076	597679.3	101983.4	1294899				
SMP	AC75646-005	29	1187831	526045.1	88984.78	1210463				
SMP	AC75646-007	30	1336197	593665.7	98782.31	1362552				
SMP	AC75646-009	31	1325648	582511.9	98131.97	1346299				
SMP	AC75646-011	32	1289581	566081.2	92980.93	1317298				
SMP	AC75646-013	33	1323345	585407.1	96499.78	1339977				
SMP	AC75646-015	34	1271757	553032.4	91185.90	1290956				
SMP	AC75646-017	35	1216325	546378.2	89731.55	1255298				
SMP	AC75646-019	36	1227700	539716.7	89732.13	1251402				
SMP	AC75646-021	37	1222596	532687.9	87756.98	1261152				
SMP	RINSE	38	1215494	549555.9	89083.03	1255567				
CCV	CCV V-176971	39	1214317	542166.8	92250.91	1251612				
LLCCV	LLCCV V-176972	40	1309933	596829.7	98645.20	1350125				
CCB	CCB V-176968	41	1351180	617013.9	102530.3	1376729				
SMP	AC75646-023	42	1239342	530123.0	87924.91	1238485				
SMP	AC75646-025	43	1245212	528695.4	87563.32	1270525				
SMP	AC75646-027	44	1230245	539668.4	89264.66	1256024				
SMP	AC75646-029	45	1271283	542149.4	88270.20	1288207				
SMP	AC75646-031	46	1380317	598335.3	96303.00	1388521				
SMP	RINSE	47	1417948	646204.6	106519.9	1459416				
CCV	CCV V-176971	48	1293323	586146.0	96649.21	1339094				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110835 0263

TuneID: 1

LLCCV	LLCCV V-176972	49	1341300	606196.6	100293.2	1373311
CCB	CCB V-176968	50	1335533	596130.4	97552.54	1355717

ICPMS Internal Standard Summary Report

3110835 0264

TuneID: 2

Batch/FileID: S112213A Sample ID: CalBlk V-176961 Sample Date 11/22/13 Sample Time: 11:20

IS ID:	Area	Area Limit
Ho-2	2036228	1425359.6 - 3054342
In-2	1559125	1091387.5 - 2338687.5
Sc-2	1395143	976600.1 - 2092714.5
Tb-2	2104948	1473463.6 - 3157422

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-176961	2	2036228	1559125	1395143	2104948				
SMP	Rinse	1	2114801	1630034	1443908	2193082				
CAL	CalStd1 V-17696	3	2065485	1576515	1405300	2113439				
CAL	CalStd2 V-17696	4	2091796	1627516	1453418	2169270				
CAL	CalStd3 V-17696	5	2115859	1665779	1482786	2197713				
CAL	CalStd4 V-17696	6	2133775	1653195	1488015	2192818				
CAL	CalStd5 V-17696	7	2074459	1594423	1420516	2126891				
ICV	ICV V-176967	8	2064458	1633490	1445731	2152937				
LLICV	LLICV V-176972	9	2124657	1689695	1489670	2196717				
ICB	ICB V-176968	10	2144471	1701366	1527970	2237753				
ICSA	ICSA V-176969	11	1954708	1455254	1349652	2017346				
ICSAB	ICSAB V-176970	12	1825772	1364628	1255975	1885720				
CCV	CCV V-176971	13	1943801	1518564	1351142	2029566				
LLCCV	LLCCV V-176972	14	1996819	1556977	1391549	2053509				
CCB	CCB V-176968	15	2016777	1576800	1410251	2076003				
MB	MB 27441	16	1835669	1417097	1262299	1904694				
LCS	LCSW 27441	17	1788223	1314520	1223951	1860022				
MR	LCSW MR 27441	18	1817628	1362353	1241227	1866498				
SMP	AC75646-001	19	1940865	1479585	1311323	2012819				
MR	AC75646-001	20	1950242	1478458	1317602	1986292				
SD	AC75646-001	21	2098829	1643955	1454265	2162249				
MS	AC75646-003	22	1837548	1391480	1281508	1902304				
MSD	AC75646-033	23	1796728	1370836	1280566	1858199				
PS	AC75646-001	24	1773232	1352622	1233869	1839589				
SMP	RINSE	25	2119093	1638103	1479657	2189197				
CCV	CCV V-176971	26	2132342	1650676	1506518	2205866				
LLCCV	LLCCV V-176972	27	2221606	1757536	1564829	2268024				
CCB	CCB V-176968	28	2026277	1614399	1438690	2115690				
SMP	AC75646-005	29	1851430	1403019	1257711	1895526				
SMP	AC75646-007	30	2001350	1539630	1378347	2051198				
SMP	AC75646-009	31	1968802	1503078	1346506	2010727				
SMP	AC75646-011	32	1998180	1530834	1353498	2066048				
SMP	AC75646-013	33	1986340	1538458	1349487	2061524				
SMP	AC75646-015	34	1888470	1439531	1275291	1940435				
SMP	AC75646-017	35	1852659	1427581	1263535	1929538				
SMP	AC75646-019	36	1857572	1408470	1223106	1922645				
SMP	AC75646-021	37	1851873	1426901	1245192	1922316				
SMP	RINSE	38	2017922	1574056	1387405	2091637				
CCV	CCV V-176971	39	2041056	1574801	1412374	2105959				
LLCCV	LLCCV V-176972	40	2139747	1655695	1469800	2221520				
CCB	CCB V-176968	41	2143758	1663693	1464973	2234424				
SMP	AC75646-023	42	2045458	1511577	1366197	2069755				
SMP	AC75646-025	43	1911073	1435001	1263459	1973324				
SMP	AC75646-027	44	1865306	1386722	1235972	1909479				
SMP	AC75646-029	45	1911365	1458939	1279484	1984671				
SMP	AC75646-031	46	2049488	1544160	1361172	2105562				
SMP	RINSE	47	2243934	1715916	1507151	2298826				
CCV	CCV V-176971	48	2000256	1542217	1363472	2082388				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110835 0265

TuneID: 2

LLCCV	LLCCV V-176972	49	2124075	1617261	1413182	2185564
CCB	CCB V-176968	50	2059458	1575949	1376790	2131253

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110835 0266

TuneID: 1

Batch/FileID: S112213B Sample ID: CalBlk V-176961 Sample Date 11/22/13 Sample Time: 16:16

IS ID:	Area	Area Limit
Ho-1	1382986	968090.2 - 2074479
In-1	627502.1	439251.47 - 941253.15
Sc-1	103013.5	72109.45 - 154520.25
Tb-1	1421955	995368.5 - 2132932.5

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-176961	2	1382986	627502.1	103013.5	1421955				
SMP	Rinse	1	1281532	561935.9	95747.38	1306927				
CAL	CalStd1 V-17696	3	1370807	615994.1	102921.9	1390026				
CAL	CalStd2 V-17696	4	1490327	671251.8	111353.6	1523102				
CAL	CalStd3 V-17696	5	1348192	605069.8	100088.9	1382608				
CAL	CalStd4 V-17696	6	1305082	592859.4	97064.45	1348805				
CAL	CalStd5 V-17696	7	1374982	611936.6	101398.9	1411553				
ICV	ICV V-176967	8	1408951	620129.7	104211.5	1433772				
LLICV	LLICV V-176972	9	1405945	633961.4	103376.4	1413825				
ICB	ICB V-176968	10	1376617	615117.7	101151.6	1396543				
ICSA	ICSA V-176969	11	1278520	531380.1	91408.03	1296154				
ICSAB	ICSAB V-176970	12	1201191	506160.9	87583.44	1222826				
CCV	CCV V-176971	13	1403762	642239.3	106884.6	1439433				
LLCCV	LLCCV V-176972	14	1401267	640147.7	108454.5	1431058				
CCB	CCB V-176968	15	1426820	655539.7	108989.7	1452578				
MB	MB 27442	16	1264529	555019.8	91046.88	1295361				
LCS	LCSW 27442	17	1274186	542554.1	93119.98	1286794				
MR	LCSW MR 27442	18	1296767	550228.5	92992.44	1327650				
SMP	AC75646-002	19	1341146	591551.7	96629.01	1373516				
MR	AC75646-002	20	1371187	595256.0	97422.21	1410766				
SD	AC75646-002	21	1417597	645298.8	104476.2	1463858				
MS	AC75646-004	22	1226284	509647.9	85290.41	1252132				
MSD	AC75646-034	23	1294082	543217.8	90669.79	1316265				
PS	AC75646-002	24	1261227	541038.3	87650.95	1281669				
SMP	RINSE	25	1402811	615709.8	100514.9	1419609				
CCV	CCV V-176971	26	1261577	551537.3	91476.50	1288768				
LLCCV	LLCCV V-176972	27	1300006	581240.3	95487.91	1317238				
CCB	CCB V-176968	28	1282918	574596.8	94456.80	1311830				
SMP	AC75646-006	29	1219279	525320.4	85112.62	1236172				
SMP	AC75646-008	30	1254669	540181.8	87194.96	1275751				
SMP	AC75646-010	31	1251713	536855.0	84991.25	1279989				
SMP	AC75646-012	32	1237291	523641.5	83415.36	1250665				
SMP	AC75646-014	33	1278881	545253.6	86348.44	1295558				
SMP	AC75646-016	34	1221329	527579.4	83648.77	1242912				
SMP	AC75646-018	35	1233510	530815.9	85039.57	1259674				
SMP	AC75646-020	36	1274598	536277.6	86072.35	1282571				
SMP	AC75646-022	37	1225118	523841.5	82576.84	1229477				
SMP	RINSE	38	1470924	649604.5	105801.6	1488083				
CCV	CCV V-176971	39	1384566	610100.6	100046.6	1422353				
LLCCV	LLCCV V-176972	40	1333614	578275.3	93891.53	1348879				
CCB	CCB V-176968	41	1369539	601266.0	97373.71	1384611				
SMP	AC75646-024	42	1337972	567744.1	91154.15	1354658				
SMP	AC75646-026	43	1277162	551708.6	86844.37	1300004				
SMP	AC75646-028	44	1329149	568677.3	90476.63	1350548				
SMP	AC75646-030	45	1357347	579601.6	91937.75	1384068				
SMP	AC75646-032	46	1358148	583509.1	92212.02	1374483				
SMP	RINSE	47	1470065	641148.4	103052.1	1484827				
CCV	CCV V-176971	48	1376452	603083.1	97432.97	1388562				

* Indicates Internal Standard Area outside of limits

TuneID: 1

LLCCV	LLCCV V-176972	49	1374315	605350.1	97530.95	1398538
CCB	CCB V-176968	50	1303278	582516.4	93619.07	1338482

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

3110835 0268

TuneID: 2

Batch/FileID: S112213B Sample ID: CalBlk V-176961 Sample Date 11/22/13 Sample Time: 16:16

IS ID:	Area	Area Limit
Ho-2 2231264	1561884.8	- 3346896
In-2 1713882	1199717.4	- 2570823
Sc-2 1505216	1053651.2	- 2257824
Tb-2 2311468	1618027.6	- 3467202

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-176961	2	2231264	1713882	1505216	2311468				
SMP	Rinse	1	2185026	1679605	1461354	2246149				
CAL	CalStd1 V-17696	3	2200848	1732133	1477419	2275051				
CAL	CalStd2 V-17696	4	2198061	1695458	1466654	2261110				
CAL	CalStd3 V-17696	5	2071735	1573153	1393834	2136497				
CAL	CalStd4 V-17696	6	2151189	1589976	1398512	2186589				
CAL	CalStd5 V-17696	7	2191208	1641171	1424067	2238747				
ICV	ICV V-176967	8	2178442	1658174	1447810	2259932				
LLICV	LLICV V-176972	9	2209815	1692869	1481665	2286555				
ICB	ICB V-176968	10	2165562	1655853	1435229	2215049				
ICSA	ICSA V-176969	11	1952637	1429549	1290271	1996183				
ICSAB	ICSAB V-176970	12	2072478	1520119	1386698	2156171				
CCV	CCV V-176971	13	2274605	1751479	1547837	2329336				
LLCCV	LLCCV V-176972	14	2257637	1766186	1539206	2339337				
CCB	CCB V-176968	15	2226985	1739936	1515489	2313844				
MB	MB 27442	16	1924414	1460597	1292267	1977235				
LCS	LCSW 27442	17	1918297	1422866	1295034	1946619				
MR	LCSW MR 27442	18	1957237	1471663	1329147	2013764				
SMP	AC75646-002	19	2073113	1596713	1407903	2140533				
MR	AC75646-002	20	2105333	1612827	1390453	2154606				
SD	AC75646-002	21	2243109	1745105	1506388	2321185				
MS	AC75646-004	22	1883053	1375607	1247377	1952922				
MSD	AC75646-034	23	1909443	1400855	1254867	1963008				
PS	AC75646-002	24	1945673	1441969	1253067	2013565				
SMP	RINSE	25	2152946	1649965	1440565	2229049				
CCV	CCV V-176971	26	2028526	1566292	1361073	2089482				
LLCCV	LLCCV V-176972	27	2086629	1579600	1380014	2149218				
CCB	CCB V-176968	28	2036796	1570094	1344856	2120242				
SMP	AC75646-006	29	1820601	1346803	1172940	1879043				
SMP	AC75646-008	30	1891338	1411182	1223430	1964656				
SMP	AC75646-010	31	1882971	1398196	1219932	1941078				
SMP	AC75646-012	32	1912614	1415182	1207040	1953021				
SMP	AC75646-014	33	1896755	1431075	1216176	1962759				
SMP	AC75646-016	34	1858194	1387805	1222562	1938319				
SMP	AC75646-018	35	1913384	1434428	1227133	1967659				
SMP	AC75646-020	36	1906560	1415345	1212879	1966695				
SMP	AC75646-022	37	1916220	1408890	1228159	1967943				
SMP	RINSE	38	2287376	1738222	1491479	2347931				
CCV	CCV V-176971	39	2142365	1627468	1406093	2218786				
LLCCV	LLCCV V-176972	40	2042890	1579702	1332720	2105675				
CCB	CCB V-176968	41	2127127	1619467	1380904	2173713				
SMP	AC75646-024	42	1942944	1458002	1256458	2015446				
SMP	AC75646-026	43	1920973	1434805	1221448	1961331				
SMP	AC75646-028	44	2050320	1503977	1314268	2099019				
SMP	AC75646-030	45	2020248	1524440	1311409	2091805				
SMP	AC75646-032	46	2028951	1499236	1293638	2073411				
SMP	RINSE	47	2211100	1682044	1435165	2297335				
CCV	CCV V-176971	48	2124724	1600745	1381032	2198200				

* Indicates Internal Standard Area outside of limits

TuneID: 2

LLCCV	LLCCV V-176972	49	2104632	1596753	1379848	2158695
CCB	CCB V-176968	50	2078314	1573882	1349518	2158317

Run Log

3110835.0270

Data File: W\METALS.FRM\ICPDATA\New\PEICP2A\SW15726A2.txt

Analysis Date: 11/22/13

Instrument: PEICP2A

Sample Id	Qc 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	15:09	1							V-174666(ICB/CCB)
Calib 1 V-173067	1	CAL	15:12	2							V-173067(ICS1 - Lowest std)
Calib 2 V-173273	1	CAL	15:15	3							V-173273(ICS2- Low Std)
Calib 3 V-173274	1	CAL	15:19	4							V-173274(ICS3 - Middle Std)
Calib 4 V-174144	1	CAL	15:22	5							V-174144(ICS4 - High std)
ICS3 V-173274	1	ICS	15:27	6							V-173274(ICS3 - Middle Std)
ICV V-173510	1	ICV	15:30	7							V-173510(CCV)
LLICV V-176606 [aq]	1	LLICV	15:34	8		AQUEO	AQUEO	SW846	27441		V-176606 [aq](LLICV-SW846H2O)
ICB V-174666	1	ICB	15:37	9							V-174666(ICB/CCB)
ICSA V-173614	1	ICSA	15:40	10							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	15:45	11							V-173231(ICSAB)
MB 27441 (1)	1	MB	15:50	12		AQUEO	AQUEO	SW846	27441		0
LCSW 27441	1	LCS	15:54	13		AQUEO	AQUEO	SW846	27441		0
LCSW MR 27441	1	LCS	15:57	14		AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	SMP	16:01	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	MR	16:04	16	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-003	1	MS	16:08	17	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-033	1	MSD	16:11	18	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	PS	16:15	19	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
CCV V-173510	1	CCV	16:18	20							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	16:22	21		AQUEO	AQUEO	SW846	27441		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	16:25	22							0
AC75646-001	5	SD	16:28	23	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-005	1	SMP	16:32	24	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-007	1	SMP	16:35	25	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-009	1	SMP	16:39	26	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-011	1	SMP	16:42	27	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-013	1	SMP	16:46	28	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-015	1	SMP	16:49	29	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
ICSA V-173614	1	ICSA	16:52	30							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	16:57	31							V-173231(ICSAB)
CCV V-173510	1	CCV	17:02	32							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	17:06	33		AQUEO	AQUEO	SW846	27441		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	17:09	34							0
AC75646-017	1	SMP	17:13	35	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-019	1	SMP	17:16	36	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-021	1	SMP	17:19	37	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-023	1	SMP	17:23	38	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-025	1	SMP	17:26	39	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-027	1	SMP	17:30	40	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-029	1	SMP	17:33	41	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-031	1	SMP	17:37	42	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
CSA V-173614	1	ICSA	17:40	43							V-173614(ICSA)
CSAB V-173231	1	ICSAB	17:45	44							V-173231(ICSAB)
CCV V-173510	1	CCV	17:50	45							V-173510(CCV)
LLCCV V-176606 [aq]	1	LLCCV	17:53	46		AQUEO	AQUEO	SW846	27441		V-176606 [aq](LLICV-SW846H2O)
CCB	1	CCB	17:57	47							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

scan
192.168.1.78 11/22/2013 6:13:13 PM

OK

_____ 11/25/13

Run Log

3110835.0271

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD1A\SW15726A.txt

Analysis Date: 11/21/13

Instrument: PEICPRAD1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Std:
Calib Blk 1 V-174666	1	CAL	17:09	1							V-174666(ICB/CCB)
Calib Std 1 V-175715	1	CAL	17:12	2							V-175715(ICS2- Low Std)
Calib Std 2 V-175281	1	CAL	17:15	3							V-175281(ICS3 - Middle Std)
Calib Std 3 V-176344	1	CAL	17:18	4							V-176344(ICS4 - High std)
ICS3 V-175281	1	ICS	17:21	5							V-175281(ICS3 - Middle Std)
ICV V-176789	1	ICV	17:24	6							V-176789(CCV)
LLICV [aq] V-176895	1	LLICV	17:27	7		AQUEO	AQUEO	SW846	27441		V-176895(LLICV aqueous)
ICB V-174666	1	ICB	17:30	8							V-174666(ICB/CCB)
ICSA V-175629	1	ICSA	17:33	9							V-175629(ICSA)
ICSAB V-175630	1	ICSAB	17:37	10							V-175630(ICSAB)
MB 27441 (1)	1	MB	17:40	11		AQUEO	AQUEO	SW846	27441		0
LCSW 27441	1	LCS	17:43	12		AQUEO	AQUEO	SW846	27441		0
LCSW MR 27441	1	LCS	17:46	13		AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	SMP	17:49	14	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	MR	17:52	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-003	1	MS	17:55	16	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-033	1	MSD	17:58	17	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	PS	18:01	18	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
CCV V-176789	1	CCV	18:04	19							V-176789(CCV)
LLCCV [aq] V-176895	1	LLCCV	18:07	20		AQUEO	AQUEO	SW846	27441		V-176895(LLICV aqueous)
CCB V-174666	1	CCB	18:10	21							V-174666(ICB/CCB)
AC75646-001	5	SD	18:13	22	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-005	1	SMP	18:16	23	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-007	1	SMP	18:19	24	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-009	1	SMP	18:22	25	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
CSA V-175629	1	ICSA	18:25	26							V-175629(ICSA)
CSAB V-175630	1	ICSAB	18:29	27							V-175630(ICSAB)
CCV V-176789	1	CCV	18:32	28							V-176789(CCV)
LLCCV [aq] V-176895	1	LLCCV	18:35	29		AQUEO	AQUEO	SW846	27441		V-176895(LLICV aqueous)
CCB V-174666	1	CCB	18:38	30							V-174666(ICB/CCB)
AC75646-011	1	NA	18:41	31	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-013	1	NA	18:44	32	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-015	1	NA	18:47	33	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-017	1	NA	18:50	34	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-019	1	NA	18:53	35	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0

Comments/Reviewed by:

Standard/Batch/SnCl2 Lot #:

can
92.168.1.78 11/22/2013 10:41:42 AM

irst half OK, second half plasma extinguished

2 11/21/13

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD1A\SW15726B.txt

Analysis Date: 11/22/13

Instrument: PEICPRAD1A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Std's:
Calib Blk 1 V-174666	1	CAL	10:30	1							V-174666(ICB/CCB)
Calib Std 1 V-175715	1	CAL	10:33	2							V-175715(ICS2 - Low Std)
Calib Std 2 V-175281	1	CAL	10:36	3							V-175281(ICS3 - Middle Std)
Calib Std 3 V-176344	1	CAL	10:39	4							V-176344(ICS4 - High std)
ICS3 V-175281	1	ICS	10:42	5							V-175281(ICS3 - Middle Std)
ICV V-176789	1	ICV	10:45	6							V-176789(CCV)
LLICV [aq] V-176895	1	LLICV	10:48	7		AQUEO	AQUEO	SW846	27441		V-176895(LLICV aqueous)
ICB V-174666	1	ICB	10:52	8							V-174666(ICB/CCB)
ICSA V-175629	1	ICSA	10:54	9							V-175629(ICSA)
ICSAB V-175630	1	ICSAB	10:58	10							V-175630(ICSAB)
AC75646-011	1	SMP	11:01	11	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-013	1	SMP	11:04	12	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-015	1	SMP	11:07	13	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-017	1	SMP	11:10	14	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-019	1	SMP	11:13	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-021	1	SMP	11:16	16	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
CCV V-176789	1	CCV	11:19	17							V-176789(CCV)
LLCCV [aq] V-176895	1	LLCCV	11:23	18		AQUEO	AQUEO	SW846	27441		V-176895(LLICV aqueous)
CCB V-174666	1	CCB	11:26	19							V-174666(ICB/CCB)
AC75646-023	1	SMP	11:29	20	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-025	1	SMP	11:32	21	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-027	1	SMP	11:35	22	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-029	1	SMP	11:38	23	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
AC75646-031	1	SMP	11:40	24	MET-TAL6010W	AQUEO	AQUEO	SW846	27441		0
CSA V-175629	1	ICSA	11:43	25							V-175629(ICSA)
CSAB V-175630	1	ICSAB	11:47	26							V-175630(ICSAB)
CCV V-176789	1	CCV	11:50	27							V-176789(CCV)
LLCCV [aq] V-176895	1	LLCCV	11:53	28		AQUEO	AQUEO	SW846	27441		V-176895(LLICV aqueous)
CCB V-174666	1	CCB	11:56	29							V-174666(ICB/CCB)

Comments/Reviewedby:

Standard/Batch/SnCi2 Lot #:

ean
92.168.1.78 11/22/2013 12:07:29 PM

OK

sl 11/25/13

Run Log

3110835.0273

Data File: W:\METALS.FRM\ICPDATA\New\MS2_7500SWA\SI12213A.b\SI12213A.TXT

Analysis Date: 11/22/13

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	11:14	1		AQUEO	AQUEO	SW846	27441		0
CalBlk V-176961	1	ISBLK	11:20	2		AQUEO	AQUEO				V-176961(Cal Blk)
CalStd1 V-176962	1	CAL	11:26	3							V-176962(Cal Std-1)
CalStd2 V-176963	1	CAL	11:32	4							V-176963(Cal Std-2)
CalStd3 V-176964	1	CAL	11:38	5							V-176964(Cal Std-3)
CalStd4 V-176965	1	CAL	11:44	6							V-176965(Cal Std-4)
CalStd5 V-176966	1	CAL	11:50	7							V-176966(Cal Std-5)
ICV V-176967	1	ICV	11:55	8							V-176967(ICV)
LLICV V-176972	1	LLICV	12:01	9		AQUEO	AQUEO	SW846	27441		V-176972(LL-ICV/CCV AQ.)
ICB V-176968	1	ICB	12:07	10							V-176968(ICB/CCB)
ICSA V-176969	1	ICSA	12:13	11							V-176969(ICSA)
ICSAB V-176970	1	ICSAB	12:19	12							V-176970(ICSAB)
CCV V-176971	1	CCV	12:25	13							V-176971(CCV)
LLCCV V-176972	1	LLCCV	12:31	14		AQUEO	AQUEO	SW846	27441		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	12:37	15							V-176968(ICB/CCB)
MB 27441	1	MB	12:42	16		AQUEO	AQUEO	SW846	27441		0
LCSW 27441	1	LCS	12:48	17		AQUEO	AQUEO	SW846	27441		0
LCSW MR 27441	1	LCS	12:54	18		AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	SMP	13:00	19	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	MR	13:06	20	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-001	5	SD	13:11	21	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-003	1	MS	13:17	22	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-033	1	MSD	13:23	23	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	PS	13:29	24	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
RINSE	1	NA	13:35	25		AQUEO	AQUEO	SW846	27441		0
CCV V-176971	1	CCV	13:41	26							V-176971(CCV)
LLCCV V-176972	1	LLCCV	13:47	27		AQUEO	AQUEO	SW846	27441		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	13:52	28							V-176968(ICB/CCB)
AC75646-005	1	SMP	13:58	29	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-007	1	SMP	14:04	30	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-009	1	SMP	14:10	31	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-011	1	SMP	14:16	32	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-013	1	SMP	14:22	33	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-015	1	SMP	14:28	34	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-017	1	SMP	14:34	35	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-019	1	SMP	14:40	36	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-021	1	SMP	14:45	37	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
RINSE	1	NA	14:52	38		AQUEO	AQUEO	SW846	27441		0
CCV V-176971	1	CCV	14:57	39							V-176971(CCV)
LLCCV V-176972	1	LLCCV	15:03	40		AQUEO	AQUEO	SW846	27441		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	15:09	41							V-176968(ICB/CCB)
AC75646-023	1	SMP	15:15	42	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-025	1	SMP	15:21	43	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-027	1	SMP	15:27	44	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-029	1	SMP	15:33	45	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-031	1	SMP	15:39	46	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
RINSE	1	NA	15:45	47		AQUEO	AQUEO	SW846	27441		0
CCV V-176971	1	CCV	15:50	48							V-176971(CCV)
LLCCV V-176972	1	LLCCV	15:56	49		AQUEO	AQUEO	SW846	27441		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	16:02	50							V-176968(ICB/CCB)

Comments/Reviewed by:

Standard/Batch/SnCl2 Lot #:

gabrielle
192.168.1.39 11/22/2013 4:53:31 PMRUN OK.
Co.As.Se reported.

2 12/4/13

Run Log

3110835' 0274

Data File: W:\METALS.FRM\ICPDATA\New\MS2_7500SWA\SI12113A.b\SI12113A.TXT

Analysis Date: 11/21/13

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	12:12	1		AQUEO	AQUEO	SW846	27441		0
CalBlk V-176961	1	ISBLK	12:17	2		AQUEO	AQUEO				V-176961(Cal Blk)
CalStd1 V-176962	1	CAL	12:23	3							V-176962(Cal Std-1)
CalStd2 V-176963	1	CAL	12:29	4							V-176963(Cal Std-2)
CalStd3 V-176964	1	CAL	12:35	5							V-176964(Cal Std-3)
CalStd4 V-176965	1	CAL	12:41	6							V-176965(Cal Std-4)
CalStd5 V-176966	1	CAL	12:47	7							V-176966(Cal Std-5)
ICV V-176967	1	ICV	12:53	8							V-176967(ICV)
LLICV V-176972	1	LLICV	12:59	9		AQUEO	AQUEO	SW846	27441		V-176972(LL-ICV/CCV AQ.)
ICB V-176968	1	ICB	13:05	10							V-176968(ICB/CCB)
ICSA V-176969	1	ICSA	13:10	11							V-176969(ICSA)
ICSAB V-176970	1	ICSAB	13:16	12							V-176970(ICSAB)
CCV V-176971	1	CCV	13:22	13						As,Co,Se failed.	V-176971(CCV)
LLCCV V-176972	1	LLCCV	13:28	14		AQUEO	AQUEO	SW846	27441		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	13:34	15							V-176968(ICB/CCB)
MB 27441	1	MB	13:40	16		AQUEO	AQUEO	SW846	27441		0
LCSW 27441	1	LCS	13:45	17		AQUEO	AQUEO	SW846	27441		0
LCSW MR 27441	1	LCS	13:51	18		AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	SMP	13:57	19	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	MR	14:03	20	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-001	5	SD	14:09	21	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-003	1	MS	14:15	22	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-033	1	MSD	14:20	23	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	PS	14:26	24	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
RINSE	1	NA	14:32	25		AQUEO	AQUEO	SW846	27441		0
CCV V-176971	1	CCV	14:38	26							V-176971(CCV)
LLCCV V-176972	1	LLCCV	14:44	27		AQUEO	AQUEO	SW846	27441		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	14:50	28							V-176968(ICB/CCB)
AC75646-005	1	SMP	14:56	29	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-007	1	SMP	15:02	30	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-009	1	SMP	15:07	31	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-011	1	SMP	15:13	32	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-013	1	SMP	15:19	33	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-015	1	SMP	15:25	34	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-017	1	SMP	15:31	35	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-019	1	SMP	15:37	36	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-021	1	SMP	15:43	37	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
RINSE	1	NA	15:49	38		AQUEO	AQUEO	SW846	27441		0
CCV V-176971	1	CCV	15:55	39							V-176971(CCV)
LLCCV V-176972	1	LLCCV	16:01	40		AQUEO	AQUEO	SW846	27441		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	16:07	41							V-176968(ICB/CCB)
AC75646-023	1	SMP	16:12	42	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-025	1	SMP	16:18	43	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-027	1	SMP	16:24	44	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-029	1	SMP	16:30	45	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
AC75646-031	1	SMP	16:36	46	MET-TAL6020W	AQUEO	AQUEO	SW846	27441		0
RINSE	1	NA	16:42	47		AQUEO	AQUEO	SW846	27441		0
CCV V-176971	1	CCV	16:48	48							V-176971(CCV)
LLCCV V-176972	1	LLCCV	16:54	49		AQUEO	AQUEO	SW846	27441		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	17:00	50							V-176968(ICB/CCB)

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

gabrielle
192.168.1.39 11/22/2013 4:44:34 PMRUN OK.
Co,As,Se not reported.

2-12/4/13

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\SW15727C2.txt

Analysis Date: 11/22/13

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	18:04	1							V-174666(ICB/CCB)
Calib 1 V-173067	1	CAL	18:08	2							V-173067(ICS1 - Lowest std)
Calib 2 V-173273	1	CAL	18:11	3							V-173273(ICS2- Low Std)
Calib 3 V-173274	1	CAL	18:14	4							V-173274(ICS3 - Middle Std)
Calib 4 V-174144	1	CAL	18:18	5							V-174144(ICS4 - High std)
ICS3 V-173274	1	ICS	18:22	6							V-173274(ICS3 - Middle Std)
ICV V-173510	1	ICV	18:26	7							V-173510(CCV)
LLICV V-177224 [aq]	1	LLICV	18:29	8		AQUEO	AQUEO	SW846	27442	AI failed	V-177224 [aq](LLICV/LLCCV aq)
ICB V-174666	1	ICB	18:33	9							V-174666(ICB/CCB)
ICSA V-173614	1	ICSA	18:36	10							V-173614(ICSA)
ICSAB V-173231	1	ICSAB	18:41	11							V-173231(ICSAB)
MB 27442 (1)	1	MB	18:46	12		AQUEO	AQUEO	SW846	27442		0
LCSW 27442	1	LCS	18:49	13		AQUEO	AQUEO	SW846	27442		0
LCSW MR 27442	1	LCS	18:53	14		AQUEO	AQUEO	SW846	27442		0
AC75646-002	1	SMP	18:56	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-002	1	MR	19:00	16	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-004	1	MS	19:03	17	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-034	1	MSD	19:07	18	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-002	1	PS	19:10	19	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
CCV V-173510	1	CCV	19:14	20							V-173510(CCV)
LLCCV V-177224 [aq]	1	LLCCV	19:17	21		AQUEO	AQUEO	SW846	27442		V-177224 [aq](LLICV/LLCCV aq)
CCB	1	CCB	19:21	22							0
AC75646-002	5	SD	19:24	23	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-006	1	SMP	19:28	24	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-008	1	SMP	19:31	25	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-010	1	SMP	19:35	26	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-012	1	SMP	19:38	27	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-014	1	SMP	19:41	28	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-016	1	SMP	19:45	29	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-018	1	SMP	19:48	30	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
CSA V-173614	1	ICSA	19:52	31							V-173614(ICSA)
CSAB V-173231	1	ICSAB	19:56	32							V-173231(ICSAB)
CCV V-173510	1	CCV	20:01	33							V-173510(CCV)
LLCCV V-177224 [aq]	1	LLCCV	20:05	34		AQUEO	AQUEO	SW846	27442	AI failed	V-177224 [aq](LLICV/LLCCV aq)
CCB	1	CCB	20:08	35							0
AC75646-020	1	SMP	20:12	36	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-022	1	SMP	20:15	37	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-024	1	SMP	20:19	38	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-026	1	SMP	20:22	39	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-028	1	SMP	20:25	40	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-030	1	SMP	20:29	41	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-032	1	SMP	20:32	42	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
CSA V-173614	1	ICSA	20:36	43							V-173614(ICSA)
CSAB V-173231	1	ICSAB	20:41	44							V-173231(ICSAB)
CCV V-173510	1	CCV	20:45	45							V-173510(CCV)
LLCCV V-177224 [aq]	1	LLCCV	20:49	46		AQUEO	AQUEO	SW846	27442		V-177224 [aq](LLICV/LLCCV aq)
CCB	1	CCB	20:52	47							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

jean
92.168.1.78 11/23/2013 11:16:08 AM

OK except AI

2 11/28/13

Run Log

3110835 0276
Page 1 of 2

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\SW15727E2.txt

Analysis Date: 11/25/13

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	10:42	1							V-174666(ICB/CCB)
Calib 1 V-173067	1	CAL	10:45	2							V-173067(ICS1 - Lowest std)
Calib 2 V-173273	1	CAL	10:49	3							V-173273(ICS2 - Low Std)
Calib 3 V-173274	1	CAL	10:52	4							V-173274(ICS3 - Middle Std)
Calib 4 V-174144	1	CAL	10:55	5							V-174144(ICS4 - High std)
CS3 V-173274	1	ICS	11:00	6							V-173274(ICS3 - Middle Std)
CV V-173510	1	ICV	11:03	7							V-173510(CCV)
LLICV V-177224 [aq]	1	LLICV	11:07	8		AQUEO	AQUEO	SW846	27442		V-177224 [aq](LLICV/LLCCV aq)
CB V-174666	1	ICB	11:10	9							V-174666(ICB/CCB)
CSA V-173614	1	ICSA	11:13	10							V-173614(ICSA)
CSAB V-173231	1	ICSAB	11:18	11							V-173231(ICSAB)
MB 27442 (1)	1	MB	11:23	12		AQUEO	AQUEO	SW846	27442		0
CSW 27442	1	LCS	11:27	13		AQUEO	AQUEO	SW846	27442		0
CSW MR 27442	1	LCS	11:30	14		AQUEO	AQUEO	SW846	27442		0
VC75646-002	1	NA	11:34	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27442	missed cup	0
VC75646-002	1	MR	11:37	16	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-004	1	MS	11:40	17	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-034	1	MSD	11:44	18	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-002	1	NA	11:47	19	MET-TAL6010W	AQUEO	AQUEO	SW846	27442	missed cup	0
CCV V-173510	1	CCV	11:51	20							V-173510(CCV)
LLCCV V-177224 [aq]	1	LLCCV	11:54	21		AQUEO	AQUEO	SW846	27442		V-177224 [aq](LLICV/LLCCV aq)
CCB	1	CCB	11:58	22							0
VC75646-002	5	SD	12:01	23	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-002	1	PS	12:04	24	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
CCV V-173510	1	CCV	12:08	25							V-173510(CCV)
LLCCV V-177224 [aq]	1	LLCCV	12:11	26		AQUEO	AQUEO	SW846	27442		V-177224 [aq](LLICV/LLCCV aq)
CCB	1	CCB	12:15	27							0
VC75646-006	1	SMP	12:18	28	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-008	1	SMP	12:21	29	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-010	1	SMP	12:25	30	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-012	1	SMP	12:28	31	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-014	1	SMP	12:31	32	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-016	1	SMP	12:35	33	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-018	1	SMP	12:38	34	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
CSA V-173614	1	ICSA	12:41	35							V-173614(ICSA)
CSAB V-173231	1	ICSAB	12:46	36							V-173231(ICSAB)
CCV V-173510	1	CCV	12:51	37							V-173510(CCV)
LLCCV V-177224 [aq]	1	LLCCV	12:55	38		AQUEO	AQUEO	SW846	27442		V-177224 [aq](LLICV/LLCCV aq)
CCB	1	CCB	12:58	39							0
VC75646-020	1	SMP	13:01	40	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-022	1	SMP	13:05	41	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-024	1	SMP	13:08	42	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-026	1	SMP	13:11	43	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-028	1	SMP	13:15	44	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-030	1	SMP	13:18	45	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
VC75646-032	1	SMP	13:22	46	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
CSA V-173614	1	ICSA	13:25	47							V-173614(ICSA)
CSAB V-173231	1	ICSAB	13:30	48							V-173231(ICSAB)
CCV V-173510	1	CCV	13:34	49							V-173510(CCV)
LLCCV V-177224 [aq]	1	LLCCV	13:38	50		AQUEO	AQUEO	SW846	27442		V-177224 [aq](LLICV/LLCCV aq)
CCB	1	CCB	13:41	51							0
NI	1	NA	13:44	52		AQUEO	AQUEO	SW846	27442	reference only	0
NI	1	NA	13:49	53		AQUEO	AQUEO	SW846	27442	reference only	0
NI	1	NA	13:52	54		AQUEO	AQUEO	SW846	27442	reference only	0
NI	1	NA	13:56	55		AQUEO	AQUEO	SW846	27442	reference only	0
VC75646-002	1	SMP	14:00	56	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
CSA V-173614	1	ICSA	14:04	57							V-173614(ICSA)

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

sean
192.168.1.78 11/25/2013 2:26:33 PM

AI OK

2 11/27/13

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP2A\SW15727E2.txt

Analysis Date: 11/25/13

Instrument: PEICP2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
ICSAB V-173231	1	ICSAB	14:08	58							V-173231(ICSAB)
CCV V-173510	1	CCV	14:13	59							V-173510(CCV)
LLCCV V-177224 [aq]	1	LLCCV	14:16	60		AQUEO	AQUEO	SW846	27442		V-177224 [aq](LLICV/LLCCV aq)
CCB	1	CCB	14:20	61							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

sean
192.168.1.78 11/25/2013 2:26:33 PM

AI OK

e 11/28/13

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD1A\SW15727A.txt

Analysis Date: 11/22/13

Instrument: PEICPRAD1A

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	12:00	1							V-174666(ICB/CCB)
Calib Std 1 V-175715	1	CAL	12:03	2							V-175715(ICS2 - Low Std)
Calib Std 2 V-175281	1	CAL	12:06	3							V-175281(ICS3 - Middle Std)
Calib Std 3 V-176344	1	CAL	12:09	4							V-176344(ICS4 - High std)
ICS3 V-175281	1	ICS	12:12	5							V-175281(ICS3 - Middle Std)
ICV V-176789	1	ICV	12:15	6							V-176789(CCV)
LLICV [aq] V-176895	1	LLICV	12:18	7		AQUEO	AQUEO	SW846	27442		V-176895(LLICV aqueous)
ICB V-174666	1	ICB	12:21	8							V-174666(ICB/CCB)
ICSA V-175629	1	ICSA	12:24	9							V-175629(ICSA)
ICSAB V-175630	1	ICSAB	12:27	10							V-175630(ICSAB)
MB 27442 (I)	1	MB	12:31	11		AQUEO	AQUEO	SW846	27442		0
LCSW 27442	1	LCS	12:33	12		AQUEO	AQUEO	SW846	27442		0
LCSW MR 27442	1	LCS	12:36	13		AQUEO	AQUEO	SW846	27442		0
AC75646-002	1	SMP	12:39	14	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-002	1	MR	12:42	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-004	1	MS	12:46	16	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-034	1	MSD	12:49	17	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-002	1	PS	12:52	18	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
CCV V-176789	1	CCV	12:55	19							V-176789(CCV)
LLCCV [aq] V-176895	1	LLCCV	12:58	20		AQUEO	AQUEO	SW846	27442		V-176895(LLICV aqueous)
CCB V-174666	1	CCB	13:01	21							V-174666(ICB/CCB)
AC75646-002	5	SD	13:04	22	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-006	1	SMP	13:07	23	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-008	1	SMP	13:10	24	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-010	1	SMP	13:13	25	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-012	1	SMP	13:16	26	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-014	1	SMP	13:19	27	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
CSA V-175629	1	ICSA	13:22	28							V-175629(ICSA)
CSAB V-175630	1	ICSAB	13:25	29							V-175630(ICSAB)
CCV V-176789	1	CCV	13:29	30							V-176789(CCV)
LLCCV [aq] V-176895	1	LLCCV	13:32	31		AQUEO	AQUEO	SW846	27442		V-176895(LLICV aqueous)
CCB V-174666	1	CCB	13:35	32							V-174666(ICB/CCB)
AC75646-016	1	NA	13:38	33	MET-TAL6010W	AQUEO	AQUEO	SW846	27442	not used	0
AC75646-018	1	NA	13:41	34	MET-TAL6010W	AQUEO	AQUEO	SW846	27442	not used	0
AC75646-020	1	NA	13:44	35	MET-TAL6010W	AQUEO	AQUEO	SW846	27442	not used	0
AC75646-022	1	NA	13:47	36	MET-TAL6010W	AQUEO	AQUEO	SW846	27442	not used	0
AC75646-024	1	NA	13:49	37	MET-TAL6010W	AQUEO	AQUEO	SW846	27442	not used	0
CCV V-176789	1	CCV	13:52	38						failed	V-176789(CCV)

Comments/Reviewed by:

Standard/Batch/SnCl2 Lot #:

sean
192.168.1.78 11/22/2013 2:14:06 PM

first half OK, second half not used

2 11/28/13

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD1A\SW15727B.txt

Analysis Date: 11/22/13

Instrument: PEICPRAD1A

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	14:00	1							V-174666(ICB/CCB)
Calib Std 1 V-175715	1	CAL	14:03	2							V-175715(ICS2 - Low Std)
Calib Std 2 V-175281	1	CAL	14:06	3							V-175281(ICS3 - Middle Std)
Calib Std 3 V-176344	1	CAL	14:09	4							V-176344(ICS4 - High std)
CS3 V-175281	1	ICS	14:12	5							V-175281(ICS3 - Middle Std)
CV V-176789	1	ICV	14:15	6							V-176789(CCV)
LLICV [aq] V-176895	1	LLICV	14:18	7		AQUEO	AQUEO	SW846	27442		V-176895(LLICV aqueous)
CB V-174666	1	ICB	14:21	8							V-174666(ICB/CCB)
CSA V-175629	1	ICSA	14:24	9							V-175629(ICS4)
CSAB V-175630	1	ICSAB	14:28	10							V-175630(ICSAB)
AC75646-016	1	SMP	14:31	11	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-018	1	SMP	14:34	12	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-020	1	SMP	14:37	13	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-022	1	SMP	14:40	14	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-024	1	SMP	14:43	15	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
CCV V-176789	1	CCV	14:46	16							V-176789(CCV)
LLCCV [aq] V-176895	1	LLCCV	14:49	17		AQUEO	AQUEO	SW846	27442		V-176895(LLICV aqueous)
CB V-174666	1	CCB	14:52	18							V-174666(ICB/CCB)
AC75646-026	1	SMP	14:55	19	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-028	1	SMP	14:58	20	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-030	1	SMP	15:01	21	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
AC75646-032	1	SMP	15:04	22	MET-TAL6010W	AQUEO	AQUEO	SW846	27442		0
CSA V-175629	1	ICSA	15:07	23							V-175629(ICS4)
CSAB V-175630	1	ICSAB	15:10	24							V-175630(ICSAB)
CCV V-176789	1	CCV	15:14	25							V-176789(CCV)
LLCCV [aq] V-176895	1	LLCCV	15:17	26		AQUEO	AQUEO	SW846	27442		V-176895(LLICV aqueous)
CB V-174666	1	CCB	15:20	27							V-174666(ICB/CCB)

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

sean
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OK

11/28/13

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGC2A\H15727SW.txt

Analysis Date: 11/22/13

Instrument: HGC2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	16:59	1							0
.2 PPB	1	CAL	17:01	2							0
.5 PPB	1	CAL	17:02	3							0
1 PPB	1	CAL	17:04	4							0
2 PPB	1	CAL	17:05	5							0
5 PPB	1	CAL	17:07	6							0
10 PPB	1	CAL	17:08	7							0
25 PPB	1	CAL	17:10	8							0
ICV (2)	1	ICV	17:11	9							0
ICB	1	ICB	17:13	10							0
MB 27442 (1)	1	MB	17:14	11		AQUEO	AQUEO	SW846	27442		0
LCSW 27442	1	LCS	17:16	12		AQUEO	AQUEO	SW846	27442		0
LCSW MR 27442	1	LCS	17:17	13		AQUEO	AQUEO	SW846	27442		0
AC75646-002	1	SMP	17:19	14	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-002	1	MR	17:20	15	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-004	1	MS	17:22	16	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-034	1	MSD	17:23	17	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-006	1	SMP	17:25	18	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-008	1	SMP	17:26	19	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
CCV	1	CCV	17:28	20							0
CCB	1	CCB	17:29	21							0
AC75646-010	1	SMP	17:31	22	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-012	1	SMP	17:32	23	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-014	1	SMP	17:34	24	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-016	1	SMP	17:35	25	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-018	1	SMP	17:37	26	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-020	1	SMP	17:38	27	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-022	1	SMP	17:40	28	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-024	1	SMP	17:41	29	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-026	1	SMP	17:43	30	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
CCV	1	CCV	17:44	31							0
CCB	1	CCB	17:46	32							0
AC75646-028	1	SMP	17:47	33	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-030	1	SMP	17:49	34	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
AC75646-032	1	SMP	17:50	35	HG-W-7470	AQUEO	AQUEO	SW846	27442		0
CCV	1	CCV	17:52	36							0
CCB	1	CCB	17:53	37							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

olufemi
192.168.1.89 11/22/2013 6:06:14 PM

V-177236

RUN IS OK

2 11/25/13

Run Log

3110835 0281

Data File: W:\METALS.FRM\ICPDATA\New\HGCV2A\H15726SW.txt

Analysis Date: 11/20/13

Instrument: HGCV2A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Std:
Calibration Blank	1	CAL	17:41	1							0
.2 PPB	1	CAL	17:42	2							0
.5 PPB	1	CAL	17:44	3							0
1 PPB	1	CAL	17:45	4							0
2 PPB	1	CAL	17:47	5							0
5 PPB	1	CAL	17:48	6							0
10 PPB	1	CAL	17:50	7							0
25 PPB	1	CAL	17:51	8							0
ICV (2)	1	ICV	17:53	9							0
ICB	1	ICB	17:54	10							0
MB 27441 (1)	1	MB	17:56	11		AQUEO	AQUEO	SW846	27441		0
LCSW 27441	1	LCS	17:57	12		AQUEO	AQUEO	SW846	27441		0
LCSW MR 27441	1	LCS	17:59	13		AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	SMP	18:00	14	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-001	1	MR	18:02	15	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-003	1	MS	18:03	16	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-033	1	MSD	18:05	17	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-005	1	SMP	18:06	18	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-007	1	SMP	18:07	19	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
CCV	1	CCV	18:09	20							0
CCB	1	CCB	18:11	21							0
AC75646-009	1	SMP	18:12	22	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-011	1	SMP	18:14	23	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-013	1	SMP	18:15	24	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-015	1	SMP	18:16	25	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-017	1	SMP	18:18	26	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-019	1	SMP	18:19	27	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-021	1	SMP	18:21	28	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-023	1	SMP	18:22	29	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-025	1	SMP	18:24	30	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
CCV	1	CCV	18:25	31							0
CCB	1	CCB	18:27	32							0
AC75646-027	1	SMP	18:28	33	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-029	1	SMP	18:30	34	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
AC75646-031	1	SMP	18:31	35	HG-W-7470	AQUEO	AQUEO	SW846	27441		0
CCV	1	CCV	18:33	36							0
CCB	1	CCB	18:34	37							0

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

olufemi
192.168.1.89 11/21/2013 12:32:08 PM

V-177138

RUN IS OK

11/21/13

Run Log

3110835_0282

Data File: W:\METALS.FRM\ICPDATA\New\MS2_7500SWA\S112213B.b\S112213B.TXT

Analysis Date: 11/22/13

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	16:10	1		AQUEO	AQUEO	SW846	27442		0
CalBlk V-176961	1	ISBLK	16:16	2		AQUEO	AQUEO				V-176961(Cal Blk)
CalStd1 V-176962	1	CAL	16:22	3							V-176962(Cal Std-1)
CalStd2 V-176963	1	CAL	16:28	4							V-176963(Cal Std-2)
CalStd3 V-176964	1	CAL	16:34	5							V-176964(Cal Std-3)
CalStd4 V-176965	1	CAL	16:40	6							V-176965(Cal Std-4)
CalStd5 V-176966	1	CAL	16:45	7							V-176966(Cal Std-5)
ICV V-176967	1	ICV	16:51	8							V-176967(ICV)
LLICV V-176972	1	LLICV	16:57	9		AQUEO	AQUEO	SW846	27442		V-176972(LL-ICV/CCV AQ.)
ICB V-176968	1	ICB	17:03	10							V-176968(ICB/CCB)
ICSA V-176969	1	ICSA	17:09	11							V-176969(ICSA)
ICSAB V-176970	1	ICSAB	17:15	12							V-176970(ICSAB)
CCV V-176971	1	CCV	17:21	13							V-176971(CCV)
LLCCV V-176972	1	LLCCV	17:26	14		AQUEO	AQUEO	SW846	27442		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	17:32	15							V-176968(ICB/CCB)
MB 27442	1	MB	17:38	16		AQUEO	AQUEO	SW846	27442		0
LCSW 27442	1	LCS	17:44	17		AQUEO	AQUEO	SW846	27442		0
LCSW MR 27442	1	LCS	17:50	18		AQUEO	AQUEO	SW846	27442		0
AC75646-002	1	SMP	17:56	19	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-002	1	MR	18:01	20	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-002	5	SD	18:07	21	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-004	1	MS	18:13	22	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-034	1	MSD	18:19	23	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-002	1	PS	18:25	24	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
RINSE	1	NA	18:31	25		AQUEO	AQUEO	SW846	27442		0
CCV V-176971	1	CCV	18:36	26							V-176971(CCV)
LLCCV V-176972	1	LLCCV	18:42	27		AQUEO	AQUEO	SW846	27442		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	18:48	28							V-176968(ICB/CCB)
AC75646-006	1	SMP	18:54	29	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-008	1	SMP	19:00	30	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-010	1	SMP	19:06	31	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-012	1	SMP	19:12	32	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-014	1	SMP	19:18	33	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-016	1	SMP	19:23	34	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-018	1	SMP	19:30	35	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-020	1	SMP	19:35	36	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-022	1	SMP	19:41	37	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
RINSE	1	NA	19:47	38		AQUEO	AQUEO	SW846	27442		0
CCV V-176971	1	CCV	19:53	39							V-176971(CCV)
LLCCV V-176972	1	LLCCV	19:59	40		AQUEO	AQUEO	SW846	27442		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	20:05	41							V-176968(ICB/CCB)
AC75646-024	1	SMP	20:11	42	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-026	1	SMP	20:17	43	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-028	1	SMP	20:22	44	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-030	1	SMP	20:28	45	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
AC75646-032	1	SMP	20:34	46	MET-TAL6020W	AQUEO	AQUEO	SW846	27442		0
RINSE	1	NA	20:40	47		AQUEO	AQUEO	SW846	27442		0
CCV V-176971	1	CCV	20:46	48							V-176971(CCV)
LLCCV V-176972	1	LLCCV	20:52	49		AQUEO	AQUEO	SW846	27442		V-176972(LL-ICV/CCV AQ.)
CCB V-176968	1	CCB	20:58	50							V-176968(ICB/CCB)

Comments/Reviewedby:

Standard/Batch/SnCl2 Lot #:

pcousineau
192.168.1.123 11/25/2013 10:41:15 AM

All ok.

11/25/13

File SW15726A2

Batch 15726 SW846

Method: PE2 4300DV AXIAL

Page 1

Date: 11/22/2013 3:11:31 PM

Analyst JBL 11/22/13

=====
Analysis Begun

Start Time: 11/22/2013 3:09:04 PM

Plasma On Time: 11/22/2013 9:51:33 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\11.22.13.sif

Batch ID: PEICP 2

Results Data Set: SW15726A2

Results Library: C:\pe\administrator\Results\Results.mdb

=====
Method Loaded

Method Name: PE2 4300DV AXIAL

Method Last Saved: 11/19/2013 10:24:13 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: 11/22/2013 3:09:04 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
Sc 361.383	1003440.3	146.04	0.01%	100 %
Y 371.029	347727.3	394.32	0.11%	100 %
Ag 328.068†	1482.0	32.79	2.21%	[0.00] mg/L
Al 308.215†	7874.3	68.68	0.87%	[0.00] mg/L
As 188.979†	15.3	1.63	10.67%	[0.00] mg/L
Ba 233.527†	-431.1	9.61	2.23%	[0.00] mg/L
Be 313.107†	-1056.1	23.39	2.21%	[0.00] mg/L
Ca 315.887†	-9928.5	637.63	6.42%	[0.00] mg/L
Cd 228.802†	479.1	2.90	0.60%	[0.00] mg/L
Co 228.616†	53.8	2.57	4.78%	[0.00] mg/L
Cr 267.716†	-289.8	12.22	4.22%	[0.00] mg/L
Cu 327.393†	-6923.0	86.71	1.25%	[0.00] mg/L
Fe 273.955†	522.5	11.09	2.12%	[0.00] mg/L
K 404.721†	-4822.6	45.45	0.94%	[0.00] mg/L
Mg 279.077†	-1999.0	50.06	2.50%	[0.00] mg/L
Mn 257.610†	897.9	1.13	0.13%	[0.00] mg/L
Mo 202.031†	114.8	3.50	3.05%	[0.00] mg/L
Na 330.237†	458.2	15.50	3.38%	[0.00] mg/L
Ni 231.604†	147.4	1.45	0.98%	[0.00] mg/L
Pb 220.353†	228.7	5.58	2.44%	[0.00] mg/L
Sb 206.836†	1.6	0.50	30.67%	[0.00] mg/L
Se 196.026†	17.3	2.89	16.68%	[0.00] mg/L
Sn 189.927†	18.6	1.68	9.02%	[0.00] mg/L
Ti 334.940†	-567.2	24.63	4.34%	[0.00] mg/L
Tl 190.801†	-3.0	1.79	60.07%	[0.00] mg/L
V 290.880†	3022.1	37.49	1.24%	[0.00] mg/L
Zn 206.200†	93.7	7.95	8.49%	[0.00] mg/L

15726
27441

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: 11/22/2013 3:12:27 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	1020628.2	1501.35	0.15%	102	%
Y 371.029	350065.2	768.78	0.22%	101	%
As 188.979†	5.2	0.28	5.45%	[0.005]	mg/L
Be 313.107†	8444.8	31.03	0.37%	[0.003]	mg/L
Cd 228.802†	152.9	2.08	1.36%	[0.003]	mg/L
Pb 220.353†	48.8	8.08	16.55%	[0.004]	mg/L
Tl 190.801†	7.9	1.63	20.49%	[0.005]	mg/L

Sequence No.: 3

Sample ID: Calib 2 V-173273

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 11/22/2013 3:15:51 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	999520.1	3848.79	0.39%	99.6 %
Y 371.029	343293.6	719.39	0.21%	98.7 %
Ag 328.068†	399.2	20.33	5.09%	[0.002] mg/L
Al 308.215†	3312.4	4.39	0.13%	[0.10] mg/L
As 188.979†	12.0	2.37	19.73%	[0.010] mg/L
Ba 233.527†	1387.6	5.01	0.36%	[0.010] mg/L
Be 313.107†	26146.7	89.88	0.34%	[0.010] mg/L
Ca 315.887†	91842.9	630.92	0.69%	[1.0] mg/L
Cd 228.802†	502.2	0.28	0.05%	[0.010] mg/L
Co 228.616†	426.6	3.55	0.83%	[0.010] mg/L
Cr 267.716†	792.4	7.93	1.00%	[0.010] mg/L
Cu 327.393†	1437.9	53.02	3.69%	[0.010] mg/L
Fe 273.955†	2441.0	4.19	0.17%	[0.10] mg/L
K 404.721†	51.4	1.94	3.79%	[1.0] mg/L
Mg 279.077†	15587.3	76.23	0.49%	[1.0] mg/L
Mn 257.610†	7574.2	66.99	0.88%	[0.010] mg/L
Mo 202.031†	179.7	1.26	0.70%	[0.010] mg/L
Na 330.237†	742.2	25.64	3.45%	[1.0] mg/L
Ni 231.604†	451.7	12.04	2.67%	[0.010] mg/L
Pb 220.353†	114.2	3.03	2.65%	[0.010] mg/L
Sb 206.836†	19.9	1.57	7.85%	[0.010] mg/L
Se 196.026†	11.0	2.05	18.59%	[0.010] mg/L
Sn 189.927†	40.5	0.37	0.91%	[0.010] mg/L
Ti 334.940†	7338.9	290.59	3.96%	[0.010] mg/L
Tl 190.801†	13.9	5.38	38.61%	[0.010] mg/L
V 290.880†	1396.2	29.84	2.14%	[0.010] mg/L
Zn 206.200†	440.6	3.72	0.84%	[0.010] mg/L

Sequence No.: 4

Sample ID: Calib 3 V-173274

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 11/22/2013 3:19:16 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	951568.8	3317.91	0.35%	94.8	%
Y 371.029	316652.7	2057.87	0.65%	91.1	%
Ag 328.068†	19956.7	26.20	0.13%	[0.10]	mg/L
Al 308.215†	147406.5	959.90	0.65%	[5.0]	mg/L
As 188.979†	675.2	4.04	0.60%	[0.50]	mg/L
Ba 233.527†	71181.8	488.09	0.69%	[0.50]	mg/L
Be 313.107†	1417886.0	1806.88	0.13%	[0.50]	mg/L
Ca 315.887†	5136201.3	11134.98	0.22%	[50]	mg/L
Cd 228.802†	27249.3	246.95	0.91%	[0.50]	mg/L
Co 228.616†	21644.5	91.12	0.42%	[0.50]	mg/L
Cr 267.716†	41319.2	163.76	0.40%	[0.50]	mg/L
Cu 327.393†	69433.2	498.62	0.72%	[0.50]	mg/L
Fe 273.955†	119964.7	996.81	0.83%	[5.0]	mg/L
K 404.721†	4871.3	93.52	1.92%	[50]	mg/L
Mg 279.077†	836934.9	2071.35	0.25%	[50]	mg/L
Mn 257.610†	379886.6	3037.25	0.80%	[0.50]	mg/L
Mo 202.031†	9882.8	44.53	0.45%	[0.50]	mg/L
Na 330.237†	56060.7	360.78	0.64%	[50]	mg/L
Ni 231.604†	23028.6	106.51	0.46%	[0.50]	mg/L
Pb 220.353†	5883.3	49.09	0.83%	[0.50]	mg/L
Sb 206.836†	1104.8	7.32	0.66%	[0.50]	mg/L
Se 196.026†	601.2	21.80	3.63%	[0.50]	mg/L
Sn 189.927†	1974.3	10.70	0.54%	[0.50]	mg/L
Ti 334.940†	375733.4	2054.34	0.55%	[0.50]	mg/L
Tl 190.801†	752.4	10.13	1.35%	[0.50]	mg/L
V 290.880†	74361.0	553.03	0.74%	[0.50]	mg/L
Zn 206.200†	24131.6	118.91	0.49%	[0.50]	mg/L

Sequence No.: 5

Sample ID: Calib 4 V-174144

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 11/22/2013 3:22:46 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib 4 V-174144

Analyte	Mean Corrected	Std.Dev.	RSD	Conc.	Units
Sc 361.383	919384.5	2408.79	0.26%	91.6	%
Y 371.029	308215.9	1140.34	0.37%	88.6	%
Ag 328.068†	38375.3	26.35	0.07%	[0.20]	mg/L
Al 308.215†	280233.4	887.40	0.32%	[10]	mg/L
As 188.979†	1307.7	3.68	0.28%	[1.0]	mg/L
Ba 233.527†	135140.7	57.61	0.04%	[1.0]	mg/L
Be 313.107†	2707017.3	383.96	0.01%	[1.0]	mg/L
Ca 315.887†	9693215.1	39136.24	0.40%	[100]	mg/L
Cd 228.802†	52408.4	115.13	0.22%	[1.0]	mg/L
Co 228.616†	41018.7	76.39	0.19%	[1.0]	mg/L
Cr 267.716†	78522.5	141.85	0.18%	[1.0]	mg/L
Cu 327.393†	132857.8	53.73	0.04%	[1.0]	mg/L
Fe 273.955†	226693.9	214.60	0.09%	[10]	mg/L
K 404.721†	9939.3	33.77	0.34%	[100]	mg/L
Mg 279.077†	1583864.3	1033.35	0.07%	[100]	mg/L
Mn 257.610†	721782.6	183.93	0.03%	[1.0]	mg/L
Mo 202.031†	18959.9	19.26	0.10%	[1.0]	mg/L
Na 330.237†	113861.1	332.48	0.29%	[100]	mg/L
Ni 231.604†	43582.3	65.35	0.15%	[1.0]	mg/L
Pb 220.353†	11232.8	9.98	0.09%	[1.0]	mg/L
Sb 206.836†	2121.6	7.55	0.36%	[1.0]	mg/L
Se 196.026†	1145.5	4.67	0.41%	[1.0]	mg/L
Sn 189.927†	3790.0	11.99	0.32%	[1.0]	mg/L
Ti 334.940†	725228.3	1226.23	0.17%	[1.0]	mg/L
Tl 190.801†	1414.7	11.43	0.81%	[1.0]	mg/L
V 290.880†	139251.4	51.38	0.04%	[1.0]	mg/L
Zn 206.200†	45950.1	40.70	0.09%	[1.0]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	147.0	192500	0.00000	0.999789	
Al 308.215	3	Lin, Calc Int	1558.3	28130	0.00000	0.999652	
As 188.979	4	Lin, Calc Int	1.9	1314	0.00000	0.999870	
Ba 233.527	3	Lin, Calc Int	673.7	135800	0.00000	0.999623	
Be 313.107	4	Lin, Calc Int	7835.7	2723000	0.00000	0.999734	
Ca 315.887	3	Lin, Calc Int	50396.1	97480	0.00000	0.999524	
Cd 228.802	4	Lin, Calc Int	122.0	52680	0.00000	0.999812	
Co 228.616	3	Lin, Calc Int	214.1	41210	0.00000	0.999597	
Cr 267.716	3	Lin, Calc Int	377.8	78890	0.00000	0.999637	
Cu 327.393	3	Lin, Calc Int	596.4	133300	0.00000	0.999733	
Fe 273.955	3	Lin, Calc Int	1283.5	22780	0.00000	0.999554	
K 404.721	3	Lin, Calc Int	-39.7	99.48	0.00000	0.999951	
Mg 279.077	3	Lin, Calc Int	8076.5	15920	0.00000	0.999571	
Mn 257.610	3	Lin, Calc Int	3619.0	725000	0.00000	0.999636	
Mo 202.031	3	Lin, Calc Int	68.8	19040	0.00000	0.999757	
Na 330.237	3	Lin, Calc Int	-338.3	1139	0.00000	0.999971	
Ni 231.604	3	Lin, Calc Int	232.4	43800	0.00000	0.999576	
Pb 220.353	4	Lin, Calc Int	35.0	11300	0.00000	0.999737	
Sb 206.836	3	Lin, Calc Int	7.4	2130	0.00000	0.999769	
Se 196.026	3	Lin, Calc Int	5.0	1151	0.00000	0.999669	
Sn 189.927	3	Lin, Calc Int	15.6	3803	0.00000	0.999771	
Ti 334.940	3	Lin, Calc Int	2427.1	727500	0.00000	0.999827	
Tl 190.801	4	Lin, Calc Int	5.8	1426	0.00000	0.999529	
V 290.880	3	Lin, Calc Int	863.5	140100	0.00000	0.999389	
Zn 206.200	3	Lin, Calc Int	201.9	46170	0.00000	0.999661	

Sequence No.: 6

Sample ID: ICS3 V-173274

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 11/22/2013 3:27:14 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	945023.6	94.2 %		1.04			1.11%
Y 371.029	315262.7	90.7 %		0.05			0.06%
Ag 328.068†	20152.9	0.104367 mg/L		0.0011722	0.104367 mg/L	0.0011722	1.12%
QC value within limits for Ag							
Al 308.215†	149182.2	5.23986 mg/L		0.053666	5.23986 mg/L	0.053666	1.02%
QC value within limits for Al							
As 188.979†	678.3	0.513922 mg/L		0.0126232	0.513922 mg/L	0.0126232	2.46%
QC value within limits for As							
Ba 233.527†	71971.2	0.524929 mg/L		0.0034744	0.524929 mg/L	0.0034744	0.66%
QC value within limits for Ba							
Be 313.107†	1428195.8	0.521376 mg/L		0.0002005	0.521376 mg/L	0.0002005	0.04%
QC value within limits for Be							
Ca 315.887†	5169527.7	52.5000 mg/L		0.00868	52.5000 mg/L	0.00868	0.02%
QC value within limits for Ca							
Cd 228.802†	27453.2	0.518476 mg/L		0.0041371	0.518476 mg/L	0.0041371	0.80%
QC value within limits for Cd							
Co 228.616†	21746.4	0.523349 mg/L		0.0047641	0.523349 mg/L	0.0047641	0.91%
QC value within limits for Co							
Cr 267.716†	41559.0	0.524895 mg/L		0.0040795	0.524895 mg/L	0.0040795	0.78%
QC value within limits for Cr							
Cu 327.393†	70080.3	0.520362 mg/L		0.0047931	0.520362 mg/L	0.0047931	0.92%
QC value within limits for Cu							
Fe 273.955†	120525.8	5.23471 mg/L		0.048431	5.23471 mg/L	0.048431	0.93%
QC value within limits for Fe							
K 404.721†	4994.6	50.6085 mg/L		1.21526	50.6085 mg/L	1.21526	2.40%
QC value within limits for K							
Mg 279.077†	842555.8	52.4189 mg/L		0.04253	52.4189 mg/L	0.04253	0.08%
QC value within limits for Mg							
Mn 257.610†	383318.5	0.521930 mg/L		0.0046637	0.521930 mg/L	0.0046637	0.89%
QC value within limits for Mn							
Mo 202.031†	9994.7	0.519292 mg/L		0.0078676	0.519292 mg/L	0.0078676	1.52%
QC value within limits for Mo							
Na 330.237†	56644.7	50.0208 mg/L		0.44702	50.0208 mg/L	0.44702	0.89%
QC value within limits for Na							
Ni 231.604†	23255.4	0.526285 mg/L		0.0058121	0.526285 mg/L	0.0058121	1.10%
QC value within limits for Ni							
Pb 220.353†	5956.2	0.524026 mg/L		0.0088513	0.524026 mg/L	0.0088513	1.69%
QC value within limits for Pb							
Sb 206.836†	1115.6	0.520847 mg/L		0.0095198	0.520847 mg/L	0.0095198	1.83%
QC value within limits for Sb							
Se 196.026†	604.0	0.519922 mg/L		0.0096114	0.519922 mg/L	0.0096114	1.85%
QC value within limits for Se							
Sn 189.927†	1999.9	0.523622 mg/L		0.0108697	0.523622 mg/L	0.0108697	2.08%
QC value within limits for Sn							
Ti 334.940†	379475.8	0.518248 mg/L		0.0048330	0.518248 mg/L	0.0048330	0.93%
QC value within limits for Ti							
Tl 190.801†	761.6	0.535293 mg/L		0.0120909	0.535293 mg/L	0.0120909	2.26%
QC value within limits for Tl							
V 290.880†	75243.0	0.524013 mg/L		0.0037131	0.524013 mg/L	0.0037131	0.71%
QC value within limits for V							
Zn 206.200†	24344.1	0.522479 mg/L		0.0029904	0.522479 mg/L	0.0029904	0.57%
QC value within limits for Zn							

All analyte(s) passed QC.

Sequence No.: 7
 Sample ID: ICV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/22/2013 3:30:43 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	939561.5	93.6 %		0.32			0.34%
Y 371.029	314387.5	90.4 %		0.34			0.37%
Ag 328.068†	19068.3	0.0987159 mg/L		0.00058339	0.0987159 mg/L	0.00058339	0.59%
QC value within limits for Ag		328.068	Recovery = 98.72%				
Al 308.215†	143117.7	5.02452 mg/L		0.029820	5.02452 mg/L	0.029820	0.59%
QC value within limits for Al		308.215	Recovery = 100.49%				
As 188.979†	655.3	0.496425 mg/L		0.0031504	0.496425 mg/L	0.0031504	0.63%
QC value within limits for As		188.979	Recovery = 99.28%				
Ba 233.527†	69270.8	0.505047 mg/L		0.0028830	0.505047 mg/L	0.0028830	0.57%
QC value within limits for Ba		233.527	Recovery = 101.01%				
Be 313.107†	1354044.9	0.494157 mg/L		0.0042642	0.494157 mg/L	0.0042642	0.86%
QC value within limits for Be		313.107	Recovery = 98.83%				
Ca 315.887†	4966951.0	50.4224 mg/L		0.41528	50.4224 mg/L	0.41528	0.82%
QC value within limits for Ca		315.887	Recovery = 100.84%				
Cd 228.802†	26488.2	0.500171 mg/L		0.0025228	0.500171 mg/L	0.0025228	0.50%
QC value within limits for Cd		228.802	Recovery = 100.03%				
Co 228.616†	20767.1	0.499575 mg/L		0.0012335	0.499575 mg/L	0.0012335	0.25%
QC value within limits for Co		228.616	Recovery = 99.92%				
Cr 267.716†	39968.7	0.504640 mg/L		0.0016603	0.504640 mg/L	0.0016603	0.33%
QC value within limits for Cr		267.716	Recovery = 100.93%				
Cu 327.393†	66288.5	0.491958 mg/L		0.0025944	0.491958 mg/L	0.0025944	0.53%
QC value within limits for Cu		327.393	Recovery = 98.39%				
Fe 273.955†	116009.1	5.03642 mg/L		0.010414	5.03642 mg/L	0.010414	0.21%
QC value within limits for Fe		273.955	Recovery = 100.73%				
K 404.721†	4623.0	46.8733 mg/L		2.05061	46.8733 mg/L	2.05061	4.37%
QC value within limits for K		404.721	Recovery = 93.75%				
Mg 279.077†	822634.2	51.1674 mg/L		0.42959	51.1674 mg/L	0.42959	0.84%
QC value within limits for Mg		279.077	Recovery = 102.33%				
Mn 257.610†	362870.3	0.493767 mg/L		0.0020978	0.493767 mg/L	0.0020978	0.42%
QC value within limits for Mn		257.610	Recovery = 98.75%				
Mo 202.031†	9675.8	0.502627 mg/L		0.0021896	0.502627 mg/L	0.0021896	0.44%
QC value within limits for Mo		202.031	Recovery = 100.53%				
Na 330.237†	53816.5	47.5382 mg/L		0.26662	47.5382 mg/L	0.26662	0.56%
QC value within limits for Na		330.237	Recovery = 95.08%				
Ni 231.604†	22187.0	0.501870 mg/L		0.0016766	0.501870 mg/L	0.0016766	0.33%
QC value within limits for Ni		231.604	Recovery = 100.37%				
Pb 220.353†	5715.4	0.502704 mg/L		0.0016358	0.502704 mg/L	0.0016358	0.33%
QC value within limits for Pb		220.353	Recovery = 100.54%				
Sb 206.836†	1095.7	0.511461 mg/L		0.0022466	0.511461 mg/L	0.0022466	0.44%
QC value within limits for Sb		206.836	Recovery = 102.29%				
Se 196.026†	577.5	0.496922 mg/L		0.0019578	0.496922 mg/L	0.0019578	0.39%
QC value within limits for Se		196.026	Recovery = 99.38%				
Sn 189.927†	1963.7	0.514026 mg/L		0.0005453	0.514026 mg/L	0.0005453	0.11%
QC value within limits for Sn		189.927	Recovery = 102.81%				
Ti 334.940†	361298.2	0.493264 mg/L		0.0031311	0.493264 mg/L	0.0031311	0.63%
QC value within limits for Ti		334.940	Recovery = 98.65%				
Tl 190.801†	736.4	0.517418 mg/L		0.0023934	0.517418 mg/L	0.0023934	0.46%
QC value within limits for Tl		190.801	Recovery = 103.48%				
V 290.880†	71147.7	0.494944 mg/L		0.0033623	0.494944 mg/L	0.0033623	0.68%
QC value within limits for V		290.880	Recovery = 98.99%				
Zn 206.200†	23161.0	0.496869 mg/L		0.0021805	0.496869 mg/L	0.0021805	0.44%
QC value within limits for Zn		206.200	Recovery = 99.37%				

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: LLICV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/22/2013 3:34:10 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
Sc 361.383	1000037.2	99.7 %	0.05			0.05%
Y 371.029	342167.6	98.4 %	0.00			0.00%
Ag 328.068†	3866.8	0.0193435 mg/L	0.00026032	0.0193435 mg/L	0.00026032	1.35%
QC value within limits for Ag		328.068 Recovery = 96.72%				
Al 308.215†	5647.0	0.145079 mg/L	0.0034456	0.145079 mg/L	0.0034456	2.38%
QC value within limits for Al		308.215 Recovery = 72.54%				
As 188.979†	23.7	0.0165572 mg/L	0.00047980	0.0165572 mg/L	0.00047980	2.90%
QC value within limits for As		188.979 Recovery = 82.79%				
Ba 233.527†	6950.9	0.0462236 mg/L	0.00007206	0.0462236 mg/L	0.00007206	0.16%
QC value within limits for Ba		233.527 Recovery = 92.45%				
Be 313.107†	31216.8	0.0085700 mg/L	0.00000316	0.0085700 mg/L	0.00000316	0.04%
QC value within limits for Be		313.107 Recovery = 71.42%				
Ca 315.887†	496390.7	4.57452 mg/L	0.008488	4.57452 mg/L	0.008488	0.19%
QC value within limits for Ca		315.887 Recovery = 91.49%				
Cd 228.802†	601.8	0.0090825 mg/L	0.00004283	0.0090825 mg/L	0.00004283	0.47%
QC value within limits for Cd		228.802 Recovery = 75.69%				
Co 228.616†	846.1	0.0153114 mg/L	0.00006658	0.0153114 mg/L	0.00006658	0.43%
QC value within limits for Co		228.616 Recovery = 76.56%				
Cr 267.716†	3977.1	0.0457270 mg/L	0.00034101	0.0457270 mg/L	0.00034101	0.75%
QC value within limits for Cr		267.716 Recovery = 91.45%				
Cu 327.393†	6704.7	0.0457358 mg/L	0.00002934	0.0457358 mg/L	0.00002934	0.06%
QC value within limits for Cu		327.393 Recovery = 91.47%				
Fe 273.955†	7133.0	0.256794 mg/L	0.0006091	0.256794 mg/L	0.0006091	0.24%
QC value within limits for Fe		273.955 Recovery = 85.60%				
K 404.721†	549.7	5.92534 mg/L	0.401053	5.92534 mg/L	0.401053	6.77%
QC value within limits for K		404.721 Recovery = 118.51%				
Mg 279.077†	82115.4	4.65060 mg/L	0.019718	4.65060 mg/L	0.019718	0.42%
QC value within limits for Mg		279.077 Recovery = 93.01%				
Mn 257.610†	29339.5	0.0353088 mg/L	0.00000877	0.0353088 mg/L	0.00000877	0.02%
QC value within limits for Mn		257.610 Recovery = 88.27%				
Mo 202.031†	397.0	0.0170633 mg/L	0.00028664	0.0170633 mg/L	0.00028664	1.68%
QC value within limits for Mo		202.031 Recovery = 85.32%				
Na 330.237†	4490.2	4.23849 mg/L	0.000944	4.23849 mg/L	0.000944	0.02%
QC value within limits for Na		330.237 Recovery = 84.77%				
Ni 231.604†	2246.5	0.0460070 mg/L	0.00006971	0.0460070 mg/L	0.00006971	0.15%
QC value within limits for Ni		231.604 Recovery = 92.01%				
Pb 220.353†	138.8	0.0091282 mg/L	0.00081053	0.0091282 mg/L	0.00081053	8.88%
QC value within limits for Pb		220.353 Recovery = 76.07%				
Sb 206.836†	39.7	0.0151422 mg/L	0.00000033	0.0151422 mg/L	0.00000033	0.00%
QC value within limits for Sb		206.836 Recovery = 75.71%				
Se 196.026†	47.8	0.0370983 mg/L	0.00110834	0.0370983 mg/L	0.00110834	2.99%
QC value within limits for Se		196.026 Recovery = 92.75%				
Sn 189.927†	173.2	0.0415906 mg/L	0.00007603	0.0415906 mg/L	0.00007603	0.18%
QC value within limits for Sn		189.927 Recovery = 83.18%				
Ti 334.940†	33996.9	0.0433923 mg/L	0.00001904	0.0433923 mg/L	0.00001904	0.04%
QC value within limits for Ti		334.940 Recovery = 86.78%				
Tl 190.801†	31.0	0.0180245 mg/L	0.00073668	0.0180245 mg/L	0.00073668	4.09%
QC value within limits for Tl		190.801 Recovery = 90.12%				
V 290.880†	7281.3	0.0451984 mg/L	0.00055440	0.0451984 mg/L	0.00055440	1.23%
QC value within limits for V		290.880 Recovery = 90.40%				
Zn 206.200†	2308.2	0.0456051 mg/L	0.00013415	0.0456051 mg/L	0.00013415	0.29%
QC value within limits for Zn		206.200 Recovery = 91.21%				

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICB V-174666

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 11/22/2013 3:37:37 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB V-174666

Mean Data: 105 V 17.1000												
Mean Corrected				Calib		Sample						
Analyte		Intensity		Conc. Units		Std.Dev.		Conc. Units		Std.Dev.		RSD
Sc 361.383		1007702.4		100 %		0.4						0.36%
Y 371.029		349021.2		100 %		0.5						0.51%
Ag 328.068†		1.6	-0.0007602	mg/L	0.00058361	-0.0007602	mg/L	0.00058361				76.77%
QC value within limits for Ag 328.068		Recovery = Not calculated										
Al 308.215†		-65.5	-0.0576708	mg/L	0.00055627	-0.0576708	mg/L	0.00055627				0.96%
QC value within limits for Al 308.215		Recovery = Not calculated										
As 188.979†		-0.9	-0.0021116	mg/L	0.00013196	-0.0021116	mg/L	0.00013196				6.25%
QC value within limits for As 188.979		Recovery = Not calculated										
Ba 233.527†		1.5	-0.0049486	mg/L	0.00000926	-0.0049486	mg/L	0.00000926				0.19%
QC value within limits for Ba 233.527		Recovery = Not calculated										
Be 313.107†		-15.6	-0.0028818	mg/L	0.00003475	-0.0028818	mg/L	0.00003475				1.21%
QC value within limits for Be 313.107		Recovery = Not calculated										
Ca 315.887†		-273.4	-0.519653	mg/L	0.0083725	-0.519653	mg/L	0.0083725				1.61%
QC value within limits for Ca 315.887		Recovery = Not calculated										
Cd 228.802†		-8.8	-0.0024808	mg/L	0.00015152	-0.0024808	mg/L	0.00015152				6.11%
QC value within limits for Cd 228.802		Recovery = Not calculated										
Co 228.616†		2.3	-0.0051451	mg/L	0.00030637	-0.0051451	mg/L	0.00030637				5.95%
QC value within limits for Co 228.616		Recovery = Not calculated										
Cr 267.716†		-14.0	-0.0049869	mg/L	0.00007438	-0.0049869	mg/L	0.00007438				1.49%
QC value within limits for Cr 267.716		Recovery = Not calculated										
Cu 327.393†		-54.3	-0.0048727	mg/L	0.00074694	-0.0048727	mg/L	0.00074694				15.33%
QC value within limits for Cu 327.393		Recovery = Not calculated										
Fe 273.955†		2.8	-0.0562203	mg/L	0.00034450	-0.0562203	mg/L	0.00034450				0.61%
QC value within limits for Fe 273.955		Recovery = Not calculated										
K 404.721†		117.6	1.58172	mg/L	0.399037	1.58172	mg/L	0.399037				25.23%
QC value within limits for K 404.721		Recovery = Not calculated										
Mg 279.077†		42.5	-0.504641	mg/L	0.0003301	-0.504641	mg/L	0.0003301				0.07%
QC value within limits for Mg 279.077		Recovery = Not calculated										
Mn 257.610†		-5.1	-0.0049810	mg/L	0.00000399	-0.0049810	mg/L	0.00000399				0.08%
QC value within limits for Mn 257.610		Recovery = Not calculated										
Mo 202.031†		-0.1	-0.0035991	mg/L	0.00012776	-0.0035991	mg/L	0.00012776				3.55%
QC value within limits for Mo 202.031		Recovery = Not calculated										
Na 330.237†		-67.9	0.237309	mg/L	0.0065506	0.237309	mg/L	0.0065506				2.76%
QC value within limits for Na 330.237		Recovery = Not calculated										
Ni 231.604†		-0.3	-0.0053186	mg/L	0.00010169	-0.0053186	mg/L	0.00010169				1.91%
QC value within limits for Ni 231.604		Recovery = Not calculated										
Pb 220.353†		-0.4	-0.0031324	mg/L	0.00059473	-0.0031324	mg/L	0.00059473				18.99%
QC value within limits for Pb 220.353		Recovery = Not calculated										
Sb 206.836†		-2.8	-0.0047838	mg/L	0.00100802	-0.0047838	mg/L	0.00100802				21.07%
QC value within limits for Sb 206.836		Recovery = Not calculated										
Se 196.026†		2.8	-0.0018792	mg/L	0.00502954	-0.0018792	mg/L	0.00502954				267.64%
QC value within limits for Se 196.026		Recovery = Not calculated										
Sn 189.927†		2.7	-0.0034190	mg/L	0.00040892	-0.0034190	mg/L	0.00040892				11.96%
QC value within limits for Sn 189.927		Recovery = Not calculated										
Ti 334.940†		-9.4	-0.0033489	mg/L	0.00004584	-0.0033489	mg/L	0.00004584				1.37%
QC value within limits for Ti 334.940		Recovery = Not calculated										
Tl 190.801†		-2.2	-0.0056379	mg/L	0.00140581	-0.0056379	mg/L	0.00140581				24.94%
QC value within limits for Tl 190.801		Recovery = Not calculated										
V 290.880†		-39.3	-0.0063773	mg/L	0.00029102	-0.0063773	mg/L	0.00029102				4.56%
QC value within limits for V 290.880		Recovery = Not calculated										
Zn 206.200†		-8.2	-0.0045470	mg/L	0.00008392	-0.0045470	mg/L	0.00008392				1.85%
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: 11/22/2013 3:40:59 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	844461.3	84.2 %	0.87			1.03%
Y 371.029	282179.0	81.1 %	0.49			0.60%
Ag 328.068†	-3276.5	-0.0015468 mg/L	0.00033362	-0.0015468 mg/L	0.00033362	21.57%
Al 308.215†	13995969.8	497.542 mg/L	4.4013	497.542 mg/L	4.4013	0.88%
QC value within limits for Al 308.215 Recovery = 99.51%						
As 188.979†	34.6	-0.0056091 mg/L	0.00328399	-0.0056091 mg/L	0.00328399	58.55%
Ba 233.527†	1728.7	0.0006846 mg/L	0.00000142	0.0006846 mg/L	0.00000142	0.21%
Be 313.107†	-1978.5	-0.0036029 mg/L	0.00001940	-0.0036029 mg/L	0.00001940	0.54%
Ca 315.887†	46384364.1	474.969 mg/L	3.4206	474.969 mg/L	3.4206	0.72%
QC value within limits for Ca 315.887 Recovery = 94.99%						
Cd 228.802†	229.0	-0.0037823 mg/L	0.00007243	-0.0037823 mg/L	0.00007243	1.91%
Co 228.616†	-38.5	-0.0060240 mg/L	0.00029858	-0.0060240 mg/L	0.00029858	4.96%
Cr 267.716†	-220.8	-0.0074538 mg/L	0.00010927	-0.0074538 mg/L	0.00010927	1.47%
Cu 327.393†	755.1	-0.0113240 mg/L	0.00276056	-0.0113240 mg/L	0.00276056	24.38%
Fe 273.955†	4258491.5	186.890 mg/L	0.8510	186.890 mg/L	0.8510	0.46%
QC value within limits for Fe 273.955 Recovery = 93.45%						
K 404.721†	-2121.0	-20.9223 mg/L	1.57396	-20.9223 mg/L	1.57396	7.52%
Mg 279.077†	8061791.2	505.723 mg/L	1.6470	505.723 mg/L	1.6470	0.33%
QC value within limits for Mg 279.077 Recovery = 101.14%						
Mn 257.610†	1458.9	-0.0217354 mg/L	0.00001002	-0.0217354 mg/L	0.00001002	0.05%
Mo 202.031†	568.6	0.0006896 mg/L	0.00014372	0.0006896 mg/L	0.00014372	20.84%
Na 330.237†	107.8	0.391593 mg/L	0.0597913	0.391593 mg/L	0.0597913	15.27%
Ni 231.604†	49.2	-0.0041525 mg/L	0.00024886	-0.0041525 mg/L	0.00024886	5.99%
Pb 220.353†	-507.8	-0.0070293 mg/L	0.00114916	-0.0070293 mg/L	0.00114916	16.35%
Sb 206.836†	-57.2	-0.0072537 mg/L	0.00126651	-0.0072537 mg/L	0.00126651	17.46%
Se 196.026†	-9.6	-0.0070326 mg/L	0.01066510	-0.0070326 mg/L	0.01066510	151.65%
Sn 189.927†	-5.4	-0.0045281 mg/L	0.00044257	-0.0045281 mg/L	0.00044257	9.77%
Ti 334.940†	659.0	-0.0024301 mg/L	0.00005107	-0.0024301 mg/L	0.00005107	2.10%
Tl 190.801†	21.4	-0.0115831 mg/L	0.00184811	-0.0115831 mg/L	0.00184811	15.96%
V 290.880†	12868.4	0.0121363 mg/L	0.00349704	0.0121363 mg/L	0.00349704	28.81%
Zn 206.200†	635.3	-0.0064142 mg/L	0.00033893	-0.0064142 mg/L	0.00033893	5.28%

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: ICSAB V-173231

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 11/22/2013 3:45:52 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	841816.2	83.9 %	0.08			0.10%
Y 371.029	280686.6	80.7 %	0.17			0.21%
Ag 328.068†	212379.3	1.11860 mg/L	0.005565	1.11860 mg/L	0.005565	0.50%
QC value within limits for Ag 328.068 Recovery = 111.86%						
Al 308.215†	14056493.0	499.693 mg/L	3.2618	499.693 mg/L	3.2618	0.65%
QC value within limits for Al 308.215 Recovery = 99.94%						
As 188.979†	1424.2	1.05186 mg/L	0.008287	1.05186 mg/L	0.008287	0.79%
QC value within limits for As 188.979 Recovery = 105.19%						
Ba 233.527†	74134.7	0.533970 mg/L	0.0036307	0.533970 mg/L	0.0036307	0.68%
QC value within limits for Ba 233.527 Recovery = 106.79%						
Be 313.107†	1437349.6	0.524925 mg/L	0.0028220	0.524925 mg/L	0.0028220	0.54%
QC value within limits for Be 313.107 Recovery = 104.99%						
Ca 315.887†	46506342.3	476.217 mg/L	3.4808	476.217 mg/L	3.4808	0.73%
QC value within limits for Ca 315.887 Recovery = 95.24%						
Cd 228.802†	57128.3	1.07633 mg/L	0.007371	1.07633 mg/L	0.007371	0.68%
QC value within limits for Cd 228.802 Recovery = 107.63%						
Co 228.616†	20373.6	0.489245 mg/L	0.0034611	0.489245 mg/L	0.0034611	0.71%
QC value within limits for Co 228.616 Recovery = 97.85%						
Cr 267.716†	40090.4	0.503719 mg/L	0.0029308	0.503719 mg/L	0.0029308	0.58%
QC value within limits for Cr 267.716 Recovery = 100.74%						
Cu 327.393†	74128.4	0.538905 mg/L	0.0050131	0.538905 mg/L	0.0050131	0.93%
QC value within limits for Cu 327.393 Recovery = 107.78%						
Fe 273.955†	4262398.8	187.062 mg/L	1.3773	187.062 mg/L	1.3773	0.74%
QC value within limits for Fe 273.955 Recovery = 93.53%						
K 404.721†	-1960.0	-19.3042 mg/L	1.97773	-19.3042 mg/L	1.97773	10.25%
Mg 279.077†	8078255.7	506.759 mg/L	3.2584	506.759 mg/L	3.2584	0.64%
QC value within limits for Mg 279.077 Recovery = 101.35%						
Mn 257.610†	371591.0	0.488745 mg/L	0.0044448	0.488745 mg/L	0.0044448	0.91%
QC value within limits for Mn 257.610 Recovery = 97.75%						
Mo 202.031†	572.3	0.0008005 mg/L	0.00005635	0.0008005 mg/L	0.00005635	7.04%
Na 330.237†	1155.1	1.31092 mg/L	0.017165	1.31092 mg/L	0.017165	1.31%
Ni 231.604†	42440.3	0.963755 mg/L	0.0079014	0.963755 mg/L	0.0079014	0.82%
QC value within limits for Ni 231.604 Recovery = 96.38%						
Pb 220.353†	10634.6	0.979536 mg/L	0.0055824	0.979536 mg/L	0.0055824	0.57%
QC value within limits for Pb 220.353 Recovery = 97.95%						
Sb 206.836†	2232.6	1.06768 mg/L	0.008167	1.06768 mg/L	0.008167	0.76%
QC value within limits for Sb 206.836 Recovery = 106.77%						
Se 196.026†	1165.2	1.01342 mg/L	0.012903	1.01342 mg/L	0.012903	1.27%
QC value within limits for Se 196.026 Recovery = 101.34%						
Sn 189.927†	1.9	-0.0026262 mg/L	0.00086332	-0.0026262 mg/L	0.00086332	32.87%
Ti 334.940†	764.2	-0.0022856 mg/L	0.00003969	-0.0022856 mg/L	0.00003969	1.74%
Tl 190.801†	1427.8	0.974249 mg/L	0.0096863	0.974249 mg/L	0.0096863	0.99%
QC value within limits for Tl 190.801 Recovery = 97.42%						
V 290.880†	82042.0	0.505876 mg/L	0.0070924	0.505876 mg/L	0.0070924	1.40%
QC value within limits for V 290.880 Recovery = 101.18%						
Zn 206.200†	45385.2	0.962814 mg/L	0.0061747	0.962814 mg/L	0.0061747	0.64%
QC value within limits for Zn 206.200 Recovery = 96.28%						

All analyte(s) passed QC.

Sequence No.: 12
 Sample ID: MB 27441 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 58
 Date Collected: 11/22/2013 3:50:49 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 27441 (1)

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1025449.5	102	%	0.7				0.72%
Y 371.029	351837.1	101	%	0.7				0.65%
Ag 328.068†	-29.5	-0.0009209	mg/L	0.00013390	-0.0009209	mg/L	0.00013390	14.54%
Al 308.215†	459.1	-0.0390165	mg/L	0.00070375	-0.0390165	mg/L	0.00070375	1.80%
As 188.979†	0.6	-0.0010014	mg/L	0.00023080	-0.0010014	mg/L	0.00023080	23.05%
Ba 233.527†	13.1	-0.0048633	mg/L	0.00006201	-0.0048633	mg/L	0.00006201	1.28%
Be 313.107†	-11.0	-0.0028801	mg/L	0.00000536	-0.0028801	mg/L	0.00000536	0.19%
Ca 315.887†	3204.0	-0.483992	mg/L	0.0051312	-0.483992	mg/L	0.0051312	1.06%
Cd 228.802†	-8.8	-0.0024814	mg/L	0.00009395	-0.0024814	mg/L	0.00009395	3.79%
Co 228.616†	1.1	-0.0051740	mg/L	0.00013593	-0.0051740	mg/L	0.00013593	2.63%
Cr 267.716†	-4.0	-0.0048619	mg/L	0.00005907	-0.0048619	mg/L	0.00005907	1.22%
Cu 327.393†	102.6	-0.0036966	mg/L	0.00041055	-0.0036966	mg/L	0.00041055	11.11%
Fe 273.955†	153.1	-0.0496219	mg/L	0.00043940	-0.0496219	mg/L	0.00043940	0.89%
K 404.721†	108.2	1.48681	mg/L	2.064600	1.48681	mg/L	2.064600	138.86%
Mg 279.077†	320.0	-0.487221	mg/L	0.0010436	-0.487221	mg/L	0.0010436	0.21%
Mn 257.610†	50.7	-0.0049047	mg/L	0.00001430	-0.0049047	mg/L	0.00001430	0.29%
Mo 202.031†	-5.1	-0.0038610	mg/L	0.00015193	-0.0038610	mg/L	0.00015193	3.93%
Na 330.237†	-101.6	0.207714	mg/L	0.0330669	0.207714	mg/L	0.0330669	15.92%
Ni 231.604†	7.6	-0.0051381	mg/L	0.00021912	-0.0051381	mg/L	0.00021912	4.26%
Pb 220.353†	-2.7	-0.0033365	mg/L	0.00050601	-0.0033365	mg/L	0.00050601	15.17%
Sb 206.836†	-0.6	-0.0037643	mg/L	0.00143374	-0.0037643	mg/L	0.00143374	38.09%
Se 196.026†	2.0	-0.0026336	mg/L	0.00179730	-0.0026336	mg/L	0.00179730	68.24%
Sn 189.927†	3.6	-0.0031941	mg/L	0.00034370	-0.0031941	mg/L	0.00034370	10.76%
Ti 334.940†	9.0	-0.0033235	mg/L	0.00007067	-0.0033235	mg/L	0.00007067	2.13%
Tl 190.801†	-3.0	-0.0061910	mg/L	0.00191784	-0.0061910	mg/L	0.00191784	30.98%
V 290.880†	3.3	-0.0060755	mg/L	0.00025405	-0.0060755	mg/L	0.00025405	4.18%
Zn 206.200†	229.4	0.0006000	mg/L	0.00000387	0.0006000	mg/L	0.00000387	0.65%

Sequence No.: 13
 Sample ID: LCSW 27441
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 59
 Date Collected: 11/22/2013 3:54:13 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW 27441

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	956092.2	95.3 %		0.49			0.51%
Y 371.029	320349.4	92.1 %		0.16			0.18%
Ag 328.068†	19133.7	0.0990585 mg/L		0.00095631	0.0990585 mg/L	0.00095631	0.97%
Al 308.215†	144517.5	5.07436 mg/L		0.026899	5.07436 mg/L	0.026899	0.53%
As 188.979†	642.5	0.486697 mg/L		0.0012659	0.486697 mg/L	0.0012659	0.26%
Ba 233.527†	69712.9	0.508303 mg/L		0.0025990	0.508303 mg/L	0.0025990	0.51%
Be 313.107†	1337728.0	0.488164 mg/L		0.0003039	0.488164 mg/L	0.0003039	0.06%
Ca 315.887†	4917115.7	49.9112 mg/L		0.00776	49.9112 mg/L	0.00776	0.02%
Cd 228.802†	26577.8	0.501875 mg/L		0.0014663	0.501875 mg/L	0.0014663	0.29%
Co 228.616†	20943.4	0.503831 mg/L		0.0020678	0.503831 mg/L	0.0020678	0.41%
Cr 267.716†	40300.8	0.508827 mg/L		0.0025202	0.508827 mg/L	0.0025202	0.50%
Cu 327.393†	67099.2	0.498041 mg/L		0.0004640	0.498041 mg/L	0.0004640	0.09%
Fe 273.955†	116739.2	5.06847 mg/L		0.030486	5.06847 mg/L	0.030486	0.60%
K 404.721†	4776.7	48.4185 mg/L		3.63076	48.4185 mg/L	3.63076	7.50%
Mg 279.077†	812737.9	50.5457 mg/L		0.01846	50.5457 mg/L	0.01846	0.04%
Mn 257.610†	365140.7	0.496920 mg/L		0.0028548	0.496920 mg/L	0.0028548	0.57%
Mo 202.031†	9588.9	0.498076 mg/L		0.0026917	0.498076 mg/L	0.0026917	0.54%
Na 330.237†	53911.1	47.6212 mg/L		0.35420	47.6212 mg/L	0.35420	0.74%
Ni 231.604†	22357.1	0.505749 mg/L		0.0006569	0.505749 mg/L	0.0006569	0.13%
Pb 220.353†	5645.6	0.496539 mg/L		0.0027098	0.496539 mg/L	0.0027098	0.55%
Sb 206.836†	1081.2	0.504680 mg/L		0.0050459	0.504680 mg/L	0.0050459	1.00%
Se 196.026†	570.5	0.490845 mg/L		0.0031573	0.490845 mg/L	0.0031573	0.64%
Sn 189.927†	1915.1	0.501233 mg/L		0.0031609	0.501233 mg/L	0.0031609	0.63%
Ti 334.940†	363191.2	0.495865 mg/L		0.0005327	0.495865 mg/L	0.0005327	0.11%
Tl 190.801†	726.4	0.510433 mg/L		0.0030963	0.510433 mg/L	0.0030963	0.61%
V 290.880†	71623.3	0.498421 mg/L		0.0046829	0.498421 mg/L	0.0046829	0.94%
Zn 206.200†	23371.6	0.501431 mg/L		0.0001868	0.501431 mg/L	0.0001868	0.04%

Sequence No.: 14

Sample ID: LCSW MR 27441

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 60

Date Collected: 11/22/2013 3:57:43 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCSW MR 27441

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	968757.4	96.5	%	0.28			0.29%
Y 371.029	319221.3	91.8	%	1.05			1.15%
Ag 328.068†	18714.7	0.0968728	mg/L	0.00060980	0.0968728	0.00060980	0.63%
Al 308.215†	140692.4	4.93856	mg/L	0.044601	4.93856	0.044601	0.90%
As 188.979†	632.8	0.479352	mg/L	0.0063200	0.479352	0.0063200	1.32%
Ba 233.527†	67938.8	0.495240	mg/L	0.0040870	0.495240	0.0040870	0.83%
Be 313.107†	1327362.2	0.484363	mg/L	0.0001943	0.484363	0.0001943	0.04%
Ca 315.887†	4880149.3	49.5323	mg/L	0.02247	49.5323	0.02247	0.05%
Cd 228.802†	25906.1	0.489130	mg/L	0.0050658	0.489130	0.0050658	1.04%
Co 228.616†	20476.5	0.492486	mg/L	0.0047563	0.492486	0.0047563	0.97%
Cr 267.716†	39273.9	0.495746	mg/L	0.0022306	0.495746	0.0022306	0.45%
Cu 327.393†	65541.3	0.486364	mg/L	0.0056532	0.486364	0.0056532	1.16%
Fe 273.955†	114260.2	4.95965	mg/L	0.056388	4.95965	0.056388	1.14%
K 404.721†	4829.5	48.9488	mg/L	0.19871	48.9488	0.19871	0.41%
Mg 279.077†	807800.4	50.2355	mg/L	0.02439	50.2355	0.02439	0.05%
Mn 257.610†	356859.0	0.485506	mg/L	0.0047131	0.485506	0.0047131	0.97%
Mo 202.031†	9368.5	0.486518	mg/L	0.0001249	0.486518	0.0001249	0.03%
Na 330.237†	52686.8	46.5465	mg/L	0.40147	46.5465	0.40147	0.86%
Ni 231.604†	21810.0	0.493244	mg/L	0.0038886	0.493244	0.0038886	0.79%
Pb 220.353†	5514.7	0.484933	mg/L	0.0026384	0.484933	0.0026384	0.54%
Sb 206.836†	1055.2	0.492466	mg/L	0.0022606	0.492466	0.0022606	0.46%
Se 196.026†	553.0	0.475712	mg/L	0.0061284	0.475712	0.0061284	1.29%
Sn 189.927†	1863.8	0.487729	mg/L	0.0009148	0.487729	0.0009148	0.19%
Ti 334.940†	353405.0	0.482414	mg/L	0.0045567	0.482414	0.0045567	0.94%
Tl 190.801†	717.0	0.503669	mg/L	0.0017574	0.503669	0.0017574	0.35%
V 290.880†	69729.6	0.484944	mg/L	0.0034066	0.484944	0.0034066	0.70%
Zn 206.200†	22866.5	0.490500	mg/L	0.0053252	0.490500	0.0053252	1.09%

Sequence No.: 15
 Sample ID: 75646-001
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 61
 Date Collected: 11/22/2013 4:01:14 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-001

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	991266.8	98.8	%	0.03				0.03%
Y 371.029	336015.8	96.6	%	0.22				0.23%
Ag 328.068†	-63.6	-0.0008111	mg/L	0.00027137	-0.0008111	mg/L	0.00027137	33.46%
Al 308.215†	3283.5	0.0613534	mg/L	0.00010748	0.0613534	mg/L	0.00010748	0.18%
As 188.979†	2.6	0.0005795	mg/L	0.00037737	0.0005795	mg/L	0.00037737	65.12%
Ba 233.527†	4013.3	0.0244739	mg/L	0.00004843	0.0244739	mg/L	0.00004843	0.20%
Be 313.107†	322.9	-0.0027590	mg/L	0.00002394	-0.0027590	mg/L	0.00002394	0.87%
Ca 315.887†	1226415.8	12.0590	mg/L	0.00102	12.0590	mg/L	0.00102	0.01%
Cd 228.802†	4.8	-0.0023074	mg/L	0.00001472	-0.0023074	mg/L	0.00001472	0.64%
Co 228.616†	42.0	-0.0041820	mg/L	0.00036378	-0.0041820	mg/L	0.00036378	8.70%
Cr 267.716†	20.3	-0.0044748	mg/L	0.00017717	-0.0044748	mg/L	0.00017717	3.96%
Cu 327.393†	421.7	-0.0014779	mg/L	0.00145039	-0.0014779	mg/L	0.00145039	98.14%
Fe 273.955†	75400.1	3.25370	mg/L	0.021029	3.25370	mg/L	0.021029	0.65%
K 404.721†	172.2	2.12991	mg/L	1.800723	2.12991	mg/L	1.800723	84.54%
Mg 279.077†	70654.1	3.92920	mg/L	0.019493	3.92920	mg/L	0.019493	0.50%
Mn 257.610†	127927.0	0.171311	mg/L	0.0006153	0.171311	mg/L	0.0006153	0.36%
Mo 202.031†	46.3	-0.0016059	mg/L	0.00034160	-0.0016059	mg/L	0.00034160	21.27%
Na 330.237†	37185.7	32.9393	mg/L	0.09017	32.9393	mg/L	0.09017	0.27%
Ni 231.604†	65.0	-0.0038244	mg/L	0.00048267	-0.0038244	mg/L	0.00048267	12.62%
Pb 220.353†	35.4	-0.0003225	mg/L	0.00068454	-0.0003225	mg/L	0.00068454	212.29%
Sb 206.836†	1.0	-0.0027010	mg/L	0.00099254	-0.0027010	mg/L	0.00099254	36.75%
Se 196.026†	5.3	0.0005585	mg/L	0.00365964	0.0005585	mg/L	0.00365964	655.26%
Sn 189.927†	1.7	-0.0033560	mg/L	0.00028930	-0.0033560	mg/L	0.00028930	8.62%
Ti 334.940†	2906.2	0.0006586	mg/L	0.00110204	0.0006586	mg/L	0.00110204	167.34%
Tl 190.801†	-3.2	-0.0064208	mg/L	0.00406148	-0.0064208	mg/L	0.00406148	63.26%
V 290.880†	738.2	-0.0014842	mg/L	0.00014464	-0.0014842	mg/L	0.00014464	9.74%
Zn 206.200†	679.5	0.0102165	mg/L	0.00010575	0.0102165	mg/L	0.00010575	1.04%

Sequence No.: 16
 Sample ID: 75646-001 MR
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 62
 Date Collected: 11/22/2013 4:04:40 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-001 MR

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	996115.5	99.3	%	0.14			0.14%
Y 371.029	337293.8	97.0	%	0.24			0.25%
Ag 328.068†	-70.2	-0.0008460	mg/L	0.00045208	-0.0008460 mg/L	0.00045208	53.44%
Al 308.215†	3496.8	0.0689403	mg/L	0.00121108	0.0689403 mg/L	0.00121108	1.76%
As 188.979†	1.6	-0.0001985	mg/L	0.00047477	-0.0001985 mg/L	0.00047477	239.13%
Ba 233.527†	3950.3	0.0240100	mg/L	0.00014599	0.0240100 mg/L	0.00014599	0.61%
Be 313.107†	236.5	-0.0027898	mg/L	0.00002660	-0.0027898 mg/L	0.00002660	0.95%
Ca 315.887†	1221498.8	12.0086	mg/L	0.06313	12.0086 mg/L	0.06313	0.53%
Cd 228.802†	4.7	-0.0023095	mg/L	0.00009839	-0.0023095 mg/L	0.00009839	4.26%
Co 228.616†	48.8	-0.0040106	mg/L	0.00024012	-0.0040106 mg/L	0.00024012	5.99%
Cr 267.716†	30.4	-0.0043487	mg/L	0.00002488	-0.0043487 mg/L	0.00002488	0.57%
Cu 327.393†	301.0	-0.0023809	mg/L	0.00130675	-0.0023809 mg/L	0.00130675	54.88%
Fe 273.955†	75214.7	3.24556	mg/L	0.020572	3.24556 mg/L	0.020572	0.63%
K 404.721†	69.0	1.09307	mg/L	0.118151	1.09307 mg/L	0.118151	10.81%
Mg 279.077†	71041.6	3.95354	mg/L	0.021314	3.95354 mg/L	0.021314	0.54%
Mn 257.610†	127427.8	0.170621	mg/L	0.0005349	0.170621 mg/L	0.0005349	0.31%
Mo 202.031†	42.5	-0.0017997	mg/L	0.00043902	-0.0017997 mg/L	0.00043902	24.39%
Na 330.237†	37353.0	33.0861	mg/L	0.09160	33.0861 mg/L	0.09160	0.28%
Ni 231.604†	46.9	-0.0042374	mg/L	0.00007359	-0.0042374 mg/L	0.00007359	1.74%
Pb 220.353†	14.4	-0.0021839	mg/L	0.00041102	-0.0021839 mg/L	0.00041102	18.82%
Sb 206.836†	-0.4	-0.0033501	mg/L	0.00242664	-0.0033501 mg/L	0.00242664	72.44%
Se 196.026†	2.6	-0.0018086	mg/L	0.00064157	-0.0018086 mg/L	0.00064157	35.47%
Sn 189.927†	-4.9	-0.0050898	mg/L	0.00029156	-0.0050898 mg/L	0.00029156	5.73%
Ti 334.940†	1025.2	-0.0019269	mg/L	0.00020229	-0.0019269 mg/L	0.00020229	10.50%
Tl 190.801†	-2.8	-0.0061824	mg/L	0.00020960	-0.0061824 mg/L	0.00020960	3.39%
V 290.880†	722.2	-0.0016014	mg/L	0.00033296	-0.0016014 mg/L	0.00033296	20.79%
Zn 206.200†	638.0	0.0093175	mg/L	0.00025031	0.0093175 mg/L	0.00025031	2.69%

Sequence No.: 17
 Sample ID: 75646-003 MS 1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 63
 Date Collected: 11/22/2013 4:08:05 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-003 MS 1

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	957202.2	95.4 %		0.36			0.38%
Y 371.029	317528.9	91.3 %		0.21			0.23%
Ag 328.068†	18558.3	0.0963506 mg/L		0.00002349	0.0963506 mg/L	0.00002349	0.02%
Al 308.215†	142238.8	4.99356 mg/L		0.012349	4.99356 mg/L	0.012349	0.25%
As 188.979†	646.0	0.489410 mg/L		0.0007410	0.489410 mg/L	0.0007410	0.15%
Ba 233.527†	72537.8	0.528986 mg/L		0.0012632	0.528986 mg/L	0.0012632	0.24%
Be 313.107†	1336216.8	0.487614 mg/L		0.0008214	0.487614 mg/L	0.0008214	0.17%
Ca 315.887†	6156080.0	62.6161 mg/L		0.20640	62.6161 mg/L	0.20640	0.33%
Cd 228.802†	25979.2	0.490428 mg/L		0.0017089	0.490428 mg/L	0.0017089	0.35%
Co 228.616†	20466.0	0.492226 mg/L		0.0002791	0.492226 mg/L	0.0002791	0.06%
Cr 267.716†	39160.2	0.494363 mg/L		0.0026364	0.494363 mg/L	0.0026364	0.53%
Cu 327.393†	65751.5	0.487760 mg/L		0.0014503	0.487760 mg/L	0.0014503	0.30%
Fe 273.955†	190342.5	8.29964 mg/L		0.007872	8.29964 mg/L	0.007872	0.09%
K 404.721†	4860.5	49.2601 mg/L		1.10409	49.2601 mg/L	1.10409	2.24%
Mg 279.077†	880952.3	54.8289 mg/L		0.21485	54.8289 mg/L	0.21485	0.39%
Mn 257.610†	488457.9	0.666848 mg/L		0.0016208	0.666848 mg/L	0.0016208	0.24%
Mo 202.031†	9341.4	0.484639 mg/L		0.0003853	0.484639 mg/L	0.0003853	0.08%
Na 330.237†	97955.5	86.2842 mg/L		0.40695	86.2842 mg/L	0.40695	0.47%
Ni 231.604†	21674.5	0.490147 mg/L		0.0009047	0.490147 mg/L	0.0009047	0.18%
Pb 220.353†	5500.3	0.483285 mg/L		0.0018745	0.483285 mg/L	0.0018745	0.39%
Sb 206.836†	1074.5	0.501821 mg/L		0.0003004	0.501821 mg/L	0.0003004	0.06%
Se 196.026†	562.3	0.484043 mg/L		0.0026445	0.484043 mg/L	0.0026445	0.55%
Sn 189.927†	1868.2	0.489226 mg/L		0.0021671	0.489226 mg/L	0.0021671	0.44%
Ti 334.940†	353058.8	0.481939 mg/L		0.0003760	0.481939 mg/L	0.0003760	0.08%
Tl 190.801†	709.2	0.498123 mg/L		0.0011471	0.498123 mg/L	0.0011471	0.23%
V 290.880†	70123.8	0.487080 mg/L		0.0003512	0.487080 mg/L	0.0003512	0.07%
Zn 206.200†	23432.7	0.502633 mg/L		0.0014871	0.502633 mg/L	0.0014871	0.30%

Sequence No.: 18
 Sample ID: 75646-033 MS 2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 64
 Date Collected: 11/22/2013 4:11:37 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-033 MS 2

Analyte	Mean Corrected Intensity	Conc. Units	Calib Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	949853.0	94.7 %	0.14			0.15%
Y 371.029	316102.5	90.9 %	0.90			0.99%
Ag 328.068†	18784.0	0.0975096 mg/L	0.00076823	0.0975096 mg/L	0.00076823	0.79%
Al 308.215†	143615.6	5.04242 mg/L	0.021678	5.04242 mg/L	0.021678	0.43%
As 188.979†	650.9	0.493135 mg/L	0.0074435	0.493135 mg/L	0.0074435	1.51%
Ba 233.527†	73065.2	0.532876 mg/L	0.0034990	0.532876 mg/L	0.0034990	0.66%
Be 313.107†	1334587.1	0.487013 mg/L	0.0020631	0.487013 mg/L	0.0020631	0.42%
Ca 315.887†	6065195.0	61.6839 mg/L	0.25285	61.6839 mg/L	0.25285	0.41%
Cd 228.802†	26291.0	0.496352 mg/L	0.0027743	0.496352 mg/L	0.0027743	0.56%
Co 228.616†	20698.5	0.497877 mg/L	0.0022774	0.497877 mg/L	0.0022774	0.46%
Cr 267.716†	39506.3	0.498775 mg/L	0.0029087	0.498775 mg/L	0.0029087	0.58%
Cu 327.393†	66103.0	0.490409 mg/L	0.0009875	0.490409 mg/L	0.0009875	0.20%
Fe 273.955†	186863.3	8.14690 mg/L	0.033118	8.14690 mg/L	0.033118	0.41%
K 404.721†	4915.0	49.8084 mg/L	0.04351	49.8084 mg/L	0.04351	0.09%
Mg 279.077†	875534.3	54.4886 mg/L	0.25228	54.4886 mg/L	0.25228	0.46%
Mn 257.610†	479706.5	0.654791 mg/L	0.0029479	0.654791 mg/L	0.0029479	0.45%
Mo 202.031†	9448.2	0.490275 mg/L	0.0020316	0.490275 mg/L	0.0020316	0.41%
Na 330.237†	95773.5	84.3689 mg/L	0.27259	84.3689 mg/L	0.27259	0.32%
Ni 231.604†	21938.5	0.496183 mg/L	0.0026970	0.496183 mg/L	0.0026970	0.54%
Pb 220.353†	5554.4	0.488110 mg/L	0.0035718	0.488110 mg/L	0.0035718	0.73%
Sb 206.836†	1087.9	0.508085 mg/L	0.0042257	0.508085 mg/L	0.0042257	0.83%
Se 196.026†	568.0	0.488966 mg/L	0.0060817	0.488966 mg/L	0.0060817	1.24%
Sn 189.927†	1899.5	0.497450 mg/L	0.0035735	0.497450 mg/L	0.0035735	0.72%
Ti 334.940†	357805.3	0.488462 mg/L	0.0029207	0.488462 mg/L	0.0029207	0.60%
Tl 190.801†	712.5	0.500510 mg/L	0.0011323	0.500510 mg/L	0.0011323	0.23%
V 290.880†	70863.1	0.492405 mg/L	0.0036257	0.492405 mg/L	0.0036257	0.74%
Zn 206.200†	23543.6	0.505038 mg/L	0.0008187	0.505038 mg/L	0.0008187	0.16%

Sequence No.: 19
 Sample ID: 75646-001 PS
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 65
 Date Collected: 11/22/2013 4:15:08 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-001 PS

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	942080.8	93.9 %		0.28			0.30%
Y 371.029	313646.6	90.2 %		0.11			0.12%
Ag 328.068†	17269.0	0.0897169 mg/L		0.00019575	0.0897169 mg/L	0.00019575	0.22%
Al 308.215†	166894.3	5.87010 mg/L		0.002090	5.87010 mg/L	0.002090	0.04%
As 188.979†	761.3	0.576976 mg/L		0.0016869	0.576976 mg/L	0.0016869	0.29%
Ba 233.527†	84007.9	0.613439 mg/L		0.0017069	0.613439 mg/L	0.0017069	0.28%
Be 313.107†	1562466.2	0.570693 mg/L		0.0024067	0.570693 mg/L	0.0024067	0.42%
Ca 315.887†	6889231.5	70.1355 mg/L		0.18196	70.1355 mg/L	0.18196	0.26%
Cd 228.802†	30606.2	0.578220 mg/L		0.0017042	0.578220 mg/L	0.0017042	0.29%
Co 228.616†	23925.9	0.576179 mg/L		0.0007653	0.576179 mg/L	0.0007653	0.13%
Cr 267.716†	45887.1	0.579673 mg/L		0.0015576	0.579673 mg/L	0.0015576	0.27%
Cu 327.393†	77120.2	0.572907 mg/L		0.0017691	0.572907 mg/L	0.0017691	0.31%
Fe 273.955†	206806.5	9.02240 mg/L		0.009996	9.02240 mg/L	0.009996	0.11%
K 404.721†	5790.3	58.6073 mg/L		2.05556	58.6073 mg/L	2.05556	3.51%
Mg 279.077†	1010954.4	62.9942 mg/L		0.23380	62.9942 mg/L	0.23380	0.37%
Mn 257.610†	541528.2	0.739745 mg/L		0.0017548	0.739745 mg/L	0.0017548	0.24%
Mo 202.031†	9386.3	0.486716 mg/L		0.0015206	0.486716 mg/L	0.0015206	0.31%
Na 330.237†	106236.3	93.5533 mg/L		0.02101	93.5533 mg/L	0.02101	0.02%
Ni 231.604†	25457.7	0.576533 mg/L		0.0018173	0.576533 mg/L	0.0018173	0.32%
Pb 220.353†	6454.0	0.567648 mg/L		0.0023774	0.567648 mg/L	0.0023774	0.42%
Sb 206.836†	1076.3	0.502705 mg/L		0.0023711	0.502705 mg/L	0.0023711	0.47%
Se 196.026†	651.4	0.561283 mg/L		0.0105911	0.561283 mg/L	0.0105911	1.89%
Sn 189.927†	1876.8	0.491730 mg/L		0.0011590	0.491730 mg/L	0.0011590	0.24%
Ti 334.940†	354774.7	0.484297 mg/L		0.0000081	0.484297 mg/L	0.0000081	0.00%
Tl 190.801†	832.5	0.584431 mg/L		0.0001764	0.584431 mg/L	0.0001764	0.03%
V 290.880†	81727.9	0.568826 mg/L		0.0001990	0.568826 mg/L	0.0001990	0.03%
Zn 206.200†	27285.9	0.586048 mg/L		0.0031658	0.586048 mg/L	0.0031658	0.54%

Sequence No.: 20

Sample ID: CCV V-173510

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 11/22/2013 4:18:39 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	953044.5	95.0 %		0.94			0.99%
Y 371.029	316293.8	91.0 %		0.51			0.56%
Ag 328.068†	19074.5	0.0987465 mg/L		0.00085543	0.0987465 mg/L	0.00085543	0.87%
QC value within limits for Ag		328.068	Recovery = 98.75%				
Al 308.215†	142332.1	4.99677 mg/L		0.079213	4.99677 mg/L	0.079213	1.59%
QC value within limits for Al		308.215	Recovery = 99.94%				
As 188.979†	637.8	0.483159 mg/L		0.0028763	0.483159 mg/L	0.0028763	0.60%
QC value within limits for As		188.979	Recovery = 96.63%				
Ba 233.527†	68913.2	0.502414 mg/L		0.0074359	0.502414 mg/L	0.0074359	1.48%
QC value within limits for Ba		233.527	Recovery = 100.48%				
Be 313.107†	1340076.4	0.489029 mg/L		0.0002744	0.489029 mg/L	0.0002744	0.06%
QC value within limits for Be		313.107	Recovery = 97.81%				
Ca 315.887†	4916667.3	49.9067 mg/L		0.04889	49.9067 mg/L	0.04889	0.10%
QC value within limits for Ca		315.887	Recovery = 99.81%				
Cd 228.802†	26342.9	0.497418 mg/L		0.0064175	0.497418 mg/L	0.0064175	1.29%
QC value within limits for Cd		228.802	Recovery = 99.48%				
Co 228.616†	20661.1	0.496971 mg/L		0.0066289	0.496971 mg/L	0.0066289	1.33%
QC value within limits for Co		228.616	Recovery = 99.39%				
Cr 267.716†	40002.0	0.505004 mg/L		0.0041060	0.505004 mg/L	0.0041060	0.81%
QC value within limits for Cr		267.716	Recovery = 101.00%				
Cu 327.393†	65648.4	0.487161 mg/L		0.0074939	0.487161 mg/L	0.0074939	1.54%
QC value within limits for Cu		327.393	Recovery = 97.43%				
Fe 273.955†	115511.9	5.01460 mg/L		0.057773	5.01460 mg/L	0.057773	1.15%
QC value within limits for Fe		273.955	Recovery = 100.29%				
K 404.721†	4676.9	47.4147 mg/L		1.50746	47.4147 mg/L	1.50746	3.18%
QC value within limits for K		404.721	Recovery = 94.83%				
Mg 279.077†	814480.9	50.6551 mg/L		0.01041	50.6551 mg/L	0.01041	0.02%
QC value within limits for Mg		279.077	Recovery = 101.31%				
Mn 257.610†	360570.9	0.490611 mg/L		0.0063270	0.490611 mg/L	0.0063270	1.29%
QC value within limits for Mn		257.610	Recovery = 98.12%				
Mo 202.031†	9469.5	0.491809 mg/L		0.0054883	0.491809 mg/L	0.0054883	1.12%
QC value within limits for Mo		202.031	Recovery = 98.36%				
Na 330.237†	53577.6	47.3284 mg/L		0.72192	47.3284 mg/L	0.72192	1.53%
QC value within limits for Na		330.237	Recovery = 94.66%				
Ni 231.604†	22115.8	0.500231 mg/L		0.0071547	0.500231 mg/L	0.0071547	1.43%
QC value within limits for Ni		231.604	Recovery = 100.05%				
Pb 220.353†	5568.1	0.489667 mg/L		0.0034067	0.489667 mg/L	0.0034067	0.70%
QC value within limits for Pb		220.353	Recovery = 97.93%				
Sb 206.836†	1080.2	0.504186 mg/L		0.0066266	0.504186 mg/L	0.0066266	1.31%
QC value within limits for Sb		206.836	Recovery = 100.84%				
Se 196.026†	566.9	0.487773 mg/L		0.0047039	0.487773 mg/L	0.0047039	0.96%
QC value within limits for Se		196.026	Recovery = 97.55%				
Sn 189.927†	1903.3	0.498148 mg/L		0.0003952	0.498148 mg/L	0.0003952	0.08%
QC value within limits for Sn		189.927	Recovery = 99.63%				
Ti 334.940†	358660.6	0.489638 mg/L		0.0077651	0.489638 mg/L	0.0077651	1.59%
QC value within limits for Ti		334.940	Recovery = 97.93%				
Tl 190.801†	724.5	0.508999 mg/L		0.0007169	0.508999 mg/L	0.0007169	0.14%
QC value within limits for Tl		190.801	Recovery = 101.80%				
V 290.880†	70670.2	0.491602 mg/L		0.0058328	0.491602 mg/L	0.0058328	1.19%
QC value within limits for V		290.880	Recovery = 98.32%				
Zn 206.200†	23063.4	0.494761 mg/L		0.0064898	0.494761 mg/L	0.0064898	1.31%
QC value within limits for Zn		206.200	Recovery = 98.95%				

All analyte(s) passed QC.

Sequence No.: 21

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/22/2013 4:22:07 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	999190.1	99.6 %	0.91			0.92%
Y 371.029	340980.3	98.1 %	0.91			0.92%
Ag 328.068†	3836.8	0.0191877 mg/L	0.00039238	0.0191877 mg/L	0.00039238	2.04%
QC value within limits for Ag 328.068 Recovery = 95.94%						
Al 308.215†	5819.3	0.151205 mg/L	0.0018822	0.151205 mg/L	0.0018822	1.24%
QC value within limits for Al 308.215 Recovery = 75.60%						
As 188.979†	24.1	0.0167989 mg/L	0.00139976	0.0167989 mg/L	0.00139976	8.33%
QC value within limits for As 188.979 Recovery = 83.99%						
Ba 233.527†	6998.6	0.0465752 mg/L	0.00005978	0.0465752 mg/L	0.00005978	0.13%
QC value within limits for Ba 233.527 Recovery = 93.15%						
Be 313.107†	31357.7	0.0086216 mg/L	0.00003308	0.0086216 mg/L	0.00003308	0.38%
QC value within limits for Be 313.107 Recovery = 71.85%						
Ca 315.887†	495012.6	4.56038 mg/L	0.005301	4.56038 mg/L	0.005301	0.12%
QC value within limits for Ca 315.887 Recovery = 91.21%						
Cd 228.802†	620.5	0.0094377 mg/L	0.00009094	0.0094377 mg/L	0.00009094	0.96%
QC value within limits for Cd 228.802 Recovery = 78.65%						
Co 228.616†	841.5	0.0151999 mg/L	0.00000194	0.0151999 mg/L	0.00000194	0.01%
QC value within limits for Co 228.616 Recovery = 76.00%						
Cr 267.716†	3995.7	0.0459635 mg/L	0.00051386	0.0459635 mg/L	0.00051386	1.12%
QC value within limits for Cr 267.716 Recovery = 91.93%						
Cu 327.393†	6866.5	0.0469488 mg/L	0.00005279	0.0469488 mg/L	0.00005279	0.11%
QC value within limits for Cu 327.393 Recovery = 93.90%						
Fe 273.955†	7153.5	0.257695 mg/L	0.0010427	0.257695 mg/L	0.0010427	0.40%
QC value within limits for Fe 273.955 Recovery = 85.90%						
K 404.721†	527.3	5.70016 mg/L	0.621853	5.70016 mg/L	0.621853	10.91%
QC value within limits for K 404.721 Recovery = 114.00%						
Mg 279.077†	82531.1	4.67671 mg/L	0.010449	4.67671 mg/L	0.010449	0.22%
QC value within limits for Mg 279.077 Recovery = 93.53%						
Mn 257.610†	29551.0	0.0355996 mg/L	0.00000683	0.0355996 mg/L	0.00000683	0.02%
QC value within limits for Mn 257.610 Recovery = 89.00%						
Mo 202.031†	399.9	0.0172153 mg/L	0.00034169	0.0172153 mg/L	0.00034169	1.98%
QC value within limits for Mo 202.031 Recovery = 86.08%						
Na 330.237†	4575.0	4.31299 mg/L	0.043354	4.31299 mg/L	0.043354	1.01%
QC value within limits for Na 330.237 Recovery = 86.26%						
Ni 231.604†	2264.0	0.0464069 mg/L	0.00071666	0.0464069 mg/L	0.00071666	1.54%
QC value within limits for Ni 231.604 Recovery = 92.81%						
Pb 220.353†	154.1	0.0104842 mg/L	0.00100267	0.0104842 mg/L	0.00100267	9.56%
QC value within limits for Pb 220.353 Recovery = 87.37%						
Sb 206.836†	43.6	0.0170181 mg/L	0.00115477	0.0170181 mg/L	0.00115477	6.79%
QC value within limits for Sb 206.836 Recovery = 85.09%						
Se 196.026†	54.1	0.0426040 mg/L	0.00274013	0.0426040 mg/L	0.00274013	6.43%
QC value within limits for Se 196.026 Recovery = 106.51%						
Sn 189.927†	173.2	0.0416114 mg/L	0.00155388	0.0416114 mg/L	0.00155388	3.73%
QC value within limits for Sn 189.927 Recovery = 83.22%						
Ti 334.940†	34247.0	0.0437360 mg/L	0.00009744	0.0437360 mg/L	0.00009744	0.22%
QC value within limits for Ti 334.940 Recovery = 87.47%						
Tl 190.801†	29.4	0.0168936 mg/L	0.00086674	0.0168936 mg/L	0.00086674	5.13%
QC value within limits for Tl 190.801 Recovery = 84.47%						
V 290.880†	7312.8	0.0454197 mg/L	0.00061779	0.0454197 mg/L	0.00061779	1.36%
QC value within limits for V 290.880 Recovery = 90.84%						
Zn 206.200†	2331.0	0.0460984 mg/L	0.00052671	0.0460984 mg/L	0.00052671	1.14%
QC value within limits for Zn 206.200 Recovery = 92.20%						

All analyte(s) passed QC.

Sequence No.: 22

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 11/22/2013 4:25:34 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	1005199.9	100 %		1.2			1.18%
Y 371.029	348497.1	100 %		1.2			1.17%
Ag 328.068†	-47.7	-0.0010163 mg/L	0.00010751	-0.0010163 mg/L	0.00010751		10.58%
QC value within limits for Ag 328.068			Recovery = Not calculated				
Al 308.215†	14.9	-0.0548159 mg/L	0.00090186	-0.0548159 mg/L	0.00090186		1.65%
QC value within limits for Al 308.215			Recovery = Not calculated				
As 188.979†	0.9	-0.0007433 mg/L	0.00063677	-0.0007433 mg/L	0.00063677		85.66%
QC value within limits for As 188.979			Recovery = Not calculated				
Ba 233.527†	-18.2	-0.0050936 mg/L	0.00001629	-0.0050936 mg/L	0.00001629		0.32%
QC value within limits for Ba 233.527			Recovery = Not calculated				
Be 313.107†	-4.6	-0.0028778 mg/L	0.00000796	-0.0028778 mg/L	0.00000796		0.28%
QC value within limits for Be 313.107			Recovery = Not calculated				
Ca 315.887†	-397.1	-0.520922 mg/L	0.0071692	-0.520922 mg/L	0.0071692		1.38%
QC value within limits for Ca 315.887			Recovery = Not calculated				
Cd 228.802†	1.2	-0.0022910 mg/L	0.00011751	-0.0022910 mg/L	0.00011751		5.13%
QC value within limits for Cd 228.802			Recovery = Not calculated				
Co 228.616†	-3.3	-0.0052800 mg/L	0.00034398	-0.0052800 mg/L	0.00034398		6.51%
QC value within limits for Co 228.616			Recovery = Not calculated				
Cr 267.716†	-5.1	-0.0048742 mg/L	0.00015781	-0.0048742 mg/L	0.00015781		3.24%
QC value within limits for Cr 267.716			Recovery = Not calculated				
Cu 327.393†	-64.6	-0.0049503 mg/L	0.00112163	-0.0049503 mg/L	0.00112163		22.66%
QC value within limits for Cu 327.393			Recovery = Not calculated				
Fe 273.955†	-17.2	-0.0570961 mg/L	0.00046055	-0.0570961 mg/L	0.00046055		0.81%
QC value within limits for Fe 273.955			Recovery = Not calculated				
K 404.721†	104.0	1.44427 mg/L	0.173215	1.44427 mg/L	0.173215		11.99%
QC value within limits for K 404.721			Recovery = Not calculated				
Mg 279.077†	-5.0	-0.507627 mg/L	0.0050813	-0.507627 mg/L	0.0050813		1.00%
QC value within limits for Mg 279.077			Recovery = Not calculated				
Mn 257.610†	-0.9	-0.0049751 mg/L	0.00000213	-0.0049751 mg/L	0.00000213		0.04%
QC value within limits for Mn 257.610			Recovery = Not calculated				
Mo 202.031†	0.9	-0.0035443 mg/L	0.00033884	-0.0035443 mg/L	0.00033884		9.56%
QC value within limits for Mo 202.031			Recovery = Not calculated				
Na 330.237†	-40.0	0.261806 mg/L	0.0176257	0.261806 mg/L	0.0176257		6.73%
QC value within limits for Na 330.237			Recovery = Not calculated				
Ni 231.604†	-2.0	-0.0053578 mg/L	0.00024261	-0.0053578 mg/L	0.00024261		4.53%
QC value within limits for Ni 231.604			Recovery = Not calculated				
Pb 220.353†	10.1	-0.0022097 mg/L	0.00121787	-0.0022097 mg/L	0.00121787		55.12%
QC value within limits for Pb 220.353			Recovery = Not calculated				
Sb 206.836†	-1.5	-0.0041727 mg/L	0.00174251	-0.0041727 mg/L	0.00174251		41.76%
QC value within limits for Sb 206.836			Recovery = Not calculated				
Se 196.026†	-0.5	-0.0047460 mg/L	0.00885056	-0.0047460 mg/L	0.00885056		186.49%
QC value within limits for Se 196.026			Recovery = Not calculated				
Sn 189.927†	3.8	-0.0031299 mg/L	0.00078525	-0.0031299 mg/L	0.00078525		25.09%
QC value within limits for Sn 189.927			Recovery = Not calculated				
Ti 334.940†	-15.8	-0.0033577 mg/L	0.00001224	-0.0033577 mg/L	0.00001224		0.36%
QC value within limits for Ti 334.940			Recovery = Not calculated				
Tl 190.801†	-0.5	-0.0044780 mg/L	0.00017131	-0.0044780 mg/L	0.00017131		3.83%
QC value within limits for Tl 190.801			Recovery = Not calculated				
V 290.880†	-10.2	-0.0061691 mg/L	0.00036832	-0.0061691 mg/L	0.00036832		5.97%
QC value within limits for V 290.880			Recovery = Not calculated				
Zn 206.200†	-7.6	-0.0045334 mg/L	0.00000682	-0.0045334 mg/L	0.00000682		0.15%
QC value within limits for Zn 206.200			Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 23
 Sample ID: 75646-001 SD
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 66
 Date Collected: 11/22/2013 4:28:57 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-001 SD

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1000914.6	99.7	%	0.09			0.09%
Y 371.029	341196.5	98.1	%	0.11			0.11%
Ag 328.068†	-21.7	-0.0008229	mg/L	0.00011007	-0.0008229	mg/L	0.00011007 13.38%
Al 308.215†	589.5	-0.0343946	mg/L	0.00148759	-0.0343946	mg/L	0.00148759 4.33%
As 188.979†	-2.1	-0.0030272	mg/L	0.00104422	-0.0030272	mg/L	0.00104422 34.49%
Ba 233.527†	777.4	0.0007404	mg/L	0.00006755	0.0007404	mg/L	0.00006755 9.12%
Be 313.107†	51.6	-0.0028572	mg/L	0.00002122	-0.0028572	mg/L	0.00002122 0.74%
Ca 315.887†	242851.8	1.97338	mg/L	0.008971	1.97338	mg/L	0.008971 0.45%
Cd 228.802†	-7.3	-0.0024699	mg/L	0.00008107	-0.0024699	mg/L	0.00008107 3.28%
Co 228.616†	12.8	-0.0048891	mg/L	0.00012992	-0.0048891	mg/L	0.00012992 2.66%
Cr 267.716†	-1.7	-0.0048140	mg/L	0.00018621	-0.0048140	mg/L	0.00018621 3.87%
Cu 327.393†	-126.5	-0.0054489	mg/L	0.00046908	-0.0054489	mg/L	0.00046908 8.61%
Fe 273.955†	15204.4	0.611125	mg/L	0.0032153	0.611125	mg/L	0.0032153 0.53%
K 404.721†	37.8	0.778929	mg/L	1.4654564	0.778929	mg/L	1.4654564 188.14%
Mg 279.077†	14442.0	0.399536	mg/L	0.0004789	0.399536	mg/L	0.0004789 0.12%
Mn 257.610†	25853.1	0.0306515	mg/L	0.00000419	0.0306515	mg/L	0.00000419 0.01%
Mo 202.031†	13.0	-0.0029983	mg/L	0.00012882	-0.0029983	mg/L	0.00012882 4.30%
Na 330.237†	6771.2	6.24079	mg/L	0.044562	6.24079	mg/L	0.044562 0.71%
Ni 231.604†	13.7	-0.0049977	mg/L	0.00013520	-0.0049977	mg/L	0.00013520 2.71%
Pb 220.353†	13.9	-0.0019463	mg/L	0.00019686	-0.0019463	mg/L	0.00019686 10.11%
Sb 206.836†	0.9	-0.0030249	mg/L	0.00004510	-0.0030249	mg/L	0.00004510 1.49%
Se 196.026†	0.3	-0.0040347	mg/L	0.00582860	-0.0040347	mg/L	0.00582860 144.46%
Sn 189.927†	3.8	-0.0030755	mg/L	0.00014968	-0.0030755	mg/L	0.00014968 4.87%
Ti 334.940†	220.7	-0.0030326	mg/L	0.00001939	-0.0030326	mg/L	0.00001939 0.64%
Tl 190.801†	-1.3	-0.0050244	mg/L	0.00093876	-0.0050244	mg/L	0.00093876 18.68%
V 290.880†	219.1	-0.0046668	mg/L	0.00042018	-0.0046668	mg/L	0.00042018 9.00%
Zn 206.200†	154.3	-0.0010544	mg/L	0.00007785	-0.0010544	mg/L	0.00007785 7.38%

Sequence No.: 24
 Sample ID: 75646-005
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 67
 Date Collected: 11/22/2013 4:32:22 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-005

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1001219.2	99.8	%	0.71				0.71%
Y 371.029	343650.3	98.8	%	0.67				0.68%
Ag 328.068†	-178.4	-0.0008946	mg/L	0.00008159	-0.0008946	mg/L	0.00008159	9.12%
Al 308.215†	10001.9	0.300213	mg/L	0.0063534	0.300213	mg/L	0.0063534	2.12%
As 188.979†	2.2	0.0005884	mg/L	0.00088793	0.0005884	mg/L	0.00088793	150.91%
Ba 233.527†	3286.9	0.0189001	mg/L	0.00020628	0.0189001	mg/L	0.00020628	1.09%
Be 313.107†	-14.8	-0.0028855	mg/L	0.00003766	-0.0028855	mg/L	0.00003766	1.31%
Ca 315.887†	1520108.4	15.0643	mg/L	0.07520	15.0643	mg/L	0.07520	0.50%
Cd 228.802†	51.2	-0.0014986	mg/L	0.00015671	-0.0014986	mg/L	0.00015671	10.46%
Co 228.616†	117.2	-0.0023688	mg/L	0.00004772	-0.0023688	mg/L	0.00004772	2.01%
Cr 267.716†	22.4	-0.0044491	mg/L	0.00000112	-0.0044491	mg/L	0.00000112	0.03%
Cu 327.393†	374.4	-0.0018791	mg/L	0.00067111	-0.0018791	mg/L	0.00067111	35.71%
Fe 273.955†	209896.5	9.15805	mg/L	0.028568	9.15805	mg/L	0.028568	0.31%
K 404.721†	108.9	1.49407	mg/L	0.263177	1.49407	mg/L	0.263177	17.61%
Mg 279.077†	63044.8	3.44712	mg/L	0.045082	3.44712	mg/L	0.045082	1.31%
Mn 257.610†	126281.4	0.169059	mg/L	0.0022057	0.169059	mg/L	0.0022057	1.30%
Mo 202.031†	48.6	-0.0015958	mg/L	0.00026032	-0.0015958	mg/L	0.00026032	16.31%
Na 330.237†	22562.2	20.1025	mg/L	0.20276	20.1025	mg/L	0.20276	1.01%
Ni 231.604†	79.2	-0.0034998	mg/L	0.00005061	-0.0034998	mg/L	0.00005061	1.45%
Pb 220.353†	27.3	-0.0015676	mg/L	0.00054063	-0.0015676	mg/L	0.00054063	34.49%
Sb 206.836†	0.6	-0.0023056	mg/L	0.00094257	-0.0023056	mg/L	0.00094257	40.88%
Se 196.026†	2.2	-0.0009679	mg/L	0.00479553	-0.0009679	mg/L	0.00479553	495.45%
Sn 189.927†	-8.3	-0.0059283	mg/L	0.00000577	-0.0059283	mg/L	0.00000577	0.10%
Ti 334.940†	7892.8	0.0075125	mg/L	0.00001892	0.0075125	mg/L	0.00001892	0.25%
Tl 190.801†	-3.1	-0.0061228	mg/L	0.00107228	-0.0061228	mg/L	0.00107228	17.51%
V 290.880†	747.9	-0.0015726	mg/L	0.00030642	-0.0015726	mg/L	0.00030642	19.48%
Zn 206.200†	791.8	0.0124139	mg/L	0.00004592	0.0124139	mg/L	0.00004592	0.37%

Sequence No.: 25
 Sample ID: 75646-007
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 68
 Date Collected: 11/22/2013 4:35:49 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-007

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1005928.7	100 %		0.0			0.05%
Y 371.029	341972.9	98.3 %		0.20			0.21%
Ag 328.068†	-120.2	-0.0010213 mg/L		0.00005774	-0.0010213 mg/L	0.00005774	5.65%
Al 308.215†	1961.0	0.0143378 mg/L		0.00065415	0.0143378 mg/L	0.00065415	4.56%
As 188.979†	2.2	0.0002621 mg/L		0.00075961	0.0002621 mg/L	0.00075961	289.86%
Ba 233.527†	2872.6	0.0160354 mg/L		0.00004199	0.0160354 mg/L	0.00004199	0.26%
Be 313.107†	-81.3	-0.0029065 mg/L		0.00002249	-0.0029065 mg/L	0.00002249	0.77%
Ca 315.887†	1494302.1	14.8060 mg/L		0.02084	14.8060 mg/L	0.02084	0.14%
Cd 228.802†	15.6	-0.0021233 mg/L		0.00010395	-0.0021233 mg/L	0.00010395	4.90%
Co 228.616†	95.4	-0.0028805 mg/L		0.00030599	-0.0028805 mg/L	0.00030599	10.62%
Cr 267.716†	10.1	-0.0046095 mg/L		0.00003056	-0.0046095 mg/L	0.00003056	0.66%
Cu 327.393†	346.2	-0.0020802 mg/L		0.00270646	-0.0020802 mg/L	0.00270646	130.11%
Fe 273.955†	97443.2	4.22139 mg/L		0.015315	4.22139 mg/L	0.015315	0.36%
K 404.721†	221.6	2.62724 mg/L		0.511449	2.62724 mg/L	0.511449	19.47%
Mg 279.077†	60302.9	3.27830 mg/L		0.000647	3.27830 mg/L	0.000647	0.02%
Mn 257.610†	120131.0	0.160582 mg/L		0.0000310	0.160582 mg/L	0.0000310	0.02%
Mo 202.031†	42.4	-0.0019056 mg/L		0.00016487	-0.0019056 mg/L	0.00016487	8.65%
Na 330.237†	21463.0	19.1376 mg/L		0.07404	19.1376 mg/L	0.07404	0.39%
Ni 231.604†	52.1	-0.0041180 mg/L		0.00003531	-0.0041180 mg/L	0.00003531	0.86%
Pb 220.353†	22.8	-0.0015313 mg/L		0.00023008	-0.0015313 mg/L	0.00023008	15.03%
Sb 206.836†	2.1	-0.0021205 mg/L		0.00011841	-0.0021205 mg/L	0.00011841	5.58%
Se 196.026†	6.1	0.0013975 mg/L		0.00171936	0.0013975 mg/L	0.00171936	123.03%
Sn 189.927†	-8.5	-0.0059690 mg/L		0.00103714	-0.0059690 mg/L	0.00103714	17.38%
Ti 334.940†	1160.5	-0.0017409 mg/L		0.00012996	-0.0017409 mg/L	0.00012996	7.47%
Tl 190.801†	-3.2	-0.0063860 mg/L		0.00298105	-0.0063860 mg/L	0.00298105	46.68%
V 290.880†	630.7	-0.0022049 mg/L		0.00005186	-0.0022049 mg/L	0.00005186	2.35%
Zn 206.200†	432.9	0.0048375 mg/L		0.00002409	0.0048375 mg/L	0.00002409	0.50%

Sequence No.: 26 Autosampler Location: 69
Sample ID: 75646-009 Date Collected: 11/22/2013 4:39:14 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Mean Data: 75646-009

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	1013257.6	101 %		0.6			0.63%
Y 371.029	350945.9	101 %		0.7			0.67%
Ag 328.068†	15.7	-0.0005773 mg/L		0.00006577	-0.0005773 mg/L	0.00006577	11.39%
Al 308.215†	24307.5	0.808819 mg/L		0.0007778	0.808819 mg/L	0.0007778	0.10%
As 188.979†	-0.1	-0.0017062 mg/L		0.00092434	-0.0017062 mg/L	0.00092434	54.17%
Ba 233.527†	3561.5	0.0212240 mg/L		0.00004111	0.0212240 mg/L	0.00004111	0.19%
Be 313.107†	111.9	-0.0028466 mg/L		0.00000520	-0.0028466 mg/L	0.00000520	0.18%
Ca 315.887†	1451255.9	14.3578 mg/L		0.02587	14.3578 mg/L	0.02587	0.18%
Cd 228.802†	3654.2	0.0669768 mg/L		0.00042096	0.0669768 mg/L	0.00042096	0.63%
Co 228.616†	62.9	-0.0037316 mg/L		0.00008587	-0.0037316 mg/L	0.00008587	2.30%
Cr 267.716†	256.7	-0.0007545 mg/L		0.00003104	-0.0007545 mg/L	0.00003104	4.11%
Cu 327.393†	1989.1	0.0102249 mg/L		0.00035475	0.0102249 mg/L	0.00035475	3.47%
Fe 273.955†	28719.1	1.20442 mg/L		0.009971	1.20442 mg/L	0.009971	0.83%
K 404.721†	384.1	4.25999 mg/L		1.936886	4.25999 mg/L	1.936886	45.47%
Mg 279.077†	42936.5	2.20111 mg/L		0.017651	2.20111 mg/L	0.017651	0.80%
Mn 257.610†	1560258.0	2.14697 mg/L		0.005380	2.14697 mg/L	0.005380	0.25%
Mo 202.031†	46.6	-0.0016895 mg/L		0.00027736	-0.0016895 mg/L	0.00027736	16.42%
Na 330.237†	19253.4	17.1980 mg/L		0.13684	17.1980 mg/L	0.13684	0.80%
Ni 231.604†	422.6	0.0043401 mg/L		0.00017186	0.0043401 mg/L	0.00017186	3.96%
Pb 220.353†	104.3	0.0060939 mg/L		0.00030517	0.0060939 mg/L	0.00030517	5.01%
Sb 206.836†	-1.1	-0.0038800 mg/L		0.00068141	-0.0038800 mg/L	0.00068141	17.56%
Se 196.026†	7.8	0.0012623 mg/L		0.00273328	0.0012623 mg/L	0.00273328	216.53%
Sn 189.927†	-3.2	-0.0046152 mg/L		0.00059932	-0.0046152 mg/L	0.00059932	12.99%
Ti 334.940†	23438.3	0.0288797 mg/L		0.00029089	0.0288797 mg/L	0.00029089	1.01%
Tl 190.801†	-1.0	-0.0069281 mg/L		0.00084724	-0.0069281 mg/L	0.00084724	12.23%
V 290.880†	623.1	-0.0014330 mg/L		0.00044098	-0.0014330 mg/L	0.00044098	30.77%
Zn 206.200†	1096.4	0.0193148 mg/L		0.00003222	0.0193148 mg/L	0.00003222	0.17%

Sequence No.: 27
 Sample ID: 75646-011
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 70
 Date Collected: 11/22/2013 4:42:41 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-011

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	992414.5	98.9	%	0.76			0.77%
Y 371.029	338160.1	97.2	%	0.65			0.67%
Ag 328.068†	18.2	-0.0006445	mg/L	0.00015939	-0.0006445 mg/L	0.00015939	24.73%
Al 308.215†	10752.9	0.326924	mg/L	0.0020547	0.326924 mg/L	0.0020547	0.63%
As 188.979†	-0.2	-0.0017350	mg/L	0.00132061	-0.0017350 mg/L	0.00132061	76.12%
Ba 233.527†	4343.9	0.0270212	mg/L	0.00005701	0.0270212 mg/L	0.00005701	0.21%
Be 313.107†	-12.1	-0.0028846	mg/L	0.00002422	-0.0028846 mg/L	0.00002422	0.84%
Ca 315.887†	925132.0	8.97282	mg/L	0.005581	8.97282 mg/L	0.005581	0.06%
Cd 228.802†	624.5	0.0094961	mg/L	0.00034704	0.0094961 mg/L	0.00034704	3.65%
Co 228.616†	5.8	-0.0050755	mg/L	0.00025822	-0.0050755 mg/L	0.00025822	5.09%
Cr 267.716†	32.7	-0.0043746	mg/L	0.00010759	-0.0043746 mg/L	0.00010759	2.46%
Cu 327.393†	239.2	-0.0028105	mg/L	0.00055583	-0.0028105 mg/L	0.00055583	19.78%
Fe 273.955†	7725.2	0.282789	mg/L	0.0003475	0.282789 mg/L	0.0003475	0.12%
K 404.721†	176.8	2.17653	mg/L	1.363364	2.17653 mg/L	1.363364	62.64%
Mg 279.077†	30905.4	1.43381	mg/L	0.001969	1.43381 mg/L	0.001969	0.14%
Mn 257.610†	22465.0	0.0259404	mg/L	0.00001755	0.0259404 mg/L	0.00001755	0.07%
Mo 202.031†	33.9	-0.0021563	mg/L	0.00003636	-0.0021563 mg/L	0.00003636	1.69%
Na 330.237†	40309.3	35.6813	mg/L	0.00195	35.6813 mg/L	0.00195	0.01%
Ni 231.604†	41.4	-0.0043630	mg/L	0.00013201	-0.0043630 mg/L	0.00013201	3.03%
Pb 220.353†	7.2	-0.0024627	mg/L	0.00003842	-0.0024627 mg/L	0.00003842	1.56%
Sb 206.836†	-0.3	-0.0036070	mg/L	0.00012095	-0.0036070 mg/L	0.00012095	3.35%
Se 196.026†	0.4	-0.0042022	mg/L	0.00386863	-0.0042022 mg/L	0.00386863	92.06%
Sn 189.927†	-4.9	-0.0051941	mg/L	0.00007188	-0.0051941 mg/L	0.00007188	1.38%
Ti 334.940†	8255.0	0.0080105	mg/L	0.00012177	0.0080105 mg/L	0.00012177	1.52%
Tl 190.801†	-2.8	-0.0059931	mg/L	0.00204581	-0.0059931 mg/L	0.00204581	34.14%
V 290.880†	470.4	-0.0029979	mg/L	0.00031325	-0.0029979 mg/L	0.00031325	10.45%
Zn 206.200†	357.5	0.0033543	mg/L	0.00024865	0.0033543 mg/L	0.00024865	7.41%

Sequence No.: 28
 Sample ID: 75646-013
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 71
 Date Collected: 11/22/2013 4:46:06 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-013

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1005263.4	100	%	0.2			0.24%
Y 371.029	344489.6	99.1	%	0.22			0.23%
Ag 328.068†	-42.1	-0.0009854	mg/L	0.00005157	-0.0009854	mg/L	0.00005157 5.23%
Al 308.215†	1005.5	-0.0196250	mg/L	0.00329703	-0.0196250	mg/L	0.00329703 16.80%
As 188.979†	-0.6	-0.0020644	mg/L	0.00000934	-0.0020644	mg/L	0.00000934 0.45%
Ba 233.527†	2166.0	0.0109924	mg/L	0.00012527	0.0109924	mg/L	0.00012527 1.14%
Be 313.107†	-48.8	-0.0028940	mg/L	0.00001849	-0.0028940	mg/L	0.00001849 0.64%
Ca 315.887†	1136901.6	11.1458	mg/L	0.03470	11.1458	mg/L	0.03470 0.31%
Cd 228.802†	-10.7	-0.0025651	mg/L	0.00003411	-0.0025651	mg/L	0.00003411 1.33%
Co 228.616†	-4.4	-0.0053000	mg/L	0.00017516	-0.0053000	mg/L	0.00017516 3.30%
Cr 267.716†	35.1	-0.0043499	mg/L	0.00009427	-0.0043499	mg/L	0.00009427 2.17%
Cu 327.393†	-5.1	-0.0046638	mg/L	0.00035855	-0.0046638	mg/L	0.00035855 7.69%
Fe 273.955†	476.2	-0.0354371	mg/L	0.00104282	-0.0354371	mg/L	0.00104282 2.94%
K 404.721†	203.0	2.43953	mg/L	0.293818	2.43953	mg/L	0.293818 12.04%
Mg 279.077†	32289.6	1.52088	mg/L	0.009730	1.52088	mg/L	0.009730 0.64%
Mn 257.610†	9717.9	0.0083552	mg/L	0.00006492	0.0083552	mg/L	0.00006492 0.78%
Mo 202.031†	34.2	-0.0022050	mg/L	0.00024825	-0.0022050	mg/L	0.00024825 11.26%
Na 330.237†	9330.8	8.48769	mg/L	0.017887	8.48769	mg/L	0.017887 0.21%
Ni 231.604†	3.9	-0.0052195	mg/L	0.00013170	-0.0052195	mg/L	0.00013170 2.52%
Pb 220.353†	6.3	-0.0025609	mg/L	0.00010505	-0.0025609	mg/L	0.00010505 4.10%
Sb 206.836†	-0.5	-0.0037315	mg/L	0.00155079	-0.0037315	mg/L	0.00155079 41.56%
Se 196.026†	0.1	-0.0045991	mg/L	0.00306694	-0.0045991	mg/L	0.00306694 66.69%
Sn 189.927†	-8.5	-0.0060826	mg/L	0.00018350	-0.0060826	mg/L	0.00018350 3.02%
Ti 334.940†	23.0	-0.0033043	mg/L	0.00007898	-0.0033043	mg/L	0.00007898 2.39%
Tl 190.801†	-2.6	-0.0059184	mg/L	0.00254923	-0.0059184	mg/L	0.00254923 43.07%
V 290.880†	372.8	-0.0036993	mg/L	0.00034572	-0.0036993	mg/L	0.00034572 9.35%
Zn 206.200†	495.4	0.0063582	mg/L	0.00004270	0.0063582	mg/L	0.00004270 0.67%

Sequence No.: 29
 Sample ID: 75646-015
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 72
 Date Collected: 11/22/2013 4:49:31 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-015

Mean Corrected		Calib		Sample				
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc 361.383	998125.3	99.5	%	0.06				0.06%
Y 371.029	339287.4	97.6	%	0.22				0.23%
Ag 328.068†	23.4	-0.0006274	mg/L	0.00008060	-0.0006274	mg/L	0.00008060	12.85%
Al 308.215†	6320.1	0.169296	mg/L	0.0080166	0.169296	mg/L	0.0080166	4.74%
As 188.979†	0.0	-0.0017952	mg/L	0.00088924	-0.0017952	mg/L	0.00088924	49.54%
Ba 233.527†	4558.1	0.0286033	mg/L	0.00007505	0.0286033	mg/L	0.00007505	0.26%
Be 313.107†	-146.6	-0.0029318	mg/L	0.00000314	-0.0029318	mg/L	0.00000314	0.11%
Ca 315.887†	2183984.3	21.8846	mg/L	0.05364	21.8846	mg/L	0.05364	0.25%
Cd 228.802†	4.0	-0.0023355	mg/L	0.00000656	-0.0023355	mg/L	0.00000656	0.28%
Co 228.616†	30.3	-0.0044644	mg/L	0.00030920	-0.0044644	mg/L	0.00030920	6.93%
Cr 267.716†	46.2	-0.0040394	mg/L	0.00000469	-0.0040394	mg/L	0.00000469	0.12%
Cu 327.393†	562.9	-0.0005543	mg/L	0.00099816	-0.0005543	mg/L	0.00099816	180.06%
Fe 273.955†	5017.3	0.163915	mg/L	0.0032431	0.163915	mg/L	0.0032431	1.98%
K 404.721†	229.9	2.71028	mg/L	0.134060	2.71028	mg/L	0.134060	4.95%
Mg 279.077†	59793.7	3.25085	mg/L	0.036868	3.25085	mg/L	0.036868	1.13%
Mn 257.610†	331046.8	0.451497	mg/L	0.0003229	0.451497	mg/L	0.0003229	0.07%
Mo 202.031†	65.9	-0.0009191	mg/L	0.00012687	-0.0009191	mg/L	0.00012687	13.80%
Na 330.237†	24617.9	21.9070	mg/L	0.29125	21.9070	mg/L	0.29125	1.33%
Ni 231.604†	113.5	-0.0027148	mg/L	0.00006271	-0.0027148	mg/L	0.00006271	2.31%
Pb 220.353†	23.0	-0.0010948	mg/L	0.00015609	-0.0010948	mg/L	0.00015609	14.26%
Sb 206.836†	-0.9	-0.0039244	mg/L	0.00045422	-0.0039244	mg/L	0.00045422	11.57%
Se 196.026†	4.0	-0.0016604	mg/L	0.00326520	-0.0016604	mg/L	0.00326520	196.66%
Sn 189.927†	-5.5	-0.0050404	mg/L	0.00061247	-0.0050404	mg/L	0.00061247	12.15%
Ti 334.940†	3832.3	0.0019316	mg/L	0.00009816	0.0019316	mg/L	0.00009816	5.08%
Tl 190.801†	-7.5	-0.0097729	mg/L	0.00284573	-0.0097729	mg/L	0.00284573	29.12%
V 290.880†	661.7	-0.0017448	mg/L	0.00079641	-0.0017448	mg/L	0.00079641	45.64%
Zn 206.200†	646.2	0.0096141	mg/L	0.00002091	0.0096141	mg/L	0.00002091	0.22%

Sequence No.: 30

Sample ID: ICSA V-173614

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 11/22/2013 4:52:59 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
Sc 361.383	839389.1	83.7 %	0.33			0.39%
Y 371.029	279062.6	80.3 %	0.31			0.38%
Ag 328.068†	-3279.6	-0.0014313 mg/L	0.00016660	-0.0014313 mg/L	0.00016660	11.64%
Al 308.215†	14101249.1	501.285 mg/L	1.7093	501.285 mg/L	1.7093	0.34%
QC value within limits for Al 308.215 Recovery = 100.26%						
As 188.979†	41.0	-0.0009438 mg/L	0.00091247	-0.0009438 mg/L	0.00091247	96.68%
Ba 233.527†	1744.1	0.0007407 mg/L	0.00001344	0.0007407 mg/L	0.00001344	1.82%
Be 313.107†	-1998.7	-0.0036103 mg/L	0.00002349	-0.0036103 mg/L	0.00002349	0.65%
Ca 315.887†	46705457.5	478.261 mg/L	3.1769	478.261 mg/L	3.1769	0.66%
QC value within limits for Ca 315.887 Recovery = 95.65%						
Cd 228.802†	240.0	-0.0036184 mg/L	0.00014502	-0.0036184 mg/L	0.00014502	4.01%
Co 228.616†	-46.4	-0.0062143 mg/L	0.00035052	-0.0062143 mg/L	0.00035052	5.64%
Cr 267.716†	-246.4	-0.0077751 mg/L	0.00005723	-0.0077751 mg/L	0.00005723	0.74%
Cu 327.393†	824.6	-0.0108932 mg/L	0.00043859	-0.0108932 mg/L	0.00043859	4.03%
Fe 273.955†	4293036.3	188.407 mg/L	0.4204	188.407 mg/L	0.4204	0.22%
QC value within limits for Fe 273.955 Recovery = 94.20%						
K 404.721†	-1925.0	-18.9529 mg/L	0.27779	-18.9529 mg/L	0.27779	1.47%
Mg 279.077†	8131552.5	510.103 mg/L	1.5457	510.103 mg/L	1.5457	0.30%
QC value within limits for Mg 279.077 Recovery = 102.02%						
Mn 257.610†	1493.5	-0.0218501 mg/L	0.00003163	-0.0218501 mg/L	0.00003163	0.14%
Mo 202.031†	579.7	0.0010902 mg/L	0.00102853	0.0010902 mg/L	0.00102853	94.34%
Na 330.237†	99.0	0.383845 mg/L	0.0111510	0.383845 mg/L	0.0111510	2.91%
Ni 231.604†	59.2	-0.0039250 mg/L	0.00002795	-0.0039250 mg/L	0.00002795	0.71%
Pb 220.353†	-507.6	-0.0067230 mg/L	0.00190003	-0.0067230 mg/L	0.00190003	28.26%
Sb 206.836†	-58.4	-0.0076611 mg/L	0.00181263	-0.0076611 mg/L	0.00181263	23.66%
Se 196.026†	-20.9	-0.0167765 mg/L	0.00136296	-0.0167765 mg/L	0.00136296	8.12%
Sn 189.927†	-4.4	-0.0042586 mg/L	0.00055711	-0.0042586 mg/L	0.00055711	13.08%
Ti 334.940†	647.9	-0.0024455 mg/L	0.00006862	-0.0024455 mg/L	0.00006862	2.81%
Tl 190.801†	23.4	-0.0103901 mg/L	0.00264644	-0.0103901 mg/L	0.00264644	25.47%
V 290.880†	12956.3	0.0121303 mg/L	0.00078754	0.0121303 mg/L	0.00078754	6.49%
Zn 206.200†	626.7	-0.0067241 mg/L	0.00039144	-0.0067241 mg/L	0.00039144	5.82%

All analyte(s) passed QC.

Sequence No.: 31

Sample ID: ICSAB V-173231

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 11/22/2013 4:57:52 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	841852.9	83.9 %		0.44			0.52%
Y 371.029	282725.0	81.3 %		0.12			0.14%
Ag 328.068†	213836.5	1.12620 mg/L		0.008055	1.12620 mg/L	0.008055	0.72%
QC value within limits for Ag 328.068 Recovery = 112.62%							
Al 308.215†	14092631.4	500.978 mg/L		3.1885	500.978 mg/L	3.1885	0.64%
QC value within limits for Al 308.215 Recovery = 100.20%							
As 188.979†	1443.5	1.06646 mg/L		0.005918	1.06646 mg/L	0.005918	0.55%
QC value within limits for As 188.979 Recovery = 106.65%							
Ba 233.527†	74426.4	0.536106 mg/L		0.0043211	0.536106 mg/L	0.0043211	0.81%
QC value within limits for Ba 233.527 Recovery = 107.22%							
Be 313.107†	1438034.4	0.525177 mg/L		0.0023856	0.525177 mg/L	0.0023856	0.45%
QC value within limits for Be 313.107 Recovery = 105.04%							
Ca 315.887†	46696985.1	478.172 mg/L		4.8324	478.172 mg/L	4.8324	1.01%
QC value within limits for Ca 315.887 Recovery = 95.63%							
Cd 228.802†	57458.4	1.08257 mg/L		0.006116	1.08257 mg/L	0.006116	0.56%
QC value within limits for Cd 228.802 Recovery = 108.26%							
Co 228.616†	20476.8	0.491750 mg/L		0.0030116	0.491750 mg/L	0.0030116	0.61%
QC value within limits for Co 228.616 Recovery = 98.35%							
Cr 267.716†	40352.7	0.507047 mg/L		0.0051574	0.507047 mg/L	0.0051574	1.02%
QC value within limits for Cr 267.716 Recovery = 101.41%							
Cu 327.393†	74570.2	0.542177 mg/L		0.0005575	0.542177 mg/L	0.0005575	0.10%
QC value within limits for Cu 327.393 Recovery = 108.44%							
Fe 273.955†	4270091.7	187.399 mg/L		0.6713	187.399 mg/L	0.6713	0.36%
QC value within limits for Fe 273.955 Recovery = 93.70%							
K 404.721†	-2076.8	-20.4781 mg/L		0.62293	-20.4781 mg/L	0.62293	3.04%
Mg 279.077†	8081776.7	506.980 mg/L		3.4199	506.980 mg/L	3.4199	0.67%
QC value within limits for Mg 279.077 Recovery = 101.40%							
Mn 257.610†	374374.4	0.492576 mg/L		0.0037232	0.492576 mg/L	0.0037232	0.76%
QC value within limits for Mn 257.610 Recovery = 98.52%							
Mo 202.031†	582.4	0.0012409 mg/L		0.00042162	0.0012409 mg/L	0.00042162	33.98%
Na 330.237†	1153.7	1.30969 mg/L		0.013974	1.30969 mg/L	0.013974	1.07%
Ni 231.604†	42796.5	0.971889 mg/L		0.0104838	0.971889 mg/L	0.0104838	1.08%
QC value within limits for Ni 231.604 Recovery = 97.19%							
Pb 220.353†	10674.6	0.983213 mg/L		0.0070124	0.983213 mg/L	0.0070124	0.71%
QC value within limits for Pb 220.353 Recovery = 98.32%							
Sb 206.836†	2235.6	1.06915 mg/L		0.004848	1.06915 mg/L	0.004848	0.45%
QC value within limits for Sb 206.836 Recovery = 106.91%							
Se 196.026†	1170.0	1.01763 mg/L		0.002874	1.01763 mg/L	0.002874	0.28%
QC value within limits for Se 196.026 Recovery = 101.76%							
Sn 189.927†	-8.5	-0.0053753 mg/L		0.00191943	-0.0053753 mg/L	0.00191943	35.71%
Ti 334.940†	819.3	-0.0022098 mg/L		0.00005061	-0.0022098 mg/L	0.00005061	2.29%
Tl 190.801†	1438.8	0.981851 mg/L		0.0009800	0.981851 mg/L	0.0009800	0.10%
QC value within limits for Tl 190.801 Recovery = 98.19%							
V 290.880†	82420.9	0.508540 mg/L		0.0047369	0.508540 mg/L	0.0047369	0.93%
QC value within limits for V 290.880 Recovery = 101.71%							
Zn 206.200†	45616.2	0.967783 mg/L		0.0080911	0.967783 mg/L	0.0080911	0.84%
QC value within limits for Zn 206.200 Recovery = 96.78%							

All analyte(s) passed QC.

Sequence No.: 32
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/22/2013 5:02:49 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	954025.9	95.1 %	0.30			0.32%
Y 371.029	316666.2	91.1 %	1.42			1.56%
Ag 328.068†	18834.4	0.0974969 mg/L	0.00032013	0.0974969 mg/L	0.00032013	0.33%
QC value within limits for Ag		328.068 Recovery = 97.50%				
Al 308.215†	141794.4	4.97772 mg/L	0.000516	4.97772 mg/L	0.000516	0.01%
QC value within limits for Al		308.215 Recovery = 99.55%				
As 188.979†	630.3	0.477469 mg/L	0.0005028	0.477469 mg/L	0.0005028	0.11%
QC value within limits for As		188.979 Recovery = 95.49%				
Ba 233.527†	68215.9	0.497280 mg/L	0.0001107	0.497280 mg/L	0.0001107	0.02%
QC value within limits for Ba		233.527 Recovery = 99.46%				
Be 313.107†	1334500.6	0.486982 mg/L	0.0003245	0.486982 mg/L	0.0003245	0.89%
QC value within limits for Be		313.107 Recovery = 97.40%				
Ca 315.887†	4890675.7	49.6402 mg/L	0.37486	49.6402 mg/L	0.37486	0.76%
QC value within limits for Ca		315.887 Recovery = 99.28%				
Cd 228.802†	26106.0	0.492922 mg/L	0.0009132	0.492922 mg/L	0.0009132	0.19%
QC value within limits for Cd		228.802 Recovery = 98.58%				
Co 228.616†	20514.5	0.493406 mg/L	0.0012981	0.493406 mg/L	0.0012981	0.26%
QC value within limits for Co		228.616 Recovery = 98.68%				
Cr 267.716†	39558.8	0.499364 mg/L	0.0003238	0.499364 mg/L	0.0003238	0.06%
QC value within limits for Cr		267.716 Recovery = 99.87%				
Cu 327.393†	65302.2	0.484568 mg/L	0.0000122	0.484568 mg/L	0.0000122	0.00%
QC value within limits for Cu		327.393 Recovery = 96.91%				
Fe 273.955†	114845.2	4.98533 mg/L	0.012870	4.98533 mg/L	0.012870	0.26%
QC value within limits for Fe		273.955 Recovery = 99.71%				
K 404.721†	4726.0	47.9081 mg/L	0.58821	47.9081 mg/L	0.58821	1.23%
QC value within limits for K		404.721 Recovery = 95.82%				
Mg 279.077†	809822.3	50.3625 mg/L	0.38055	50.3625 mg/L	0.38055	0.76%
QC value within limits for Mg		279.077 Recovery = 100.72%				
Mn 257.610†	358106.7	0.487222 mg/L	0.0002604	0.487222 mg/L	0.0002604	0.05%
QC value within limits for Mn		257.610 Recovery = 97.44%				
Mo 202.031†	9392.7	0.487783 mg/L	0.0014207	0.487783 mg/L	0.0014207	0.29%
QC value within limits for Mo		202.031 Recovery = 97.56%				
Na 330.237†	53163.9	46.9653 mg/L	0.05460	46.9653 mg/L	0.05460	0.12%
QC value within limits for Na		330.237 Recovery = 93.93%				
Ni 231.604†	21911.1	0.495555 mg/L	0.0013468	0.495555 mg/L	0.0013468	0.27%
QC value within limits for Ni		231.604 Recovery = 99.11%				
Pb 220.353†	5506.3	0.484198 mg/L	0.0010979	0.484198 mg/L	0.0010979	0.23%
QC value within limits for Pb		220.353 Recovery = 96.84%				
Sb 206.836†	1064.8	0.496969 mg/L	0.0009538	0.496969 mg/L	0.0009538	0.19%
QC value within limits for Sb		206.836 Recovery = 99.39%				
Se 196.026†	562.9	0.484292 mg/L	0.0083417	0.484292 mg/L	0.0083417	1.72%
QC value within limits for Se		196.026 Recovery = 96.86%				
Sn 189.927†	1886.4	0.493675 mg/L	0.0012632	0.493675 mg/L	0.0012632	0.26%
QC value within limits for Sn		189.927 Recovery = 98.73%				
Ti 334.940†	356369.1	0.486488 mg/L	0.0001472	0.486488 mg/L	0.0001472	0.03%
QC value within limits for Ti		334.940 Recovery = 97.30%				
Tl 190.801†	719.5	0.505436 mg/L	0.0050953	0.505436 mg/L	0.0050953	1.01%
QC value within limits for Tl		190.801 Recovery = 101.09%				
V 290.880†	70049.2	0.487208 mg/L	0.0009073	0.487208 mg/L	0.0009073	0.19%
QC value within limits for V		290.880 Recovery = 97.44%				
Zn 206.200†	22876.8	0.490721 mg/L	0.0022623	0.490721 mg/L	0.0022623	0.46%
QC value within limits for Zn		206.200 Recovery = 98.14%				

All analyte(s) passed QC.

Sequence No.: 33

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/22/2013 5:06:16 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	995035.6	99.2 %	0.50			0.51%
Y 371.029	339889.6	97.7 %	0.45			0.46%
Ag 328.068†	3781.3	0.0188994 mg/L	0.00036289	0.0188994 mg/L	0.00036289	1.92%
QC value within limits for Ag		328.068 Recovery = 94.50%				
Al 308.215†	5872.0	0.153080 mg/L	0.0007875	0.153080 mg/L	0.0007875	0.51%
QC value within limits for Al		308.215 Recovery = 76.54%				
As 188.979†	25.0	0.0175425 mg/L	0.00022231	0.0175425 mg/L	0.00022231	1.27%
QC value within limits for As		188.979 Recovery = 87.71%				
Ba 233.527†	6986.0	0.0464826 mg/L	0.00059012	0.0464826 mg/L	0.00059012	1.27%
QC value within limits for Ba		233.527 Recovery = 92.97%				
Be 313.107†	31145.5	0.0085438 mg/L	0.00005539	0.0085438 mg/L	0.00005539	0.65%
QC value within limits for Be		313.107 Recovery = 71.20%				
Ca 315.887†	495690.1	4.56733 mg/L	0.011764	4.56733 mg/L	0.011764	0.26%
QC value within limits for Ca		315.887 Recovery = 91.35%				
Cd 228.802†	608.7	0.0092140 mg/L	0.00003245	0.0092140 mg/L	0.00003245	0.35%
QC value within limits for Cd		228.802 Recovery = 76.78%				
Co 228.616†	849.7	0.0153979 mg/L	0.00021236	0.0153979 mg/L	0.00021236	1.38%
QC value within limits for Co		228.616 Recovery = 76.99%				
Cr 267.716†	3892.1	0.0446484 mg/L	0.00052642	0.0446484 mg/L	0.00052642	1.18%
QC value within limits for Cr		267.716 Recovery = 89.30%				
Cu 327.393†	6911.5	0.0472865 mg/L	0.00064551	0.0472865 mg/L	0.00064551	1.37%
QC value within limits for Cu		327.393 Recovery = 94.57%				
Fe 273.955†	7146.3	0.257379 mg/L	0.0016825	0.257379 mg/L	0.0016825	0.65%
QC value within limits for Fe		273.955 Recovery = 85.79%				
K 404.721†	367.3	4.09152 mg/L	1.083461	4.09152 mg/L	1.083461	26.48%
QC value within limits for K		404.721 Recovery = 81.83%				
Mg 279.077†	82122.8	4.65106 mg/L	0.034069	4.65106 mg/L	0.034069	0.73%
QC value within limits for Mg		279.077 Recovery = 93.02%				
Mn 257.610†	29401.7	0.0353946 mg/L	0.00018219	0.0353946 mg/L	0.00018219	0.51%
QC value within limits for Mn		257.610 Recovery = 88.49%				
Mo 202.031†	394.9	0.0169556 mg/L	0.00007995	0.0169556 mg/L	0.00007995	0.47%
QC value within limits for Mo		202.031 Recovery = 84.78%				
Na 330.237†	4567.6	4.30648 mg/L	0.022993	4.30648 mg/L	0.022993	0.53%
QC value within limits for Na		330.237 Recovery = 86.13%				
Ni 231.604†	2264.5	0.0464186 mg/L	0.00071189	0.0464186 mg/L	0.00071189	1.53%
QC value within limits for Ni		231.604 Recovery = 92.84%				
Pb 220.353†	147.8	0.0099199 mg/L	0.00068082	0.0099199 mg/L	0.00068082	6.86%
QC value within limits for Pb		220.353 Recovery = 82.67%				
Sb 206.836†	42.3	0.0163933 mg/L	0.00383904	0.0163933 mg/L	0.00383904	23.42%
QC value within limits for Sb		206.836 Recovery = 81.97%				
Se 196.026†	38.8	0.0292718 mg/L	0.00721328	0.0292718 mg/L	0.00721328	24.64%
QC value within limits for Se		196.026 Recovery = 73.18%				
Sn 189.927†	176.1	0.0423645 mg/L	0.00042790	0.0423645 mg/L	0.00042790	1.01%
QC value within limits for Sn		189.927 Recovery = 84.73%				
Ti 334.940†	33977.4	0.0433655 mg/L	0.00030572	0.0433655 mg/L	0.00030572	0.70%
QC value within limits for Ti		334.940 Recovery = 86.73%				
Tl 190.801†	26.4	0.0147414 mg/L	0.00121379	0.0147414 mg/L	0.00121379	8.23%
QC value within limits for Tl		190.801 Recovery = 73.71%				
V 290.880†	7277.2	0.0451689 mg/L	0.00006584	0.0451689 mg/L	0.00006584	0.15%
QC value within limits for V		290.880 Recovery = 90.34%				
Zn 206.200†	2318.7	0.0458316 mg/L	0.00036026	0.0458316 mg/L	0.00036026	0.79%
QC value within limits for Zn		206.200 Recovery = 91.66%				

All analyte(s) passed QC.

Sequence No.: 34
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/22/2013 5:09:43 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	997086.8	99.4 %		0.28			0.28%
Y 371.029	345001.2	99.2 %		0.00			0.00%
Ag 328.068†	-31.0 -0.0009294 mg/L		0.00013459	-0.0009294 mg/L	0.00013459	14.48%	
QC value within limits for Ag 328.068	Recovery = Not calculated						
Al 308.215†	121.9 -0.0510099 mg/L		0.00041876	-0.0510099 mg/L	0.00041876	0.82%	
QC value within limits for Al 308.215	Recovery = Not calculated						
As 188.979†	1.1 -0.0006084 mg/L		0.00159880	-0.0006084 mg/L	0.00159880	262.79%	
QC value within limits for As 188.979	Recovery = Not calculated						
Ba 233.527†	-23.8 -0.0051355 mg/L		0.00005546	-0.0051355 mg/L	0.00005546	1.08%	
QC value within limits for Ba 233.527	Recovery = Not calculated						
Be 313.107†	-22.8 -0.0028845 mg/L		0.00002075	-0.0028845 mg/L	0.00002075	0.72%	
QC value within limits for Be 313.107	Recovery = Not calculated						
Ca 315.887†	-829.0 -0.525354 mg/L		0.0025161	-0.525354 mg/L	0.0025161	0.48%	
QC value within limits for Ca 315.887	Recovery = Not calculated						
Cd 228.802†	3.7 -0.0022432 mg/L		0.00004290	-0.0022432 mg/L	0.00004290	1.91%	
QC value within limits for Cd 228.802	Recovery = Not calculated						
Co 228.616†	0.7 -0.0051841 mg/L		0.00005561	-0.0051841 mg/L	0.00005561	1.07%	
QC value within limits for Co 228.616	Recovery = Not calculated						
Cr 267.716†	-22.7 -0.0050971 mg/L		0.00003556	-0.0050971 mg/L	0.00003556	0.70%	
QC value within limits for Cr 267.716	Recovery = Not calculated						
Cu 327.393†	31.3 -0.0042308 mg/L		0.00062614	-0.0042308 mg/L	0.00062614	14.80%	
QC value within limits for Cu 327.393	Recovery = Not calculated						
Fe 273.955†	-8.0 -0.0566956 mg/L		0.00023967	-0.0566956 mg/L	0.00023967	0.42%	
QC value within limits for Fe 273.955	Recovery = Not calculated						
K 404.721†	-3.8 0.360932 mg/L		0.7371756	0.360932 mg/L	0.7371756	204.24%	
QC value within limits for K 404.721	Recovery = Not calculated						
Mg 279.077†	25.2 -0.505729 mg/L		0.0020216	-0.505729 mg/L	0.0020216	0.40%	
QC value within limits for Mg 279.077	Recovery = Not calculated						
Mn 257.610†	27.7 -0.0049357 mg/L		0.00000260	-0.0049357 mg/L	0.00000260	0.05%	
QC value within limits for Mn 257.610	Recovery = Not calculated						
Mo 202.031†	0.6 -0.0035598 mg/L		0.00050648	-0.0035598 mg/L	0.00050648	14.23%	
QC value within limits for Mo 202.031	Recovery = Not calculated						
Na 330.237†	-103.3 0.206250 mg/L		0.0420910	0.206250 mg/L	0.0420910	20.41%	
QC value within limits for Na 330.237	Recovery = Not calculated						
Ni 231.604†	-6.8 -0.0054656 mg/L		0.00016359	-0.0054656 mg/L	0.00016359	2.99%	
QC value within limits for Ni 231.604	Recovery = Not calculated						
Pb 220.353†	-1.4 -0.0032260 mg/L		0.00139875	-0.0032260 mg/L	0.00139875	43.36%	
QC value within limits for Pb 220.353	Recovery = Not calculated						
Sb 206.836†	-0.4 -0.0036609 mg/L		0.00149980	-0.0036609 mg/L	0.00149980	40.97%	
QC value within limits for Sb 206.836	Recovery = Not calculated						
Se 196.026†	-0.3 -0.0045535 mg/L		0.00275546	-0.0045535 mg/L	0.00275546	60.51%	
QC value within limits for Se 196.026	Recovery = Not calculated						
Sn 189.927†	2.6 -0.0034564 mg/L		0.00007788	-0.0034564 mg/L	0.00007788	2.25%	
QC value within limits for Sn 189.927	Recovery = Not calculated						
Ti 334.940†	-16.3 -0.0033584 mg/L		0.00009758	-0.0033584 mg/L	0.00009758	2.91%	
QC value within limits for Ti 334.940	Recovery = Not calculated						
Tl 190.801†	-0.2 -0.0042347 mg/L		0.00216290	-0.0042347 mg/L	0.00216290	51.08%	
QC value within limits for Tl 190.801	Recovery = Not calculated						
V 290.880†	121.4 -0.0052304 mg/L		0.00012957	-0.0052304 mg/L	0.00012957	2.48%	
QC value within limits for V 290.880	Recovery = Not calculated						
Zn 206.200†	-18.5 -0.0047709 mg/L		0.00001268	-0.0047709 mg/L	0.00001268	0.27%	
QC value within limits for Zn 206.200	Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 35
 Sample ID: 75646-017
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 73
 Date Collected: 11/22/2013 5:13:06 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-017

Mean Data: 75040-017								
	Mean Corrected		Calib		Sample			
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc 361.383	1004699.7	100	%	0.2				0.22%
Y 371.029	344297.5	99.0	%	0.28				0.28%
Ag 328.068†	-17.2	-0.0008556	mg/L	0.00016565	-0.0008556	mg/L	0.00016565	19.36%
Al 308.215†	614.8	-0.0334879	mg/L	0.00197536	-0.0334879	mg/L	0.00197536	5.90%
As 188.979†	1.3	-0.0004658	mg/L	0.00105024	-0.0004658	mg/L	0.00105024	225.49%
Ba 233.527†	20.5	-0.0048103	mg/L	0.00001240	-0.0048103	mg/L	0.00001240	0.26%
Be 313.107†	-89.5	-0.0029090	mg/L	0.00000308	-0.0029090	mg/L	0.00000308	0.11%
Ca 315.887†	9108.6	-0.423452	mg/L	0.0023894	-0.423452	mg/L	0.0023894	0.56%
Cd 228.802†	-14.2	-0.0025831	mg/L	0.00007700	-0.0025831	mg/L	0.00007700	2.98%
Co 228.616†	9.0	-0.0049809	mg/L	0.00005502	-0.0049809	mg/L	0.00005502	1.10%
Cr 267.716†	34.8	-0.0043672	mg/L	0.00012176	-0.0043672	mg/L	0.00012176	2.79%
Cu 327.393†	130.8	-0.0034862	mg/L	0.00017792	-0.0034862	mg/L	0.00017792	5.10%
Fe 273.955†	623.9	-0.0289541	mg/L	0.00040533	-0.0289541	mg/L	0.00040533	1.40%
K 404.721†	110.1	1.50614	mg/L	0.634513	1.50614	mg/L	0.634513	42.13%
Mg 279.077†	99.3	-0.501089	mg/L	0.0009820	-0.501089	mg/L	0.0009820	0.20%
Mn 257.610†	207.3	-0.0046881	mg/L	0.00002260	-0.0046881	mg/L	0.00002260	0.48%
Mo 202.031†	3.5	-0.0034117	mg/L	0.00001518	-0.0034117	mg/L	0.00001518	0.44%
Na 330.237†	73.7	0.361633	mg/L	0.0789164	0.361633	mg/L	0.0789164	21.82%
Ni 231.604†	5.7	-0.0051819	mg/L	0.00011318	-0.0051819	mg/L	0.00011318	2.18%
Pb 220.353†	7.4	-0.0024458	mg/L	0.00082426	-0.0024458	mg/L	0.00082426	33.70%
Sb 206.836†	-1.1	-0.0040208	mg/L	0.00126503	-0.0040208	mg/L	0.00126503	31.46%
Se 196.026†	5.3	0.0002646	mg/L	0.00108603	0.0002646	mg/L	0.00108603	410.39%
Sn 189.927†	2.8	-0.0033795	mg/L	0.00027107	-0.0033795	mg/L	0.00027107	8.02%
Ti 334.940†	99.2	-0.0031996	mg/L	0.00001879	-0.0031996	mg/L	0.00001879	0.59%
Tl 190.801†	-1.1	-0.0048594	mg/L	0.00080545	-0.0048594	mg/L	0.00080545	16.57%
V 290.880†	152.1	-0.0050123	mg/L	0.00003629	-0.0050123	mg/L	0.00003629	0.72%
Zn 206.200†	445.1	0.0052703	mg/L	0.00023117	0.0052703	mg/L	0.00023117	4.39%

Sequence No.: 36
 Sample ID: 75646-019
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 74
 Date Collected: 11/22/2013 5:16:33 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-019

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	965159.6	96.2	%	2.34				2.44%
Y 371.029	326406.6	93.9	%	2.02				2.15%
Ag 328.068†	-48.7	-0.0007706	mg/L	0.00013894	-0.0007706	mg/L	0.00013894	18.03%
Al 308.215†	1364.4	-0.0069050	mg/L	0.00581308	-0.0069050	mg/L	0.00581308	84.19%
As 188.979†	3.1	0.0005905	mg/L	0.00010286	0.0005905	mg/L	0.00010286	17.42%
Ba 233.527†	5012.3	0.0318478	mg/L	0.00103863	0.0318478	mg/L	0.00103863	3.26%
Be 313.107†	-273.2	-0.0029764	mg/L	0.00001895	-0.0029764	mg/L	0.00001895	0.64%
Ca 315.887†	3288521.5	33.2121	mg/L	1.01641	33.2121	mg/L	1.01641	3.06%
Cd 228.802†	10.8	-0.0022792	mg/L	0.00062247	-0.0022792	mg/L	0.00062247	27.31%
Co 228.616†	3.6	-0.0050980	mg/L	0.00011678	-0.0050980	mg/L	0.00011678	2.29%
Cr 267.716†	101.3	-0.0033417	mg/L	0.00019457	-0.0033417	mg/L	0.00019457	5.82%
Cu 327.393†	-48.5	-0.0052907	mg/L	0.00032592	-0.0052907	mg/L	0.00032592	6.16%
Fe 273.955†	65708.2	2.82823	mg/L	0.084701	2.82823	mg/L	0.084701	2.99%
K 404.721†	347.5	3.89211	mg/L	0.482592	3.89211	mg/L	0.482592	12.40%
Mg 279.077†	80533.1	4.55156	mg/L	0.122371	4.55156	mg/L	0.122371	2.69%
Mn 257.610†	321532.2	0.438325	mg/L	0.0138199	0.438325	mg/L	0.0138199	3.15%
Mo 202.031†	81.4	-0.0004978	mg/L	0.00014392	-0.0004978	mg/L	0.00014392	28.91%
Na 330.237†	43656.6	38.6195	mg/L	1.14652	38.6195	mg/L	1.14652	2.97%
Ni 231.604†	26.2	-0.0047082	mg/L	0.00005822	-0.0047082	mg/L	0.00005822	1.24%
Pb 220.353†	14.4	-0.0021449	mg/L	0.00043711	-0.0021449	mg/L	0.00043711	20.38%
Sb 206.836†	3.7	-0.0014992	mg/L	0.00060065	-0.0014992	mg/L	0.00060065	40.06%
Se 196.026†	9.7	0.0035635	mg/L	0.00328820	0.0035635	mg/L	0.00328820	92.27%
Sn 189.927†	-12.2	-0.0065090	mg/L	0.00118850	-0.0065090	mg/L	0.00118850	18.26%
Ti 334.940†	-88.3	-0.0034573	mg/L	0.00000678	-0.0034573	mg/L	0.00000678	0.20%
Tl 190.801†	-5.9	-0.0085674	mg/L	0.00078334	-0.0085674	mg/L	0.00078334	9.14%
V 290.880†	992.0	0.0003382	mg/L	0.00090432	0.0003382	mg/L	0.00090432	267.36%
Zn 206.200†	793.0	0.0126918	mg/L	0.00026331	0.0126918	mg/L	0.00026331	2.07%

Sequence No.: 37
 Sample ID: 75646-021
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 75
 Date Collected: 11/22/2013 5:19:59 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-021

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	984970.1	98.2 %		0.69			0.70%
Y 371.029	333447.9	95.9 %		0.64			0.67%
Ag 328.068†	-119.9	-0.0007488 mg/L	0.00000129	-0.0007488 mg/L	0.00000129	0.17%	
Al 308.215†	1368.7	-0.0067352 mg/L	0.00171495	-0.0067352 mg/L	0.00171495	25.46%	
As 188.979†	1.1	-0.0002748 mg/L	0.00126013	-0.0002748 mg/L	0.00126013	458.59%	
Ba 233.527†	6088.9	0.0396061 mg/L	0.00008819	0.0396061 mg/L	0.00008819	0.22%	
Be 313.107†	-147.0	-0.0029302 mg/L	0.00002949	-0.0029302 mg/L	0.00002949	1.01%	
Ca 315.887†	1374447.2	13.5647 mg/L	0.06095	13.5647 mg/L	0.06095	0.45%	
Cd 228.802†	6803.3	0.126703 mg/L	0.0009607	0.126703 mg/L	0.0009607	0.76%	
Co 228.616†	787.7	0.0139229 mg/L	0.00047863	0.0139229 mg/L	0.00047863	3.44%	
Cr 267.716†	-24.2	-0.0044864 mg/L	0.00007347	-0.0044864 mg/L	0.00007347	1.64%	
Cu 327.393†	372.0	-0.0018686 mg/L	0.00064913	-0.0018686 mg/L	0.00064913	34.74%	
Fe 273.955†	168374.5	7.33525 mg/L	0.054090	7.33525 mg/L	0.054090	0.74%	
K 404.721†	160.4	2.01112 mg/L	0.998395	2.01112 mg/L	0.998395	49.64%	
Mg 279.077†	33708.9	1.61449 mg/L	0.002613	1.61449 mg/L	0.002613	0.16%	
Mn 257.610†	1214489.0	1.67008 mg/L	0.008938	1.67008 mg/L	0.008938	0.54%	
Mo 202.031†	60.2	-0.0009258 mg/L	0.00005660	-0.0009258 mg/L	0.00005660	6.11%	
Na 330.237†	28526.3	25.3379 mg/L	0.01779	25.3379 mg/L	0.01779	0.07%	
Ni 231.604†	24.6	-0.0047469 mg/L	0.00001819	-0.0047469 mg/L	0.00001819	0.38%	
Pb 220.353†	30.8	-0.0010988 mg/L	0.00042460	-0.0010988 mg/L	0.00042460	38.64%	
Sb 206.836†	-1.0	-0.0032577 mg/L	0.00026652	-0.0032577 mg/L	0.00026652	8.18%	
Se 196.026†	3.0	-0.0013775 mg/L	0.00254148	-0.0013775 mg/L	0.00254148	184.50%	
Sn 189.927†	-7.0	-0.0056326 mg/L	0.00020378	-0.0056326 mg/L	0.00020378	3.62%	
Ti 334.940†	182.3	-0.0030853 mg/L	0.00002500	-0.0030853 mg/L	0.00002500	0.81%	
Tl 190.801†	1.9	-0.0043872 mg/L	0.00092459	-0.0043872 mg/L	0.00092459	21.07%	
V 290.880†	488.7	-0.0026810 mg/L	0.00013871	-0.0026810 mg/L	0.00013871	5.17%	
Zn 206.200†	393.9	0.0038708 mg/L	0.00031826	0.0038708 mg/L	0.00031826	8.22%	

Sequence No.: 38
 Sample ID: 75646-023
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 76
 Date Collected: 11/22/2013 5:23:25 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-023

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	993701.1	99.0 %	0.47			0.48%
Y 371.029	337459.5	97.0 %	0.36			0.37%
Ag 328.068†	-87.9	-0.0007935 mg/L	0.00013574	-0.0007935 mg/L	0.00013574	17.11%
Al 308.215†	53117.6	1.83302 mg/L	0.021087	1.83302 mg/L	0.021087	1.15%
As 188.979†	2.2	0.0000330 mg/L	0.00198376	0.0000330 mg/L	0.00198376	>999.9%
Ba 233.527†	6236.1	0.0407826 mg/L	0.00037367	0.0407826 mg/L	0.00037367	0.92%
Be 313.107†	89.6	-0.0028653 mg/L	0.00000801	-0.0028653 mg/L	0.00000801	0.28%
Ca 315.887†	2853040.1	28.7427 mg/L	0.02002	28.7427 mg/L	0.02002	0.07%
Cd 228.802†	559.7	0.0081317 mg/L	0.00014419	0.0081317 mg/L	0.00014419	1.77%
Co 228.616†	150.5	-0.0016471 mg/L	0.00003220	-0.0016471 mg/L	0.00003220	1.96%
Cr 267.716†	836.3	0.0059187 mg/L	0.00016010	0.0059187 mg/L	0.00016010	2.71%
Cu 327.393†	8211.6	0.0566718 mg/L	0.00138279	0.0566718 mg/L	0.00138279	2.44%
Fe 273.955†	113175.9	4.91205 mg/L	0.045546	4.91205 mg/L	0.045546	0.93%
K 404.721†	836.3	8.80662 mg/L	1.712952	8.80662 mg/L	1.712952	19.45%
Mg 279.077†	151977.3	9.03640 mg/L	0.066433	9.03640 mg/L	0.066433	0.74%
Mn 257.610†	179175.2	0.241808 mg/L	0.0024011	0.241808 mg/L	0.0024011	0.99%
Mo 202.031†	134.0	0.0023725 mg/L	0.00026233	0.0023725 mg/L	0.00026233	11.06%
Na 330.237†	21886.8	19.5096 mg/L	0.18249	19.5096 mg/L	0.18249	0.94%
Ni 231.604†	611.4	0.0086576 mg/L	0.00009991	0.0086576 mg/L	0.00009991	1.15%
Pb 220.353†	180.4	0.0125168 mg/L	0.00112046	0.0125168 mg/L	0.00112046	8.95%
Sb 206.836†	5.0	-0.0006757 mg/L	0.00055514	-0.0006757 mg/L	0.00055514	82.16%
Se 196.026†	6.8	0.0017122 mg/L	0.00230727	0.0017122 mg/L	0.00230727	134.76%
Sn 189.927†	2.8	-0.0026651 mg/L	0.00000148	-0.0026651 mg/L	0.00000148	0.06%
Ti 334.940†	44653.9	0.0580403 mg/L	0.00061328	0.0580403 mg/L	0.00061328	1.06%
Tl 190.801†	-7.9	-0.0093881 mg/L	0.00244732	-0.0093881 mg/L	0.00244732	26.07%
V 290.880†	6876.5	0.0416153 mg/L	0.00020104	0.0416153 mg/L	0.00020104	0.48%
Zn 206.200†	16526.6	0.353364 mg/L	0.0036012	0.353364 mg/L	0.0036012	1.02%

Sequence No.: 39
 Sample ID: 75646-025
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 77
 Date Collected: 11/22/2013 5:26:51 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-025

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	996134.0	99.3 %		0.64			0.65%
Y 371.029	343683.0	98.8 %		0.62			0.63%
Ag 328.068†	-6.3	-0.0005903 mg/L		0.00038637	-0.0005903 mg/L	0.00038637	65.45%
Al 308.215†	32090.4	1.08553 mg/L		0.014059	1.08553 mg/L	0.014059	1.30%
As 188.979†	2.5	0.0004064 mg/L		0.00015180	0.0004064 mg/L	0.00015180	37.35%
Ba 233.527†	3323.4	0.0194261 mg/L		0.00012830	0.0194261 mg/L	0.00012830	0.66%
Be 313.107†	17.8	-0.0028799 mg/L		0.00001664	-0.0028799 mg/L	0.00001664	0.58%
Ca 315.887†	1162819.4	11.4082 mg/L		0.03775	11.4082 mg/L	0.03775	0.33%
Cd 228.802†	2321.1	0.0416689 mg/L		0.00014760	0.0416689 mg/L	0.00014760	0.35%
Co 228.616†	28.8	-0.0045518 mg/L		0.00009510	-0.0045518 mg/L	0.00009510	2.09%
Cr 267.716†	5041.9	0.0591336 mg/L		0.00092839	0.0591336 mg/L	0.00092839	1.57%
Cu 327.393†	2817.1	0.0164735 mg/L		0.00153393	0.0164735 mg/L	0.00153393	9.31%
Fe 273.955†	55206.0	2.36718 mg/L		0.034046	2.36718 mg/L	0.034046	1.44%
K 404.721†	155.2	1.95901 mg/L		0.759225	1.95901 mg/L	0.759225	38.76%
Mg 279.077†	32690.4	1.54463 mg/L		0.031843	1.54463 mg/L	0.031843	2.06%
Mn 257.610†	41474.9	0.0521565 mg/L		0.00079295	0.0521565 mg/L	0.00079295	1.52%
Mo 202.031†	42.2	-0.0018225 mg/L		0.00040092	-0.0018225 mg/L	0.00040092	22.00%
Na 330.237†	10426.0	9.44913 mg/L		0.078046	9.44913 mg/L	0.078046	0.83%
Ni 231.604†	259.7	0.0006217 mg/L		0.00022827	0.0006217 mg/L	0.00022827	36.72%
Pb 220.353†	110.6	0.0065873 mg/L		0.00037991	0.0065873 mg/L	0.00037991	5.77%
Sb 206.836†	2.2	-0.0022131 mg/L		0.00133703	-0.0022131 mg/L	0.00133703	60.41%
Se 196.026†	5.1	0.0002384 mg/L		0.00520334	0.0002384 mg/L	0.00520334	>999.9%
Sn 189.927†	2.2	-0.0032709 mg/L		0.00125745	-0.0032709 mg/L	0.00125745	38.44%
Ti 334.940†	20893.9	0.0253825 mg/L		0.00022296	0.0253825 mg/L	0.00022296	0.88%
Tl 190.801†	-1.1	-0.0047039 mg/L		0.00097712	-0.0047039 mg/L	0.00097712	20.77%
V 290.880†	1503.8	0.0042933 mg/L		0.00037796	0.0042933 mg/L	0.00037796	8.80%
Zn 206.200†	4588.3	0.0948976 mg/L		0.00054997	0.0948976 mg/L	0.00054997	0.58%

Sequence No.: 40
 Sample ID: 75646-027
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 78
 Date Collected: 11/22/2013 5:30:16 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-027

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	987966.0	98.5 %		0.05			0.05%
Y 371.029	333058.4	95.8 %		0.15			0.16%
Ag 328.068†	38.1 -0.0004877	mg/L	0.00008835	-0.0004877	mg/L	0.00008835	18.11%
Al 308.215†	6373.6 0.171196	mg/L	0.0029419	0.171196	mg/L	0.0029419	1.72%
As 188.979†	-0.9 -0.0024357	mg/L	0.00069006	-0.0024357	mg/L	0.00069006	28.33%
Ba 233.527†	2304.4 0.0119769	mg/L	0.00013255	0.0119769	mg/L	0.00013255	1.11%
Be 313.107†	-80.6 -0.0029072	mg/L	0.00001112	-0.0029072	mg/L	0.00001112	0.38%
Ca 315.887†	2008748.7 20.0833	mg/L	0.07610	20.0833	mg/L	0.07610	0.38%
Cd 228.802†	1221.0 0.0207682	mg/L	0.00022511	0.0207682	mg/L	0.00022511	1.08%
Co 228.616†	8.4 -0.0049928	mg/L	0.00013740	-0.0049928	mg/L	0.00013740	2.75%
Cr 267.716†	43.1 -0.0038840	mg/L	0.00008808	-0.0038840	mg/L	0.00008808	2.27%
Cu 327.393†	4624.1 0.0299282	mg/L	0.00080311	0.0299282	mg/L	0.00080311	2.68%
Fe 273.955†	21709.9 0.896715	mg/L	0.0021765	0.896715	mg/L	0.0021765	0.24%
K 404.721†	345.5 3.87228	mg/L	0.489865	3.87228	mg/L	0.489865	12.65%
Mg 279.077†	56988.5 3.07719	mg/L	0.012666	3.07719	mg/L	0.012666	0.41%
Mn 257.610†	713808.8 0.979443	mg/L	0.0041882	0.979443	mg/L	0.0041882	0.43%
Mo 202.031†	69.3 -0.0006795	mg/L	0.00006794	-0.0006795	mg/L	0.00006794	10.00%
Na 330.237†	26075.5 23.1866	mg/L	0.05312	23.1866	mg/L	0.05312	0.23%
Ni 231.604†	36.1 -0.0044821	mg/L	0.00014977	-0.0044821	mg/L	0.00014977	3.34%
Pb 220.353†	21.7 -0.0012770	mg/L	0.00059747	-0.0012770	mg/L	0.00059747	46.79%
Sb 206.836†	1.2 -0.0028428	mg/L	0.00073778	-0.0028428	mg/L	0.00073778	25.95%
Se 196.026†	7.3 0.0012034	mg/L	0.00239658	0.0012034	mg/L	0.00239658	199.16%
Sn 189.927†	-7.8 -0.0056903	mg/L	0.00018736	-0.0056903	mg/L	0.00018736	3.29%
Ti 334.940†	3073.0 0.0008878	mg/L	0.00011107	0.0008878	mg/L	0.00011107	12.51%
Tl 190.801†	-2.8 -0.0070108	mg/L	0.00017356	-0.0070108	mg/L	0.00017356	2.48%
V 290.880†	1266.2 0.0027174	mg/L	0.00001446	0.0027174	mg/L	0.00001446	0.53%
Zn 206.200†	1699.6 0.0324013	mg/L	0.00035572	0.0324013	mg/L	0.00035572	1.10%

Sequence No.: 41
 Sample ID: 75646-029
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 79
 Date Collected: 11/22/2013 5:33:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-029

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	999928.7	99.7	%	0.61			0.61%
Y 371.029	337828.3	97.2	%	0.34			0.35%
Ag 328.068†	-60.1	-0.0010799	mg/L	0.00016636	-0.0010799 mg/L	0.00016636	15.41%
Al 308.215†	462.5	-0.0389601	mg/L	0.00003979	-0.0389601 mg/L	0.00003979	0.10%
As 188.979†	-2.1	-0.0034945	mg/L	0.00354359	-0.0034945 mg/L	0.00354359	101.41%
Ba 233.527†	4631.6	0.0291530	mg/L	0.00031606	0.0291530 mg/L	0.00031606	1.08%
Be 313.107†	-169.0	-0.0029380	mg/L	0.00002150	-0.0029380 mg/L	0.00002150	0.73%
Ca 315.887†	2633346.7	26.4938	mg/L	0.01486	26.4938 mg/L	0.01486	0.06%
Cd 228.802†	-8.6	-0.0025899	mg/L	0.00007287	-0.0025899 mg/L	0.00007287	2.81%
Co 228.616†	12.2	-0.0048916	mg/L	0.00017191	-0.0048916 mg/L	0.00017191	3.51%
Cr 267.716†	7.8	-0.0044688	mg/L	0.00006929	-0.0044688 mg/L	0.00006929	1.55%
Cu 327.393†	81.1	-0.0042261	mg/L	0.00153048	-0.0042261 mg/L	0.00153048	36.21%
Fe 273.955†	230.0	-0.0462472	mg/L	0.00040892	-0.0462472 mg/L	0.00040892	0.88%
K 404.721†	363.7	4.05507	mg/L	1.080398	4.05507 mg/L	1.080398	26.64%
Mg 279.077†	75641.4	4.24728	mg/L	0.008398	4.24728 mg/L	0.008398	0.20%
Mn 257.610†	442811.6	0.605616	mg/L	0.0001930	0.605616 mg/L	0.0001930	0.03%
Mo 202.031†	67.8	-0.0009782	mg/L	0.00004146	-0.0009782 mg/L	0.00004146	4.24%
Na 330.237†	11908.8	10.7507	mg/L	0.00695	10.7507 mg/L	0.00695	0.06%
Ni 231.604†	41.4	-0.0043616	mg/L	0.00001731	-0.0043616 mg/L	0.00001731	0.40%
Pb 220.353†	3.0	-0.0028849	mg/L	0.00034829	-0.0028849 mg/L	0.00034829	12.07%
Sb 206.836†	0.7	-0.0031828	mg/L	0.00035365	-0.0031828 mg/L	0.00035365	11.11%
Se 196.026†	9.9	0.0032442	mg/L	0.00804595	0.0032442 mg/L	0.00804595	248.01%
Sn 189.927†	-10.9	-0.0063473	mg/L	0.00043497	-0.0063473 mg/L	0.00043497	6.85%
Ti 334.940†	-250.3	-0.0036800	mg/L	0.00003964	-0.0036800 mg/L	0.00003964	1.08%
Tl 190.801†	-1.4	-0.0056820	mg/L	0.00067932	-0.0056820 mg/L	0.00067932	11.96%
V 290.880†	749.5	-0.0011966	mg/L	0.00025690	-0.0011966 mg/L	0.00025690	21.47%
Zn 206.200†	439.9	0.0051575	mg/L	0.00021171	0.0051575 mg/L	0.00021171	4.10%

Sequence No.: 42
 Sample ID: 75646-031
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 80
 Date Collected: 11/22/2013 5:37:10 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-031

Mean Data: 75010-052								
	Mean Corrected		Calib		Sample			
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc 361.383	1005249.1	100	%	1.1				1.13%
Y 371.029	343492.2	98.8	%	0.91				0.92%
Ag 328.068†	-17.7	-0.0008505	mg/L	0.00029733	-0.0008505	mg/L	0.00029733	34.96%
Al 308.215†	1462.6	-0.0033771	mg/L	0.00033479	-0.0033771	mg/L	0.00033479	9.91%
As 188.979†	-0.8	-0.0022282	mg/L	0.00173880	-0.0022282	mg/L	0.00173880	78.03%
Ba 233.527†	1748.0	0.0079103	mg/L	0.00004877	0.0079103	mg/L	0.00004877	0.62%
Be 313.107†	-55.1	-0.0028967	mg/L	0.00000776	-0.0028967	mg/L	0.00000776	0.27%
Ca 315.887†	1240485.6	12.2083	mg/L	0.03583	12.2083	mg/L	0.03583	0.29%
Cd 228.802†	170.9	0.0008757	mg/L	0.00000283	0.0008757	mg/L	0.00000283	0.32%
Co 228.616†	2.3	-0.0051387	mg/L	0.00011594	-0.0051387	mg/L	0.00011594	2.26%
Cr 267.716†	352.5	-0.0003306	mg/L	0.00008340	-0.0003306	mg/L	0.00008340	25.23%
Cu 327.393†	547.9	-0.0005316	mg/L	0.00038713	-0.0005316	mg/L	0.00038713	72.83%
Fe 273.955†	2627.2	0.0589882	mg/L	0.00019727	0.0589882	mg/L	0.00019727	0.33%
K 404.721†	52.9	0.930880	mg/L	2.5482975	0.930880	mg/L	2.5482975	273.75%
Mg 279.077†	44552.1	2.29095	mg/L	0.008792	2.29095	mg/L	0.008792	0.38%
Mn 257.610†	1291.8	-0.0032952	mg/L	0.00005890	-0.0032952	mg/L	0.00005890	1.79%
Mo 202.031†	38.7	-0.0020091	mg/L	0.00053110	-0.0020091	mg/L	0.00053110	26.43%
Na 330.237†	9963.5	9.04305	mg/L	0.060584	9.04305	mg/L	0.060584	0.67%
Ni 231.604†	25.2	-0.0047344	mg/L	0.00012697	-0.0047344	mg/L	0.00012697	2.68%
Pb 220.353†	1.3	-0.0030230	mg/L	0.00080608	-0.0030230	mg/L	0.00080608	26.66%
Sb 206.836†	0.2	-0.0034201	mg/L	0.00074834	-0.0034201	mg/L	0.00074834	21.88%
Se 196.026†	2.1	-0.0028449	mg/L	0.00469286	-0.0028449	mg/L	0.00469286	164.96%
Sn 189.927†	-6.7	-0.0055682	mg/L	0.00220543	-0.0055682	mg/L	0.00220543	39.61%
Ti 334.940†	781.0	-0.0022625	mg/L	0.00011507	-0.0022625	mg/L	0.00011507	5.09%
Tl 190.801†	-4.9	-0.0074760	mg/L	0.00215102	-0.0074760	mg/L	0.00215102	28.77%
V 290.880†	482.2	-0.0030268	mg/L	0.00007096	-0.0030268	mg/L	0.00007096	2.34%
Zn 206.200†	524.3	0.0069800	mg/L	0.00006859	0.0069800	mg/L	0.00006859	0.98%

Sequence No.: 43
 Sample ID: ICSEA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/22/2013 5:40:35 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSEA V-173614

Mean Data: 1000 V 17000								
Analyte	Mean Corrected		Calib	Std.Dev.	Sample		RSD	
	Intensity	Conc.	Units		Conc.	Units		Std.Dev.
Sc 361.383	842801.5	84.0	%	0.10			0.12%	
Y 371.029	280558.4	80.7	%	0.47			0.58%	
Ag 328.068†	-3341.3	-0.0018327	mg/L	0.00050389	-0.0018327	mg/L	27.49%	
Al 308.215†	14195155.6	504.623	mg/L	2.3364	504.623	mg/L	2.3364	0.46%
QC value within limits for Al 308.215 Recovery = 100.92%								
As 188.979†	39.4	-0.0024445	mg/L	0.00311511	-0.0024445	mg/L	0.00311511	127.43%
Ba 233.527†	1732.4	0.0006893	mg/L	0.00026673	0.0006893	mg/L	0.00026673	38.70%
Be 313.107†	-1971.0	-0.0036002	mg/L	0.00002238	-0.0036002	mg/L	0.00002238	0.62%
Ca 315.887†	46932386.0	480.589	mg/L	3.2207	480.589	mg/L	3.2207	0.67%
QC value within limits for Ca 315.887 Recovery = 96.12%								
Cd 228.802†	214.6	-0.0041135	mg/L	0.00007219	-0.0041135	mg/L	0.00007219	1.76%
Co 228.616†	-42.9	-0.0061305	mg/L	0.00028739	-0.0061305	mg/L	0.00028739	4.69%
Cr 267.716†	-240.0	-0.0076965	mg/L	0.00004716	-0.0076965	mg/L	0.00004716	0.61%
Cu 327.393†	765.4	-0.0114094	mg/L	0.00058603	-0.0114094	mg/L	0.00058603	5.14%
Fe 273.955†	4271859.8	187.477	mg/L	0.0614	187.477	mg/L	0.0614	0.03%
QC value within limits for Fe 273.955 Recovery = 93.74%								
K 404.721†	-1941.6	-19.1193	mg/L	1.71619	-19.1193	mg/L	1.71619	8.98%
Mg 279.077†	8088151.2	507.378	mg/L	1.2764	507.378	mg/L	1.2764	0.25%
QC value within limits for Mg 279.077 Recovery = 101.48%								
Mn 257.610†	1430.7	-0.0218357	mg/L	0.00021214	-0.0218357	mg/L	0.00021214	0.97%
Mo 202.031†	570.2	0.0004500	mg/L	0.00104825	0.0004500	mg/L	0.00104825	232.93%
Na 330.237†	104.4	0.388535	mg/L	0.0846281	0.388535	mg/L	0.0846281	21.78%
Ni 231.604†	54.3	-0.0040371	mg/L	0.00002599	-0.0040371	mg/L	0.00002599	0.64%
Pb 220.353†	-490.0	-0.0045914	mg/L	0.00031058	-0.0045914	mg/L	0.00031058	6.76%
Sb 206.836†	-60.4	-0.0086073	mg/L	0.00724457	-0.0086073	mg/L	0.00724457	84.17%
Se 196.026†	-23.9	-0.0197384	mg/L	0.01539998	-0.0197384	mg/L	0.01539998	78.02%
Sn 189.927†	-4.5	-0.0043680	mg/L	0.00037932	-0.0043680	mg/L	0.00037932	8.68%
Ti 334.940†	722.1	-0.0023435	mg/L	0.00006064	-0.0023435	mg/L	0.00006064	2.59%
Tl 190.801†	14.7	-0.0166668	mg/L	0.00369041	-0.0166668	mg/L	0.00369041	22.14%
V 290.880†	13039.1	0.0131145	mg/L	0.00177652	0.0131145	mg/L	0.00177652	13.55%
Zn 206.200†	624.1	-0.0067986	mg/L	0.00005128	-0.0067986	mg/L	0.00005128	0.75%
All analyte(s) passed QC.								

All analyte(s) passed QC.

Sequence No.: 44
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/22/2013 5:45:16 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	844715.8	84.2 %		0.14			0.16%
Y 371.029	282206.6	81.2 %		0.44			0.54%
Ag 328.068†	211666.9	1.11480 mg/L		0.014157	1.11480 mg/L	0.014157	1.27%
QC value within limits for Ag	328.068	Recovery = 111.48%					
Al 308.215†	14020317.1	498.407 mg/L		0.4892	498.407 mg/L	0.4892	0.10%
QC value within limits for Al	308.215	Recovery = 99.68%					
As 188.979†	1437.5	1.06201 mg/L		0.003004	1.06201 mg/L	0.003004	0.28%
QC value within limits for As	188.979	Recovery = 106.20%					
Ba 233.527†	74102.4	0.533774 mg/L		0.0053319	0.533774 mg/L	0.0053319	1.00%
QC value within limits for Ba	233.527	Recovery = 106.75%					
Be 313.107†	1430086.6	0.522258 mg/L		0.0001625	0.522258 mg/L	0.0001625	0.03%
QC value within limits for Be	313.107	Recovery = 104.45%					
Ca 315.887†	46393294.5	475.059 mg/L		0.7692	475.059 mg/L	0.7692	0.16%
QC value within limits for Ca	315.887	Recovery = 95.01%					
Cd 228.802†	57149.9	1.07675 mg/L		0.011774	1.07675 mg/L	0.011774	1.09%
QC value within limits for Cd	228.802	Recovery = 107.68%					
Co 228.616†	20419.3	0.490352 mg/L		0.0000275	0.490352 mg/L	0.0000275	0.01%
QC value within limits for Co	228.616	Recovery = 98.07%					
Cr 267.716†	40014.4	0.502754 mg/L		0.0075819	0.502754 mg/L	0.0075819	1.51%
QC value within limits for Cr	267.716	Recovery = 100.55%					
Cu 327.393†	73957.8	0.537658 mg/L		0.0033464	0.537658 mg/L	0.0033464	0.62%
QC value within limits for Cu	327.393	Recovery = 107.53%					
Fe 273.955†	4237542.6	185.971 mg/L		0.1587	185.971 mg/L	0.1587	0.09%
QC value within limits for Fe	273.955	Recovery = 92.99%					
K 404.721†	-2102.8	-20.7397 mg/L		0.88476	-20.7397 mg/L	0.88476	4.27%
Mg 279.077†	8031149.3	503.801 mg/L		0.2399	503.801 mg/L	0.2399	0.05%
QC value within limits for Mg	279.077	Recovery = 100.76%					
Mn 257.610†	371598.6	0.488865 mg/L		0.0054902	0.488865 mg/L	0.0054902	1.12%
QC value within limits for Mn	257.610	Recovery = 97.77%					
Mo 202.031†	570.5	0.0007675 mg/L		0.00007169	0.0007675 mg/L	0.00007169	9.34%
Na 330.237†	1132.5	1.29106 mg/L		0.037102	1.29106 mg/L	0.037102	2.87%
Ni 231.604†	42425.9	0.963427 mg/L		0.0107222	0.963427 mg/L	0.0107222	1.11%
QC value within limits for Ni	231.604	Recovery = 96.34%					
Pb 220.353†	10663.3	0.982052 mg/L		0.0002360	0.982052 mg/L	0.0002360	0.02%
QC value within limits for Pb	220.353	Recovery = 98.21%					
Sb 206.836†	2241.7	1.07183 mg/L		0.001504	1.07183 mg/L	0.001504	0.14%
QC value within limits for Sb	206.836	Recovery = 107.18%					
Se 196.026†	1173.2	1.02023 mg/L		0.006774	1.02023 mg/L	0.006774	0.66%
QC value within limits for Se	196.026	Recovery = 102.02%					
Sn 189.927†	-9.0	-0.0055197 mg/L		0.00019842	-0.0055197 mg/L	0.00019842	3.59%
Ti 334.940†	732.1	-0.0023296 mg/L		0.00003771	-0.0023296 mg/L	0.00003771	1.62%
Tl 190.801†	1435.6	0.979762 mg/L		0.0043569	0.979762 mg/L	0.0043569	0.44%
QC value within limits for Tl	190.801	Recovery = 97.98%					
V 290.880†	81771.9	0.504378 mg/L		0.0058898	0.504378 mg/L	0.0058898	1.17%
QC value within limits for V	290.880	Recovery = 100.88%					
Zn 206.200†	45556.1	0.966580 mg/L		0.0011296	0.966580 mg/L	0.0011296	0.12%
QC value within limits for Zn	206.200	Recovery = 96.66%					

All analyte(s) passed QC.

Sequence No.: 45
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/22/2013 5:50:13 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	949079.8	94.6 %		0.42			0.44%
Y 371.029	312923.0	90.0 %		0.17			0.19%
Ag 328.068†	18839.1	0.0975221 mg/L	0.00048199		0.0975221 mg/L	0.00048199	0.49%
QC value within limits for Ag	328.068	Recovery = 97.52%					
Al 308.215†	142317.6	4.99624 mg/L	0.008563		4.99624 mg/L	0.008563	0.17%
QC value within limits for Al	308.215	Recovery = 99.92%					
As 188.979†	637.8	0.483101 mg/L	0.0000765		0.483101 mg/L	0.0000765	0.02%
QC value within limits for As	188.979	Recovery = 96.62%					
Ba 233.527†	68548.2	0.499727 mg/L	0.0004321		0.499727 mg/L	0.0004321	0.09%
QC value within limits for Ba	233.527	Recovery = 99.95%					
Be 313.107†	1347222.6	0.491654 mg/L	0.0024026		0.491654 mg/L	0.0024026	0.49%
QC value within limits for Be	313.107	Recovery = 98.33%					
Ca 315.887†	4938160.4	50.1272 mg/L	0.12767		50.1272 mg/L	0.12767	0.25%
QC value within limits for Ca	315.887	Recovery = 100.25%					
Cd 228.802†	26269.8	0.496029 mg/L	0.0010467		0.496029 mg/L	0.0010467	0.21%
QC value within limits for Cd	228.802	Recovery = 99.21%					
Co 228.616†	20545.6	0.494177 mg/L	0.0030193		0.494177 mg/L	0.0030193	0.61%
QC value within limits for Co	228.616	Recovery = 98.84%					
Cr 267.716†	39527.5	0.498994 mg/L	0.0044077		0.498994 mg/L	0.0044077	0.88%
QC value within limits for Cr	267.716	Recovery = 99.80%					
Cu 327.393†	65430.6	0.485527 mg/L	0.0001090		0.485527 mg/L	0.0001090	0.02%
QC value within limits for Cu	327.393	Recovery = 97.11%					
Fe 273.955†	115039.6	4.99386 mg/L	0.026842		4.99386 mg/L	0.026842	0.54%
QC value within limits for Fe	273.955	Recovery = 99.88%					
K 404.721†	4733.6	47.9850 mg/L	0.82570		47.9850 mg/L	0.82570	1.72%
QC value within limits for K	404.721	Recovery = 95.97%					
Mg 279.077†	817792.4	50.8632 mg/L	0.13767		50.8632 mg/L	0.13767	0.27%
QC value within limits for Mg	279.077	Recovery = 101.73%					
Mn 257.610†	358975.9	0.488404 mg/L	0.0007722		0.488404 mg/L	0.0007722	0.16%
QC value within limits for Mn	257.610	Recovery = 97.68%					
Mo 202.031†	9489.1	0.492829 mg/L	0.0016493		0.492829 mg/L	0.0016493	0.33%
QC value within limits for Mo	202.031	Recovery = 98.57%					
Na 330.237†	53453.7	47.2197 mg/L	0.21995		47.2197 mg/L	0.21995	0.47%
QC value within limits for Na	330.237	Recovery = 94.44%					
Ni 231.604†	21991.7	0.497400 mg/L	0.0006692		0.497400 mg/L	0.0006692	0.13%
QC value within limits for Ni	231.604	Recovery = 99.48%					
Pb 220.353†	5601.9	0.492658 mg/L	0.0015676		0.492658 mg/L	0.0015676	0.32%
QC value within limits for Pb	220.353	Recovery = 98.53%					
Sb 206.836†	1080.2	0.504205 mg/L	0.0030355		0.504205 mg/L	0.0030355	0.60%
QC value within limits for Sb	206.836	Recovery = 100.84%					
Se 196.026†	568.8	0.489394 mg/L	0.0010149		0.489394 mg/L	0.0010149	0.21%
QC value within limits for Se	196.026	Recovery = 97.88%					
Sn 189.927†	1899.9	0.497243 mg/L	0.0019172		0.497243 mg/L	0.0019172	0.39%
QC value within limits for Sn	189.927	Recovery = 99.45%					
Ti 334.940†	357288.3	0.487752 mg/L	0.0004957		0.487752 mg/L	0.0004957	0.10%
QC value within limits for Ti	334.940	Recovery = 97.55%					
Tl 190.801†	724.7	0.509163 mg/L	0.0045986		0.509163 mg/L	0.0045986	0.90%
QC value within limits for Tl	190.801	Recovery = 101.83%					
V 290.880†	70314.7	0.489038 mg/L	0.0020735		0.489038 mg/L	0.0020735	0.42%
QC value within limits for V	290.880	Recovery = 97.81%					
Zn 206.200†	22970.5	0.492748 mg/L	0.0013444		0.492748 mg/L	0.0013444	0.27%
QC value within limits for Zn	206.200	Recovery = 98.55%					

All analyte(s) passed QC.

Sequence No.: 46

Sample ID: LLCCV V-176606 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/22/2013 5:53:40 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-176606 [aq]

Analyte	Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	986640.5	98.3	%	0.34			0.35%
Y 371.029	336833.2	96.9	%	0.15			0.16%
Ag 328.068†	3884.3	0.0194346	mg/L	0.00012294	0.0194346 mg/L	0.00012294	0.63%
QC value within limits for Ag		328.068		Recovery = 97.17%			
Al 308.215†	6069.2	0.160082	mg/L	0.0054322	0.160082 mg/L	0.0054322	3.39%
QC value within limits for Al		308.215		Recovery = 80.04%			
As 188.979†	25.8	0.0181047	mg/L	0.00203786	0.0181047 mg/L	0.00203786	11.26%
QC value within limits for As		188.979		Recovery = 78.52%			
Ba 233.527†	7010.7	0.0466639	mg/L	0.00099714	0.0466639 mg/L	0.00099714	2.14%
QC value within limits for Ba		233.527		Recovery = 93.33%			
Be 313.107†	31484.5	0.0086682	mg/L	0.00015487	0.0086682 mg/L	0.00015487	1.79%
QC value within limits for Be		313.107		Recovery = 72.23%			
Ca 315.887†	500939.4	4.62117	mg/L	0.061144	4.62117 mg/L	0.061144	1.32%
QC value within limits for Ca		315.887		Recovery = 92.42%			
Cd 228.802†	617.3	0.0093774	mg/L	0.00015986	0.0093774 mg/L	0.00015986	1.70%
QC value within limits for Cd		228.802		Recovery = 78.14%			
Co 228.616†	866.6	0.0158089	mg/L	0.00028398	0.0158089 mg/L	0.00028398	1.80%
QC value within limits for Co		228.616		Recovery = 79.04%			
Cr 267.716†	3978.9	0.0457519	mg/L	0.00080933	0.0457519 mg/L	0.00080933	1.77%
QC value within limits for Cr		267.716		Recovery = 91.50%			
Cu 327.393†	6955.4	0.0476151	mg/L	0.00023671	0.0476151 mg/L	0.00023671	0.50%
QC value within limits for Cu		327.393		Recovery = 95.23%			
Fe 273.955†	7193.5	0.259451	mg/L	0.0022706	0.259451 mg/L	0.0022706	0.88%
QC value within limits for Fe		273.955		Recovery = 86.48%			
K 404.721†	394.8	4.36819	mg/L	1.944010	4.36819 mg/L	1.944010	44.50%
QC value within limits for K		404.721		Recovery = 87.36%			
Mg 279.077†	82822.1	4.69499	mg/L	0.074598	4.69499 mg/L	0.074598	1.59%
QC value within limits for Mg		279.077		Recovery = 93.90%			
Mn 257.610†	29661.5	0.0357514	mg/L	0.00055828	0.0357514 mg/L	0.00055828	1.56%
QC value within limits for Mn		257.610		Recovery = 89.38%			
Mo 202.031†	404.5	0.0174568	mg/L	0.00025776	0.0174568 mg/L	0.00025776	1.48%
QC value within limits for Mo		202.031		Recovery = 87.28%			
Na 330.237†	4592.8	4.32859	mg/L	0.073414	4.32859 mg/L	0.073414	1.70%
QC value within limits for Na		330.237		Recovery = 86.57%			
Ni 231.604†	2299.1	0.0472080	mg/L	0.00007789	0.0472080 mg/L	0.00007789	0.16%
QC value within limits for Ni		231.604		Recovery = 94.42%			
Pb 220.353†	152.8	0.0103685	mg/L	0.00024169	0.0103685 mg/L	0.00024169	2.33%
QC value within limits for Pb		220.353		Recovery = 86.40%			
Sb 206.836†	46.2	0.0182209	mg/L	0.00032783	0.0182209 mg/L	0.00032783	1.80%
QC value within limits for Sb		206.836		Recovery = 91.10%			
Se 196.026†	49.7	0.0388029	mg/L	0.00229210	0.0388029 mg/L	0.00229210	5.91%
QC value within limits for Se		196.026		Recovery = 97.01%			
Sn 189.927†	176.3	0.0424104	mg/L	0.00125395	0.0424104 mg/L	0.00125395	2.96%
QC value within limits for Sn		189.927		Recovery = 84.82%			
Ti 334.940†	34276.6	0.0437767	mg/L	0.00056167	0.0437767 mg/L	0.00056167	1.28%
QC value within limits for Ti		334.940		Recovery = 87.55%			
Tl 190.801†	26.3	0.0147143	mg/L	0.00018175	0.0147143 mg/L	0.00018175	1.24%
QC value within limits for Tl		190.801		Recovery = 73.57%			
V 290.880†	7429.8	0.0462526	mg/L	0.00080711	0.0462526 mg/L	0.00080711	1.75%
QC value within limits for V		290.880		Recovery = 92.51%			
Zn 206.200†	2358.0	0.0466828	mg/L	0.00009601	0.0466828 mg/L	0.00009601	0.21%
QC value within limits for Zn		206.200		Recovery = 93.37%			

All analyte(s) passed QC.

Sequence No.: 47

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 11/22/2013 5:57:07 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Mean Data: CCL			Mean Corrected		Calib		Sample			
Analyte			Intensity		Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD	
Sc 361.383			996623.6		99.3 %	0.49			0.49%	
Y 371.029			345227.1		99.3 %	0.70			0.70%	
Ag 328.068†			5.6	-0.0007394	mg/L	0.00013719	-0.0007394	mg/L	0.00013719	18.55%
	QC value	within limits	for Ag 328.068	Recovery	=	Not calculated				
Al 308.215†			143.2	-0.0502593	mg/L	0.00028171	-0.0502593	mg/L	0.00028171	0.56%
	QC value	within limits	for Al 308.215	Recovery	=	Not calculated				
As 188.979†			-2.6	-0.0034235	mg/L	0.00109431	-0.0034235	mg/L	0.00109431	31.96%
	QC value	within limits	for As 188.979	Recovery	=	Not calculated				
Ba 233.527†			-6.8	-0.0050098	mg/L	0.00001771	-0.0050098	mg/L	0.00001771	0.35%
	QC value	within limits	for Ba 233.527	Recovery	=	Not calculated				
Be 313.107†			-71.8	-0.0029025	mg/L	0.00000822	-0.0029025	mg/L	0.00000822	0.28%
	QC value	within limits	for Be 313.107	Recovery	=	Not calculated				
Ca 315.887†			-289.8	-0.519826	mg/L	0.0021746	-0.519826	mg/L	0.0021746	0.42%
	QC value	within limits	for Ca 315.887	Recovery	=	Not calculated				
Cd 228.802†			6.8	-0.0021846	mg/L	0.00016835	-0.0021846	mg/L	0.00016835	7.71%
	QC value	within limits	for Cd 228.802	Recovery	=	Not calculated				
Co 228.616†			2.2	-0.0051470	mg/L	0.00005436	-0.0051470	mg/L	0.00005436	1.06%
	QC value	within limits	for Co 228.616	Recovery	=	Not calculated				
Cr 267.716†			-3.6	-0.0048541	mg/L	0.00015579	-0.0048541	mg/L	0.00015579	3.21%
	QC value	within limits	for Cr 267.716	Recovery	=	Not calculated				
Cu 327.393†			-41.0	-0.0047729	mg/L	0.00061039	-0.0047729	mg/L	0.00061039	12.79%
	QC value	within limits	for Cu 327.393	Recovery	=	Not calculated				
Fe 273.955†			10.5	-0.0558818	mg/L	0.00030419	-0.0558818	mg/L	0.00030419	0.54%
	QC value	within limits	for Fe 273.955	Recovery	=	Not calculated				
K 404.721†			31.8	0.718595	mg/L	0.5620851	0.718595	mg/L	0.5620851	78.22%
	QC value	within limits	for K 404.721	Recovery	=	Not calculated				
Mg 279.077†			7.7	-0.506822	mg/L	0.0035371	-0.506822	mg/L	0.0035371	0.70%
	QC value	within limits	for Mg 279.077	Recovery	=	Not calculated				
Mn 257.610†			30.1	-0.0049323	mg/L	0.00002671	-0.0049323	mg/L	0.00002671	0.54%
	QC value	within limits	for Mn 257.610	Recovery	=	Not calculated				
Mo 202.031†			6.4	-0.0032567	mg/L	0.00009327	-0.0032567	mg/L	0.00009327	2.86%
	QC value	within limits	for Mo 202.031	Recovery	=	Not calculated				
Na 330.237†			-44.6	0.257797	mg/L	0.0962403	0.257797	mg/L	0.0962403	37.33%
	QC value	within limits	for Na 330.237	Recovery	=	Not calculated				
Ni 231.604†			15.2	-0.0049644	mg/L	0.00010723	-0.0049644	mg/L	0.00010723	2.16%
	QC value	within limits	for Ni 231.604	Recovery	=	Not calculated				
Pb 220.353†			-5.9	-0.0036182	mg/L	0.00025504	-0.0036182	mg/L	0.00025504	7.05%
	QC value	within limits	for Pb 220.353	Recovery	=	Not calculated				
Sb 206.836†			-1.9	-0.0043655	mg/L	0.00203938	-0.0043655	mg/L	0.00203938	46.72%
	QC value	within limits	for Sb 206.836	Recovery	=	Not calculated				
Se 196.026†			5.8	0.0006658	mg/L	0.00314783	0.0006658	mg/L	0.00314783	472.76%
	QC value	within limits	for Se 196.026	Recovery	=	Not calculated				
Sn 189.927†			2.9	-0.0033741	mg/L	0.00004173	-0.0033741	mg/L	0.00004173	1.24%
	QC value	within limits	for Sn 189.927	Recovery	=	Not calculated				
Ti 334.940†			27.6	-0.0032980	mg/L	0.00004151	-0.0032980	mg/L	0.00004151	1.26%
	QC value	within limits	for Ti 334.940	Recovery	=	Not calculated				
Tl 190.801†			-1.8	-0.0053831	mg/L	0.00005526	-0.0053831	mg/L	0.00005526	1.03%
	QC value	within limits	for Tl 190.801	Recovery	=	Not calculated				
V 290.880†			108.3	-0.0053235	mg/L	0.00033346	-0.0053235	mg/L	0.00033346	6.26%
	QC value	within limits	for V 290.880	Recovery	=	Not calculated				
Zn 206.200†			-15.2	-0.0046982	mg/L	0.00036615	-0.0046982	mg/L	0.00036615	7.79%
	QC value	within limits	for Zn 206.200	Recovery	=	Not calculated				

All analyte(s) passed QC.

File SW15726B

3110835 0330

Batch 15726 SW846

Method: PE 1 3000DV RADIAL

Page 1

Date: 11/22/2013 10:32:54 AM

Analyst J Bl 11/22/13

=====
Analysis Begun

Start Time: 11/22/2013 10:30:56 AM

Plasma On Time: 11/22/2013 9:55:21 AM

Logged In Analyst: shiamala

Technique: ICP Continuous

Spectrometer Model: Optima 3300 DV, S/N 069N5072002 Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\11.21.13.sif

Batch ID: PEICP 1

Results Data Set: SW15726B

Results Library: C:\pe\Administrator\Results\Results.mdb

=====
Method Loaded

Method Name: PE 1 3000DV RADIAL

Method Last Saved: 11/21/2013 4:39:38 PM

IEC File: IEC042213R.iec

MSF File:

Method Description: 200.7/6010B/6010C

=====
Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blk 1 V-174666

Date Collected: 11/22/2013 10:30:58 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	Calib Conc. Units
Al 308.215	25.3	3.32	13.15%	[0.00] mg/L
Ca 315.887	-70.5	5.68	8.06%	[0.00] mg/L
Fe 273.955	9.3	2.23	23.86%	[0.00] mg/L
Mg 279.077	3.9	0.89	22.67%	[0.00] mg/L
Mn 257.610	-49.8	2.90	5.82%	[0.00] mg/L
K 766.490	-3220.8	119.71	3.72%	[0.00] mg/L
Na 589.592	4677.8	85.44	1.83%	[0.00] mg/L
Ti 334.940	5.5	0.73	13.31%	[0.00] mg/L

15726
27441

75646-011-031 WgK reported

Sequence No.: 2
Sample ID: Calib Std 1 V-175715
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 160
Date Collected: 11/22/2013 10:33:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 1 V-175715

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	17.3	1.87	10.81%	[0.1]	mg/L
Ca 315.887	1202.4	1.25	0.10%	[1]	mg/L
Fe 273.955	13.0	1.03	7.91%	[0.1]	mg/L
Mg 279.077	167.7	2.46	1.47%	[1]	mg/L
Mn 257.610	29.7	0.88	2.97%	[0.01]	mg/L
K 766.490	3569.7	5.03	0.14%	[1]	mg/L
Na 589.592	10577.1	97.39	0.92%	[1]	mg/L
Ti 334.940	58.0	1.09	1.88%	[0.01]	mg/L

Sequence No.: 3
Sample ID: Calib Std 2 V-175281
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 11/22/2013 10:36:55 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 2 V-175281

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	881.4	2.30	0.26%	[5]	mg/L
Ca 315.887	69413.6	52.22	0.08%	[50]	mg/L
Fe 273.955	788.3	3.22	0.41%	[5]	mg/L
Mg 279.077	8992.4	38.03	0.42%	[50]	mg/L
Mn 257.610	1647.5	5.80	0.35%	[0.5]	mg/L
K 766.490	211704.9	394.57	0.19%	[50]	mg/L
Na 589.592	615676.5	1223.25	0.20%	[50]	mg/L
Ti 334.940	3458.7	6.46	0.19%	[0.5]	mg/L

Sequence No.: 4
 Sample ID: Calib Std 3 V-176344
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/22/2013 10:39:55 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: Calib Std 3 V-176344

Analyte	Intensity	Std.Dev.	RSD	Conc.	Units
Al 308.215	1668.5	14.51	0.87%	[10]	mg/L
Ca 315.887	127256.9	1651.80	1.30%	[100]	mg/L
Fe 273.955	1477.9	13.44	0.91%	[10]	mg/L
Mg 279.077	16588.9	80.82	0.49%	[100]	mg/L
Mn 257.610	3079.8	18.78	0.61%	[1.0]	mg/L
K 766.490	401549.9	243.47	0.06%	[100]	mg/L
Na 589.592	1155478.7	539.60	0.05%	[100]	mg/L
Ti 334.940	6486.6	44.95	0.69%	[1.0]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Al 308.215	3	Lin, Calc Int	8.9	167.7	0.00000	0.999580	
Ca 315.887	3	Lin, Calc Int	1021.1	1283	0.00000	0.998908	
Fe 273.955	3	Lin, Calc Int	8.2	148.8	0.00000	0.999400	
Mg 279.077	3	Lin, Calc Int	127.8	167.1	0.00000	0.999069	
Mn 257.610	3	Lin, Calc Int	19.1	3100	0.00000	0.999352	
K 766.490	3	Lin, Calc Int	1786.9	4038	0.00000	0.999599	
Na 589.592	3	Lin, Calc Int	6460.8	11630	0.00000	0.999423	
Ti 334.940	3	Lin, Calc Int	36.1	6529	0.00000	0.999408	

Sequence No.: 5

Sample ID: ICS3 V-175281

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 11/22/2013 10:42:59 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICS3 V-175281

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	891.2	5.26239 mg/L	0.002691	5.26239 mg/L	0.002691	0.05%
QC value within limits for Al 308.215 Recovery = 105.25%						
Ca 315.887	68740.9	52.7673 mg/L	1.90862	52.7673 mg/L	1.90862	3.62%
QC value within limits for Ca 315.887 Recovery = 105.53%						
Fe 273.955	793.7	5.28005 mg/L	0.002650	5.28005 mg/L	0.002650	0.05%
QC value within limits for Fe 273.955 Recovery = 105.60%						
Mg 279.077	9047.2	53.3659 mg/L	0.11759	53.3659 mg/L	0.11759	0.22%
QC value within limits for Mg 279.077 Recovery = 106.73%						
Mn 257.610	1648.0	0.525511 mg/L	0.0002377	0.525511 mg/L	0.0002377	0.05%
QC value within limits for Mn 257.610 Recovery = 105.10%						
K 766.490	208388.9	51.1696 mg/L	1.88341	51.1696 mg/L	1.88341	3.68%
QC value within limits for K 766.490 Recovery = 102.34%						
Na 589.592	606821.4	51.6288 mg/L	1.87684	51.6288 mg/L	1.87684	3.64%
QC value within limits for Na 589.592 Recovery = 103.26%						
Ti 334.940	3468.8	0.525755 mg/L	0.0000131	0.525755 mg/L	0.0000131	0.00%
QC value within limits for Ti 334.940 Recovery = 105.15%						

All analyte(s) passed QC.

Sequence No.: 6

Sample ID: ICV V-176789

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 11/22/2013 10:45:58 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICV V-176789

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Al 308.215	860.5	5.07932 mg/L	0.008971	5.07932 mg/L	0.008971	0.18%	
QC value within limits for Al 308.215 Recovery = 101.59%							
Ca 315.887	67271.0	51.6219 mg/L	0.60483	51.6219 mg/L	0.60483	1.17%	
QC value within limits for Ca 315.887 Recovery = 103.24%							
Fe 273.955	765.3	5.08898 mg/L	0.003300	5.08898 mg/L	0.003300	0.06%	
QC value within limits for Fe 273.955 Recovery = 101.78%							
Mg 279.077	8843.0	52.1437 mg/L	0.14584	52.1437 mg/L	0.14584	0.28%	
QC value within limits for Mg 279.077 Recovery = 104.29%							
Mn 257.610	1570.6	0.500528 mg/L	0.0016133	0.500528 mg/L	0.0016133	0.32%	
QC value within limits for Mn 257.610 Recovery = 100.11%							
K 766.490	203789.2	50.0304 mg/L	0.59634	50.0304 mg/L	0.59634	1.19%	
QC value within limits for K 766.490 Recovery = 100.06%							
Na 589.592	591451.9	50.3071 mg/L	0.63244	50.3071 mg/L	0.63244	1.26%	
QC value within limits for Na 589.592 Recovery = 100.61%							
Ti 334.940	3315.6	0.502299 mg/L	0.0006884	0.502299 mg/L	0.0006884	0.14%	
QC value within limits for Ti 334.940 Recovery = 100.46%							

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV [aq] V-176895

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 11/22/2013 10:48:59 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV [aq] V-176895

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	29.1	0.120911 mg/L	0.0047137	0.120911 mg/L	0.0047137	3.90%
QC value less than the lower limit for Al 308.215 Recovery = 60.46%						
Ca 315.887	6620.4	4.36300 mg/L	0.021543	4.36300 mg/L	0.021543	0.49%
QC value within limits for Ca 315.887 Recovery = 87.26%						
Fe 273.955	48.1	0.268131 mg/L	0.0190595	0.268131 mg/L	0.0190595	7.11%
QC value within limits for Fe 273.955 Recovery = 89.38%						
Mg 279.077	905.8	4.65436 mg/L	0.074444	4.65436 mg/L	0.074444	1.60%
QC value within limits for Mg 279.077 Recovery = 93.09%						
Mn 257.610	118.6	0.0320902 mg/L	0.00051333	0.0320902 mg/L	0.00051333	1.60%
QC value within limits for Mn 257.610 Recovery = 80.23%						
K 766.490	19950.4	4.49861 mg/L	0.119310	4.49861 mg/L	0.119310	2.65%
QC value within limits for K 766.490 Recovery = 89.97%						
Na 589.592	59480.0	4.55946 mg/L	0.082806	4.55946 mg/L	0.082806	1.82%
QC value within limits for Na 589.592 Recovery = 91.19%						
Ti 334.940	317.3	0.0430750 mg/L	0.00088495	0.0430750 mg/L	0.00088495	2.05%
QC value within limits for Ti 334.940 Recovery = 86.15%						

QC Failed. Continue with analysis.

Sequence No.: 8
 Sample ID: ICB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 11/22/2013 10:52:02 AM
 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
Al 308.215	2.0	-0.0409295 mg/L	0.03422413	-0.0409295 mg/L	0.03422413	83.62%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887	-3.0	-0.797907 mg/L	0.0027433	-0.797907 mg/L	0.0027433	0.34%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955	-1.2	-0.0631328 mg/L	0.02340372	-0.0631328 mg/L	0.02340372	37.07%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	2.1	-0.752545 mg/L	0.0005587	-0.752545 mg/L	0.0005587	0.07%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	-7.9	-0.0087224 mg/L	0.00092099	-0.0087224 mg/L	0.00092099	10.56%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490	354.1	-0.354864 mg/L	0.0747636	-0.354864 mg/L	0.0747636	21.07%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592	-66.1	-0.561285 mg/L	0.0060018	-0.561285 mg/L	0.0060018	1.07%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940	0.1	-0.0055131 mg/L	0.00113065	-0.0055131 mg/L	0.00113065	20.51%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSA V-175629

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/22/2013 10:54:59 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA V-175629

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	86930.0	518.418 mg/L	1.2213	518.418 mg/L	1.2213	0.24%
QC value within limits for Al 308.215 Recovery = 103.68%						
Ca 315.887	645315.2	502.034 mg/L	0.9522	502.034 mg/L	0.9522	0.19%
QC value within limits for Ca 315.887 Recovery = 100.41%						
Fe 273.955	29161.9	195.953 mg/L	0.1108	195.953 mg/L	0.1108	0.06%
QC value within limits for Fe 273.955 Recovery = 97.98%						
Mg 279.077	86533.2	516.974 mg/L	0.3087	516.974 mg/L	0.3087	0.06%
QC value within limits for Mg 279.077 Recovery = 103.39%						
Mn 257.610	4.8	-0.0046171 mg/L	0.00019983	-0.0046171 mg/L	0.00019983	4.33%
K 766.490	491.6	-0.320811 mg/L	0.0019376	-0.320811 mg/L	0.0019376	0.60%
Na 589.592	1120.7	-0.459229 mg/L	0.0090895	-0.459229 mg/L	0.0090895	1.98%
Ti 334.940	-66.7	-0.0157421 mg/L	0.00068594	-0.0157421 mg/L	0.00068594	4.36%

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSAB V-175630

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 11/22/2013 10:58:21 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB V-175630

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Al 308.215	87582.2	522.308 mg/L		0.9601	522.308 mg/L		0.9601	0.18%
QC value within limits for Al 308.215 Recovery = 104.46%								
Ca 315.887	650478.7	506.057 mg/L		1.1737	506.057 mg/L		1.1737	0.23%
QC value within limits for Ca 315.887 Recovery = 101.21%								
Fe 273.955	28840.2	193.791 mg/L		0.5353	193.791 mg/L		0.5353	0.28%
QC value within limits for Fe 273.955 Recovery = 96.90%								
Mg 279.077	87116.5	520.464 mg/L		2.1239	520.464 mg/L		2.1239	0.41%
QC value within limits for Mg 279.077 Recovery = 104.09%								
Mn 257.610	1636.3	0.521723 mg/L		0.0043896	0.521723 mg/L		0.0043896	0.84%
QC value within limits for Mn 257.610 Recovery = 104.34%								
K 766.490	653.5	-0.280697 mg/L		0.0109340	-0.280697 mg/L		0.0109340	3.90%
Na 589.592	1210.8	-0.451482 mg/L		0.0123253	-0.451482 mg/L		0.0123253	2.73%
Ti 334.940	-62.9	-0.0151674 mg/L		0.00169040	-0.0151674 mg/L		0.00169040	11.14%

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: 75646-011
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 64
Date Collected: 11/22/2013 11:01:43 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-011

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	60.7	0.309060 mg/L		0.0006452	0.309060 mg/L	0.0006452	0.21%
Ca 315.887	13131.0	9.43607 mg/L		0.045796	9.43607 mg/L	0.045796	0.49%
Fe 273.955	57.1	0.328655 mg/L		0.0009331	0.328655 mg/L	0.0009331	0.28%
Mg 279.077	358.1	1.37779 mg/L		0.017892	1.37779 mg/L	0.017892	1.30%
Mn 257.610	95.1	0.0245286 mg/L		0.00018697	0.0245286 mg/L	0.00018697	0.76%
K 766.490	6215.8	1.09692 mg/L		0.016296	1.09692 mg/L	0.016296	1.49%
Na 589.592	502564.4	42.6631 mg/L		0.78119	42.6631 mg/L	0.78119	1.83%
Ti 334.940	69.7	0.0051482 mg/L		0.00024845	0.0051482 mg/L	0.00024845	4.83%

Sequence No.: 12
 Sample ID: 75646-013
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 65
 Date Collected: 11/22/2013 11:04:47 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-013

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc. Units			Conc. Units			
Al 308.215	-2.3	-0.0666415 mg/L	0.00121984	-0.0666415 mg/L	0.00121984	1.83%		
Ca 315.887	16183.4	11.8145 mg/L	0.01653	11.8145 mg/L	0.01653	0.14%		
Fe 273.955	3.8	-0.0293981 mg/L	0.02204864	-0.0293981 mg/L	0.02204864	75.00%		
Mg 279.077	367.2	1.43234 mg/L	0.029325	1.43234 mg/L	0.029325	2.05%		
Mn 257.610	34.3	0.0048945 mg/L	0.00061104	0.0048945 mg/L	0.00061104	12.48%		
K 766.490	6464.7	1.15857 mg/L	0.001474	1.15857 mg/L	0.001474	0.13%		
Na 589.592	122593.5	9.98699 mg/L	0.009354	9.98699 mg/L	0.009354	0.09%		
Ti 334.940	-2.3	-0.0058756 mg/L	0.00049602	-0.0058756 mg/L	0.00049602	8.44%		

Sequence No.: 13
Sample ID: 75646-015
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 11/22/2013 11:07:47 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-015

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Al 308.215	27.8	0.113307	mg/L	0.0288082	0.113307	mg/L	0.0288082 25.42%
Ca 315.887	30892.8	23.2761	mg/L	0.25237	23.2761	mg/L	0.25237 1.08%
Fe 273.955	32.9	0.166220	mg/L	0.0092404	0.166220	mg/L	0.0092404 5.56%
Mg 279.077	685.6	3.33728	mg/L	0.003853	3.33728	mg/L	0.003853 0.12%
Mn 257.610	1509.2	0.480719	mg/L	0.0004251	0.480719	mg/L	0.0004251 0.09%
K 766.490	10688.4	2.20465	mg/L	0.068370	2.20465	mg/L	0.068370 3.10%
Na 589.592	309204.4	26.0348	mg/L	0.18951	26.0348	mg/L	0.18951 0.73%
Ti 334.940	35.3	-0.0001275	mg/L	0.00015120	-0.0001275	mg/L	0.00015120 118.55%

Sequence No.: 14
Sample ID: 75646-017
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 67
Date Collected: 11/22/2013 11:10:49 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-017

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	-4.0	-0.0764225	mg/L	0.02831222	-0.0764225	mg/L	0.02831222	37.05%
Ca 315.887	108.6	-0.710987	mg/L	0.0027339	-0.710987	mg/L	0.0027339	0.38%
Fe 273.955	1.3	-0.0460798	mg/L	0.00262897	-0.0460798	mg/L	0.00262897	5.71%
Mg 279.077	-1.0	-0.771031	mg/L	0.0295837	-0.771031	mg/L	0.0295837	3.84%
Mn 257.610	-4.3	-0.0075613	mg/L	0.00024216	-0.0075613	mg/L	0.00024216	3.20%
K 766.490	290.4	-0.370624	mg/L	0.0537710	-0.370624	mg/L	0.0537710	14.51%
Na 589.592	1412.6	-0.434127	mg/L	0.0126994	-0.434127	mg/L	0.0126994	2.93%
Ti 334.940	1.2	-0.0053502	mg/L	0.00077043	-0.0053502	mg/L	0.00077043	14.40%

Sequence No.: 15
Sample ID: 75646-019
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 68
Date Collected: 11/22/2013 11:13:50 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-019

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Al 308.215	-0.1	-0.0533482	mg/L	0.00452912	-0.0533482	mg/L	0.00452912	8.49%
Ca 315.887	45079.6	34.3304	mg/L	1.57632	34.3304	mg/L	1.57632	4.59%
Fe 273.955	440.8	2.90760	mg/L	0.031913	2.90760	mg/L	0.031913	1.10%
Mg 279.077	891.4	4.56834	mg/L	0.064386	4.56834	mg/L	0.064386	1.41%
Mn 257.610	1424.7	0.453472	mg/L	0.0032470	0.453472	mg/L	0.0032470	0.72%
K 766.490	12632.5	2.68617	mg/L	0.191753	2.68617	mg/L	0.191753	7.14%
Na 589.592	503930.6	42.7806	mg/L	0.21664	42.7806	mg/L	0.21664	0.51%
Ti 334.940	-4.1	-0.0061616	mg/L	0.00032947	-0.0061616	mg/L	0.00032947	5.35%

Sequence No.: 16
Sample ID: 75646-021
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 69
Date Collected: 11/22/2013 11:16:56 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-021

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	5.7	-0.0190158	mg/L	0.00678323	-0.0190158	mg/L	0.00678323 35.67%
Ca 315.887	20168.0	14.9193	mg/L	0.24279	14.9193	mg/L	0.24279 1.63%
Fe 273.955	1162.7	7.76011	mg/L	0.050902	7.76011	mg/L	0.050902 0.66%
Mg 279.077	387.7	1.55463	mg/L	0.003614	1.55463	mg/L	0.003614 0.23%
Mn 257.610	5503.4	1.76928	mg/L	0.002821	1.76928	mg/L	0.002821 0.16%
K 766.490	15678.8	3.44064	mg/L	0.041599	3.44064	mg/L	0.041599 1.21%
Na 589.592	367379.1	31.0376	mg/L	0.47546	31.0376	mg/L	0.47546 1.53%
Ti 334.940	-1.0	-0.0056846	mg/L	0.00073916	-0.0056846	mg/L	0.00073916 13.00%

Sequence No.: 17
 Sample ID: CCV V-176789
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 11/22/2013 11:19:58 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-176789

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	861.0	5.08216 mg/L	0.045596	5.08216 mg/L	0.045596	0.90%
QC value within limits for Al 308.215 Recovery = 101.64%						
Ca 315.887	66525.1	51.0407 mg/L	1.17570	51.0407 mg/L	1.17570	2.30%
QC value within limits for Ca 315.887 Recovery = 102.08%						
Fe 273.955	769.9	5.11952 mg/L	0.020717	5.11952 mg/L	0.020717	0.40%
QC value within limits for Fe 273.955 Recovery = 102.39%						
Mg 279.077	8878.2	52.3546 mg/L	0.05442	52.3546 mg/L	0.05442	0.10%
QC value within limits for Mg 279.077 Recovery = 104.71%						
Mn 257.610	1573.6	0.501505 mg/L	0.0014024	0.501505 mg/L	0.0014024	0.28%
QC value within limits for Mn 257.610 Recovery = 100.30%						
K 766.490	199772.9	49.0356 mg/L	1.14515	49.0356 mg/L	1.14515	2.34%
QC value within limits for K 766.490 Recovery = 98.07%						
Na 589.592	582194.2	49.5110 mg/L	1.11185	49.5110 mg/L	1.11185	2.25%
QC value within limits for Na 589.592 Recovery = 99.02%						
Ti 334.940	3328.5	0.504266 mg/L	0.0009434	0.504266 mg/L	0.0009434	0.19%
QC value within limits for Ti 334.940 Recovery = 100.85%						

All analyte(s) passed QC.

Sequence No.: 18
 Sample ID: LLCCV [aq] V-176895
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/22/2013 11:23:00 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LLCCV [aq] V-176895

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	30.5	0.129385 mg/L	0.0132969	0.129385 mg/L	0.0132969	10.28%
QC value less than the lower limit for Al 308.215 Recovery = 64.69%						
Ca 315.887	6709.8	4.43268 mg/L	0.000474	4.43268 mg/L	0.000474	0.01%
QC value within limits for Ca 315.887 Recovery = 88.65%						
Fe 273.955	46.4	0.256910 mg/L	0.0077107	0.256910 mg/L	0.0077107	3.00%
QC value within limits for Fe 273.955 Recovery = 85.64%						
Mg 279.077	915.6	4.71331 mg/L	0.003046	4.71331 mg/L	0.003046	0.06%
QC value within limits for Mg 279.077 Recovery = 94.27%						
Mn 257.610	122.4	0.0333211 mg/L	0.00183229	0.0333211 mg/L	0.00183229	5.50%
QC value within limits for Mn 257.610 Recovery = 83.30%						
K 766.490	20019.3	4.51567 mg/L	0.043931	4.51567 mg/L	0.043931	0.97%
QC value within limits for K 766.490 Recovery = 90.31%						
Na 589.592	59836.9	4.59015 mg/L	0.040330	4.59015 mg/L	0.040330	0.88%
QC value within limits for Na 589.592 Recovery = 91.80%						
Ti 334.940	320.0	0.0434791 mg/L	0.00056289	0.0434791 mg/L	0.00056289	1.29%
QC value within limits for Ti 334.940 Recovery = 86.96%						
QC Failed. Continue with analysis.						

Sequence No.: 19
 Sample ID: CCB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/22/2013 11:26:03 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB V-174666

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	11.8	0.0176292 mg/L	0.03488569	0.0176292 mg/L	0.03488569	197.89%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887	3.8	-0.792626 mg/L	0.0004718	-0.792626 mg/L	0.0004718	0.06%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955	0.2	-0.0537990 mg/L	0.02485078	-0.0537990 mg/L	0.02485078	46.19%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	4.7	-0.736522 mg/L	0.0126765	-0.736522 mg/L	0.0126765	1.72%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	-6.7	-0.0083330 mg/L	0.00006208	-0.0083330 mg/L	0.00006208	0.74%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490	302.7	-0.367587 mg/L	0.0934242	-0.367587 mg/L	0.0934242	25.42%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592	-170.1	-0.570234 mg/L	0.0037565	-0.570234 mg/L	0.0037565	0.66%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940	5.4	-0.0046974 mg/L	0.00000196	-0.0046974 mg/L	0.00000196	0.04%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 20
Sample ID: 75646-023
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 70
Date Collected: 11/22/2013 11:29:07 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-023

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Al 308.215	335.0	1.94494	mg/L	0.013767	1.94494	mg/L 0.013767	0.71%
Ca 315.887	40742.8	30.9512	mg/L	0.63847	30.9512	mg/L 0.63847	2.06%
Fe 273.955	785.1	5.22219	mg/L	0.027590	5.22219	mg/L 0.027590	0.53%
Mg 279.077	1754.1	9.73020	mg/L	0.041659	9.73020	mg/L 0.041659	0.43%
Mn 257.610	803.7	0.253106	mg/L	0.0020611	0.253106	mg/L 0.0020611	0.81%
K 766.490	39686.2	9.38660	mg/L	0.237112	9.38660	mg/L 0.237112	2.53%
Na 589.592	265794.6	22.3018	mg/L	0.41411	22.3018	mg/L 0.41411	1.86%
Ti 334.940	439.2	0.0617340	mg/L	0.00001459	0.0617340	mg/L 0.00001459	0.02%

Sequence No.: 21
Sample ID: 75646-025
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 71
Date Collected: 11/22/2013 11:32:11 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-025

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	193.3	1.09993	mg/L	0.025237	1.09993	0.025237	2.29%
Ca 315.887	16595.0	12.1352	mg/L	0.05425	12.1352	0.05425	0.45%
Fe 273.955	381.4	2.50868	mg/L	0.028486	2.50868	0.028486	1.14%
Mg 279.077	374.7	1.47731	mg/L	0.002629	1.47731	0.002629	0.18%
Mn 257.610	177.8	0.0511929	mg/L	0.00127064	0.0511929	0.00127064	2.48%
K 766.490	6693.4	1.21520	mg/L	0.030393	1.21520	0.030393	2.50%
Na 589.592	134817.6	11.0382	mg/L	0.03767	11.0382	0.03767	0.34%
Ti 334.940	209.3	0.0265267	mg/L	0.00062325	0.0265267	0.00062325	2.35%

Sequence No.: 22
Sample ID: 75646-027
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 72
Date Collected: 11/22/2013 11:35:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-027

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	31.8	0.136802 mg/L	0.0012348	0.136802 mg/L	0.0012348	0.90%
Ca 315.887	28846.5	21.6816 mg/L	0.06851	21.6816 mg/L	0.06851	0.32%
Fe 273.955	151.1	0.960355 mg/L	0.0026365	0.960355 mg/L	0.0026365	0.27%
Mg 279.077	653.4	3.14446 mg/L	0.046057	3.14446 mg/L	0.046057	1.46%
Mn 257.610	3250.1	1.04235 mg/L	0.008516	1.04235 mg/L	0.008516	0.82%
K 766.490	19850.5	4.47384 mg/L	0.003292	4.47384 mg/L	0.003292	0.07%
Na 589.592	323172.1	27.2360 mg/L	0.06626	27.2360 mg/L	0.06626	0.24%
Ti 334.940	27.2	-0.0013670 mg/L	0.00127744	-0.0013670 mg/L	0.00127744	93.45%

Sequence No.: 23
 Sample ID: 75646-029
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 73
 Date Collected: 11/22/2013 11:38:02 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-029

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Al 308.215	0.2	-0.0514428	mg/L	0.00773837	-0.0514428	mg/L	0.00773837	15.04%
Ca 315.887	38393.8	29.1208	mg/L	0.04604	29.1208	mg/L	0.04604	0.16%
Fe 273.955	-1.1	-0.0620797	mg/L	0.01702590	-0.0620797	mg/L	0.01702590	27.43%
Mg 279.077	879.7	4.49869	mg/L	0.000953	4.49869	mg/L	0.000953	0.02%
Mn 257.610	2042.4	0.652739	mg/L	0.0010978	0.652739	mg/L	0.0010978	0.17%
K 766.490	15014.7	3.27617	mg/L	0.024111	3.27617	mg/L	0.024111	0.74%
Na 589.592	154575.9	12.7374	mg/L	0.01054	12.7374	mg/L	0.01054	0.08%
Ti 334.940	-2.4	-0.0058958	mg/L	0.00085862	-0.0058958	mg/L	0.00085862	14.56%

Sequence No.: 24
Sample ID: 75646-031
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 74
Date Collected: 11/22/2013 11:40:58 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-031

Analyte	Mean Corrected Intensity	Conc.	Units	Calib. Std.Dev.	Conc.	Units	Sample Std.Dev.	RSD
Al 308.215	5.5	-0.0198448	mg/L	0.02315377	-0.0198448	mg/L	0.02315377	116.67%
Ca 315.887	17508.9	12.8473	mg/L	0.25482	12.8473	mg/L	0.25482	1.98%
Fe 273.955	18.0	0.0658105	mg/L	0.00773536	0.0658105	mg/L	0.00773536	11.75%
Mg 279.077	515.2	2.31790	mg/L	0.021322	2.31790	mg/L	0.021322	0.92%
Mn 257.610	-2.8	-0.0070772	mg/L	0.00121868	-0.0070772	mg/L	0.00121868	17.22%
K 766.490	3747.7	0.485643	mg/L	0.0154678	0.485643	mg/L	0.0154678	3.19%
Na 589.592	129149.1	10.5507	mg/L	0.17099	10.5507	mg/L	0.17099	1.62%
Ti 334.940	10.0	-0.0039937	mg/L	0.00048790	-0.0039937	mg/L	0.00048790	12.22%

Sequence No.: 25
 Sample ID: ICSA V-175629
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 11/22/2013 11:43:55 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSA V-175629

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Al 308.215	86941.9	518.489 mg/L	0.8486	518.489 mg/L	0.8486	0.16%
QC value within limits for Al 308.215 Recovery = 103.70%						
Ca 315.887	652620.6	507.726 mg/L	0.8377	507.726 mg/L	0.8377	0.16%
QC value within limits for Ca 315.887 Recovery = 101.55%						
Fe 273.955	29256.7	196.591 mg/L	0.9435	196.591 mg/L	0.9435	0.48%
QC value within limits for Fe 273.955 Recovery = 98.30%						
Mg 279.077	86873.6	519.011 mg/L	0.5361	519.011 mg/L	0.5361	0.10%
QC value within limits for Mg 279.077 Recovery = 103.80%						
Mn 257.610	6.2	-0.0041533 mg/L	0.00005232	-0.0041533 mg/L	0.00005232	1.26%
K 766.490	77.7	-0.423323 mg/L	0.0170254	-0.423323 mg/L	0.0170254	4.02%
Na 589.592	383.7	-0.522605 mg/L	0.0031030	-0.522605 mg/L	0.0031030	0.59%
Ti 334.940	-69.7	-0.0162000 mg/L	0.00060842	-0.0162000 mg/L	0.00060842	3.76%

All analyte(s) passed QC.

Sequence No.: 26

Autosampler Location: 6

Sample ID: ICSAB V-175630

Date Collected: 11/22/2013 11:47:16 AM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: ICSAB V-175630

Analyte	Mean Corrected		Calib.		Sample		RSD
	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.		
Al 308.215	87140.6	519.674 mg/L	0.7552	519.674 mg/L	0.7552	0.15%	
QC value within limits for Al 308.215 Recovery = 103.93%							
Ca 315.887	653563.1	508.460 mg/L	1.0971	508.460 mg/L	1.0971	0.22%	
QC value within limits for Ca 315.887 Recovery = 101.69%							
Fe 273.955	29141.1	195.814 mg/L	1.1260	195.814 mg/L	1.1260	0.58%	
QC value within limits for Fe 273.955 Recovery = 97.91%							
Mg 279.077	87101.9	520.377 mg/L	0.5791	520.377 mg/L	0.5791	0.11%	
QC value within limits for Mg 279.077 Recovery = 104.08%							
Mn 257.610	1645.6	0.524711 mg/L	0.0036457	0.524711 mg/L	0.0036457	0.69%	
QC value within limits for Mn 257.610 Recovery = 104.94%							
K 766.490	212.6	-0.389906 mg/L	0.0291098	-0.389906 mg/L	0.0291098	7.47%	
Na 589.592	475.9	-0.514676 mg/L	0.0189613	-0.514676 mg/L	0.0189613	3.68%	
Ti 334.940	-62.4	-0.0150827 mg/L	0.00023557	-0.0150827 mg/L	0.00023557	1.56%	

All analyte(s) passed QC.

Sequence No.: 27
 Sample ID: CCV V-176789
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 11/22/2013 11:50:39 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-176789

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	867.5	5.12138 mg/L		0.062286	5.12138 mg/L	0.062286	1.22%
QC value within limits for Al 308.215 Recovery = 102.43%							
Ca 315.887	68237.0	52.3746 mg/L		0.47682	52.3746 mg/L	0.47682	0.91%
QC value within limits for Ca 315.887 Recovery = 104.75%							
Fe 273.955	781.6	5.19862 mg/L		0.013139	5.19862 mg/L	0.013139	0.25%
QC value within limits for Fe 273.955 Recovery = 103.97%							
Mg 279.077	8980.3	52.9655 mg/L		0.14446	52.9655 mg/L	0.14446	0.27%
QC value within limits for Mg 279.077 Recovery = 105.93%							
Mn 257.610	1593.3	0.507833 mg/L		0.0005041	0.507833 mg/L	0.0005041	0.10%
QC value within limits for Mn 257.610 Recovery = 101.57%							
K 766.490	203324.3	49.9152 mg/L		0.38993	49.9152 mg/L	0.38993	0.78%
QC value within limits for K 766.490 Recovery = 99.83%							
Na 589.592	593067.0	50.4460 mg/L		0.35486	50.4460 mg/L	0.35486	0.70%
QC value within limits for Na 589.592 Recovery = 100.89%							
Ti 334.940	3379.7	0.512117 mg/L		0.0015527	0.512117 mg/L	0.0015527	0.30%
QC value within limits for Ti 334.940 Recovery = 102.42%							

All analyte(s) passed QC.

Sequence No.: 28
 Sample ID: LLCCV [aq] V-176895
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/22/2013 11:53:40 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LLCCV [aq] V-176895

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	30.7	0.130361 mg/L	0.0123838	0.130361 mg/L	0.0123838	9.50%
QC value less than the lower limit for Al 308.215 Recovery = 65.18%						
Ca 315.887	6764.3	4.47515 mg/L	0.004571	4.47515 mg/L	0.004571	0.10%
QC value within limits for Ca 315.887 Recovery = 89.50%						
Fe 273.955	46.5	0.257447 mg/L	0.0149061	0.257447 mg/L	0.0149061	5.79%
QC value within limits for Fe 273.955 Recovery = 85.82%						
Mg 279.077	924.3	4.76520 mg/L	0.002797	4.76520 mg/L	0.002797	0.06%
QC value within limits for Mg 279.077 Recovery = 95.30%						
Mn 257.610	116.9	0.0315527 mg/L	0.00057795	0.0315527 mg/L	0.00057795	1.83%
QC value within limits for Mn 257.610 Recovery = 78.88%						
K 766.490	19753.3	4.44979 mg/L	0.033802	4.44979 mg/L	0.033802	0.76%
QC value within limits for K 766.490 Recovery = 89.00%						
Na 589.592	59482.1	4.55964 mg/L	0.109771	4.55964 mg/L	0.109771	2.41%
QC value within limits for Na 589.592 Recovery = 91.19%						
Ti 334.940	319.2	0.0433683 mg/L	0.00015663	0.0433683 mg/L	0.00015663	0.36%
QC value within limits for Ti 334.940 Recovery = 86.74%						
QC Failed. Continue with analysis.						

Sequence No.: 29

Sample ID: CCB V-174666

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 11/22/2013 11:56:43 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB V-174666

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	10.0	0.0071038 mg/L	0.01407026	0.0071038 mg/L	0.01407026	198.07%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887	9.7	-0.788068 mg/L	0.0003507	-0.788068 mg/L	0.0003507	0.04%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955	3.3	-0.0325266 mg/L	0.01032252	-0.0325266 mg/L	0.01032252	31.74%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	0.9	-0.759651 mg/L	0.0136492	-0.759651 mg/L	0.0136492	1.80%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	-9.3	-0.0091575 mg/L	0.00172552	-0.0091575 mg/L	0.00172552	18.84%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490	105.1	-0.416525 mg/L	0.0196096	-0.416525 mg/L	0.0196096	4.71%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592	-228.6	-0.575260 mg/L	0.0007959	-0.575260 mg/L	0.0007959	0.14%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940	-1.1	-0.0056950 mg/L	0.00114068	-0.0056950 mg/L	0.00114068	20.03%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

File SW15726A

3110835 0359
Batch 15726 SW846

Method: PE 1 3000DV RADIAL

Page 1

Date: 11/21/2013 5:11:46 PM

Analyst JBL 11/22/13

=====
Analysis Begun

Start Time: 11/21/2013 5:09:48 PM

Plasma On Time: 11/21/2013 3:47:10 PM

Logged In Analyst: shiamala

Technique: ICP Continuous

Spectrometer Model: Optima 3300 DV, S/N 069N5072002 Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\11.21.13.sif

Batch ID: PEICP 1

Results Data Set: SW15726A

Results Library: C:\pe\Administrator\Results\Results.mdb

=====
Method Loaded

Method Name: PE 1 3000DV RADIAL

Method Last Saved: 11/21/2013 4:39:38 PM

IEC File: IEC042213R.iec

MSF File:

Method Description: 200.7/6010B/6010C

=====
Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blk 1 V-174666

Date Collected: 11/21/2013 5:09:49 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
Al 308.215	24.2	2.53	10.45%	[0.00]	mg/L
Ca 315.887	-110.2	6.73	6.11%	[0.00]	mg/L
Fe 273.955	11.5	2.45	21.36%	[0.00]	mg/L
Mg 279.077	5.2	3.33	64.38%	[0.00]	mg/L
Mn 257.610	-58.0	2.71	4.68%	[0.00]	mg/L
K 766.490	-3257.2	188.75	5.79%	[0.00]	mg/L
Na 589.592	3786.8	4.41	0.12%	[0.00]	mg/L
Ti 334.940	5.1	1.28	25.00%	[0.00]	mg/L

15726
27441

Na,K reported

75646-011-031 not reported

Sequence No.: 2
Sample ID: Calib Std 1 V-175715
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 160
Date Collected: 11/21/2013 5:12:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 1 V-175715

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	19.7	0.82	4.16%	[0.1]	mg/L
Ca 315.887	1281.5	10.64	0.83%	[1]	mg/L
Fe 273.955	11.6	1.68	14.46%	[0.1]	mg/L
Mg 279.077	168.3	3.18	1.89%	[1]	mg/L
Mn 257.610	33.4	1.11	3.32%	[0.01]	mg/L
K 766.490	3394.9	331.19	9.76%	[1]	mg/L
Na 589.592	11073.2	484.38	4.37%	[1]	mg/L
Ti 334.940	70.6	3.54	5.02%	[0.01]	mg/L

Sequence No.: 3
Sample ID: Calib Std 2 V-175281
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 11/21/2013 5:15:47 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 2 V-175281

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units
Al 308.215	930.5	11.08	1.19%	[5] mg/L
Ca 315.887	72437.0	1317.04	1.82%	[50] mg/L
Fe 273.955	828.8	2.52	0.30%	[5] mg/L
Mg 279.077	9414.3	26.40	0.28%	[50] mg/L
Mn 257.610	1691.8	13.07	0.77%	[0.5] mg/L
K 766.490	205560.8	3958.29	1.93%	[50] mg/L
Na 589.592	614341.1	10631.12	1.73%	[50] mg/L
Ti 334.940	3765.0	15.94	0.42%	[0.5] mg/L

Sequence No.: 4

Sample ID: Calib Std 3 V-176344

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 11/21/2013 5:18:47 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib Std 3 V-176344

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	1740.4	7.16	0.41%	[10]	mg/L
Ca 315.887	134674.7	1474.12	1.09%	[100]	mg/L
Fe 273.955	1552.3	5.21	0.34%	[10]	mg/L
Mg 279.077	17414.8	77.69	0.45%	[100]	mg/L
Mn 257.610	3159.8	25.44	0.81%	[1.0]	mg/L
K 766.490	390491.8	4306.76	1.10%	[100]	mg/L
Na 589.592	1156005.3	12303.28	1.06%	[100]	mg/L
Ti 334.940	7112.9	27.47	0.39%	[1.0]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Al 308.215	3	Lin, Calc Int	12.0	175.0	0.00000	0.999376	
Ca 315.887	3	Lin, Calc Int	898.5	1356	0.00000	0.999239	
Fe 273.955	3	Lin, Calc Int	7.8	156.4	0.00000	0.999368	
Mg 279.077	3	Lin, Calc Int	126.0	175.5	0.00000	0.999129	
Mn 257.610	3	Lin, Calc Int	21.2	3179	0.00000	0.999342	
K 766.490	3	Lin, Calc Int	1645.8	3926	0.00000	0.999621	
Na 589.592	3	Lin, Calc Int	6392.6	11630	0.00000	0.999474	
Ti 334.940	3	Lin, Calc Int	37.7	7151	0.00000	0.999545	

Sequence No.: 5

Sample ID: ICS3 V-175281

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 11/21/2013 5:21:47 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICS3 V-175281

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	927.6	5.23203 mg/L	0.042717	5.23203 mg/L	0.042717	0.82%
QC value within limits for Al 308.215 Recovery = 104.64%						
Ca 315.887	71797.5	52.2744 mg/L	1.55966	52.2744 mg/L	1.55966	2.98%
QC value within limits for Ca 315.887 Recovery = 104.55%						
Fe 273.955	826.2	5.23316 mg/L	0.021526	5.23316 mg/L	0.021526	0.41%
QC value within limits for Fe 273.955 Recovery = 104.66%						
Mg 279.077	9359.8	52.6281 mg/L	0.18510	52.6281 mg/L	0.18510	0.35%
QC value within limits for Mg 279.077 Recovery = 105.26%						
Mn 257.610	1682.3	0.522524 mg/L	0.0031018	0.522524 mg/L	0.0031018	0.59%
QC value within limits for Mn 257.610 Recovery = 104.50%						
K 766.490	203547.6	51.4235 mg/L	1.47418	51.4235 mg/L	1.47418	2.87%
QC value within limits for K 766.490 Recovery = 102.85%						
Na 589.592	608814.1	51.8072 mg/L	1.42890	51.8072 mg/L	1.42890	2.76%
QC value within limits for Na 589.592 Recovery = 103.61%						
Ti 334.940	3747.9	0.518853 mg/L	0.0006003	0.518853 mg/L	0.0006003	0.12%
QC value within limits for Ti 334.940 Recovery = 103.77%						

All analyte(s) passed QC.

Sequence No.: 6

Autosampler Location: 4

Sample ID: ICV V-176789

Date Collected: 11/21/2013 5:24:46 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: ICV V-176789

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	905.3	5.10450 mg/L	0.016166	5.10450 mg/L	0.016166	0.32%
QC value within limits for Al 308.215 Recovery = 102.09%						
Ca 315.887	68886.3	50.1279 mg/L	0.35246	50.1279 mg/L	0.35246	0.70%
QC value within limits for Ca 315.887 Recovery = 100.26%						
Fe 273.955	804.9	5.09685 mg/L	0.030706	5.09685 mg/L	0.030706	0.60%
QC value within limits for Fe 273.955 Recovery = 101.94%						
Mg 279.077	9228.4	51.8791 mg/L	0.14905	51.8791 mg/L	0.14905	0.29%
QC value within limits for Mg 279.077 Recovery = 103.76%						
Mn 257.610	1606.3	0.498639 mg/L	0.0047846	0.498639 mg/L	0.0047846	0.96%
QC value within limits for Mn 257.610 Recovery = 99.73%						
K 766.490	195204.1	49.2985 mg/L	0.42306	49.2985 mg/L	0.42306	0.86%
QC value within limits for K 766.490 Recovery = 98.60%						
Na 589.592	584409.7	49.7085 mg/L	0.40549	49.7085 mg/L	0.40549	0.82%
QC value within limits for Na 589.592 Recovery = 99.42%						
Ti 334.940	3622.3	0.501295 mg/L	0.0034747	0.501295 mg/L	0.0034747	0.69%
QC value within limits for Ti 334.940 Recovery = 100.26%						

All analyte(s) passed QC.

Sequence No.: 7

Autosampler Location: 7

Sample ID: LLICV [aq] V-176895

Date Collected: 11/21/2013 5:27:47 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: LLICV [aq] V-176895

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	73.5	0.351182 mg/L	0.0318769	0.351182 mg/L	0.0318769	9.08%
QC value greater than the upper limit for Al 308.215 Recovery = 175.59%						
Ca 315.887	6959.3	4.46869 mg/L	0.010182	4.46869 mg/L	0.010182	0.23%
QC value within limits for Ca 315.887 Recovery = 89.37%						
Fe 273.955	61.5	0.343524 mg/L	0.0461494	0.343524 mg/L	0.0461494	13.43%
QC value within limits for Fe 273.955 Recovery = 114.51%						
Mg 279.077	952.3	4.70945 mg/L	0.014259	4.70945 mg/L	0.014259	0.30%
QC value within limits for Mg 279.077 Recovery = 94.19%						
Mn 257.610	137.0	0.0364149 mg/L	0.00085716	0.0364149 mg/L	0.00085716	2.35%
QC value within limits for Mn 257.610 Recovery = 91.04%						
K 766.490	19534.1	4.55608 mg/L	0.040765	4.55608 mg/L	0.040765	0.89%
QC value within limits for K 766.490 Recovery = 91.12%						
Na 589.592	60799.7	4.67891 mg/L	0.018395	4.67891 mg/L	0.018395	0.39%
QC value within limits for Na 589.592 Recovery = 93.58%						
Ti 334.940	356.4	0.0445609 mg/L	0.00070002	0.0445609 mg/L	0.00070002	1.57%
QC value within limits for Ti 334.940 Recovery = 89.12%						
QC Failed. Continue with analysis.						

Sequence No.: 8

Sample ID: ICB V-174666

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 11/21/2013 5:30:50 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
Al 308.215	6.4	-0.0319071 mg/L	0.06477566	-0.0319071 mg/L	0.06477566	203.01%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887	8.3	-0.656376 mg/L	0.0000511	-0.656376 mg/L	0.0000511	0.01%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955	-3.9	-0.0745538 mg/L	0.00369047	-0.0745538 mg/L	0.00369047	4.95%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	-1.1	-0.724583 mg/L	0.0160516	-0.724583 mg/L	0.0160516	2.22%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	-2.3	-0.0073978 mg/L	0.00077041	-0.0073978 mg/L	0.00077041	10.41%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490	146.5	-0.381874 mg/L	0.0196572	-0.381874 mg/L	0.0196572	5.15%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592	336.6	-0.520805 mg/L	0.0071885	-0.520805 mg/L	0.0071885	1.38%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940	2.2	-0.0049705 mg/L	0.00077443	-0.0049705 mg/L	0.00077443	15.58%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 9
 Sample ID: ICSA V-175629
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 11/21/2013 5:33:47 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-175629

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	88236.0	504.140 mg/L	8.6477	504.140 mg/L	8.6477	1.72%
QC value within limits for Al 308.215 Recovery = 100.83%						
Ca 315.887	652681.3	480.565 mg/L	8.2907	480.565 mg/L	8.2907	1.73%
QC value within limits for Ca 315.887 Recovery = 96.11%						
Fe 273.955	29825.7	190.667 mg/L	2.9746	190.667 mg/L	2.9746	1.56%
QC value within limits for Fe 273.955 Recovery = 95.33%						
Mg 279.077	87572.1	498.402 mg/L	8.2663	498.402 mg/L	8.2663	1.66%
QC value within limits for Mg 279.077 Recovery = 99.68%						
Mn 257.610	15.5	-0.0017781 mg/L	0.00070876	-0.0017781 mg/L	0.00070876	39.86%
K 766.490	73.6	-0.400432 mg/L	0.0580362	-0.400432 mg/L	0.0580362	14.49%
Na 589.592	738.1	-0.486285 mg/L	0.0019577	-0.486285 mg/L	0.0019577	0.40%
Ti 334.940	-71.8	-0.0153105 mg/L	0.00116234	-0.0153105 mg/L	0.00116234	7.59%

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSAB V-175630
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/21/2013 5:37:09 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-175630

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	90878.1	519.238 mg/L	1.8600	519.238 mg/L	1.8600	0.36%
QC value within limits for Al 308.215 Recovery = 103.85%						
Ca 315.887	672311.6	495.038 mg/L	3.3187	495.038 mg/L	3.3187	0.67%
QC value within limits for Ca 315.887 Recovery = 99.01%						
Fe 273.955	30026.2	191.948 mg/L	0.1768	191.948 mg/L	0.1768	0.09%
QC value within limits for Fe 273.955 Recovery = 95.97%						
Mg 279.077	90365.2	514.322 mg/L	2.0714	514.322 mg/L	2.0714	0.40%
QC value within limits for Mg 279.077 Recovery = 102.86%						
Mn 257.610	1652.9	0.513293 mg/L	0.0028397	0.513293 mg/L	0.0028397	0.55%
QC value within limits for Mn 257.610 Recovery = 102.66%						
K 766.490	-30.6	-0.426974 mg/L	0.0165291	-0.426974 mg/L	0.0165291	3.87%
Na 589.592	962.1	-0.467020 mg/L	0.0030024	-0.467020 mg/L	0.0030024	0.64%
Ti 334.940	-68.8	-0.0148919 mg/L	0.00042598	-0.0148919 mg/L	0.00042598	2.86%

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: MB 27441 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 52
 Date Collected: 11/21/2013 5:40:31 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 27441 (1)

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc. Units			Conc. Units			
Al 308.215	-5.0	-0.0973211 mg/L	0.00712661	-0.0973211 mg/L	0.00712661	7.32%		
Ca 315.887	62.6	-0.616307 mg/L	0.0029927	-0.616307 mg/L	0.0029927	0.49%		
Fe 273.955	0.1	-0.0490864 mg/L	0.02062713	-0.0490864 mg/L	0.02062713	42.02%		
Mg 279.077	4.6	-0.691959 mg/L	0.0347324	-0.691959 mg/L	0.0347324	5.02%		
Mn 257.610	-1.3	-0.0070783 mg/L	0.00021517	-0.0070783 mg/L	0.00021517	3.04%		
K 766.490	121.1	-0.388339 mg/L	0.0411489	-0.388339 mg/L	0.0411489	10.60%		
Na 589.592	165.7	-0.535503 mg/L	0.0074950	-0.535503 mg/L	0.0074950	1.40%		
Ti 334.940	2.7	-0.0048990 mg/L	0.00027230	-0.0048990 mg/L	0.00027230	5.56%		

Sequence No.: 12
Sample ID: LCSW 27441
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 11/21/2013 5:43:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCSW 27441

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	923.5	5.20829 mg/L	0.002074	5.20829 mg/L	0.002074	0.04%
Ca 315.887	71610.0	52.1361 mg/L	0.36787	52.1361 mg/L	0.36787	0.71%
Fe 273.955	820.3	5.19532 mg/L	0.010925	5.19532 mg/L	0.010925	0.21%
Mg 279.077	9401.6	52.8666 mg/L	0.05413	52.8666 mg/L	0.05413	0.10%
Mn 257.610	1641.5	0.509688 mg/L	0.0004485	0.509688 mg/L	0.0004485	0.09%
K 766.490	201774.6	50.9720 mg/L	0.27919	50.9720 mg/L	0.27919	0.55%
Na 589.592	605083.8	51.4864 mg/L	0.26588	51.4864 mg/L	0.26588	0.52%
Ti 334.940	3711.4	0.513752 mg/L	0.0011493	0.513752 mg/L	0.0011493	0.22%

Sequence No.: 13
Sample ID: LCSW MR 27441
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 54
Date Collected: 11/21/2013 5:46:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCSW MR 27441

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	903.6	5.09491 mg/L	0.078834	5.09491 mg/L	0.078834	1.55%
Ca 315.887	71655.3	52.1695 mg/L	0.66503	52.1695 mg/L	0.66503	1.27%
Fe 273.955	812.9	5.14825 mg/L	0.062678	5.14825 mg/L	0.062678	1.22%
Mg 279.077	9317.8	52.3888 mg/L	0.34796	52.3888 mg/L	0.34796	0.66%
Mn 257.610	1617.5	0.502148 mg/L	0.0011153	0.502148 mg/L	0.0011153	0.22%
K 766.490	202199.4	51.0801 mg/L	0.55378	51.0801 mg/L	0.55378	1.08%
Na 589.592	605879.4	51.5548 mg/L	0.46228	51.5548 mg/L	0.46228	0.90%
Ti 334.940	3663.8	0.507090 mg/L	0.0030577	0.507090 mg/L	0.0030577	0.60%

Sequence No.: 14

Sample ID: 75646-001

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 55

Date Collected: 11/21/2013 5:49:40 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 75646-001

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc. Units			Conc. Units			
Al 308.215	15.6	0.0202480	mg/L	0.01590792	0.0202480	mg/L	0.01590792	78.57%
Ca 315.887	18138.2	12.7109	mg/L	0.12618	12.7109	mg/L	0.12618	0.99%
Fe 273.955	543.2	3.42339	mg/L	0.005546	3.42339	mg/L	0.005546	0.16%
Mg 279.077	839.9	4.06854	mg/L	0.010017	4.06854	mg/L	0.010017	0.25%
Mn 257.610	593.4	0.179986	mg/L	0.0015670	0.179986	mg/L	0.0015670	0.87%
K 766.490	5941.9	1.09421	mg/L	0.017759	1.09421	mg/L	0.017759	1.62%
Na 589.592	466183.9	39.5413	mg/L	0.42611	39.5413	mg/L	0.42611	1.08%
Ti 334.940	44.7	0.0009771	mg/L	0.00103191	0.0009771	mg/L	0.00103191	105.61%

Sequence No.: 15
 Sample ID: 75646-001 MR
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 56
 Date Collected: 11/21/2013 5:52:36 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-001 MR

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc. Units			Conc. Units			
Al 308.215	17.5	0.0312764 mg/L	0.02986226	0.0312764 mg/L	0.02986226	95.48%		
Ca 315.887	17837.7	12.4894 mg/L	0.17989	12.4894 mg/L	0.17989	1.44%		
Fe 273.955	540.2	3.40456 mg/L	0.024922	3.40456 mg/L	0.024922	0.73%		
Mg 279.077	836.0	4.04679 mg/L	0.021758	4.04679 mg/L	0.021758	0.54%		
Mn 257.610	584.9	0.177311 mg/L	0.0022336	0.177311 mg/L	0.0022336	1.26%		
K 766.490	5715.5	1.03654 mg/L	0.022466	1.03654 mg/L	0.022466	2.17%		
Na 589.592	461829.7	39.1668 mg/L	0.45074	39.1668 mg/L	0.45074	1.15%		
Ti 334.940	13.8	-0.0033467 mg/L	0.00062014	-0.0033467 mg/L	0.00062014	18.53%		

Sequence No.: 16

Sample ID: 75646-003 MS 1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 57

Date Collected: 11/21/2013 5:55:32 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 75646-003 MS 1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Al 308.215	914.1	5.15499	mg/L	0.058581	5.15499	mg/L	0.058581	1.14%
Ca 315.887	89033.9	64.9829	mg/L	1.71531	64.9829	mg/L	1.71531	2.64%
Fe 273.955	1342.5	8.53449	mg/L	0.072397	8.53449	mg/L	0.072397	0.85%
Mg 279.077	10054.4	56.5873	mg/L	0.33930	56.5873	mg/L	0.33930	0.60%
Mn 257.610	2211.3	0.688927	mg/L	0.0056160	0.688927	mg/L	0.0056160	0.82%
K 766.490	202055.3	51.0434	mg/L	1.32418	51.0434	mg/L	1.32418	2.59%
Na 589.592	1056271.5	90.2878	mg/L	0.32190	90.2878	mg/L	0.32190	0.36%
Ti 334.940	3620.1	0.500982	mg/L	0.0069782	0.500982	mg/L	0.0069782	1.39%

Sequence No.: 17
Sample ID: 75646-033 MS 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 58
Date Collected: 11/21/2013 5:58:34 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-033 MS 2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	918.8	5.18171	mg/L	0.016227	5.18171	mg/L	0.016227	0.31%
Ca 315.887	87465.5	63.8265	mg/L	1.25387	63.8265	mg/L	1.25387	1.96%
Fe 273.955	1321.7	8.40145	mg/L	0.041121	8.40145	mg/L	0.041121	0.49%
Mg 279.077	10104.6	56.8733	mg/L	0.27774	56.8733	mg/L	0.27774	0.49%
Mn 257.610	2201.1	0.685742	mg/L	0.0029704	0.685742	mg/L	0.0029704	0.43%
K 766.490	200713.1	50.7016	mg/L	0.88931	50.7016	mg/L	0.88931	1.75%
Na 589.592	1031729.7	88.1772	mg/L	0.68583	88.1772	mg/L	0.68583	0.78%
Ti 334.940	3678.7	0.509175	mg/L	0.0025146	0.509175	mg/L	0.0025146	0.49%

Sequence No.: 18
Sample ID: 75646-001 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 59
Date Collected: 11/21/2013 6:01:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-001 PS

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	1068.2	6.03539 mg/L	0.012470	6.03539 mg/L	0.012470	0.21%
Ca 315.887	99379.0	72.6104 mg/L	0.00742	72.6104 mg/L	0.00742	0.01%
Fe 273.955	1468.5	9.33995 mg/L	0.038808	9.33995 mg/L	0.038808	0.42%
Mg 279.077	11635.2	65.5971 mg/L	0.20301	65.5971 mg/L	0.20301	0.31%
Mn 257.610	2462.2	0.767853 mg/L	0.0019710	0.767853 mg/L	0.0019710	0.26%
K 766.490	239344.0	60.5407 mg/L	0.02279	60.5407 mg/L	0.02279	0.04%
Na 589.592	1133435.5	96.9237 mg/L	0.17336	96.9237 mg/L	0.17336	0.18%
Ti 334.940	3676.2	0.508826 mg/L	0.0020666	0.508826 mg/L	0.0020666	0.41%

Sequence No.: 19
 Sample ID: CCV V-176789
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 11/21/2013 6:04:33 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-176789

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	926.9	5.22800 mg/L	0.045628	5.22800 mg/L	0.045628	0.87%
QC value within limits for Al 308.215 Recovery = 104.56%						
Ca 315.887	70241.9	51.1275 mg/L	0.08486	51.1275 mg/L	0.08486	0.17%
QC value within limits for Ca 315.887 Recovery = 102.25%						
Fe 273.955	834.0	5.28291 mg/L	0.057300	5.28291 mg/L	0.057300	1.08%
QC value within limits for Fe 273.955 Recovery = 105.66%						
Mg 279.077	9486.9	53.3528 mg/L	0.18369	53.3528 mg/L	0.18369	0.34%
QC value within limits for Mg 279.077 Recovery = 106.71%						
Mn 257.610	1649.7	0.512283 mg/L	0.0036267	0.512283 mg/L	0.0036267	0.71%
QC value within limits for Mn 257.610 Recovery = 102.46%						
K 766.490	197132.3	49.7896 mg/L	0.02347	49.7896 mg/L	0.02347	0.05%
QC value within limits for K 766.490 Recovery = 99.58%						
Na 589.592	592354.0	50.3917 mg/L	0.04683	50.3917 mg/L	0.04683	0.09%
QC value within limits for Na 589.592 Recovery = 100.78%						
Ti 334.940	3756.5	0.520061 mg/L	0.0034149	0.520061 mg/L	0.0034149	0.66%
QC value within limits for Ti 334.940 Recovery = 104.01%						

All analyte(s) passed QC.

Sequence No.: 20
 Sample ID: LLCCV [aq] V-176895
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/21/2013 6:07:33 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LLCCV [aq] V-176895

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	75.6	0.363479 mg/L	0.0002540	0.363479 mg/L	0.0002540	0.07%
QC value greater than the upper limit for Al 308.215 Recovery = 181.74%						
Ca 315.887	7182.2	4.63303 mg/L	0.027194	4.63303 mg/L	0.027194	0.59%
QC value within limits for Ca 315.887 Recovery = 92.66%						
Fe 273.955	66.6	0.375646 mg/L	0.0185950	0.375646 mg/L	0.0185950	4.95%
QC value within limits for Fe 273.955 Recovery = 125.22%						
Mg 279.077	977.2	4.85110 mg/L	0.035439	4.85110 mg/L	0.035439	0.73%
QC value within limits for Mg 279.077 Recovery = 97.02%						
Mn 257.610	136.9	0.0363876 mg/L	0.00215425	0.0363876 mg/L	0.00215425	5.92%
QC value within limits for Mn 257.610 Recovery = 90.97%						
K 766.490	20208.6	4.72787 mg/L	0.046812	4.72787 mg/L	0.046812	0.99%
QC value within limits for K 766.490 Recovery = 94.56%						
Na 589.592	62664.6	4.83929 mg/L	0.036945	4.83929 mg/L	0.036945	0.76%
QC value within limits for Na 589.592 Recovery = 96.79%						
Ti 334.940	365.1	0.0457858 mg/L	0.00089370	0.0457858 mg/L	0.00089370	1.95%
QC value within limits for Ti 334.940 Recovery = 91.57%						
QC Failed. Continue with analysis.						

Sequence No.: 21
 Sample ID: CCB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/21/2013 6:10:39 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB V-174666

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	14.7	0.0154244 mg/L	0.00422168	0.0154244 mg/L	0.00422168	27.37%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887	33.7	-0.637636 mg/L	0.0039360	-0.637636 mg/L	0.0039360	0.62%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955	0.4	-0.0475326 mg/L	0.00244998	-0.0475326 mg/L	0.00244998	5.15%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	5.7	-0.685990 mg/L	0.0228472	-0.685990 mg/L	0.0228472	3.33%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	-5.8	-0.0084904 mg/L	0.00074566	-0.0084904 mg/L	0.00074566	8.78%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490	183.4	-0.372473 mg/L	0.0420981	-0.372473 mg/L	0.0420981	11.30%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592	913.4	-0.471202 mg/L	0.0074440	-0.471202 mg/L	0.0074440	1.58%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940	3.9	-0.0047328 mg/L	0.00039979	-0.0047328 mg/L	0.00039979	8.45%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 22
 Sample ID: 75646-001 SD
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 60
 Date Collected: 11/21/2013 6:13:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-001 SD

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Al 308.215	1.6	-0.0594279	mg/L	0.00103242	-0.0594279	mg/L	0.00103242	1.74%
Ca 315.887	3550.6	1.95538	mg/L	0.033366	1.95538	mg/L	0.033366	1.71%
Fe 273.955	104.1	0.615879	mg/L	0.0193480	0.615879	mg/L	0.0193480	3.14%
Mg 279.077	169.4	0.247018	mg/L	0.0137143	0.247018	mg/L	0.0137143	5.55%
Mn 257.610	113.6	0.0290732	mg/L	0.00047972	0.0290732	mg/L	0.00047972	1.65%
K 766.490	1120.3	-0.133832	mg/L	0.0335991	-0.133832	mg/L	0.0335991	25.11%
Na 589.592	92913.3	7.44063	mg/L	0.028194	7.44063	mg/L	0.028194	0.38%
Ti 334.940	7.8	-0.0041801	mg/L	0.00025755	-0.0041801	mg/L	0.00025755	6.16%

Sequence No.: 23
Sample ID: 75646-005
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 11/21/2013 6:16:41 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-005

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Al 308.215	62.5	0.288184	mg/L	0.0101997	0.288184	mg/L	0.0101997	3.54%
Ca 315.887	23205.0	16.4467	mg/L	0.49491	16.4467	mg/L	0.49491	3.01%
Fe 273.955	1550.3	9.86346	mg/L	0.025251	9.86346	mg/L	0.025251	0.26%
Mg 279.077	763.3	3.63218	mg/L	0.002285	3.63218	mg/L	0.002285	0.06%
Mn 257.610	593.5	0.180028	mg/L	0.0005825	0.180028	mg/L	0.0005825	0.32%
K 766.490	5038.0	0.863983	mg/L	0.0815407	0.863983	mg/L	0.0815407	9.44%
Na 589.592	292055.3	24.5665	mg/L	0.62036	24.5665	mg/L	0.62036	2.53%
Ti 334.940	84.5	0.0065364	mg/L	0.00017278	0.0065364	mg/L	0.00017278	2.64%

Sequence No.: 24
Sample ID: 75646-007
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 11/21/2013 6:19:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-007

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Al 308.215	8.0	-0.0228568	mg/L	0.01100649	-0.0228568	mg/L	0.01100649	48.15%
Ca 315.887	22553.6	15.9665	mg/L	0.09527	15.9665	mg/L	0.09527	0.60%
Fe 273.955	712.0	4.50291	mg/L	0.042755	4.50291	mg/L	0.042755	0.95%
Mg 279.077	726.7	3.42338	mg/L	0.043675	3.42338	mg/L	0.043675	1.28%
Mn 257.610	560.2	0.169570	mg/L	0.0023370	0.169570	mg/L	0.0023370	1.38%
K 766.490	4780.3	0.798338	mg/L	0.0202117	0.798338	mg/L	0.0202117	2.53%
Na 589.592	278702.0	23.4181	mg/L	0.12175	23.4181	mg/L	0.12175	0.52%
Ti 334.940	12.0	-0.0035957	mg/L	0.00073998	-0.0035957	mg/L	0.00073998	20.58%

Sequence No.: 25
Sample ID: 75646-009
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 63
Date Collected: 11/21/2013 6:22:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-009

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Al 308.215	159.5	0.842478	mg/L	0.0075486	0.842478	mg/L 0.0075486	0.90%
Ca 315.887	22222.2	15.7221	mg/L	0.04401	15.7221	mg/L 0.04401	0.28%
Fe 273.955	206.0	1.26764	mg/L	0.031064	1.26764	mg/L 0.031064	2.45%
Mg 279.077	519.9	2.24495	mg/L	0.009109	2.24495	mg/L 0.009109	0.41%
Mn 257.610	7322.8	2.29685	mg/L	0.005886	2.29685	mg/L 0.005886	0.26%
K 766.490	8987.4	1.86988	mg/L	0.004563	1.86988	mg/L 0.004563	0.24%
Na 589.592	254197.4	21.3108	mg/L	0.11747	21.3108	mg/L 0.11747	0.55%
Ti 334.940	257.1	0.0306769	mg/L	0.00017430	0.0306769	mg/L 0.00017430	0.57%

Sequence No.: 26
 Sample ID: ICSA V-175629
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 11/21/2013 6:25:38 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-175629

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	91071.4	520.343 mg/L	7.5296	520.343 mg/L	7.5296	1.45%
QC value within limits for Al 308.215 Recovery = 104.07%						
Ca 315.887	678025.2	499.251 mg/L	6.8484	499.251 mg/L	6.8484	1.37%
QC value within limits for Ca 315.887 Recovery = 99.85%						
Fe 273.955	30796.5	196.874 mg/L	2.4646	196.874 mg/L	2.4646	1.25%
QC value within limits for Fe 273.955 Recovery = 98.44%						
Mg 279.077	90600.4	515.662 mg/L	5.1386	515.662 mg/L	5.1386	1.00%
QC value within limits for Mg 279.077 Recovery = 103.13%						
Mn 257.610	10.3	-0.0034148 mg/L	0.00007060	-0.0034148 mg/L	0.00007060	2.07%
K 766.490	-111.8	-0.447658 mg/L	0.0176790	-0.447658 mg/L	0.0176790	3.95%
Na 589.592	948.9	-0.468156 mg/L	0.0105673	-0.468156 mg/L	0.0105673	2.26%
Ti 334.940	-65.7	-0.0144628 mg/L	0.00034456	-0.0144628 mg/L	0.00034456	2.38%

All analyte(s) passed QC.

Sequence No.: 27

Sample ID: ICSAB V-175630

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 11/21/2013 6:29:00 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB V-175630

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	93344.4	533.331 mg/L		6.6947	533.331 mg/L	6.6947	1.26%
QC value within limits for Al 308.215 Recovery = 106.67%							
Ca 315.887	694049.7	511.066 mg/L		6.9790	511.066 mg/L	6.9790	1.37%
QC value within limits for Ca 315.887 Recovery = 102.21%							
Fe 273.955	30631.3	195.818 mg/L		0.6041	195.818 mg/L	0.6041	0.31%
QC value within limits for Fe 273.955 Recovery = 97.91%							
Mg 279.077	92752.5	527.928 mg/L		6.0686	527.928 mg/L	6.0686	1.15%
QC value within limits for Mg 279.077 Recovery = 105.59%							
Mn 257.610	1691.3	0.525359 mg/L		0.0021112	0.525359 mg/L	0.0021112	0.40%
QC value within limits for Mn 257.610 Recovery = 105.07%							
K 766.490	-70.5	-0.437132 mg/L		0.0230227	-0.437132 mg/L	0.0230227	5.27%
Na 589.592	951.2	-0.467953 mg/L		0.0055458	-0.467953 mg/L	0.0055458	1.19%
Ti 334.940	-66.2	-0.0145316 mg/L		0.00021357	-0.0145316 mg/L	0.00021357	1.47%

All analyte(s) passed QC.

Sequence No.: 28
 Sample ID: CCV V-176789
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 11/21/2013 6:32:22 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-176789

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	916.0	5.16569 mg/L		0.060286	5.16569 mg/L	0.060286	1.17%
QC value within limits for Al 308.215 Recovery = 103.31%							
Ca 315.887	71150.2	51.7971 mg/L		0.09747	51.7971 mg/L	0.09747	0.19%
QC value within limits for Ca 315.887 Recovery = 103.59%							
Fe 273.955	821.0	5.19985 mg/L		0.005213	5.19985 mg/L	0.005213	0.10%
QC value within limits for Fe 273.955 Recovery = 104.00%							
Mg 279.077	9396.2	52.8360 mg/L		0.04218	52.8360 mg/L	0.04218	0.08%
QC value within limits for Mg 279.077 Recovery = 105.67%							
Mn 257.610	1628.3	0.505540 mg/L		0.0006245	0.505540 mg/L	0.0006245	0.12%
QC value within limits for Mn 257.610 Recovery = 101.11%							
K 766.490	200278.3	50.5909 mg/L		0.01367	50.5909 mg/L	0.01367	0.03%
QC value within limits for K 766.490 Recovery = 101.18%							
Na 589.592	601575.1	51.1847 mg/L		0.09346	51.1847 mg/L	0.09346	0.18%
QC value within limits for Na 589.592 Recovery = 102.37%							
Ti 334.940	3689.5	0.510693 mg/L		0.0011510	0.510693 mg/L	0.0011510	0.23%
QC value within limits for Ti 334.940 Recovery = 102.14%							

All analyte(s) passed QC.

Sequence No.: 29

Sample ID: LLCCV [aq] V-176895

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 11/21/2013 6:35:24 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV [aq] V-176895

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Al 308.215	76.3	0.367522 mg/L		0.0065537	0.367522 mg/L	0.0065537	1.78%
QC value greater than the upper limit for Al 308.215 Recovery = 183.76%							
Ca 315.887	7235.9	4.67259 mg/L		0.016824	4.67259 mg/L	0.016824	0.36%
QC value within limits for Ca 315.887 Recovery = 93.45%							
Fe 273.955	64.4	0.361757 mg/L		0.0093888	0.361757 mg/L	0.0093888	2.60%
QC value within limits for Fe 273.955 Recovery = 120.59%							
Mg 279.077	979.6	4.86499 mg/L		0.018218	4.86499 mg/L	0.018218	0.37%
QC value within limits for Mg 279.077 Recovery = 97.30%							
Mn 257.610	140.9	0.0376456 mg/L		0.00125844	0.0376456 mg/L	0.00125844	3.34%
QC value within limits for Mn 257.610 Recovery = 94.11%							
K 766.490	20307.2	4.75298 mg/L		0.036271	4.75298 mg/L	0.036271	0.76%
QC value within limits for K 766.490 Recovery = 95.06%							
Na 589.592	62992.2	4.86747 mg/L		0.072981	4.86747 mg/L	0.072981	1.50%
QC value within limits for Na 589.592 Recovery = 97.35%							
Ti 334.940	372.5	0.0468238 mg/L		0.00069297	0.0468238 mg/L	0.00069297	1.48%
QC value within limits for Ti 334.940 Recovery = 93.65%							
QC Failed. Continue with analysis.							

Sequence No.: 30

Sample ID: CCB V-174666

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 11/21/2013 6:38:27 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB V-174666

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	9.5	-0.0146508 mg/L	0.00864612	-0.0146508 mg/L	0.00864612	59.01%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887	37.9	-0.634565 mg/L	0.0101239	-0.634565 mg/L	0.0101239	1.60%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955	-0.1	-0.0507332 mg/L	0.01029975	-0.0507332 mg/L	0.01029975	20.30%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	3.1	-0.700759 mg/L	0.0184511	-0.700759 mg/L	0.0184511	2.63%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	-4.5	-0.0080912 mg/L	0.00049646	-0.0080912 mg/L	0.00049646	6.14%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490	115.5	-0.389756 mg/L	0.0410392	-0.389756 mg/L	0.0410392	10.53%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592	620.6	-0.496388 mg/L	0.0051265	-0.496388 mg/L	0.0051265	1.03%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940	0.9	-0.0051554 mg/L	0.00032651	-0.0051554 mg/L	0.00032651	6.33%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 31
Sample ID: 75646-011
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 64
Date Collected: 11/21/2013 6:41:31 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-011

Analyte	Mean Corrected Intensity	Conc.	Units	Calib. Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Al 308.215	68.2	0.320989	mg/L	0.0099306	0.320989	mg/L	0.0099306	3.09%
Ca 315.887	13959.7	9.63009	mg/L	0.008725	9.63009	mg/L	0.008725	0.09%
Fe 273.955	52.6	0.286622	mg/L	0.0213206	0.286622	mg/L	0.0213206	7.44%
Mg 279.077	377.0	1.43046	mg/L	0.013866	1.43046	mg/L	0.013866	0.97%
Mn 257.610	101.1	0.0251210	mg/L	0.00032274	0.0251210	mg/L	0.00032274	1.28%
K 766.490	5939.7	1.09363	mg/L	0.019140	1.09363	mg/L	0.019140	1.75%
Na 589.592	511197.1	43.4123	mg/L	0.71777	43.4123	mg/L	0.71777	1.65%
Ti 334.940	90.8	0.0074200	mg/L	0.00082414	0.0074200	mg/L	0.00082414	11.11%

Sequence No.: 32
Sample ID: 75646-013
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 65
Date Collected: 11/21/2013 6:44:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-013

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	0.8	-0.0642097	mg/L	0.01241924	-0.0642097	mg/L	0.01241924	19.34%
Ca 315.887	17407.3	12.1721	mg/L	0.04524	12.1721	mg/L	0.04524	0.37%
Fe 273.955	-1.1	-0.0568443	mg/L	0.00529085	-0.0568443	mg/L	0.00529085	9.31%
Mg 279.077	379.7	1.44592	mg/L	0.010474	1.44592	mg/L	0.010474	0.72%
Mn 257.610	40.9	0.0061986	mg/L	0.00063838	0.0061986	mg/L	0.00063838	10.30%
K 766.490	6437.5	1.22042	mg/L	0.013275	1.22042	mg/L	0.013275	1.09%
Na 589.592	126930.1	10.3660	mg/L	0.01773	10.3660	mg/L	0.01773	0.17%
Ti 334.940	0.1	-0.0052548	mg/L	0.00061570	-0.0052548	mg/L	0.00061570	11.72%

Sequence No.: 33
Sample ID: 75646-015
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 66
Date Collected: 11/21/2013 6:47:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-015

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	35.8	0.136033	mg/L	0.0201714	0.136033	mg/L	0.0201714	14.83%
Ca 315.887	33590.1	24.1038	mg/L	0.28205	24.1038	mg/L	0.28205	1.17%
Fe 273.955	33.3	0.162899	mg/L	0.0179478	0.162899	mg/L	0.0179478	11.02%
Mg 279.077	728.2	3.43193	mg/L	0.006396	3.43193	mg/L	0.006396	0.19%
Mn 257.610	1570.2	0.487282	mg/L	0.0025368	0.487282	mg/L	0.0025368	0.52%
K 766.490	10747.5	2.31816	mg/L	0.071809	2.31816	mg/L	0.071809	3.10%
Na 589.592	321977.6	27.1398	mg/L	0.38656	27.1398	mg/L	0.38656	1.42%
Ti 334.940	40.2	0.0003469	mg/L	0.00042808	0.0003469	mg/L	0.00042808	123.41%

Sequence No.: 34
Sample ID: 75646-017
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 67
Date Collected: 11/21/2013 6:50:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-017

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	-4.4	-0.0939191	mg/L	0.03572524	-0.0939191	mg/L	0.03572524	38.04%
Ca 315.887	136.8	-0.561587	mg/L	0.0008991	-0.561587	mg/L	0.0008991	0.16%
Fe 273.955	-1.4	-0.0587369	mg/L	0.01621338	-0.0587369	mg/L	0.01621338	27.60%
Mg 279.077	3.1	-0.700363	mg/L	0.0197818	-0.700363	mg/L	0.0197818	2.82%
Mn 257.610	-5.9	-0.0085129	mg/L	0.00056400	-0.0085129	mg/L	0.00056400	6.63%
K 766.490	46.9	-0.407224	mg/L	0.0010313	-0.407224	mg/L	0.0010313	0.25%
Na 589.592	1968.9	-0.380436	mg/L	0.0026467	-0.380436	mg/L	0.0026467	0.70%
Ti 334.940	2.4	-0.0049364	mg/L	0.00074528	-0.0049364	mg/L	0.00074528	15.10%

Sequence No.: 35
Sample ID: 75646-019
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 68
Date Collected: 11/21/2013 6:53:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-019

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	1.9	-0.0579833	mg/L	0.00194863	-0.0579833	mg/L	0.00194863	3.36%
Ca 315.887	49209.8	35.6203	mg/L	0.57283	35.6203	mg/L	0.57283	1.61%
Fe 273.955	472.1	2.96876	mg/L	0.028822	2.96876	mg/L	0.028822	0.97%
Mg 279.077	952.0	4.70760	mg/L	0.023878	4.70760	mg/L	0.023878	0.51%
Mn 257.610	1490.4	0.462180	mg/L	0.0057939	0.462180	mg/L	0.0057939	1.25%
K 766.490	12727.2	2.82240	mg/L	0.094762	2.82240	mg/L	0.094762	3.36%
Na 589.592	538618.5	45.7705	mg/L	0.81974	45.7705	mg/L	0.81974	1.79%
Ti 334.940	-1.8	-0.0055259	mg/L	0.00121880	-0.0055259	mg/L	0.00121880	22.06%

C:\ICPCHEM\1\DATA\S112113A.b\001CALB.D\001CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\001CALB.D\001CALB.D#
 Date Acquired: Nov 21 2013 12:10 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 21 2013 12:14 pm
 Sample Type: CalBlk

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9 Be	45	2		571	16.14
23 Na	45	1		96757	2.92
24 Mg	45	1		661	4.88
27 Al	45	1		461	7.23
39 K	45	1		46486	4.53
44 Ca	45	1		317	5.58
51 V	45	1		277	4.41
52 Cr	45	1		752	4.58
55 Mn	45	1		651	2.55
56 Fe	45	1		14380	5.34
59 Co	45	1		860	1.18
60 Ni	45	1		187	7.74
65 Cu	45	1		910	5.04
66 Zn	45	1		1822	4.20
75 As	115	1		56	6.95
78 Se	115	1		130	10.67
83 Kr	115	2		456	3.46
95 Mo	115	2		356	3.90
107 Ag	115	2		713	10.71
111 Cd	115	2		194	12.00
121 Sb	115	2		793	3.36
137 Ba	159	2		437	4.04
205 Tl	165	2		3172	4.56
206 (Pb)	165	2		1049	4.51
207 (Pb)	165	2		901	1.30
208 Pb	165	2		4347	2.62

15726
(27441)

Be, Sb, Tl, Pb, Cd
reported.

W. Y. Kalin
11.22.13

Internal Standard Elements

Element	Tune	CPS Mean	RSD(%)
45 Sc	1	85143	4.49
45 Sc	2	1328921	1.22
115 In	1	487293	5.39
115 In	2	1592344	1.33
159 Tb	1	1076359	1.62
159 Tb	2	2155593	1.40
165 Ho	1	1032914	1.56
165 Ho	2	2069304	0.90

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\S112113A.b\002CALB.D\002CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\002CALB.D\002CALB.D#
 Date Acquired: Nov 21 2013 12:16 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 21 2013 12:14 pm
 Sample Type: CalBlk

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	534	8.76
23	Na	45	1	102668	0.62
24	Mg	45	1	721	3.55
27	Al	45	1	499	3.35
39	K	45	1	50502	0.96
44	Ca	45	1	339	3.35
51	V	45	1	271	5.82
52	Cr	45	1	764	2.54
55	Mn	45	1	638	7.50
56	Fe	45	1	15858	2.69
59	Co	45	1	706	1.44
60	Ni	45	1	177	3.33
65	Cu	45	1	903	2.42
66	Zn	45	1	1930	1.11
75	As	115	1	56	2.50
78	Se	115	1	142	4.97
83	Kr	115	2	519	12.53
95	Mo	115	2	323	1.03
107	Aq	115	2	798	14.63
111	Cd	115	2	183	21.24
121	Sb	115	2	624	6.37
137	Ba	159	2	397	10.50
205	Tl	165	2	2590	6.86
206	(Pb)	165	2	935	9.20
207	(Pb)	165	2	807	6.65
208	Pb	165	2	3797	4.23

Internal Standard Elements

Element	Tune	CPS Mean	RSD(%)	
45	Sc	1	91101	6.75
45	Sc	2	1409018	1.05
115	In	1	550573	6.58
115	In	2	1674463	0.52
159	Tb	1	1206971	6.07
159	Tb	2	2214207	2.24
165	Ho	1	1184067	7.29
165	Ho	2	2128403	0.86

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\S112113A.b\003CALI.D\003CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\003CALI.D\003CALI.D#
 Date Acquired: Nov 21 2013 12:22 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 21 2013 12:20 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	3435	4.06
23	Na	45	1	147724	0.49
24	Mg	45	1	28103	1.17
27	Al	45	1	4906	2.77
39	K	45	1	74721	0.33
44	Ca	45	1	1726	4.05
51	V	45	1	2287	3.26
52	Cr	45	1	3215	4.59
55	Mn	45	1	2512	3.94
56	Fe	45	1	244085	0.72
59	Co	45	1	4479	4.90
60	Ni	45	1	1155	1.90
65	Cu	45	1	1947	2.69
66	Zn	45	1	2474	2.27
75	As	115	1	385	7.63
78	Se	115	1	303	3.02
83	Kr	115	2	540	10.27
95	Mo	115	2	2769	3.81
107	Aq	115	2	7304	0.11
111	Cd	115	2	1542	3.45
121	Sb	115	2	5548	2.30
137	Ba	159	2	2478	1.68
205	Tl	165	2	14857	2.74
206	(Pb)	165	2	5042	2.42
207	(Pb)	165	2	4407	2.31
208	Pb	165	2	19912	2.40

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	86991	1.90	91101	95.5	80 - 120
45	Sc	2	1361560	0.63	1409018	96.6	80 - 120
115	In	1	539730	3.81	550573	98.0	80 - 120
115	In	2	1597827	1.24	1674463	95.4	80 - 120
159	Tb	1	1221509	3.71	1206971	101.2	80 - 120
159	Tb	2	2142777	1.54	2214207	96.8	80 - 120
165	Ho	1	1194388	4.14	1184067	100.9	80 - 120
165	Ho	2	2104309	1.93	2128403	98.9	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\S112113A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112113A.b\004CALI.D\004CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\004CALI.D\004CALI.D#
 Date Acquired: Nov 21 2013 12:28 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 21 2013 12:26 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
9 Be	45	2	30931	2.45
23 Na	45	1	575272	3.08
24 Mg	45	1	277653	0.84
27 Al	45	1	45798	0.66
39 K	45	1	305606	0.51
44 Ca	45	1	14317	0.78
51 V	45	1	21316	0.44
52 Cr	45	1	25424	0.41
55 Mn	45	1	19163	0.90
56 Fe	45	1	2360329	2.23
59 Co	45	1	40079	1.92
60 Ni	45	1	10330	1.32
65 Cu	45	1	14191	1.78
66 Zn	45	1	7044	2.53
75 As	115	1	3300	0.77
78 Se	115	1	1786	1.17
83 Kr	115	2	521	6.05
95 Mo	115	2	25313	2.46
107 Ag	115	2	67050	1.21
111 Cd	115	2	14224	2.39
121 Sb	115	2	50502	1.30
137 Ba	159	2	20205	1.30
205 Tl	165	2	128631	1.74
206 (Pb)	165	2	43424	2.25
207 (Pb)	165	2	35930	3.36
208 Pb	165	2	169968	1.96

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89545	1.04	91101	98.3	80 - 120	
45 Sc	2	1339169	1.98	1409018	95.0	80 - 120	
115 In	1	555288	2.04	550573	100.9	80 - 120	
115 In	2	1567680	2.42	1674463	93.6	80 - 120	
159 Tb	1	1245424	1.53	1206971	103.2	80 - 120	
159 Tb	2	2106329	0.32	2214207	95.1	80 - 120	
165 Ho	1	1217182	2.42	1184067	102.8	80 - 120	
165 Ho	2	2027308	1.44	2128403	95.3	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\S112113A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112113A.b\005CALI.D\005CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\005CALI.D\005CALI.D#
 Date Acquired: Nov 21 2013 12:34 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 21 2013 12:32 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	62502	1.94
23	Na	45	1	1109591	8.11
24	Mg	45	1	565605	7.66
27	Al	45	1	92087	8.00
39	K	45	1	573921	7.67
44	Ca	45	1	28724	6.16
51	V	45	1	43220	6.36
52	Cr	45	1	51916	7.65
55	Mn	45	1	39545	7.36
56	Fe	45	1	4755712	7.68
59	Co	45	1	81541	7.57
60	Ni	45	1	21532	7.03
65	Cu	45	1	28886	7.63
66	Zn	45	1	12948	6.24
75	As	115	1	6837	8.65
78	Se	115	1	3555	10.11
83	Kr	115	2	476	6.88
95	Mo	115	2	52029	1.20
107	Ag	115	2	138683	1.49
111	Cd	115	2	29550	0.84
121	Sb	115	2	104924	0.99
137	Ba	159	2	40773	2.12
205	Tl	165	2	261664	0.96
206	(Pb)	165	2	89290	2.39
207	(Pb)	165	2	74356	1.26
208	Pb	165	2	348790	1.17

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	89885	6.62	91101	98.7	80 - 120
45	Sc	2	1421823	1.28	1409018	100.9	80 - 120
115	In	1	555900	7.70	550573	101.0	80 - 120
115	In	2	1677252	0.32	1674463	100.2	80 - 120
159	Tb	1	1258440	5.22	1206971	104.3	80 - 120
159	Tb	2	2239635	1.26	2214207	101.1	80 - 120
165	Ho	1	1231577	5.20	1184067	104.0	80 - 120
165	Ho	2	2171113	0.77	2128403	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\S112113A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112113A.b\006CALI.D\006CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\006CALI.D\006CALI.D#
 Date Acquired: Nov 21 2013 12:40 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 21 2013 12:38 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	297405	1.01
23	Na	45	1	4786614	0.85
24	Mg	45	1	2663549	1.38
27	Al	45	1	432090	1.21
39	K	45	1	2522795	0.40
44	Ca	45	1	133014	1.28
51	V	45	1	208083	1.41
52	Cr	45	1	242596	1.05
55	Mn	45	1	183012	1.21
56	Fe	45	1	22317550	2.45
59	Co	45	1	386351	1.20
60	Ni	45	1	101149	1.57
65	Cu	45	1	132473	1.61
66	Zn	45	1	52490	0.41
75	As	115	1	32213	0.57
78	Se	115	1	16341	1.50
83	Kr	115	2	540	10.53
95	Mo	115	2	243416	1.18
107	Ag	115	2	655930	1.99
111	Cd	115	2	139044	1.29
121	Sb	115	2	483662	1.43
137	Ba	159	2	194105	1.21
205	Tl	165	2	1337729	0.63
206	(Pb)	165	2	417853	0.98
207	(Pb)	165	2	343544	1.82
208	Pb	165	2	1636780	2.78

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	88639	0.66	91101	97.3	80 - 120
45	Sc	2	1325971	2.38	1409018	94.1	80 - 120
115	In	1	560257	1.31	550573	101.8	80 - 120
115	In	2	1543828	2.04	1674463	92.2	80 - 120
159	Tb	1	1264226	1.81	1206971	104.7	80 - 120
159	Tb	2	2126183	1.54	2214207	96.0	80 - 120
165	Ho	1	1253462	2.87	1184067	105.9	80 - 120
165	Ho	2	2051821	1.45	2128403	96.4	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\S112113A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112113A.b\007CALI.D\007CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\007CALI.D\007CALI.D#
 Date Acquired: Nov 21 2013 12:45 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 21 2013 12:44 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	589470	0.65
23	Na	45	1	9116361	5.95
24	Mg	45	1	5083593	6.29
27	Al	45	1	849550	5.90
39	K	45	1	4802686	5.41
44	Ca	45	1	261430	5.30
51	V	45	1	405367	5.40
52	Cr	45	1	478089	6.04
55	Mn	45	1	357812	6.39
56	Fe	45	1	43593280	5.63
59	Co	45	1	775081	3.88
60	Ni	45	1	196055	6.40
65	Cu	45	1	257636	5.85
66	Zn	45	1	101311	5.17
75	As	115	1	63253	3.97
78	Se	115	1	31534	3.23
83	Kr	115	2	446	4.75
95	Mo	115	2	480401	2.69
107	Aq	115	2	1318879	2.09
111	Cd	115	2	269692	2.06
121	Sb	115	2	979561	1.11
137	Ba	159	2	378167	0.46
205	Tl	165	2	2552119	0.40
206	(Pb)	165	2	815397	0.88
207	(Pb)	165	2	674446	2.33
208	Pb	165	2	3269687	1.88

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	83334	5.28	91101	91.5	80 - 120
45	Sc	2	1296086	0.98	1409018	92.0	80 - 120
115	In	1	516400	3.82	550573	93.8	80 - 120
115	In	2	1510452	1.79	1674463	90.2	80 - 120
159	Tb	1	1195788	3.58	1206971	99.1	80 - 120
159	Tb	2	2050689	1.33	2214207	92.6	80 - 120
165	Ho	1	1170977	3.02	1184067	98.9	80 - 120
165	Ho	2	1978248	0.80	2128403	92.9	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\S112113A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112113A.b\008_ICV.D\008_ICV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\008_ICV.D\008_ICV.D#
 Date Acquired: Nov 21 2013 12:51 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 21 2013 12:49 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	47.99	ppb	0.98	287676	50	96.0	90 - 110	
23 Na	45	1	4795.00	ppb	1.50	4566191	5000	95.9	90 - 110	
24 Mg	45	1	4830.00	ppb	0.66	2540856	5000	96.6	90 - 110	
27 Al	45	1	4741.00	ppb	1.60	1380189	5000	94.8	90 - 110	
39 K	45	1	4828.00	ppb	1.12	2419694	5000	96.6	90 - 110	
44 Ca	45	1	4600.00	ppb	0.97	123831	5000	92.0	90 - 110	
51 V	45	1	47.81	ppb	0.37	199731	50	95.6	90 - 110	
52 Cr	45	1	47.01	ppb	0.16	231362	50	94.0	90 - 110	
55 Mn	45	1	47.47	ppb	1.56	175177	50	94.9	90 - 110	
56 Fe	45	1	4838.00	ppb	1.05	21725180	5000	96.8	90 - 110	
59 Co	45	1	45.14	ppb	1.04	358395	50	90.3	90 - 110	
60 Ni	45	1	47.23	ppb	0.34	95583	50	94.5	90 - 110	
65 Cu	45	1	48.36	ppb	0.68	128566	50	96.7	90 - 110	
66 Zn	45	1	47.97	ppb	0.59	50936	50	95.9	90 - 110	
75 As	115	1	47.45	ppb	0.58	30977	50	94.9	90 - 110	
78 Se	115	1	49.49	ppb	1.09	3318	50	99.0	90 - 110	
83 Kr	115	2	-----	ppb	-----	548	50	#VALUE!	##### - #####	
95 Mo	115	2	47.67	ppb	0.68	233714	50	95.3	90 - 110	
107 Ag	115	2	9.50	ppb	1.17	127907	10	95.0	90 - 110	
111 Cd	115	2	49.18	ppb	1.07	135833	50	98.4	90 - 110	
121 Sb	115	2	45.73	ppb	0.50	454761	50	91.5	90 - 110	
137 Ba	159	2	48.76	ppb	0.83	186474	50	97.5	90 - 110	
205 Tl	165	2	47.64	ppb	1.37	1249470	50	95.3	90 - 110	
206 (Pb)	165	2	48.21	ppb	2.19	402445	50	96.4	90 - 110	
207 (Pb)	165	2	50.51	ppb	1.77	348377	50	101.0	90 - 110	
208 Pb	165	2	47.91	ppb	1.26	1596242	50	95.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	86308	0.68	91101	94.7	80 - 120	
45 Sc	2	1321007	1.08	1409018	93.8	80 - 120	
115 In	1	538798	0.97	550573	97.9	80 - 120	
115 In	2	1543136	0.71	1674463	92.2	80 - 120	
159 Tb	1	1249719	2.14	1206971	103.5	80 - 120	
159 Tb	2	2076305	1.16	2214207	93.8	80 - 120	
165 Ho	1	1223932	0.20	1184067	103.4	80 - 120	
165 Ho	2	2028536	2.38	2128403	95.3	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\S112113A.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\S112113A.b\009_CCV.D\009_CCV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\009_CCV.D\009_CCV.D#
 Date Acquired: Nov 21 2013 12:57 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 21 2013 12:49 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	0.47 ppb	4.89	1	94.1	70 - 130	
23 Na	45	1	242.40 ppb	0.13	250	97.0	70 - 130	
24 Mg	45	1	260.90 ppb	1.44	250	104.4	70 - 130	
27 Al	45	1	102.40 ppb	0.78	100	102.4	70 - 130	
39 K	45	1	250.60 ppb	1.58	250	100.2	70 - 130	
44 Ca	45	1	250.30 ppb	1.02	250	100.1	70 - 130	
51 V	45	1	0.95 ppb	1.77	1	95.4	70 - 130	
52 Cr	45	1	1.00 ppb	0.63	1	99.5	70 - 130	
55 Mn	45	1	2.91 ppb	1.35	3	96.8	70 - 130	
56 Fe	45	1	164.80 ppb	0.84	150	109.9	70 - 130	
59 Co	45	1	0.94 ppb	0.42	1	93.9	70 - 130	
60 Ni	45	1	1.46 ppb	2.64	2	97.0	70 - 130	
65 Cu	45	1	4.91 ppb	2.32	5	98.1	70 - 130	
66 Zn	45	1	9.50 ppb	2.05	10	95.0	70 - 130	
75 As	115	1	0.95 ppb	4.96	1	94.9	70 - 130	
78 Se	115	1	5.62 ppb	2.78	5	112.4	70 - 130	
83 Kr	115	2	----- ppb -----		1	#VALUE! ##### - #####		
95 Mo	115	2	1.01 ppb	6.63	1	101.2	70 - 130	
107 Ag	115	2	0.50 ppb	5.38	1	99.8	70 - 130	
111 Cd	115	2	0.97 ppb	7.00	1	97.5	70 - 130	
121 Sb	115	2	1.10 ppb	5.42	1	109.7	70 - 130	
137 Ba	159	2	2.43 ppb	4.00	3	97.2	70 - 130	
205 Tl	165	2	0.92 ppb	4.68	1	91.8	70 - 130	
206 (Pb)	165	2	1.38 ppb	2.83	2	91.8	70 - 130	
207 (Pb)	165	2	1.48 ppb	6.81	2	98.4	70 - 130	
208 Pb	165	2	1.41 ppb	4.44	2	94.1	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	94111	0.41	91101	103.3	80 - 120	
45 Sc	2	1446247	3.02	1409018	102.6	80 - 120	
115 In	1	585909	1.16	550573	106.4	80 - 120	
115 In	2	1701850	4.56	1674463	101.6	80 - 120	
159 Tb	1	1329484	0.28	1206971	110.2	80 - 120	
159 Tb	2	2269957	3.34	2214207	102.5	80 - 120	
165 Ho	1	1302914	0.88	1184067	110.0	80 - 120	
165 Ho	2	2188648	3.58	2128403	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\S112113A.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\S112113A.b\010_ICB.D\010_ICB.D#

Initial Calibration Blank (ICB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\010_ICB.D\010_ICB.D#
 Date Acquired: Nov 21 2013 01:03 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 21 2013 12:49 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	-0.04	ppb	9.08	267	0.50	
23 Na	45	1	-1.94	ppb	109.31	103918	250.00	
24 Mg	45	1	2.55	ppb	22.96	2196	250.00	
27 Al	45	1	1.41	ppb	18.47	959	100.00	
39 K	45	1	-1.84	ppb	105.98	51096	250.00	
44 Ca	45	1	1.67	ppb	129.95	397	250.00	
51 V	45	1	-0.01	ppb	86.96	233	1.00	
52 Cr	45	1	-0.02	ppb	92.17	707	1.00	
55 Mn	45	1	-0.03	ppb	38.42	532	3.00	
56 Fe	45	1	2.64	ppb	22.43	29204	150.00	
59 Co	45	1	-0.02	ppb	44.35	525	1.00	
60 Ni	45	1	-0.01	ppb	104.21	162	1.50	
65 Cu	45	1	0.19	ppb	3.98	843	5.00	
66 Zn	45	1	0.09	ppb	220.91	2091	10.00	
75 As	115	1	-0.02	ppb	117.06	48	1.00	
78 Se	115	1	0.82	ppb	20.70	165	5.00	
83 Kr	115	2	-----	ppb	-----	476	1.00	
95 Mo	115	2	-0.02	ppb	48.77	224	1.00	
107 Ag	115	2	-0.01	ppb	76.99	696	0.50	
111 Cd	115	2	-0.03	ppb	10.70	107	1.00	
121 Sb	115	2	0.01	ppb	32.55	762	1.00	
137 Ba	159	2	-0.04	ppb	42.51	237	2.50	
205 Tl	165	2	-0.05	ppb	9.37	1332	1.00	
206 (Pb)	165	2	-0.04	ppb	32.13	593	1.50	
207 (Pb)	165	2	-0.04	ppb	17.08	527	1.50	
208 Pb	165	2	-0.04	ppb	17.96	2409	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93701	1.17	91101	102.9	80 - 120	
45 Sc	2	1433625	0.43	1409018	101.7	80 - 120	
115 In	1	586425	1.60	550573	106.5	80 - 120	
115 In	2	1653015	1.09	1674463	98.7	80 - 120	
159 Tb	1	1341351	0.51	1206971	111.1	80 - 120	
159 Tb	2	2232066	1.15	2214207	100.8	80 - 120	
165 Ho	1	1306974	0.58	1184067	110.4	80 - 120	
165 Ho	2	2155506	1.68	2128403	101.3	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\S112113A.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\S112113A.b\011ICSA.D\011ICSA.D#

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\011ICSA.D\011ICSA.D#
 Date Acquired: Nov 21 2013 01:09 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 21 2013 12:49 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	-0.05 ppb	4.14	0.50	
23 Na	45	1	124600.00 ppb	8.42	250.00	
24 Mg	45	1	48500.00 ppb	9.32	250.00	
27 Al	45	1	47450.00 ppb	9.79	100.00	
39 K	45	1	49230.00 ppb	9.03	250.00	
44 Ca	45	1	147400.00 ppb	9.01	250.00	
51 V	45	1	0.01 ppb	47.29	1.00	
52 Cr	45	1	0.75 ppb	9.57	1.00	
55 Mn	45	1	4.48 ppb	9.53	3.00	**
56 Fe	45	1	119900.00 ppb	8.28	150.00	
59 Co	45	1	1.76 ppb	9.50	1.00	**
60 Ni	45	1	3.25 ppb	6.99	1.50	**
65 Cu	45	1	1.49 ppb	10.51	5.00	
66 Zn	45	1	1.07 ppb	12.52	10.00	
75 As	115	1	0.21 ppb	12.82	1.00	
78 Se	115	1	0.77 ppb	37.74	5.00	
83 Kr	115	2	----- ppb	-----	1.00	
95 Mo	115	2	1003.00 ppb	2.20	1.00	
107 Ag	115	2	0.02 ppb	14.83	0.50	
111 Cd	115	2	1.10 ppb	2.11	1.00	**
121 Sb	115	2	0.25 ppb	0.75	1.00	
137 Ba	159	2	0.94 ppb	3.46	2.50	
205 Tl	165	2	-0.04 ppb	4.13	1.00	
206 (Pb)	165	2	0.17 ppb	10.35	1.50	
207 (Pb)	165	2	0.16 ppb	10.06	1.50	
208 Pb	165	2	0.16 ppb	2.31	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	83471	8.09	91101	91.6	70 - 150	
45 Sc	2	1360205	0.89	1409018	96.5	70 - 150	
115 In	1	495568	7.72	550573	90.0	70 - 150	
115 In	2	1481250	2.04	1674463	88.5	70 - 150	
159 Tb	1	1215387	7.65	1206971	100.7	70 - 150	
159 Tb	2	2072401	2.13	2214207	93.6	70 - 150	
165 Ho	1	1211170	7.35	1184067	102.3	70 - 150	
165 Ho	2	2016338	1.98	2128403	94.7	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\S112113A.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\S112113A.b\012ICSB.D\012ICSB.D#

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\012ICSB.D\012ICSB.D#
 Date Acquired: Nov 21 2013 01:15 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 21 2013 12:49 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		-0.05	1.12	---		-	
23 Na	45	1		117300.00	0.49	---		-	
24 Mg	45	1		46300.00	1.36	---		-	
27 Al	45	1		45530.00	1.87	---		-	
39 K	45	1		47800.00	0.47	---		-	
44 Ca	45	1		139800.00	0.90	---		-	
51 V	45	1		200.40	0.85	200	100.2	80 - 120	
52 Cr	45	1		189.90	0.90	200	95.0	80 - 120	
55 Mn	45	1		198.50	0.88	200	99.3	80 - 120	
56 Fe	45	1		114000.00	1.27	---		-	
59 Co	45	1		184.30	1.88	200	92.2	80 - 120	
60 Ni	45	1		177.10	0.12	200	88.6	80 - 120	
65 Cu	45	1		177.40	0.17	---		-	
66 Zn	45	1		88.70	0.60	100	88.7	80 - 120	
75 As	115	1		102.50	0.62	100	102.5	80 - 120	
78 Se	115	1		96.50	1.14	100	96.5	80 - 120	
83 Kr	115	2		-----		---		-	
95 Mo	115	2		1049.00	1.79	---		-	
107 Ag	115	2		47.97	0.59	50	95.9	80 - 120	
111 Cd	115	2		100.90	1.23	100	100.9	80 - 120	
121 Sb	115	2		0.25	1.80	---		-	
137 Ba	159	2		0.96	3.14	---		-	
205 Tl	165	2		-0.04	9.28	---		-	
206 (Pb)	165	2		0.16	10.74	---		-	
207 (Pb)	165	2		0.16	7.33	---		-	
208 Pb	165	2		0.16	4.80	---		-	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	90110	0.90	91101	98.9	70 - 150	
45 Sc	2	1280882	1.06	1409018	90.9	70 - 150	
115 In	1	532496	1.06	550573	96.7	70 - 150	
115 In	2	1410189	0.27	1674463	84.2	70 - 150	
159 Tb	1	1277083	1.63	1206971	105.8	70 - 150	
159 Tb	2	1935176	0.98	2214207	87.4	70 - 150	
165 Ho	1	1258466	0.56	1184067	106.3	70 - 150	
165 Ho	2	1864040	1.10	2128403	87.6	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\S112113A.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\S112113A.b\013_CCV.D\013_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\013_CCV.D\013_CCV.D#
 Date Acquired: Nov 21 2013 01:20 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 21 2013 12:49 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	49.19 ppb	0.74	327993	50	98.4	90 - 110	
23 Na	45	1	5611.00 ppb	14.55	5262916	5000	112.2	90 - 110	Fail
24 Mg	45	1	5582.00 ppb	13.28	2904367	5000	111.6	90 - 110	Fail
27 Al	45	1	1698.00 ppb	12.64	489455	1500	113.2	90 - 110	Fail
39 K	45	1	5634.00 ppb	13.95	2783546	5000	112.7	90 - 110	Fail
44 Ca	45	1	5602.00 ppb	13.67	149001	5000	112.0	90 - 110	Fail
51 V	45	1	55.43 ppb	14.12	228777	50	110.9	90 - 110	Fail
52 Cr	45	1	55.78 ppb	13.20	271381	50	111.6	90 - 110	Fail
55 Mn	45	1	55.95 ppb	13.68	204007	50	111.9	90 - 110	Fail
56 Fe	45	1	5639.00 ppb	13.97	25027280	5000	112.8	90 - 110	Fail
59 Co	45	1	55.27 ppb	12.68	434116	50	110.5	90 - 110	Fail
60 Ni	45	1	55.76 ppb	14.19	111489	50	111.5	90 - 110	Fail
65 Cu	45	1	56.52 ppb	12.02	148715	50	113.0	90 - 110	Fail
66 Zn	45	1	55.82 ppb	12.99	58350	50	111.6	90 - 110	Fail
75 As	115	1	56.27 ppb	15.32	35783	50	112.5	90 - 110	Fail
78 Se	115	1	278.00 ppb	14.56	17726	250	111.2	90 - 110	Fail
83 Kr	115	2	----- ppb	-----	537	50	#VALUE! #####		
95 Mo	115	2	51.65 ppb	1.61	275832	50	103.3	90 - 110	
107 Ag	115	2	50.06 ppb	1.40	731082	50	100.1	90 - 110	
111 Cd	115	2	51.05 ppb	1.18	153589	50	102.1	90 - 110	
121 Sb	115	2	49.98 ppb	0.57	541418	50	100.0	90 - 110	
137 Ba	159	2	51.54 ppb	0.10	214344	50	103.1	90 - 110	
205 Tl	165	2	50.03 ppb	2.45	1405512	50	100.1	90 - 110	
206 (Pb)	165	2	49.47 ppb	0.60	442440	50	98.9	90 - 110	
207 (Pb)	165	2	49.42 ppb	0.28	365260	50	98.8	90 - 110	
208 Pb	165	2	49.73 ppb	0.74	1775344	50	99.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	86316	12.62	91101	94.7	80 - 120	
45 Sc	2	1469433	0.26	1409018	104.3	80 - 120	
115 In	1	532552	14.15	550573	96.7	80 - 120	
115 In	2	1681288	1.24	1674463	100.4	80 - 120	
159 Tb	1	1233126	11.51	1206971	102.2	80 - 120	
159 Tb	2	2257969	1.45	2214207	102.0	80 - 120	
165 Ho	1	1203606	11.54	1184067	101.7	80 - 120	
165 Ho	2	2173119	1.00	2128403	102.1	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\S112113A.b\002CALB.D\002CALB.D#

15 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S112113A.b\014_CCV.D\014_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\014_CCV.D\014_CCV.D#
 Date Acquired: Nov 21 2013 01:26 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 21 2013 12:49 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	0.44 ppb	1.67	1	87.1	70 - 130	
23 Na	45	1	262.30 ppb	13.15	250	104.9	70 - 130	
24 Mg	45	1	265.00 ppb	9.32	250	106.0	70 - 130	
27 Al	45	1	111.90 ppb	10.51	100	111.9	70 - 130	
39 K	45	1	248.50 ppb	12.25	250	99.4	70 - 130	
44 Ca	45	1	276.00 ppb	10.67	250	110.4	70 - 130	
51 V	45	1	0.93 ppb	9.31	1	92.6	70 - 130	
52 Cr	45	1	0.95 ppb	11.97	1	94.9	70 - 130	
55 Mn	45	1	2.78 ppb	9.65	3	92.6	70 - 130	
56 Fe	45	1	192.60 ppb	9.91	150	128.4	70 - 130	
59 Co	45	1	0.94 ppb	9.53	1	93.6	70 - 130	
60 Ni	45	1	1.40 ppb	9.65	2	93.5	70 - 130	
65 Cu	45	1	4.78 ppb	9.09	5	95.6	70 - 130	
66 Zn	45	1	9.24 ppb	10.90	10	92.4	70 - 130	
75 As	115	1	0.93 ppb	15.05	1	93.3	70 - 130	
78 Se	115	1	5.43 ppb	9.11	5	108.5	70 - 130	
83 Kr	115	2	----- ppb -----	-----	1	#VALUE! ##### - #####		
95 Mo	115	2	1.22 ppb	1.31	1	121.5	70 - 130	
107 Ag	115	2	0.48 ppb	2.49	1	95.2	70 - 130	
111 Cd	115	2	0.96 ppb	1.20	1	95.8	70 - 130	
121 Sb	115	2	0.96 ppb	1.70	1	96.2	70 - 130	
137 Ba	159	2	2.48 ppb	0.76	3	99.3	70 - 130	
205 Tl	165	2	0.88 ppb	2.45	1	88.2	70 - 130	
206 (Pb)	165	2	1.37 ppb	2.16	2	91.2	70 - 130	
207 (Pb)	165	2	1.44 ppb	2.92	2	95.7	70 - 130	
208 Pb	165	2	1.37 ppb	0.91	2	91.0	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	100360	9.76	91101	110.2	80 - 120	
45 Sc	2	1492169	3.80	1409018	105.9	80 - 120	
115 In	1	626757	10.65	550573	113.8	80 - 120	
115 In	2	1722674	2.57	1674463	102.9	80 - 120	
159 Tb	1	1424425	9.25	1206971	118.0	80 - 120	
159 Tb	2	2273897	2.41	2214207	102.7	80 - 120	
165 Ho	1	1370277	8.07	1184067	115.7	80 - 120	
165 Ho	2	2190554	1.68	2128403	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\S112113A.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\S112113A.b\015_CCB.D\015_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\015_CCB.D\015_CCB.D#
 Date Acquired: Nov 21 2013 01:32 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 21 2013 12:49 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	-0.057	ppb	6.92	178	0.50	
23 Na	45	1	20.180	ppb	16.41	127532	250.00	
24 Mg	45	1	10.000	ppb	13.34	6517	250.00	
27 Al	45	1	9.122	ppb	6.54	3429	100.00	
39 K	45	1	5.543	ppb	26.11	55567	250.00	
44 Ca	45	1	25.060	ppb	22.04	1090	250.00	
51 V	45	1	-0.018	ppb	34.85	200	1.00	
52 Cr	45	1	-0.027	ppb	30.05	652	1.00	
55 Mn	45	1	-0.059	ppb	8.20	424	3.00	
56 Fe	45	1	23.000	ppb	10.42	129658	150.00	
59 Co	45	1	-0.034	ppb	10.64	441	1.00	
60 Ni	45	1	-0.016	ppb	72.11	149	1.50	
65 Cu	45	1	0.202	ppb	15.86	891	5.00	
66 Zn	45	1	-0.036	ppb	56.82	1969	10.00	
75 As	115	1	-0.036	ppb	13.86	34	1.00	
78 Se	115	1	0.591	ppb	41.27	150	5.00	
83 Kr	115	2	-----	ppb	-----	492	1.00	
95 Mo	115	2	0.128	ppb	1.69	1019	1.00	
107 Ag	115	2	-0.020	ppb	18.38	520	0.50	
111 Cd	115	2	-0.025	ppb	9.01	111	1.00	
121 Sb	115	2	-0.030	ppb	12.99	306	1.00	
137 Ba	159	2	-0.043	ppb	12.21	226	2.50	
205 Tl	165	2	-0.064	ppb	4.58	842	1.00	
206 (Pb)	165	2	-0.052	ppb	2.53	496	1.50	
207 (Pb)	165	2	-0.060	ppb	19.04	382	1.50	
208 Pb	165	2	-0.054	ppb	5.77	1985	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	94594	0.29	91101	103.8	80 - 120	
45 Sc	2	1468618	1.39	1409018	104.2	80 - 120	
115 In	1	589980	0.15	550573	107.2	80 - 120	
115 In	2	1705050	0.92	1674463	101.8	80 - 120	
159 Tb	1	1358394	1.04	1206971	112.5	80 - 120	
159 Tb	2	2270771	0.29	2214207	102.6	80 - 120	
165 Ho	1	1325346	1.40	1184067	111.9	80 - 120	
165 Ho	2	2187859	0.67	2128403	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\S112113A.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\S112113A.b\016SMPL.D\016SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\016SMPL.D\016SMPL.D#
 Date Acquired: Nov 21 2013 01:38 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: MB 27441
 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 21 2013 12:49 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	7.23	110	2700	
23 Na	45	1		53.18	53.18	ppb	5.21	151195	225000	
24 Mg	45	1		6.19	6.19	ppb	7.53	4054	225000	
27 Al	45	1		10.74	10.74	ppb	5.83	3699	67500	
39 K	45	1		18.69	18.69	ppb	4.78	58756	225000	
44 Ca	45	1		36.74	36.74	ppb	3.00	1344	225000	
51 V	45	1		0.06	0.06	ppb	2.32	543	2700	
52 Cr	45	1		0.03	0.03	ppb	26.54	886	2700	
55 Mn	45	1		0.22	0.22	ppb	14.47	1467	2700	
56 Fe	45	1		13.89	13.89	ppb	8.62	79588	202500	
59 Co	45	1		-0.05	-0.05	ppb	4.14	260	2700	
60 Ni	45	1		0.02	0.02	ppb	44.10	216	2700	
65 Cu	45	1		1.78	1.78	ppb	5.25	5141	2700	
66 Zn	45	1		2.93	2.93	ppb	3.24	4967	2700	
75 As	115	1		0.06	0.06	ppb	52.97	98	2250	
78 Se	115	1		0.69	0.69	ppb	19.76	146	2700	
83 Kr	115	2		----	-----	ppb	-----	553	2700	
95 Mo	115	2		0.05	0.05	ppb	9.99	540	2700	
107 Ag	115	2		0.06	0.06	ppb	9.56	1569	900	
111 Cd	115	2		-0.04	-0.04	ppb	11.03	65	2700	
121 Sb	115	2		0.02	0.02	ppb	10.51	810	1125	
137 Ba	159	2		0.01	0.01	ppb	144.86	412	1350	
205 Tl	165	2		-0.06	-0.06	ppb	1.86	951	900	
206 (Pb)	165	2		-0.02	-0.02	ppb	13.04	673	2700	
207 (Pb)	165	2		-0.03	-0.03	ppb	22.06	562	2700	
208 Pb	165	2		-0.03	-0.03	ppb	6.37	2647	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	88717	0.87	91101	97.4	70 - 150	
45 Sc	2	1353455	0.35	1409018	96.1	70 - 150	
115 In	1	550213	0.99	550573	99.9	70 - 150	
115 In	2	1529189	1.41	1674463	91.3	70 - 150	
159 Tb	1	1296964	0.92	1206971	107.5	70 - 150	
159 Tb	2	2051998	1.73	2214207	92.7	70 - 150	
165 Ho	1	1274239	1.23	1184067	107.6	70 - 150	
165 Ho	2	1983579	2.49	2128403	93.2	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\S112113A.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\S112113A.b\017SMPL.D\017SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\017SMPL.D\017SMPL.D#
 Date Acquired: Nov 21 2013 01:44 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW 27441
 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 21 2013 12:49 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	257.20	257.20	ppb	0.76	1533451	2700	
23 Na	45		1	25,040.00	25040.00	ppb	0.22	22536170	225000	
24 Mg	45		1	25,070.00	25070.00	ppb	0.66	12681120	225000	
27 Al	45		1	2,536.00	2536.00	ppb	2.28	710324	67500	
39 K	45		1	23,990.00	23990.00	ppb	1.38	11383260	225000	
44 Ca	45		1	23,620.00	23620.00	ppb	1.23	610148	225000	
51 V	45		1	247.00	247.00	ppb	1.79	991141	2700	
52 Cr	45		1	245.70	245.70	ppb	0.68	1159957	2700	
55 Mn	45		1	247.80	247.80	ppb	0.88	877033	2700	
56 Fe	45		1	2,462.00	2462.00	ppb	1.04	10641410	202500	
59 Co	45		1	243.20	243.20	ppb	1.27	1854533	2700	
60 Ni	45		1	244.70	244.70	ppb	1.73	475573	2700	
65 Cu	45		1	246.80	246.80	ppb	1.63	629975	2700	
66 Zn	45		1	241.40	241.40	ppb	1.12	239419	2700	
75 As	115		1	244.30	244.30	ppb	0.71	152628	2250	
78 Se	115		1	235.80	235.80	ppb	0.33	14788	2700	
83 Kr	115		2	----	-----	ppb	-----	572	2700	
95 Mo	115		2	258.00	258.00	ppb	4.17	1186518	2700	
107 Ag	115		2	49.00	49.00	ppb	2.11	616855	900	
111 Cd	115		2	252.20	252.20	ppb	1.86	653550	2700	
121 Sb	115		2	258.70	258.70	ppb	2.37	2413028	1125	
137 Ba	159		2	253.30	253.30	ppb	1.05	938541	1350	
205 Tl	165		2	232.40	232.40	ppb	0.79	5824508	900	
206 (Pb)	165		2	246.70	246.70	ppb	1.27	1967091	2700	
207 (Pb)	165		2	271.60	271.60	ppb	1.94	1789089	2700	
208 Pb	165		2	247.50	247.50	ppb	1.42	7877240	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	83010	0.37	91101	91.1	70 - 150	
45 Sc	2	1315901	0.24	1409018	93.4	70 - 150	
115 In	1	516225	1.76	550573	93.8	70 - 150	
115 In	2	1449593	2.08	1674463	86.6	70 - 150	
159 Tb	1	1249028	2.89	1206971	103.5	70 - 150	
159 Tb	2	2014967	1.75	2214207	91.0	70 - 150	
165 Ho	1	1222734	1.89	1184067	103.3	70 - 150	
165 Ho	2	1941089	0.79	2128403	91.2	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112113A.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\S112113A.b\018SMPL.D\018SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\018SMPL.D\018SMPL.D#
 Date Acquired: Nov 21 2013 01:50 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW MR 27441
 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 21 2013 12:49 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	245.20	245.20	ppb	0.74	1471062	2700	
23 Na	45	1	24,260.00	24260.00	ppb	0.88	21021650	225000	
24 Mg	45	1	24,230.00	24230.00	ppb	1.40	11797650	225000	
27 Al	45	1	2,428.00	2428.00	ppb	2.11	654466	67500	
39 K	45	1	22,900.00	22900.00	ppb	1.03	10460100	225000	
44 Ca	45	1	22,610.00	22610.00	ppb	0.44	562275	225000	
51 V	45	1	242.50	242.50	ppb	1.13	936685	2700	
52 Cr	45	1	241.30	241.30	ppb	1.52	1096632	2700	
55 Mn	45	1	241.40	241.40	ppb	1.83	822409	2700	
56 Fe	45	1	2,427.00	2427.00	ppb	1.87	10094790	202500	
59 Co	45	1	237.00	237.00	ppb	0.80	1739593	2700	
60 Ni	45	1	238.40	238.40	ppb	0.85	445996	2700	
65 Cu	45	1	245.90	245.90	ppb	1.89	604145	2700	
66 Zn	45	1	237.40	237.40	ppb	1.10	226637	2700	
75 As	115	1	235.90	235.90	ppb	0.73	143027	2250	
78 Se	115	1	226.90	226.90	ppb	1.09	13817	2700	
83 Kr	115	2	----	-----	ppb	-----	529	2700	
95 Mo	115	2	248.50	248.50	ppb	1.65	1128644	2700	
107 Ag	115	2	47.26	47.26	ppb	1.30	587606	900	
111 Cd	115	2	244.90	244.90	ppb	0.59	626646	2700	
121 Sb	115	2	248.70	248.70	ppb	0.69	2291657	1125	
137 Ba	159	2	240.30	240.30	ppb	0.63	877417	1350	
205 Tl	165	2	222.70	222.70	ppb	0.81	5565180	900	
206 (Pb)	165	2	235.70	235.70	ppb	0.35	1874894	2700	
207 (Pb)	165	2	259.00	259.00	ppb	0.61	1701973	2700	
208 Pb	165	2	236.20	236.20	ppb	0.31	7499258	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	79907	1.60	91101	87.7	70 - 150	
45 Sc	2	1323851	0.76	1409018	94.0	70 - 150	
115 In	1	501038	1.11	550573	91.0	70 - 150	
115 In	2	1431206	0.46	1674463	85.5	70 - 150	
159 Tb	1	1242784	3.42	1206971	103.0	70 - 150	
159 Tb	2	1985523	0.86	2214207	89.7	70 - 150	
165 Ho	1	1223961	2.08	1184067	103.4	70 - 150	
165 Ho	2	1936057	2.00	2128403	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\S112113A.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\S112113A.b\019SMPL.D\019SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\019SMPL.D\019SMPL.D#
 Date Acquired: Nov 21 2013 01:55 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-001
 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 21 2013 12:49 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	3.70	1056	2700	
23 Na	45	1	19,910.00	19910.00	ppb	0.92	15317360	225000	
24 Mg	45	1	2,376.00	2376.00	ppb	0.47	1026906	225000	
27 Al	45	1	59.18	59.18	ppb	3.78	14534	67500	
39 K	45	1	818.00	818.00	ppb	0.72	369488	225000	
44 Ca	45	1	6,912.00	6912.00	ppb	0.80	152685	225000	
51 V	45	1	0.35	0.35	ppb	8.62	1407	2700	
52 Cr	45	1	0.36	0.36	ppb	12.74	2044	2700	
55 Mn	45	1	89.47	89.47	ppb	0.39	270742	2700	
56 Fe	45	1	1,710.00	1710.00	ppb	0.17	6314687	202500	
59 Co	45	1	0.74	0.74	ppb	8.68	5362	2700	
60 Ni	45	1	0.91	0.91	ppb	4.90	1652	2700	
65 Cu	45	1	1.40	1.40	ppb	5.62	3286	2700	
66 Zn	45	1	8.31	8.31	ppb	1.88	8495	2700	
75 As	115	1	0.50	0.50	ppb	7.47	329	2250	
78 Se	115	1	0.68	0.68	ppb	12.32	124	2700	
83 Kr	115	2	----	-----	ppb	-----	533	2700	
95 Mo	115	2	0.17	0.17	ppb	12.94	993	2700	
107 Ag	115	2	0.03	0.03	ppb	27.98	976	900	
111 Cd	115	2	0.12	0.12	ppb	5.06	443	2700	
121 Sb	115	2	0.16	0.16	ppb	3.99	1947	1125	
137 Ba	159	2	14.64	14.64	ppb	1.13	50027	1350	
205 Tl	165	2	0.29	0.29	ppb	4.03	8973	900	
206 (Pb)	165	2	0.39	0.39	ppb	4.95	3633	2700	
207 (Pb)	165	2	0.40	0.40	ppb	2.26	3148	2700	
208 Pb	165	2	0.38	0.38	ppb	1.74	14376	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	70891	0.51	91101	77.8	70 - 150	
45 Sc	2	1221544	1.04	1409018	86.7	70 - 150	
115 In	1	469461	0.98	550573	85.3	70 - 150	
115 In	2	1375370	1.03	1674463	82.1	70 - 150	
159 Tb	1	1150612	1.79	1206971	95.3	70 - 150	
159 Tb	2	1846260	0.52	2214207	83.4	70 - 150	
165 Ho	1	1104744	2.35	1184067	93.3	70 - 150	
165 Ho	2	1796144	0.60	2128403	84.4	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\S112113A.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\S112113A.b\020SMPL.D\020SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\020SMPL.D\020SMPL.D#
 Date Acquired: Nov 21 2013 02:01 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-001 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 21 2013 12:49 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	0.10	0.10	ppb	72.94	1052	2700	
23 Na	45	1	20,560.00	20560.00	ppb	1.11	16085480	225000	
24 Mg	45	1	2,417.00	2417.00	ppb	0.90	1062301	225000	
27 Al	45	1	75.25	75.25	ppb	7.62	18686	67500	
39 K	45	1	823.90	823.90	ppb	1.85	378051	225000	
44 Ca	45	1	7,047.00	7047.00	ppb	0.99	158253	225000	
51 V	45	1	0.28	0.28	ppb	16.15	1203	2700	
52 Cr	45	1	0.26	0.26	ppb	22.41	1667	2700	
55 Mn	45	1	89.60	89.60	ppb	1.79	275641	2700	
56 Fe	45	1	1,742.00	1742.00	ppb	0.94	6539330	202500	
59 Co	45	1	0.67	0.67	ppb	5.58	5011	2700	
60 Ni	45	1	0.78	0.78	ppb	6.64	1460	2700	
65 Cu	45	1	1.17	1.17	ppb	6.43	2814	2700	
66 Zn	45	1	7.43	7.43	ppb	1.49	7885	2700	
75 As	115	1	0.45	0.45	ppb	8.80	306	2250	
78 Se	115	1	0.53	0.53	ppb	22.14	117	2700	
83 Kr	115	2	----	-----	ppb	-----	529	2700	
95 Mo	115	2	0.17	0.17	ppb	83.53	1050	2700	
107 Ag	115	2	0.02	0.02	ppb	155.79	863	900	
111 Cd	115	2	0.11	0.11	ppb	63.60	421	2700	
121 Sb	115	2	0.13	0.13	ppb	47.06	1676	1125	
137 Ba	159	2	15.10	15.10	ppb	1.30	53598	1350	
205 Tl	165	2	0.11	0.11	ppb	53.73	4989	900	
206 (Pb)	165	2	0.31	0.31	ppb	19.82	3192	2700	
207 (Pb)	165	2	0.33	0.33	ppb	21.51	2766	2700	
208 Pb	165	2	0.31	0.31	ppb	19.97	12685	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	72072	0.42	91101	79.1	70 - 150	
45 Sc	2	1247606	0.35	1409018	88.5	70 - 150	
115 In	1	473888	0.97	550573	86.1	70 - 150	
115 In	2	1403934	0.55	1674463	83.8	70 - 150	
159 Tb	1	1153597	1.88	1206971	95.6	70 - 150	
159 Tb	2	1918476	0.51	2214207	86.6	70 - 150	
165 Ho	1	1129536	0.49	1184067	95.4	70 - 150	
165 Ho	2	1862915	0.14	2128403	87.5	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\S112113A.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\S112113A.b\021SMPL.D\021SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\021SMPL.D\021SMPL.D#
 Date Acquired: Nov 21 2013 02:07 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-001 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 21 2013 12:49 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	79.84	489	2700	
23 Na	45	1	3,885.00	3885.00	ppb	7.95	3576759	225000	
24 Mg	45	1	461.70	461.70	ppb	6.54	234428	225000	
27 Al	45	1	14.09	14.09	ppb	21.49	4423	67500	
39 K	45	1	181.30	181.30	ppb	9.37	131958	225000	
44 Ca	45	1	1,352.00	1352.00	ppb	6.24	35246	225000	
51 V	45	1	0.07	0.07	ppb	22.54	539	2700	
52 Cr	45	1	0.07	0.07	ppb	25.79	1022	2700	
55 Mn	45	1	17.06	17.06	ppb	8.02	60935	2700	
56 Fe	45	1	344.00	344.00	ppb	6.51	1500532	202500	
59 Co	45	1	0.13	0.13	ppb	15.15	1638	2700	
60 Ni	45	1	0.27	0.27	ppb	7.24	694	2700	
65 Cu	45	1	0.52	0.52	ppb	5.19	1607	2700	
66 Zn	45	1	3.28	3.28	ppb	15.83	4990	2700	
75 As	115	1	0.12	0.12	ppb	15.78	133	2250	
78 Se	115	1	0.33	0.33	ppb	15.72	121	2700	
83 Kr	115	2	----	-----	ppb	-----	537	2700	
95 Mo	115	2	0.05	0.05	ppb	8.76	564	2700	
107 Ag	115	2	-0.03	-0.03	ppb	0.63	393	900	
111 Cd	115	2	0.01	0.01	ppb	46.94	221	2700	
121 Sb	115	2	0.02	0.02	ppb	18.42	806	1125	
137 Ba	159	2	2.76	2.76	ppb	1.69	11555	1350	
205 Tl	165	2	0.00	0.00	ppb	423.70	2680	900	
206 (Pb)	165	2	0.07	0.07	ppb	11.80	1557	2700	
207 (Pb)	165	2	0.07	0.07	ppb	20.91	1345	2700	
208 Pb	165	2	0.07	0.07	ppb	8.21	6231	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	83336	7.04	91101	91.5	70 - 150	
45 Sc	2	1447455	0.30	1409018	102.7	70 - 150	
115 In	1	542483	6.01	550573	98.5	70 - 150	
115 In	2	1642621	0.74	1674463	98.1	70 - 150	
159 Tb	1	1311410	7.07	1206971	108.7	70 - 150	
159 Tb	2	2201333	1.75	2214207	99.4	70 - 150	
165 Ho	1	1284922	5.95	1184067	108.5	70 - 150	
165 Ho	2	2143453	1.45	2128403	100.7	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\S112113A.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\S112113A.b\022SMPL.D\022SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\022SMPL.D\022SMPL.D#
 Date Acquired: Nov 21 2013 02:13 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-003 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 21 2013 12:49 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	241.80	241.80	ppb	1.37	1464697	2700	
23 Na	45	1	43,530.00	43530.00	ppb	0.74	36883208	225000	
24 Mg	45	1	26,590.00	26590.00	ppb	0.95	12685700	225000	
27 Al	45	1	2,463.00	2463.00	ppb	1.32	650389	67500	
39 K	45	1	23,280.00	23280.00	ppb	1.57	10414630	225000	
44 Ca	45	1	30,370.00	30370.00	ppb	0.55	739690	225000	
51 V	45	1	240.20	240.20	ppb	1.87	909032	2700	
52 Cr	45	1	239.50	239.50	ppb	1.04	1066079	2700	
55 Mn	45	1	326.30	326.30	ppb	0.23	1088749	2700	
56 Fe	45	1	3,962.00	3962.00	ppb	0.35	16138360	202500	
59 Co	45	1	238.00	238.00	ppb	1.28	1711269	2700	
60 Ni	45	1	238.00	238.00	ppb	2.06	436182	2700	
65 Cu	45	1	245.50	245.50	ppb	1.76	590754	2700	
66 Zn	45	1	240.60	240.60	ppb	1.82	225053	2700	
75 As	115	1	237.10	237.10	ppb	0.55	141523	2250	
78 Se	115	1	219.90	219.90	ppb	0.62	13180	2700	
83 Kr	115	2	----	-----	ppb	-----	498	2700	
95 Mo	115	2	247.70	247.70	ppb	1.10	1142398	2700	
107 Ag	115	2	46.33	46.33	ppb	0.74	584777	900	
111 Cd	115	2	240.60	240.60	ppb	0.83	625078	2700	
121 Sb	115	2	247.80	247.80	ppb	0.63	2317184	1125	
137 Ba	159	2	258.20	258.20	ppb	1.11	944390	1350	
205 Tl	165	2	221.90	221.90	ppb	0.42	5548212	900	
206 (Pb)	165	2	233.70	233.70	ppb	1.35	1859643	2700	
207 (Pb)	165	2	257.30	257.30	ppb	0.40	1691389	2700	
208 Pb	165	2	234.90	234.90	ppb	0.54	7459992	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	78280	1.50	91101	85.9	70 - 150	
45 Sc	2	1336815	0.57	1409018	94.9	70 - 150	
115 In	1	493169	0.48	550573	89.6	70 - 150	
115 In	2	1452964	1.90	1674463	86.8	70 - 150	
159 Tb	1	1250011	0.41	1206971	103.6	70 - 150	
159 Tb	2	1989464	1.82	2214207	89.8	70 - 150	
165 Ho	1	1221980	1.70	1184067	103.2	70 - 150	
165 Ho	2	1936676	1.40	2128403	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\S112113A.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\S112113A.b\023SMPL.D\023SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\023SMPL.D\023SMPL.D#
 Date Acquired: Nov 21 2013 02:19 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-033 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 21 2013 12:49 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	0.86	1491964	2700	
23 Na	45	1	44,050.00	44050.00	ppb	1.56	37166400	225000	
24 Mg	45	1	27,430.00	27430.00	ppb	1.17	13033060	225000	
27 Al	45	1	2,586.00	2586.00	ppb	1.05	680168	67500	
39 K	45	1	24,260.00	24260.00	ppb	1.73	10809890	225000	
44 Ca	45	1	30,870.00	30870.00	ppb	0.88	748844	225000	
51 V	45	1	248.60	248.60	ppb	1.13	936981	2700	
52 Cr	45	1	247.50	247.50	ppb	1.12	1097286	2700	
55 Mn	45	1	334.00	334.00	ppb	0.86	1109914	2700	
56 Fe	45	1	4,027.00	4027.00	ppb	1.61	16335090	202500	
59 Co	45	1	249.50	249.50	ppb	2.42	1786366	2700	
60 Ni	45	1	249.70	249.70	ppb	2.30	455745	2700	
65 Cu	45	1	255.00	255.00	ppb	1.75	611208	2700	
66 Zn	45	1	250.30	250.30	ppb	0.75	233073	2700	
75 As	115	1	246.60	246.60	ppb	1.06	146592	2250	
78 Se	115	1	227.80	227.80	ppb	1.18	13599	2700	
83 Kr	115	2	----	-----	ppb	-----	494	2700	
95 Mo	115	2	261.20	261.20	ppb	1.12	1181626	2700	
107 Ag	115	2	48.83	48.83	ppb	0.96	604550	900	
111 Cd	115	2	251.70	251.70	ppb	0.74	641474	2700	
121 Sb	115	2	262.20	262.20	ppb	1.64	2405732	1125	
137 Ba	159	2	266.30	266.30	ppb	0.99	980761	1350	
205 Tl	165	2	227.10	227.10	ppb	0.82	5770799	900	
206 (Pb)	165	2	239.00	239.00	ppb	1.91	1932400	2700	
207 (Pb)	165	2	260.20	260.20	ppb	1.92	1738039	2700	
208 Pb	165	2	239.10	239.10	ppb	2.11	7712920	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	77961	1.24	91101	85.6	70 - 150	
45 Sc	2	1329372	1.73	1409018	94.3	70 - 150	
115 In	1	491199	0.89	550573	89.2	70 - 150	
115 In	2	1425408	0.84	1674463	85.1	70 - 150	
159 Tb	1	1261865	0.42	1206971	104.5	70 - 150	
159 Tb	2	2002925	2.08	2214207	90.5	70 - 150	
165 Ho	1	1229599	0.55	1184067	103.8	70 - 150	
165 Ho	2	1967969	1.38	2128403	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\S112113A.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\S112113A.b\024SMPL.D\024SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\024SMPL.D\024SMPL.D#
 Date Acquired: Nov 21 2013 02:25 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-001 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 21 2013 12:49 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	50.77	50.77	ppb	1.12	313265	2700	
23 Na	45	1	24,140.00	24140.00	ppb	0.82	20628940	225000	
24 Mg	45	1	7,346.00	7346.00	ppb	1.35	3527874	225000	
27 Al	45	1	1,557.00	1557.00	ppb	0.97	414104	67500	
39 K	45	1	5,630.00	5630.00	ppb	1.32	2568804	225000	
44 Ca	45	1	11,420.00	11420.00	ppb	0.71	280153	225000	
51 V	45	1	49.74	49.74	ppb	0.95	189656	2700	
52 Cr	45	1	50.38	50.38	ppb	0.52	226294	2700	
55 Mn	45	1	133.90	133.90	ppb	0.87	450186	2700	
56 Fe	45	1	6,590.00	6590.00	ppb	1.96	27007790	202500	
59 Co	45	1	51.92	51.92	ppb	0.55	376232	2700	
60 Ni	45	1	52.64	52.64	ppb	1.07	97222	2700	
65 Cu	45	1	54.73	54.73	ppb	1.20	132771	2700	
66 Zn	45	1	57.73	57.73	ppb	1.50	55617	2700	
75 As	115	1	49.65	49.65	ppb	1.46	30385	2250	
78 Se	115	1	225.90	225.90	ppb	1.43	13865	2700	
83 Kr	115	2	----	-----	ppb	-----	493	2700	
95 Mo	115	2	50.34	50.34	ppb	1.40	239832	2700	
107 Ag	115	2	48.67	48.67	ppb	2.28	634023	900	
111 Cd	115	2	49.93	49.93	ppb	2.54	133996	2700	
121 Sb	115	2	50.37	50.37	ppb	2.26	486706	1125	
137 Ba	159	2	65.51	65.51	ppb	1.35	247034	1350	
205 Tl	165	2	49.73	49.73	ppb	0.73	1271096	900	
206 (Pb)	165	2	49.07	49.07	ppb	0.04	399248	2700	
207 (Pb)	165	2	48.69	48.69	ppb	1.02	327295	2700	
208 Pb	165	2	47.44	47.44	ppb	0.90	1540411	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	78787	0.37	91101	86.5	70 - 150	
45 Sc	2	1360035	1.79	1409018	96.5	70 - 150	
115 In	1	505139	0.94	550573	91.7	70 - 150	
115 In	2	1499868	1.94	1674463	89.6	70 - 150	
159 Tb	1	1257662	0.85	1206971	104.2	70 - 150	
159 Tb	2	2048625	1.99	2214207	92.5	70 - 150	
165 Ho	1	1235618	0.94	1184067	104.4	70 - 150	
165 Ho	2	1976937	2.03	2128403	92.9	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\S112113A.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\S112113A.b\025SMPL.D\025SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\025SMPL.D\025SMPL.D#
 Date Acquired: Nov 21 2013 02:30 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: RINSE
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 3101
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 21 2013 12:49 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	0.41	0.41	ppb	2.92	3292	2700	
23 Na	45	1	167.50	167.50	ppb	3.48	249919	225000	
24 Mg	45	1	85.38	85.38	ppb	1.91	44927	225000	
27 Al	45	1	33.34	33.34	ppb	0.71	10030	67500	
39 K	45	1	71.95	71.95	ppb	3.72	82108	225000	
44 Ca	45	1	135.00	135.00	ppb	5.61	3887	225000	
51 V	45	1	0.49	0.49	ppb	1.85	2265	2700	
52 Cr	45	1	0.50	0.50	ppb	1.64	3143	2700	
55 Mn	45	1	0.71	0.71	ppb	3.30	3179	2700	
56 Fe	45	1	84.06	84.06	ppb	1.36	386581	202500	
59 Co	45	1	0.51	0.51	ppb	2.41	4657	2700	
60 Ni	45	1	0.55	0.55	ppb	3.93	1254	2700	
65 Cu	45	1	0.63	0.63	ppb	5.22	1914	2700	
66 Zn	45	1	0.50	0.50	ppb	6.82	2310	2700	
75 As	115	1	0.46	0.46	ppb	4.25	367	2250	
78 Se	115	1	1.22	1.22	ppb	9.40	184	2700	
83 Kr	115	2	----	-----	ppb	-----	536	2700	
95 Mo	115	2	0.90	0.90	ppb	3.77	5121	2700	
107 Ag	115	2	0.16	0.16	ppb	2.03	3104	900	
111 Cd	115	2	0.47	0.47	ppb	1.55	1598	2700	
121 Sb	115	2	0.47	0.47	ppb	2.61	5685	1125	
137 Ba	159	2	0.47	0.47	ppb	3.85	2335	1350	
205 Tl	165	2	0.53	0.53	ppb	3.31	17560	900	
206 (Pb)	165	2	0.43	0.43	ppb	0.99	4777	2700	
207 (Pb)	165	2	0.45	0.45	ppb	4.39	4132	2700	
208 Pb	165	2	0.42	0.42	ppb	3.05	18956	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	85071	2.22	91101	93.4	70 - 150	
45 Sc	2	1466054	0.82	1409018	104.0	70 - 150	
115 In	1	557075	1.73	550573	101.2	70 - 150	
115 In	2	1681650	0.57	1674463	100.4	70 - 150	
159 Tb	1	1350989	1.56	1206971	111.9	70 - 150	
159 Tb	2	2256275	0.86	2214207	101.9	70 - 150	
165 Ho	1	1313818	2.32	1184067	111.0	70 - 150	
165 Ho	2	2179332	0.87	2128403	102.4	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\S112113A.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\S112113A.b\026_CCV.D\026_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\026_CCV.D\026_CCV.D#
 Date Acquired: Nov 21 2013 02:36 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 21 2013 12:49 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	49.65 ppb	2.52	320717	50	99.3	90 - 110	
23 Na	45	1	5128.00 ppb	0.59	4776327	5000	102.6	90 - 110	
24 Mg	45	1	5164.00 ppb	0.45	2660972	5000	103.3	90 - 110	
27 Al	45	1	1556.00 ppb	0.76	444170	1500	103.7	90 - 110	
39 K	45	1	4955.00 ppb	1.32	2431640	5000	99.1	90 - 110	
44 Ca	45	1	4899.00 ppb	0.49	129154	5000	98.0	90 - 110	
51 V	45	1	50.26 ppb	1.15	205663	50	100.5	90 - 110	
52 Cr	45	1	50.15 ppb	0.91	241719	50	100.3	90 - 110	
55 Mn	45	1	49.91 ppb	0.39	180349	50	99.8	90 - 110	
56 Fe	45	1	5055.00 ppb	0.21	22232710	5000	101.1	90 - 110	
59 Co	45	1	51.33 ppb	1.10	399150	50	102.7	90 - 110	
60 Ni	45	1	52.47 ppb	0.53	103986	50	104.9	90 - 110	
65 Cu	45	1	53.22 ppb	0.45	138555	50	106.4	90 - 110	
66 Zn	45	1	51.70 ppb	1.25	53642	50	103.4	90 - 110	
75 As	115	1	48.12 ppb	0.82	31571	50	96.2	90 - 110	
78 Se	115	1	230.70 ppb	0.92	15178	250	92.3	90 - 110	
83 Kr	115	2	----- ppb -----	-----	539	50	#VALUE! #####	-----	
95 Mo	115	2	51.31 ppb	0.46	267766	50	102.6	90 - 110	
107 Ag	115	2	49.50 ppb	1.50	706301	50	99.0	90 - 110	
111 Cd	115	2	50.17 ppb	1.46	147469	50	100.3	90 - 110	
121 Sb	115	2	49.69 ppb	0.72	525965	50	99.4	90 - 110	
137 Ba	159	2	51.20 ppb	0.72	210001	50	102.4	90 - 110	
205 Tl	165	2	50.74 ppb	0.50	1399561	50	101.5	90 - 110	
206 (Pb)	165	2	49.72 ppb	0.50	436586	50	99.4	90 - 110	
207 (Pb)	165	2	49.51 ppb	0.10	359192	50	99.0	90 - 110	
208 Pb	165	2	49.51 ppb	0.67	1734816	50	99.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	84542	0.65	91101	92.8	80 - 120	
45 Sc	2	1423947	0.95	1409018	101.1	80 - 120	
115 In	1	541457	1.22	550573	98.3	80 - 120	
115 In	2	1642727	1.17	1674463	98.1	80 - 120	
159 Tb	1	1322770	0.88	1206971	109.6	80 - 120	
159 Tb	2	2227407	1.26	2214207	100.6	80 - 120	
165 Ho	1	1300380	1.51	1184067	109.8	80 - 120	
165 Ho	2	2133370	0.54	2128403	100.2	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\S112113A.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\S112113A.b\027_CCV.D\027_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\027_CCV.D\027_CCV.D#
 Date Acquired: Nov 21 2013 02:42 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 21 2013 12:49 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	0.52 ppb	4.90	1	103.1	70 - 130	
23 Na	45	1	273.10 ppb	5.41	250	109.2	70 - 130	
24 Mg	45	1	278.70 ppb	4.89	250	111.5	70 - 130	
27 Al	45	1	110.90 ppb	4.86	100	110.9	70 - 130	
39 K	45	1	248.80 ppb	5.40	250	99.5	70 - 130	
44 Ca	45	1	261.60 ppb	4.47	250	104.6	70 - 130	
51 V	45	1	1.03 ppb	7.78	1	102.7	70 - 130	
52 Cr	45	1	1.05 ppb	4.73	1	104.5	70 - 130	
55 Mn	45	1	2.98 ppb	5.41	3	99.4	70 - 130	
56 Fe	45	1	175.70 ppb	5.11	150	117.1	70 - 130	
59 Co	45	1	1.04 ppb	6.03	1	104.4	70 - 130	
60 Ni	45	1	1.60 ppb	5.99	2	106.7	70 - 130	
65 Cu	45	1	5.29 ppb	6.01	5	105.7	70 - 130	
66 Zn	45	1	9.93 ppb	5.21	10	99.3	70 - 130	
75 As	115	1	0.97 ppb	3.78	1	97.0	70 - 130	
78 Se	115	1	4.76 ppb	4.70	5	95.3	70 - 130	
83 Kr	115	2	----- ppb -----	-----	1	#VALUE! ##### - #####		
95 Mo	115	2	1.14 ppb	2.77	1	113.5	70 - 130	
107 Ag	115	2	0.51 ppb	0.94	1	101.2	70 - 130	
111 Cd	115	2	1.04 ppb	1.40	1	104.2	70 - 130	
121 Sb	115	2	1.02 ppb	2.98	1	101.6	70 - 130	
137 Ba	159	2	2.59 ppb	1.42	3	103.7	70 - 130	
205 Tl	165	2	1.01 ppb	1.98	1	100.8	70 - 130	
206 (Pb)	165	2	1.53 ppb	4.31	2	101.9	70 - 130	
207 (Pb)	165	2	1.56 ppb	1.95	2	103.7	70 - 130	
208 Pb	165	2	1.48 ppb	1.12	2	98.9	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	85395	4.32	91101	93.7	80 - 120	
45 Sc	2	1430034	0.79	1409018	101.5	80 - 120	
115 In	1	556041	3.21	550573	101.0	80 - 120	
115 In	2	1624212	1.49	1674463	97.0	80 - 120	
159 Tb	1	1343801	4.70	1206971	111.3	80 - 120	
159 Tb	2	2184980	0.97	2214207	98.7	80 - 120	
165 Ho	1	1304507	3.23	1184067	110.2	80 - 120	
165 Ho	2	2084676	1.05	2128403	97.9	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\S112113A.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\S112113A.b\028_CCB.D\028_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\028_CCB.D\028_CCB.D#
 Date Acquired: Nov 21 2013 02:48 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 21 2013 12:49 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	-0.031	ppb	18.73	329	0.50	
23 Na	45	1	16.850	ppb	24.60	103061	250.00	
24 Mg	45	1	5.811	ppb	15.58	3401	250.00	
27 Al	45	1	1.730	ppb	12.56	889	100.00	
39 K	45	1	4.067	ppb	77.06	45481	250.00	
44 Ca	45	1	5.205	ppb	26.23	419	250.00	
51 V	45	1	-0.003	ppb	293.00	223	1.00	
52 Cr	45	1	-0.004	ppb	206.48	641	1.00	
55 Mn	45	1	-0.023	ppb	39.92	474	3.00	
56 Fe	45	1	4.070	ppb	17.66	30303	150.00	
59 Co	45	1	-0.021	ppb	28.18	456	1.00	
60 Ni	45	1	-0.001	ppb	950.86	150	1.50	
65 Cu	45	1	0.224	ppb	4.93	792	5.00	
66 Zn	45	1	0.006	ppb	371.34	1675	10.00	
75 As	115	1	-0.018	ppb	65.19	41	1.00	
78 Se	115	1	0.508	ppb	22.68	125	5.00	
83 Kr	115	2	-----	ppb	-----	521	1.00	
95 Mo	115	2	0.007	ppb	113.87	349	1.00	
107 Ag	115	2	-0.030	ppb	6.54	351	0.50	
111 Cd	115	2	-0.015	ppb	40.09	134	1.00	
121 Sb	115	2	-0.005	ppb	178.80	552	1.00	
137 Ba	159	2	-0.013	ppb	21.57	334	2.50	
205 Tl	165	2	-0.006	ppb	29.24	2356	1.00	
206 (Pb)	165	2	-0.017	ppb	76.81	770	1.50	
207 (Pb)	165	2	-0.014	ppb	119.63	684	1.50	
208 Pb	165	2	-0.018	ppb	41.20	3098	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	78582	2.05	91101	86.3	80 - 120	
45 Sc	2	1379287	0.41	1409018	97.9	80 - 120	
115 In	1	510205	2.29	550573	92.7	80 - 120	
115 In	2	1626812	1.75	1674463	97.2	80 - 120	
159 Tb	1	1229767	3.15	1206971	101.9	80 - 120	
159 Tb	2	2143113	0.61	2214207	96.8	80 - 120	
165 Ho	1	1201872	1.45	1184067	101.5	80 - 120	
165 Ho	2	2073233	0.56	2128403	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\S112113A.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\S112113A.b\029SMPL.D\029SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\029SMPL.D\029SMPL.D#
 Date Acquired: Nov 21 2013 02:54 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-005
 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 21 2013 12:49 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	47.37	372	2700	
23 Na	45	1		12,770.00	12770.00	ppb	1.54	10137690	225000	
24 Mg	45	1		2,159.00	2159.00	ppb	2.01	960061	225000	
27 Al	45	1		205.90	205.90	ppb	1.52	51023	67500	
39 K	45	1		688.20	688.20	ppb	1.18	326198	225000	
44 Ca	45	1		7,836.00	7836.00	ppb	1.35	178031	225000	
51 V	45	1		0.42	0.42	ppb	2.94	1693	2700	
52 Cr	45	1		0.38	0.38	ppb	8.23	2182	2700	
55 Mn	45	1		89.17	89.17	ppb	0.64	277574	2700	
56 Fe	45	1		4,880.00	4880.00	ppb	0.50	18515560	202500	
59 Co	45	1		1.36	1.36	ppb	3.37	9646	2700	
60 Ni	45	1		0.96	0.96	ppb	0.38	1773	2700	
65 Cu	45	1		1.48	1.48	ppb	3.28	3542	2700	
66 Zn	45	1		8.93	8.93	ppb	3.19	9276	2700	
75 As	115	1		1.42	1.42	ppb	1.49	873	2250	
78 Se	115	1		0.71	0.71	ppb	26.59	129	2700	
83 Kr	115	2		----	-----	ppb	-----	486	2700	
95 Mo	115	2		0.12	0.12	ppb	17.96	809	2700	
107 Ag	115	2		0.00	0.00	ppb	1244.90	683	900	
111 Cd	115	2		0.44	0.44	ppb	4.17	1274	2700	
121 Sb	115	2		0.05	0.05	ppb	9.48	1018	1125	
137 Ba	159	2		12.55	12.55	ppb	1.43	44968	1350	
205 Tl	165	2		0.02	0.02	ppb	26.60	2770	900	
206 (Pb)	165	2		0.72	0.72	ppb	3.55	6392	2700	
207 (Pb)	165	2		0.70	0.70	ppb	3.79	5170	2700	
208 Pb	165	2		0.69	0.69	ppb	2.84	24743	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	72930	0.25	91101	80.1	70 - 150	
45 Sc	2	1265708	1.29	1409018	89.8	70 - 150	
115 In	1	480419	0.40	550573	87.3	70 - 150	
115 In	2	1433584	1.32	1674463	85.6	70 - 150	
159 Tb	1	1191166	2.49	1206971	98.7	70 - 150	
159 Tb	2	1934403	1.44	2214207	87.4	70 - 150	
165 Ho	1	1161133	1.66	1184067	98.1	70 - 150	
165 Ho	2	1881015	1.35	2128403	88.4	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\S112113A.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\S112113A.b\030SMPL.D\030SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\030SMPL.D\030SMPL.D#
 Date Acquired: Nov 21 2013 03:00 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-007
 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 21 2013 12:49 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	15.06	270	2700	
23 Na	45	1		11,300.00	11300.00	ppb	1.33	9133737	225000	
24 Mg	45	1		1,911.00	1911.00	ppb	1.96	864433	225000	
27 Al	45	1		34.13	34.13	ppb	1.45	8944	67500	
39 K	45	1		618.20	618.20	ppb	0.57	302275	225000	
44 Ca	45	1		7,152.00	7152.00	ppb	1.33	165310	225000	
51 V	45	1		0.13	0.13	ppb	10.36	694	2700	
52 Cr	45	1		0.17	0.17	ppb	7.89	1340	2700	
55 Mn	45	1		78.43	78.43	ppb	0.51	248419	2700	
56 Fe	45	1		2,081.00	2081.00	ppb	1.12	8037849	202500	
59 Co	45	1		1.11	1.11	ppb	2.65	8149	2700	
60 Ni	45	1		0.70	0.70	ppb	6.81	1354	2700	
65 Cu	45	1		1.61	1.61	ppb	4.72	3921	2700	
66 Zn	45	1		5.02	5.02	ppb	0.37	5988	2700	
75 As	115	1		0.81	0.81	ppb	6.30	524	2250	
78 Se	115	1		0.34	0.34	ppb	52.55	109	2700	
83 Kr	115	2		-----	-----	ppb	-----	519	2700	
95 Mo	115	2		0.03	0.03	ppb	2.24	420	2700	
107 Ag	115	2		-0.02	-0.02	ppb	10.12	533	900	
111 Cd	115	2		0.22	0.22	ppb	4.03	784	2700	
121 Sb	115	2		0.02	0.02	ppb	55.99	733	1125	
137 Ba	159	2		9.94	9.94	ppb	1.54	38694	1350	
205 Tl	165	2		-0.01	-0.01	ppb	31.26	2120	900	
206 (Pb)	165	2		0.12	0.12	ppb	16.53	1898	2700	
207 (Pb)	165	2		0.12	0.12	ppb	10.09	1640	2700	
208 Pb	165	2		0.12	0.12	ppb	8.36	7630	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	74185	1.39	91101	81.4	70 - 150	
45 Sc	2	1375450	0.38	1409018	97.6	70 - 150	
115 In	1	485412	1.96	550573	88.2	70 - 150	
115 In	2	1541558	0.69	1674463	92.1	70 - 150	
159 Tb	1	1212709	0.61	1206971	100.5	70 - 150	
159 Tb	2	2096721	0.18	2214207	94.7	70 - 150	
165 Ho	1	1178238	0.57	1184067	99.5	70 - 150	
165 Ho	2	2042584	1.52	2128403	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\S112113A.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\S112113A.b\031SMPL.D\031SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\031SMPL.D\031SMPL.D#
 Date Acquired: Nov 21 2013 03:06 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-009
 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 21 2013 12:49 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	51.12	384	2700	
23 Na	45	1		10,620.00	10620.00	ppb	2.21	9068926	225000	
24 Mg	45	1		1,434.00	1434.00	ppb	1.12	685117	225000	
27 Al	45	1		453.30	453.30	ppb	1.59	120166	67500	
39 K	45	1		1,125.00	1125.00	ppb	0.96	545261	225000	
44 Ca	45	1		7,173.00	7173.00	ppb	0.52	175089	225000	
51 V	45	1		1.06	1.06	ppb	2.06	4260	2700	
52 Cr	45	1		1.70	1.70	ppb	1.59	8231	2700	
55 Mn	45	1		1,051.00	1051.00	ppb	1.58	3507639	2700	
56 Fe	45	1		650.30	650.30	ppb	0.78	2662042	202500	
59 Co	45	1		0.78	0.78	ppb	2.61	6253	2700	
60 Ni	45	1		5.23	5.23	ppb	1.22	9748	2700	
65 Cu	45	1		8.45	8.45	ppb	1.28	20585	2700	
66 Zn	45	1		12.52	12.52	ppb	1.21	13294	2700	
75 As	115	1		0.38	0.38	ppb	7.34	286	2250	
78 Se	115	1		0.59	0.59	ppb	29.08	131	2700	
83 Kr	115	2		----	-----	ppb	-----	513	2700	
95 Mo	115	2		0.05	0.05	ppb	22.86	537	2700	
107 Ag	115	2		-0.01	-0.01	ppb	30.09	542	900	
111 Cd	115	2		36.62	36.62	ppb	0.34	99705	2700	
121 Sb	115	2		0.08	0.08	ppb	10.94	1375	1125	
137 Ba	159	2		13.30	13.30	ppb	0.70	50551	1350	
205 Tl	165	2		0.01	0.01	ppb	60.41	2786	900	
206 (Pb)	165	2		4.13	4.13	ppb	1.57	34807	2700	
207 (Pb)	165	2		4.09	4.09	ppb	1.36	28571	2700	
208 Pb	165	2		3.94	3.94	ppb	1.83	132937	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	78333	0.32	91101	86.0	70 - 150	
45 Sc	2	1363323	0.54	1409018	96.8	70 - 150	
115 In	1	513053	0.18	550573	93.2	70 - 150	
115 In	2	1520786	1.29	1674463	90.8	70 - 150	
159 Tb	1	1264225	1.64	1206971	104.7	70 - 150	
159 Tb	2	2052106	0.28	2214207	92.7	70 - 150	
165 Ho	1	1229322	1.85	1184067	103.8	70 - 150	
165 Ho	2	2002308	1.31	2128403	94.1	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\S112113A.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\S112113A.b\032SMPL.D\032SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\032SMPL.D\032SMPL.D#
 Date Acquired: Nov 21 2013 03:12 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-011
 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 21 2013 12:49 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	40.75	316	2700	
23 Na	45	1		21,290.00	21290.00	ppb	0.75	18008540	225000	
24 Mg	45	1		1,022.00	1022.00	ppb	2.21	486048	225000	
27 Al	45	1		205.20	205.20	ppb	1.09	54365	67500	
39 K	45	1		748.20	748.20	ppb	0.54	375386	225000	
44 Ca	45	1		4,615.00	4615.00	ppb	0.81	112224	225000	
51 V	45	1		0.35	0.35	ppb	2.05	1553	2700	
52 Cr	45	1		0.41	0.41	ppb	2.59	2459	2700	
55 Mn	45	1		15.72	15.72	ppb	1.31	52775	2700	
56 Fe	45	1		183.50	183.50	ppb	2.35	757261	202500	
59 Co	45	1		0.08	0.08	ppb	10.46	1194	2700	
60 Ni	45	1		0.46	0.46	ppb	7.97	987	2700	
65 Cu	45	1		1.76	1.76	ppb	2.85	4478	2700	
66 Zn	45	1		4.88	4.88	ppb	1.78	6163	2700	
75 As	115	1		0.15	0.15	ppb	10.13	144	2250	
78 Se	115	1		0.46	0.46	ppb	46.00	122	2700	
83 Kr	115	2		----	-----	ppb	-----	558	2700	
95 Mo	115	2		0.01	0.01	ppb	222.47	352	2700	
107 Ag	115	2		-0.02	-0.02	ppb	26.32	413	900	
111 Cd	115	2		5.97	5.97	ppb	1.18	16442	2700	
121 Sb	115	2		0.04	0.04	ppb	46.44	958	1125	
137 Ba	159	2		16.04	16.04	ppb	1.00	61811	1350	
205 Tl	165	2		-0.04	-0.04	ppb	33.27	1435	900	
206 (Pb)	165	2		0.18	0.18	ppb	7.44	2371	2700	
207 (Pb)	165	2		0.17	0.17	ppb	14.50	1945	2700	
208 Pb	165	2		0.17	0.17	ppb	7.49	9134	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	77965	0.48	91101	85.6	70 - 150	
45 Sc	2	1351849	0.99	1409018	95.9	70 - 150	
115 In	1	509537	1.86	550573	92.5	70 - 150	
115 In	2	1526158	0.77	1674463	91.1	70 - 150	
159 Tb	1	1277647	1.70	1206971	105.9	70 - 150	
159 Tb	2	2083406	1.22	2214207	94.1	70 - 150	
165 Ho	1	1248319	0.52	1184067	105.4	70 - 150	
165 Ho	2	2019166	1.32	2128403	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\S112113A.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\S112113A.b\033SMPL.D\033SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\033SMPL.D\033SMPL.D#
 Date Acquired: Nov 21 2013 03:18 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-013
 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 21 2013 12:49 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	2.11	204	2700	
23 Na	45	1		5,284.00	5284.00	ppb	1.26	4531362	225000	
24 Mg	45	1		1,040.00	1040.00	ppb	0.18	494047	225000	
27 Al	45	1		17.42	17.42	ppb	1.97	5001	67500	
39 K	45	1		785.40	785.40	ppb	1.49	391409	225000	
44 Ca	45	1		5,566.00	5566.00	ppb	0.55	135125	225000	
51 V	45	1		0.10	0.10	ppb	4.97	606	2700	
52 Cr	45	1		0.18	0.18	ppb	6.06	1462	2700	
55 Mn	45	1		6.93	6.93	ppb	0.18	23537	2700	
56 Fe	45	1		16.25	16.25	ppb	1.03	79387	202500	
59 Co	45	1		0.00	0.00	ppb	70.04	584	2700	
60 Ni	45	1		0.17	0.17	ppb	7.41	456	2700	
65 Cu	45	1		0.86	0.86	ppb	5.39	2307	2700	
66 Zn	45	1		6.02	6.02	ppb	3.59	7216	2700	
75 As	115	1		0.09	0.09	ppb	0.74	105	2250	
78 Se	115	1		0.14	0.14	ppb	220.53	103	2700	
83 Kr	115	2		----	-----	ppb	-----	512	2700	
95 Mo	115	2		-0.03	-0.03	ppb	29.66	141	2700	
107 Ag	115	2		-0.03	-0.03	ppb	11.31	349	900	
111 Cd	115	2		-0.01	-0.01	ppb	74.29	137	2700	
121 Sb	115	2		0.01	0.01	ppb	116.74	602	1125	
137 Ba	159	2		8.06	8.06	ppb	1.31	29797	1350	
205 Tl	165	2		-0.06	-0.06	ppb	5.06	949	900	
206 (Pb)	165	2		0.07	0.07	ppb	13.58	1362	2700	
207 (Pb)	165	2		0.06	0.06	ppb	13.26	1089	2700	
208 Pb	165	2		0.06	0.06	ppb	9.50	5164	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	77872	0.86	91101	85.5	70 - 150	
45 Sc	2	1303886	3.66	1409018	92.5	70 - 150	
115 In	1	514582	1.08	550573	93.5	70 - 150	
115 In	2	1472241	3.47	1674463	87.9	70 - 150	
159 Tb	1	1282957	1.37	1206971	106.3	70 - 150	
159 Tb	2	1987530	0.79	2214207	89.8	70 - 150	
165 Ho	1	1259473	0.24	1184067	106.4	70 - 150	
165 Ho	2	1922089	1.24	2128403	90.3	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nodas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112113A.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\S112113A.b\034SMPL.D\034SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\034SMPL.D\034SMPL.D#
 Date Acquired: Nov 21 2013 03:24 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-015
 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 21 2013 12:49 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	28.96	222	2700	
23 Na	45	1	13,850.00	13850.00	ppb	1.60	11582460	225000	
24 Mg	45	1	2,087.00	2087.00	ppb	1.04	978261	225000	
27 Al	45	1	124.60	124.60	ppb	0.57	32713	67500	
39 K	45	1	1,405.00	1405.00	ppb	2.90	657637	225000	
44 Ca	45	1	11,310.00	11310.00	ppb	1.15	270831	225000	
51 V	45	1	0.29	0.29	ppb	7.37	1324	2700	
52 Cr	45	1	0.30	0.30	ppb	4.58	1970	2700	
55 Mn	45	1	244.50	244.50	ppb	1.98	801367	2700	
56 Fe	45	1	125.70	125.70	ppb	1.03	515797	202500	
59 Co	45	1	0.41	0.41	ppb	1.72	3461	2700	
60 Ni	45	1	1.42	1.42	ppb	3.86	2699	2700	
65 Cu	45	1	2.47	2.47	ppb	4.46	6083	2700	
66 Zn	45	1	6.30	6.30	ppb	1.35	7373	2700	
75 As	115	1	0.21	0.21	ppb	4.28	180	2250	
78 Se	115	1	0.64	0.64	ppb	20.98	131	2700	
83 Kr	115	2	----	-----	ppb	-----	483	2700	
95 Mo	115	2	0.19	0.19	ppb	15.44	1211	2700	
107 Ag	115	2	-0.02	-0.02	ppb	19.77	410	900	
111 Cd	115	2	0.08	0.08	ppb	18.87	379	2700	
121 Sb	115	2	0.10	0.10	ppb	1.04	1541	1125	
137 Ba	159	2	17.47	17.47	ppb	1.78	66450	1350	
205 Tl	165	2	-0.03	-0.03	ppb	28.47	1538	900	
206 (Pb)	165	2	0.30	0.30	ppb	6.87	3336	2700	
207 (Pb)	165	2	0.31	0.31	ppb	7.62	2856	2700	
208 Pb	165	2	0.29	0.29	ppb	6.68	13052	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	76876	0.54	91101	84.4	70 - 150	
45 Sc	2	1323170	0.48	1409018	93.9	70 - 150	
115 In	1	501539	1.28	550573	91.1	70 - 150	
115 In	2	1506538	0.73	1674463	90.0	70 - 150	
159 Tb	1	1261633	1.43	1206971	104.5	70 - 150	
159 Tb	2	2057685	1.24	2214207	92.9	70 - 150	
165 Ho	1	1238846	0.51	1184067	104.6	70 - 150	
165 Ho	2	1984875	0.73	2128403	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\S112113A.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\S112113A.b\035SMPL.D\035SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\035SMPL.D\035SMPL.D#
 Date Acquired: Nov 21 2013 03:29 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-017
 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 21 2013 12:49 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	5.62	137	2700	
23 Na	45		1	142.70	142.70	ppb	9.10	207114	225000	
24 Mg	45		1	7.57	7.57	ppb	43.47	4182	225000	
27 Al	45		1	10.53	10.53	ppb	9.56	3178	67500	
39 K	45		1	16.87	16.87	ppb	26.69	50558	225000	
44 Ca	45		1	68.03	68.03	ppb	11.48	1929	225000	
51 V	45		1	0.09	0.09	ppb	32.74	564	2700	
52 Cr	45		1	0.26	0.26	ppb	5.43	1787	2700	
55 Mn	45		1	0.73	0.73	ppb	19.57	2938	2700	
56 Fe	45		1	20.21	20.21	ppb	15.52	94945	202500	
59 Co	45		1	0.88	0.88	ppb	6.35	6893	2700	
60 Ni	45		1	0.53	0.53	ppb	6.88	1113	2700	
65 Cu	45		1	1.07	1.07	ppb	9.18	2803	2700	
66 Zn	45		1	5.49	5.49	ppb	2.75	6697	2700	
75 As	115		1	0.05	0.05	ppb	20.89	83	2250	
78 Se	115		1	0.40	0.40	ppb	4.77	119	2700	
83 Kr	115		2	----	-----	ppb	-----	528	2700	
95 Mo	115		2	-0.02	-0.02	ppb	13.56	184	2700	
107 Ag	115		2	-0.03	-0.03	ppb	3.90	296	900	
111 Cd	115		2	-0.03	-0.03	ppb	8.87	83	2700	
121 Sb	115		2	0.00	0.00	ppb	18489.00	583	1125	
137 Ba	159		2	0.06	0.06	ppb	11.40	617	1350	
205 Tl	165		2	-0.07	-0.07	ppb	4.08	780	900	
206 (Pb)	165		2	-0.03	-0.03	ppb	8.79	628	2700	
207 (Pb)	165		2	-0.04	-0.04	ppb	19.10	534	2700	
208 Pb	165		2	-0.03	-0.03	ppb	8.00	2565	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	77584	1.23	91101	85.2	70 - 150	
45 Sc	2	1396945	2.55	1409018	99.1	70 - 150	
115 In	1	511399	0.99	550573	92.9	70 - 150	
115 In	2	1564745	1.42	1674463	93.4	70 - 150	
159 Tb	1	1277757	1.08	1206971	105.9	70 - 150	
159 Tb	2	2136553	2.35	2214207	96.5	70 - 150	
165 Ho	1	1250841	1.81	1184067	105.6	70 - 150	
165 Ho	2	2075783	3.73	2128403	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\S112113A.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\S112113A.b\036SMPL.D\036SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\036SMPL.D\036SMPL.D#
 Date Acquired: Nov 21 2013 03:35 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-019
 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 21 2013 12:49 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	5.61	120	2700	
23 Na	45	1	20,610.00	20610.00	ppb	1.90	17355970	225000	
24 Mg	45	1	2,439.00	2439.00	ppb	1.46	1154032	225000	
27 Al	45	1	14.71	14.71	ppb	0.29	4275	67500	
39 K	45	1	1,497.00	1497.00	ppb	1.53	704244	225000	
44 Ca	45	1	14,940.00	14940.00	ppb	2.39	360758	225000	
51 V	45	1	0.23	0.23	ppb	1.95	1077	2700	
52 Cr	45	1	0.63	0.63	ppb	3.00	3433	2700	
55 Mn	45	1	203.30	203.30	ppb	2.10	672396	2700	
56 Fe	45	1	1,361.00	1361.00	ppb	2.09	5504889	202500	
59 Co	45	1	0.09	0.09	ppb	5.28	1216	2700	
60 Ni	45	1	0.12	0.12	ppb	6.28	372	2700	
65 Cu	45	1	0.61	0.61	ppb	3.92	1706	2700	
66 Zn	45	1	7.80	7.80	ppb	3.19	8826	2700	
75 As	115	1	0.31	0.31	ppb	4.08	243	2250	
78 Se	115	1	0.16	0.16	ppb	105.05	104	2700	
83 Kr	115	2	----	-----	ppb	-----	519	2700	
95 Mo	115	2	0.00	0.00	ppb	162.27	317	2700	
107 Ag	115	2	-0.04	-0.04	ppb	2.89	219	900	
111 Cd	115	2	0.02	0.02	ppb	10.42	235	2700	
121 Sb	115	2	0.02	0.02	ppb	10.52	757	1125	
137 Ba	159	2	17.01	17.01	ppb	1.19	65108	1350	
205 Tl	165	2	-0.07	-0.07	ppb	0.69	620	900	
206 (Pb)	165	2	0.03	0.03	ppb	5.59	1143	2700	
207 (Pb)	165	2	0.02	0.02	ppb	57.92	902	2700	
208 Pb	165	2	0.03	0.03	ppb	6.08	4551	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	77603	2.07	91101	85.2	70 - 150	
45 Sc	2	1338962	1.37	1409018	95.0	70 - 150	
115 In	1	511262	3.23	550573	92.9	70 - 150	
115 In	2	1532443	0.82	1674463	91.5	70 - 150	
159 Tb	1	1287389	0.54	1206971	106.7	70 - 150	
159 Tb	2	2069862	0.48	2214207	93.5	70 - 150	
165 Ho	1	1272254	0.55	1184067	107.4	70 - 150	
165 Ho	2	2003243	0.69	2128403	94.1	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\S112113A.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\S112113A.b\037SMPL.D\037SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\037SMPL.D\037SMPL.D#
 Date Acquired: Nov 21 2013 03:41 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-021
 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 21 2013 12:49 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	5.79	90	2700	
23 Na	45	1	14,290.00	14290.00	ppb	1.77	12131270	225000	
24 Mg	45	1	1,032.00	1032.00	ppb	1.00	491197	225000	
27 Al	45	1	50.50	50.50	ppb	1.64	13718	67500	
39 K	45	1	1,731.00	1731.00	ppb	1.44	812252	225000	
44 Ca	45	1	6,233.00	6233.00	ppb	0.97	151617	225000	
51 V	45	1	0.08	0.08	ppb	1.12	547	2700	
52 Cr	45	1	0.11	0.11	ppb	11.09	1143	2700	
55 Mn	45	1	773.20	773.20	ppb	0.58	2571570	2700	
56 Fe	45	1	3,392.00	3392.00	ppb	1.19	13778740	202500	
59 Co	45	1	8.37	8.37	ppb	0.89	60605	2700	
60 Ni	45	1	0.24	0.24	ppb	1.50	584	2700	
65 Cu	45	1	0.85	0.85	ppb	7.10	2284	2700	
66 Zn	45	1	4.75	4.75	ppb	1.18	6050	2700	
75 As	115	1	0.36	0.36	ppb	3.58	278	2250	
78 Se	115	1	0.38	0.38	ppb	59.76	118	2700	
83 Kr	115	2	----	-----	ppb	-----	508	2700	
95 Mo	115	2	0.48	0.48	ppb	4.03	2675	2700	
107 Ag	115	2	-0.02	-0.02	ppb	5.33	448	900	
111 Cd	115	2	60.56	60.56	ppb	0.76	170012	2700	
121 Sb	115	2	0.00	0.00	ppb	317.81	571	1125	
137 Ba	159	2	20.26	20.26	ppb	0.96	78595	1350	
205 Tl	165	2	0.05	0.05	ppb	3.11	3753	900	
206 (Pb)	165	2	0.00	0.00	ppb	439.30	900	2700	
207 (Pb)	165	2	0.00	0.00	ppb	297.86	755	2700	
208 Pb	165	2	0.00	0.00	ppb	180.49	3514	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	78044	0.54	91101	85.7	70 - 150	
45 Sc	2	1384172	1.40	1409018	98.2	70 - 150	
115 In	1	514305	0.94	550573	93.4	70 - 150	
115 In	2	1569100	0.83	1674463	93.7	70 - 150	
159 Tb	1	1281190	2.33	1206971	106.1	70 - 150	
159 Tb	2	2100480	0.93	2214207	94.9	70 - 150	
165 Ho	1	1248645	1.68	1184067	105.5	70 - 150	
165 Ho	2	2018288	1.02	2128403	94.8	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\S112113A.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\S112113A.b\038SMPL.D\038SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\038SMPL.D\038SMPL.D#
 Date Acquired: Nov 21 2013 03:47 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 21 2013 12:49 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	1.29	2710	2700	
23 Na	45	1		192.50	192.50	ppb	1.98	271292	225000	
24 Mg	45	1		80.75	80.75	ppb	1.41	42276	225000	
27 Al	45	1		30.93	30.93	ppb	1.07	9282	67500	
39 K	45	1		67.15	67.15	ppb	3.01	79309	225000	
44 Ca	45	1		152.00	152.00	ppb	1.10	4312	225000	
51 V	45	1		0.43	0.43	ppb	1.09	2026	2700	
52 Cr	45	1		0.42	0.42	ppb	5.11	2722	2700	
55 Mn	45	1		1.99	1.99	ppb	3.99	7762	2700	
56 Fe	45	1		83.26	83.26	ppb	1.12	380715	202500	
59 Co	45	1		0.44	0.44	ppb	2.60	4074	2700	
60 Ni	45	1		0.49	0.49	ppb	1.39	1132	2700	
65 Cu	45	1		0.55	0.55	ppb	1.71	1711	2700	
66 Zn	45	1		0.34	0.34	ppb	13.27	2135	2700	
75 As	115	1		0.37	0.37	ppb	6.82	303	2250	
78 Se	115	1		1.04	1.04	ppb	13.21	171	2700	
83 Kr	115	2		----	-----	ppb	-----	519	2700	
95 Mo	115	2		0.83	0.83	ppb	1.58	4769	2700	
107 Ag	115	2		0.13	0.13	ppb	2.48	2696	900	
111 Cd	115	2		0.50	0.50	ppb	4.40	1695	2700	
121 Sb	115	2		0.37	0.37	ppb	3.19	4642	1125	
137 Ba	159	2		0.45	0.45	ppb	3.28	2288	1350	
205 Tl	165	2		0.33	0.33	ppb	1.84	11862	900	
206 (Pb)	165	2		0.34	0.34	ppb	2.72	4024	2700	
207 (Pb)	165	2		0.37	0.37	ppb	2.09	3584	2700	
208 Pb	165	2		0.34	0.34	ppb	3.46	16166	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	84549	0.88	91101	92.8	70 - 150	
45 Sc	2	1456135	0.74	1409018	103.3	70 - 150	
115 In	1	554829	1.60	550573	100.8	70 - 150	
115 In	2	1689888	1.86	1674463	100.9	70 - 150	
159 Tb	1	1378250	1.86	1206971	114.2	70 - 150	
159 Tb	2	2280861	1.45	2214207	103.0	70 - 150	
165 Ho	1	1349985	0.35	1184067	114.0	70 - 150	
165 Ho	2	2184375	0.98	2128403	102.6	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\S112113A.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\S112113A.b\039_CCV.D\039_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\039_CCV.D\039_CCV.D#
 Date Acquired: Nov 21 2013 03:53 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 21 2013 12:49 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	48.78	ppb	0.61	320074	50	97.6	90 - 110	
23 Na	45	1	5088.00	ppb	0.80	4735040	5000	101.8	90 - 110	
24 Mg	45	1	5175.00	ppb	0.70	2663820	5000	103.5	90 - 110	
27 Al	45	1	1555.00	ppb	0.43	443198	1500	103.7	90 - 110	
39 K	45	1	4841.00	ppb	1.18	2374073	5000	96.8	90 - 110	
44 Ca	45	1	4869.00	ppb	0.74	128227	5000	97.4	90 - 110	
51 V	45	1	49.55	ppb	0.60	202529	50	99.1	90 - 110	
52 Cr	45	1	49.86	ppb	0.64	240032	50	99.7	90 - 110	
55 Mn	45	1	49.80	ppb	0.30	179767	50	99.6	90 - 110	
56 Fe	45	1	5041.00	ppb	1.02	22146130	5000	100.8	90 - 110	
59 Co	45	1	51.07	ppb	0.53	396704	50	102.1	90 - 110	
60 Ni	45	1	52.29	ppb	0.26	103514	50	104.6	90 - 110	
65 Cu	45	1	53.12	ppb	2.45	138138	50	106.2	90 - 110	
66 Zn	45	1	51.30	ppb	0.41	53172	50	102.6	90 - 110	
75 As	115	1	47.58	ppb	0.67	31550	50	95.2	90 - 110	
78 Se	115	1	225.30	ppb	1.28	14983	250	90.1	90 - 110	
83 Kr	115	2	-----	ppb	-----	512	50	#VALUE! #####	-----	
95 Mo	115	2	50.69	ppb	1.55	266547	50	101.4	90 - 110	
107 Ag	115	2	49.18	ppb	1.21	707132	50	98.4	90 - 110	
111 Cd	115	2	50.32	ppb	0.92	149058	50	100.6	90 - 110	
121 Sb	115	2	49.57	ppb	1.41	528726	50	99.1	90 - 110	
137 Ba	159	2	51.27	ppb	1.39	209258	50	102.5	90 - 110	
205 Tl	165	2	50.38	ppb	0.62	1412264	50	100.8	90 - 110	
206 (Pb)	165	2	49.36	ppb	0.78	440460	50	98.7	90 - 110	
207 (Pb)	165	2	48.33	ppb	1.79	356281	50	96.7	90 - 110	
208 Pb	165	2	48.20	ppb	1.36	1716575	50	96.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	84447	0.37	91101	92.7	80 - 120	
45 Sc	2	1446278	2.52	1409018	102.6	80 - 120	
115 In	1	547215	0.92	550573	99.4	80 - 120	
115 In	2	1655471	2.77	1674463	98.9	80 - 120	
159 Tb	1	1342778	1.23	1206971	111.3	80 - 120	
159 Tb	2	2216526	1.57	2214207	100.1	80 - 120	
165 Ho	1	1310118	1.17	1184067	110.6	80 - 120	
165 Ho	2	2168173	1.58	2128403	101.9	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\S112113A.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\S112113A.b\040_CCV.D\040_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\040_CCV.D\040_CCV.D#
 Date Acquired: Nov 21 2013 03:59 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 21 2013 12:49 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	0.45 ppb	4.59	1	90.8	70 - 130	
23 Na	45	1	263.00 ppb	1.29	250	105.2	70 - 130	
24 Mg	45	1	273.70 ppb	1.22	250	109.5	70 - 130	
27 Al	45	1	109.10 ppb	0.88	100	109.1	70 - 130	
39 K	45	1	241.80 ppb	1.69	250	96.7	70 - 130	
44 Ca	45	1	255.50 ppb	1.22	250	102.2	70 - 130	
51 V	45	1	0.96 ppb	1.04	1	96.5	70 - 130	
52 Cr	45	1	1.01 ppb	0.90	1	100.7	70 - 130	
55 Mn	45	1	2.99 ppb	1.55	3	99.8	70 - 130	
56 Fe	45	1	173.00 ppb	1.37	150	115.3	70 - 130	
59 Co	45	1	0.99 ppb	1.24	1	99.0	70 - 130	
60 Ni	45	1	1.54 ppb	2.37	2	102.5	70 - 130	
65 Cu	45	1	5.32 ppb	2.29	5	106.4	70 - 130	
66 Zn	45	1	10.02 ppb	0.92	10	100.2	70 - 130	
75 As	115	1	0.89 ppb	7.48	1	89.2	70 - 130	
78 Se	115	1	4.43 ppb	6.49	5	88.5	70 - 130	
83 Kr	115	2	----- ppb -----	-----	1	#VALUE! ##### - #####		
95 Mo	115	2	1.01 ppb	5.20	1	101.4	70 - 130	
107 Ag	115	2	0.48 ppb	2.65	1	95.3	70 - 130	
111 Cd	115	2	0.97 ppb	2.95	1	97.3	70 - 130	
121 Sb	115	2	0.93 ppb	3.65	1	93.2	70 - 130	
137 Ba	159	2	2.50 ppb	2.53	3	100.0	70 - 130	
205 Tl	165	2	0.90 ppb	0.60	1	89.6	70 - 130	
206 (Pb)	165	2	1.41 ppb	0.98	2	94.0	70 - 130	
207 (Pb)	165	2	1.44 ppb	3.61	2	96.2	70 - 130	
208 Pb	165	2	1.38 ppb	1.00	2	91.7	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	84549	0.53	91101	92.8	80 - 120	
45 Sc	2	1438135	0.92	1409018	102.1	80 - 120	
115 In	1	551521	1.73	550573	100.2	80 - 120	
115 In	2	1686801	0.60	1674463	100.7	80 - 120	
159 Tb	1	1342350	1.66	1206971	111.2	80 - 120	
159 Tb	2	2217492	0.59	2214207	100.1	80 - 120	
165 Ho	1	1314537	2.81	1184067	111.0	80 - 120	
165 Ho	2	2167885	0.72	2128403	101.9	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\S112113A.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\S112113A.b\041_CCB.D\041_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\041_CCB.D\041_CCB.D#
 Date Acquired: Nov 21 2013 04:05 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 21 2013 12:49 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	-0.061 ppb	5.97	144	0.50	
23 Na	45	1	6.074 ppb	27.84	98348	250.00	
24 Mg	45	1	1.823 ppb	6.05	1566	250.00	
27 Al	45	1	0.830 ppb	19.99	681	100.00	
39 K	45	1	-3.360 ppb	51.70	44143	250.00	
44 Ca	45	1	2.640 ppb	3.79	374	250.00	
51 V	45	1	-0.036 ppb	12.73	103	1.00	
52 Cr	45	1	-0.047 ppb	9.86	474	1.00	
55 Mn	45	1	0.028 ppb	14.79	674	3.00	
56 Fe	45	1	2.160 ppb	7.20	23588	150.00	
59 Co	45	1	-0.054 ppb	3.86	229	1.00	
60 Ni	45	1	-0.043 ppb	13.10	77	1.50	
65 Cu	45	1	0.200 ppb	9.06	770	5.00	
66 Zn	45	1	0.009 ppb	739.43	1755	10.00	
75 As	115	1	-0.044 ppb	10.50	26	1.00	
78 Se	115	1	0.288 ppb	43.03	116	5.00	
83 Kr	115	2	----- ppb	-----	476	1.00	
95 Mo	115	2	-0.028 ppb	11.17	172	1.00	
107 Ag	115	2	-0.042 ppb	1.30	182	0.50	
111 Cd	115	2	-0.033 ppb	8.34	82	1.00	
121 Sb	115	2	-0.039 ppb	11.75	203	1.00	
137 Ba	159	2	-0.046 ppb	11.75	208	2.50	
205 Tl	165	2	-0.063 ppb	4.17	867	1.00	
206 (Pb)	165	2	-0.062 ppb	3.39	393	1.50	
207 (Pb)	165	2	-0.062 ppb	10.72	360	1.50	
208 Pb	165	2	-0.059 ppb	2.93	1732	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	82255	1.20	91101	90.3	80 - 120	
45 Sc	2	1426481	0.37	1409018	101.2	80 - 120	
115 In	1	534242	1.23	550573	97.0	80 - 120	
115 In	2	1645258	0.51	1674463	98.3	80 - 120	
159 Tb	1	1317650	2.25	1206971	109.2	80 - 120	
159 Tb	2	2201094	0.94	2214207	99.4	80 - 120	
165 Ho	1	1288843	1.87	1184067	108.8	80 - 120	
165 Ho	2	2119912	1.17	2128403	99.6	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\S112113A.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\S112113A.b\042SMPL.D\042SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\042SMPL.D\042SMPL.D#
 Date Acquired: Nov 21 2013 04:11 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-023
 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 21 2013 12:49 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	10.59	396	2700	
23 Na	45	1	10,530.00	10530.00	ppb	0.57	9106171	225000	
24 Mg	45	1	4,540.00	4540.00	ppb	1.17	2193756	225000	
27 Al	45	1	900.20	900.20	ppb	0.91	241069	67500	
39 K	45	1	4,499.00	4499.00	ppb	1.91	2073674	225000	
44 Ca	45	1	13,130.00	13130.00	ppb	1.25	324092	225000	
51 V	45	1	19.28	19.28	ppb	0.07	74108	2700	
52 Cr	45	1	5.04	5.04	ppb	0.92	23377	2700	
55 Mn	45	1	113.50	113.50	ppb	0.85	383924	2700	
56 Fe	45	1	2,338.00	2338.00	ppb	1.17	9648801	202500	
59 Co	45	1	1.62	1.62	ppb	2.45	12394	2700	
60 Ni	45	1	6.64	6.64	ppb	0.86	12463	2700	
65 Cu	45	1	30.70	30.70	ppb	1.00	75046	2700	
66 Zn	45	1	171.20	171.20	ppb	0.68	162642	2700	
75 As	115	1	0.88	0.88	ppb	5.16	607	2250	
78 Se	115	1	0.57	0.57	ppb	14.53	131	2700	
83 Kr	115	2	----	-----	ppb	-----	498	2700	
95 Mo	115	2	1.44	1.44	ppb	3.60	7464	2700	
107 Ag	115	2	0.04	0.04	ppb	22.38	1223	900	
111 Cd	115	2	5.07	5.07	ppb	3.38	14393	2700	
121 Sb	115	2	1.44	1.44	ppb	1.65	15123	1125	
137 Ba	159	2	21.39	21.39	ppb	1.65	84734	1350	
205 Tl	165	2	-0.04	-0.04	ppb	3.49	1391	900	
206 (Pb)	165	2	7.06	7.06	ppb	1.60	61334	2700	
207 (Pb)	165	2	6.99	6.99	ppb	1.68	50215	2700	
208 Pb	165	2	6.75	6.75	ppb	1.53	234125	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	79269	0.83	91101	87.0	70 - 150	
45 Sc	2	1401122	1.28	1409018	99.4	70 - 150	
115 In	1	521484	1.43	550573	94.7	70 - 150	
115 In	2	1569823	1.82	1674463	93.8	70 - 150	
159 Tb	1	1316877	1.72	1206971	109.1	70 - 150	
159 Tb	2	2146189	2.35	2214207	96.9	70 - 150	
165 Ho	1	1284848	1.59	1184067	108.5	70 - 150	
165 Ho	2	2084633	2.30	2128403	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\S112113A.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\S112113A.b\043SMPL.D\043SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\043SMPL.D\043SMPL.D#
 Date Acquired: Nov 21 2013 04:17 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-025
 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 21 2013 12:49 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	4.44	292	2700	
23 Na	45	1		5,679.00	5679.00	ppb	1.29	4991696	225000	
24 Mg	45	1		1,047.00	1047.00	ppb	0.86	510421	225000	
27 Al	45	1		586.00	586.00	ppb	2.60	158328	67500	
39 K	45	1		817.60	817.60	ppb	2.11	416353	225000	
44 Ca	45	1		5,668.00	5668.00	ppb	1.68	141199	225000	
51 V	45	1		4.19	4.19	ppb	1.33	16420	2700	
52 Cr	45	1		31.75	31.75	ppb	1.55	144919	2700	
55 Mn	45	1		27.50	27.50	ppb	1.95	94206	2700	
56 Fe	45	1		1,195.00	1195.00	ppb	1.95	4978063	202500	
59 Co	45	1		0.30	0.30	ppb	2.01	2859	2700	
60 Ni	45	1		2.80	2.80	ppb	3.63	5393	2700	
65 Cu	45	1		10.53	10.53	ppb	3.02	26106	2700	
66 Zn	45	1		50.77	50.77	ppb	2.04	49816	2700	
75 As	115	1		0.38	0.38	ppb	10.46	297	2250	
78 Se	115	1		0.37	0.37	ppb	16.47	120	2700	
83 Kr	115	2		----	-----	ppb	-----	493	2700	
95 Mo	115	2		0.09	0.09	ppb	5.19	744	2700	
107 Ag	115	2		0.00	0.00	ppb	77.97	772	900	
111 Cd	115	2		22.68	22.68	ppb	1.64	63135	2700	
121 Sb	115	2		0.11	0.11	ppb	4.44	1717	1125	
137 Ba	159	2		11.96	11.96	ppb	1.82	46985	1350	
205 Tl	165	2		-0.01	-0.01	ppb	61.16	2287	900	
206 (Pb)	165	2		4.32	4.32	ppb	1.30	37459	2700	
207 (Pb)	165	2		4.26	4.26	ppb	1.05	30592	2700	
208 Pb	165	2		4.14	4.14	ppb	1.32	143621	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	79938	2.41	91101	87.7	70 - 150	
45 Sc	2	1359162	0.34	1409018	96.5	70 - 150	
115 In	1	526003	2.24	550573	95.5	70 - 150	
115 In	2	1553667	1.40	1674463	92.8	70 - 150	
159 Tb	1	1334858	2.14	1206971	110.6	70 - 150	
159 Tb	2	2119358	1.95	2214207	95.7	70 - 150	
165 Ho	1	1295203	3.28	1184067	109.4	70 - 150	
165 Ho	2	2062759	0.70	2128403	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\S112113A.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\S112113A.b\044SMPL.D\044SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\044SMPL.D\044SMPL.D#
 Date Acquired: Nov 21 2013 04:23 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-027
 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 21 2013 12:49 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	4.75	114	2700	
23 Na	45	1		14,500.00	14500.00	ppb	1.83	11356090	225000	
24 Mg	45	1		1,980.00	1980.00	ppb	1.18	869284	225000	
27 Al	45	1		115.90	115.90	ppb	3.14	28552	67500	
39 K	45	1		2,582.00	2582.00	ppb	1.45	1098420	225000	
44 Ca	45	1		10,360.00	10360.00	ppb	2.07	232244	225000	
51 V	45	1		2.57	2.57	ppb	1.14	9170	2700	
52 Cr	45	1		0.34	0.34	ppb	2.58	1995	2700	
55 Mn	45	1		518.30	518.30	ppb	1.22	1590743	2700	
56 Fe	45	1		516.80	516.80	ppb	2.40	1947706	202500	
59 Co	45	1		0.09	0.09	ppb	5.39	1147	2700	
60 Ni	45	1		0.45	0.45	ppb	4.54	892	2700	
65 Cu	45	1		18.25	18.25	ppb	2.03	40629	2700	
66 Zn	45	1		18.83	18.83	ppb	1.54	17616	2700	
75 As	115	1		0.41	0.41	ppb	4.16	282	2250	
78 Se	115	1		0.31	0.31	ppb	46.81	105	2700	
83 Kr	115	2		----	-----	ppb	-----	554	2700	
95 Mo	115	2		0.40	0.40	ppb	8.02	2128	2700	
107 Ag	115	2		-0.03	-0.03	ppb	5.00	283	900	
111 Cd	115	2		12.06	12.06	ppb	2.38	31230	2700	
121 Sb	115	2		0.13	0.13	ppb	4.87	1729	1125	
137 Ba	159	2		8.65	8.65	ppb	1.96	31623	1350	
205 Tl	165	2		-0.02	-0.02	ppb	9.12	1724	900	
206 (Pb)	165	2		0.67	0.67	ppb	0.05	5997	2700	
207 (Pb)	165	2		0.68	0.68	ppb	0.96	5035	2700	
208 Pb	165	2		0.65	0.65	ppb	0.21	23504	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	72009	0.83	91101	79.0	70 - 150	
45 Sc	2	1252765	1.91	1409018	88.9	70 - 150	
115 In	1	474635	2.78	550573	86.2	70 - 150	
115 In	2	1441191	1.12	1674463	86.1	70 - 150	
159 Tb	1	1183965	1.65	1206971	98.1	70 - 150	
159 Tb	2	1966025	1.38	2214207	88.8	70 - 150	
165 Ho	1	1173417	2.09	1184067	99.1	70 - 150	
165 Ho	2	1883858	0.23	2128403	88.5	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\S112113A.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\S112113A.b\045SMPL.D\045SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\045SMPL.D\045SMPL.D#
 Date Acquired: Nov 21 2013 04:29 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-029
 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 21 2013 12:49 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	20.15	118	2700	
23 Na	45	1		6,309.00	6309.00	ppb	1.14	5059278	225000	
24 Mg	45	1		2,357.00	2357.00	ppb	1.61	1049967	225000	
27 Al	45	1		6.73	6.73	ppb	6.31	2059	67500	
39 K	45	1		1,755.00	1755.00	ppb	1.57	770314	225000	
44 Ca	45	1		12,240.00	12240.00	ppb	1.60	278408	225000	
51 V	45	1		0.07	0.07	ppb	6.66	450	2700	
52 Cr	45	1		0.08	0.08	ppb	8.91	942	2700	
55 Mn	45	1		296.00	296.00	ppb	0.57	921969	2700	
56 Fe	45	1		8.99	8.99	ppb	5.46	46915	202500	
59 Co	45	1		0.23	0.23	ppb	4.44	2084	2700	
60 Ni	45	1		0.39	0.39	ppb	9.52	804	2700	
65 Cu	45	1		0.38	0.38	ppb	5.94	1095	2700	
66 Zn	45	1		4.42	4.42	ppb	1.09	5385	2700	
75 As	115	1		0.05	0.05	ppb	46.65	80	2250	
78 Se	115	1		0.36	0.36	ppb	53.09	111	2700	
83 Kr	115	2		----	-----	ppb	-----	480	2700	
95 Mo	115	2		-0.03	-0.03	ppb	27.37	151	2700	
107 Ag	115	2		-0.04	-0.04	ppb	5.70	233	900	
111 Cd	115	2		0.02	0.02	ppb	74.31	222	2700	
121 Sb	115	2		-0.01	-0.01	ppb	81.74	488	1125	
137 Ba	159	2		15.89	15.89	ppb	0.77	56906	1350	
205 Tl	165	2		-0.07	-0.07	ppb	7.80	612	900	
206 (Pb)	165	2		0.00	0.00	ppb	576.62	845	2700	
207 (Pb)	165	2		0.00	0.00	ppb	815.75	700	2700	
208 Pb	165	2		0.00	0.00	ppb	847.87	3314	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	73063	0.93	91101	80.2	70 - 150	
45 Sc	2	1258997	1.83	1409018	89.4	70 - 150	
115 In	1	489468	0.77	550573	88.9	70 - 150	
115 In	2	1445886	0.41	1674463	86.3	70 - 150	
159 Tb	1	1214555	0.71	1206971	100.6	70 - 150	
159 Tb	2	1936101	0.87	2214207	87.4	70 - 150	
165 Ho	1	1198375	0.44	1184067	101.2	70 - 150	
165 Ho	2	1881212	1.46	2128403	88.4	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\S112113A.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\S112113A.b\046SMPL.D\046SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\046SMPL.D\046SMPL.D#
 Date Acquired: Nov 21 2013 04:34 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-031
 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 21 2013 12:49 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	5.27	120	2700	
23 Na	45	1	5,630.00	5630.00	ppb	0.61	4498303	225000	
24 Mg	45	1	1,458.00	1458.00	ppb	1.50	645869	225000	
27 Al	45	1	26.59	26.59	ppb	2.67	6911	67500	
39 K	45	1	471.30	471.30	ppb	0.90	235276	225000	
44 Ca	45	1	5,982.00	5982.00	ppb	1.07	135441	225000	
51 V	45	1	0.18	0.18	ppb	7.91	853	2700	
52 Cr	45	1	2.23	2.23	ppb	0.83	9814	2700	
55 Mn	45	1	1.19	1.19	ppb	2.61	4204	2700	
56 Fe	45	1	59.22	59.22	ppb	1.54	236349	202500	
59 Co	45	1	0.01	0.01	ppb	33.92	615	2700	
60 Ni	45	1	0.38	0.38	ppb	5.42	791	2700	
65 Cu	45	1	0.92	0.92	ppb	5.50	2283	2700	
66 Zn	45	1	5.67	5.67	ppb	1.96	6428	2700	
75 As	115	1	0.15	0.15	ppb	26.48	136	2250	
78 Se	115	1	0.37	0.37	ppb	61.44	110	2700	
83 Kr	115	2	----	-----	ppb	-----	519	2700	
95 Mo	115	2	-0.04	-0.04	ppb	2.87	108	2700	
107 Ag	115	2	-0.04	-0.04	ppb	13.14	238	900	
111 Cd	115	2	1.72	1.72	ppb	3.12	4655	2700	
121 Sb	115	2	0.00	0.00	ppb	73.14	590	1125	
137 Ba	159	2	5.93	5.93	ppb	1.85	21996	1350	
205 Tl	165	2	-0.07	-0.07	ppb	4.23	556	900	
206 (Pb)	165	2	0.00	0.00	ppb	33277.00	843	2700	
207 (Pb)	165	2	0.00	0.00	ppb	32.50	701	2700	
208 Pb	165	2	0.00	0.00	ppb	111.12	3337	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	72649	0.94	91101	79.7	70 - 150	
45 Sc	2	1279308	0.98	1409018	90.8	70 - 150	
115 In	1	484081	1.76	550573	87.9	70 - 150	
115 In	2	1460963	1.33	1674463	87.2	70 - 150	
159 Tb	1	1202510	2.00	1206971	99.6	70 - 150	
159 Tb	2	1984586	0.88	2214207	89.6	70 - 150	
165 Ho	1	1184989	1.30	1184067	100.1	70 - 150	
165 Ho	2	1920068	0.37	2128403	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\S112113A.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\S112113A.b\047SMPL.D\047SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\047SMPL.D\047SMPL.D#
 Date Acquired: Nov 21 2013 04:40 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 21 2013 12:49 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		0.32	0.32	ppb	10.83	2846	2700	
23 Na	45	1		193.20	193.20	ppb	1.72	269399	225000	
24 Mg	45	1		84.19	84.19	ppb	0.85	43637	225000	
27 Al	45	1		31.71	31.71	ppb	1.97	9416	67500	
39 K	45	1		70.98	70.98	ppb	3.45	80394	225000	
44 Ca	45	1		161.80	161.80	ppb	0.94	4526	225000	
51 V	45	1		0.46	0.46	ppb	3.73	2125	2700	
52 Cr	45	1		0.45	0.45	ppb	1.88	2830	2700	
55 Mn	45	1		1.71	1.71	ppb	2.72	6691	2700	
56 Fe	45	1		82.79	82.79	ppb	0.74	375160	202500	
59 Co	45	1		0.44	0.44	ppb	0.47	4002	2700	
60 Ni	45	1		0.48	0.48	ppb	2.98	1110	2700	
65 Cu	45	1		0.58	0.58	ppb	6.42	1764	2700	
66 Zn	45	1		0.46	0.46	ppb	15.71	2232	2700	
75 As	115	1		0.40	0.40	ppb	7.40	320	2250	
78 Se	115	1		1.10	1.10	ppb	12.43	174	2700	
83 Kr	115	2		----	-----	ppb	-----	508	2700	
95 Mo	115	2		0.77	0.77	ppb	7.16	4803	2700	
107Ag	115	2		0.14	0.14	ppb	10.46	3051	900	
111Cd	115	2		0.43	0.43	ppb	6.09	1593	2700	
121Sb	115	2		0.36	0.36	ppb	7.22	4858	1125	
137Ba	159	2		0.42	0.42	ppb	6.79	2267	1350	
205Tl	165	2		0.31	0.31	ppb	8.16	12038	900	
206 (Pb)	165	2		0.33	0.33	ppb	6.54	4123	2700	
207 (Pb)	165	2		0.34	0.34	ppb	5.78	3540	2700	
208 Pb	165	2		0.32	0.32	ppb	5.16	16311	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	83763	0.94	91101	91.9	70 - 150	
45 Sc	2	1542696	5.41	1409018	109.5	70 - 150	
115 In	1	549286	0.44	550573	99.8	70 - 150	
115 In	2	1822339	6.99	1674463	108.8	70 - 150	
159Tb	1	1351180	1.89	1206971	111.9	70 - 150	
159Tb	2	2388768	4.81	2214207	107.9	70 - 150	
165Ho	1	1332383	0.97	1184067	112.5	70 - 150	
165Ho	2	2319091	4.45	2128403	109.0	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\S112113A.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\S112113A.b\048_CCV.D\048_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\048_CCV.D\048_CCV.D#
 Date Acquired: Nov 21 2013 04:46 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 21 2013 12:49 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	48.41 ppb	1.44	312266	50	96.8	90 - 110	
23 Na	45	1	5391.00 ppb	6.33	4600404	5000	107.8	90 - 110	
24 Mg	45	1	5419.00 ppb	7.33	2559776	5000	108.4	90 - 110	
27 Al	45	1	1657.00 ppb	7.62	433406	1500	110.5	90 - 110	Fail
39 K	45	1	5198.00 ppb	8.41	2334901	5000	104.0	90 - 110	
44 Ca	45	1	5201.00 ppb	7.00	125673	5000	104.0	90 - 110	
51 V	45	1	52.42 ppb	6.86	196626	50	104.8	90 - 110	
52 Cr	45	1	53.06 ppb	7.16	234362	50	106.1	90 - 110	
55 Mn	45	1	52.88 ppb	6.85	175182	50	105.8	90 - 110	
56 Fe	45	1	5313.00 ppb	7.67	21414210	5000	106.3	90 - 110	
59 Co	45	1	54.34 ppb	6.86	387379	50	108.7	90 - 110	
60 Ni	45	1	55.36 ppb	6.54	100599	50	110.7	90 - 110	Fail
65 Cu	45	1	56.65 ppb	7.14	135190	50	113.3	90 - 110	Fail
66 Zn	45	1	54.26 ppb	7.63	51517	50	108.5	90 - 110	
75 As	115	1	50.39 ppb	6.22	30807	50	100.8	90 - 110	
78 Se	115	1	241.40 ppb	7.28	14793	250	96.6	90 - 110	
83 Kr	115	2	----- ppb	-----	509	50	#VALUE!	##### - #####	
95 Mo	115	2	49.85 ppb	1.91	263745	50	99.7	90 - 110	
107 Ag	115	2	48.27 ppb	1.15	698409	50	96.5	90 - 110	
111 Cd	115	2	49.29 ppb	0.44	146944	50	98.6	90 - 110	
121 Sb	115	2	48.14 ppb	0.48	516693	50	96.3	90 - 110	
137 Ba	159	2	50.20 ppb	0.92	206670	50	100.4	90 - 110	
205 Tl	165	2	49.53 ppb	1.20	1384154	50	99.1	90 - 110	
206 (Pb)	165	2	48.47 ppb	0.66	431206	50	96.9	90 - 110	
207 (Pb)	165	2	47.76 ppb	0.51	351058	50	95.5	90 - 110	
208 Pb	165	2	47.92 ppb	0.74	1701252	50	95.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	77729	6.29	91101	85.3	80 - 120	
45 Sc	2	1421701	0.97	1409018	100.9	80 - 120	
115 In	1	505790	5.66	550573	91.9	80 - 120	
115 In	2	1665613	1.17	1674463	99.5	80 - 120	
159 Tb	1	1261134	6.41	1206971	104.5	80 - 120	
159 Tb	2	2235186	0.35	2214207	100.9	80 - 120	
165 Ho	1	1217474	6.51	1184067	102.8	80 - 120	
165 Ho	2	2161298	1.16	2128403	101.5	80 - 120	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112113A.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\S112113A.b\049_CCV.D\049_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\049_CCV.D\049_CCV.D#
 Date Acquired: Nov 21 2013 04:52 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 21 2013 12:49 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	0.47 ppb	4.69	1	93.3	70 - 130	
23 Na	45	1	293.70 ppb	6.02	250	117.5	70 - 130	
24 Mg	45	1	301.80 ppb	5.97	250	120.7	70 - 130	
27 Al	45	1	117.80 ppb	5.98	100	117.8	70 - 130	
39 K	45	1	274.00 ppb	6.24	250	109.6	70 - 130	
44 Ca	45	1	278.00 ppb	4.99	250	111.2	70 - 130	
51 V	45	1	1.06 ppb	7.06	1	105.8	70 - 130	
52 Cr	45	1	1.09 ppb	6.54	1	108.7	70 - 130	
55 Mn	45	1	3.18 ppb	6.70	3	106.1	70 - 130	
56 Fe	45	1	185.60 ppb	6.61	150	123.7	70 - 130	
59 Co	45	1	1.07 ppb	6.88	1	107.4	70 - 130	
60 Ni	45	1	1.69 ppb	2.39	2	112.9	70 - 130	
65 Cu	45	1	5.75 ppb	5.44	5	115.0	70 - 130	
66 Zn	45	1	10.85 ppb	5.59	10	108.5	70 - 130	
75 As	115	1	0.96 ppb	2.99	1	96.3	70 - 130	
78 Se	115	1	5.12 ppb	9.50	5	102.3	70 - 130	
83 Kr	115	2	----- ppb	-----	1	#VALUE!	##### - #####	
95 Mo	115	2	1.05 ppb	2.32	1	105.4	70 - 130	
107 Ag	115	2	0.48 ppb	2.40	1	96.6	70 - 130	
111 Cd	115	2	0.99 ppb	2.96	1	99.0	70 - 130	
121 Sb	115	2	0.96 ppb	1.86	1	95.9	70 - 130	
137 Ba	159	2	2.57 ppb	0.88	3	102.8	70 - 130	
205 Tl	165	2	0.91 ppb	2.04	1	91.2	70 - 130	
206 (Pb)	165	2	1.45 ppb	1.88	2	96.5	70 - 130	
207 (Pb)	165	2	1.49 ppb	1.95	2	99.0	70 - 130	
208 Pb	165	2	1.40 ppb	1.00	2	93.3	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	72912	4.81	91101	80.0	80 - 120	
45 Sc	2	1348983	0.32	1409018	95.7	80 - 120	
115 In	1	485074	4.76	550573	88.1	80 - 120	
115 In	2	1596031	0.92	1674463	95.3	80 - 120	
159 Tb	1	1183599	2.51	1206971	98.1	80 - 120	
159 Tb	2	2067524	0.34	2214207	93.4	80 - 120	
165 Ho	1	1148201	3.78	1184067	97.0	80 - 120	
165 Ho	2	2017992	1.33	2128403	94.8	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\S112113A.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\S112113A.b\050_CCB.D\050_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112113A.b\050_CCB.D\050_CCB.D#
 Date Acquired: Nov 21 2013 04:58 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 21 2013 12:49 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	-0.062 ppb	1.23	133	0.50	
23 Na	45	1	8.751 ppb	36.78	95344	250.00	
24 Mg	45	1	1.731 ppb	24.25	1439	250.00	
27 Al	45	1	0.903 ppb	22.20	664	100.00	
39 K	45	1	-0.132 ppb	1902.70	43217	250.00	
44 Ca	45	1	2.318 ppb	89.22	346	250.00	
51 V	45	1	-0.037 ppb	14.39	91	1.00	
52 Cr	45	1	-0.045 ppb	8.50	458	1.00	
55 Mn	45	1	-0.016 ppb	163.99	493	3.00	
56 Fe	45	1	1.885 ppb	19.17	21210	150.00	
59 Co	45	1	-0.059 ppb	5.37	186	1.00	
60 Ni	45	1	-0.028 ppb	32.13	100	1.50	
65 Cu	45	1	0.180 ppb	5.24	680	5.00	
66 Zn	45	1	0.068 ppb	105.94	1717	10.00	
75 As	115	1	-0.055 ppb	6.10	18	1.00	
78 Se	115	1	0.394 ppb	26.28	118	5.00	
83 Kr	115	2	----- ppb	-----	498	1.00	
95 Mo	115	2	-0.036 ppb	13.57	123	1.00	
107 Ag	115	2	-0.041 ppb	2.54	189	0.50	
111 Cd	115	2	-0.038 ppb	0.69	67	1.00	
121 Sb	115	2	-0.038 ppb	6.42	209	1.00	
137 Ba	159	2	-0.057 ppb	13.91	154	2.50	
205 Tl	165	2	-0.068 ppb	1.80	699	1.00	
206 (Pb)	165	2	-0.062 ppb	8.55	379	1.50	
207 (Pb)	165	2	-0.061 ppb	8.30	353	1.50	
208 Pb	165	2	-0.061 ppb	4.65	1587	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	77869	1.29	91101	85.5	80 - 120	
45 Sc	2	1368545	0.86	1409018	97.1	80 - 120	
115 In	1	511722	2.32	550573	92.9	80 - 120	
115 In	2	1589099	1.51	1674463	94.9	80 - 120	
159 Tb	1	1249516	0.17	1206971	103.5	80 - 120	
159 Tb	2	2089747	1.09	2214207	94.4	80 - 120	
165 Ho	1	1233288	2.03	1184067	104.2	80 - 120	
165 Ho	2	2044150	0.87	2128403	96.0	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\S112113A.b\002CALB.D\002CALB.D#

0 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

=== Graph Detail ===

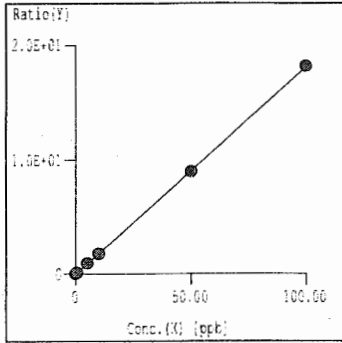
Step Mass Element
(2) 9 Be

ISTD

45

Unit

ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 1.812E-001 \cdot X + 1.516E-002$
 $X = 5.519E+000 \cdot Y - 8.369E-002$
 $DL = 1.935E-02 \text{ ppb}$
 $BEC = 8.369E-02 \text{ ppb}$

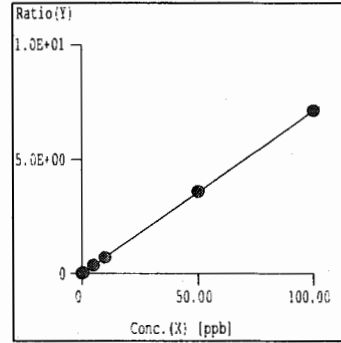
Step Mass Element
(2) 111 Cd

ISTD

115

Unit

ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 7.150E-002 \cdot X + 4.378E-003$
 $X = 1.399E+001 \cdot Y - 6.123E-002$
 $DL = 3.853E-02 \text{ ppb}$
 $BEC = 6.123E-02 \text{ ppb}$

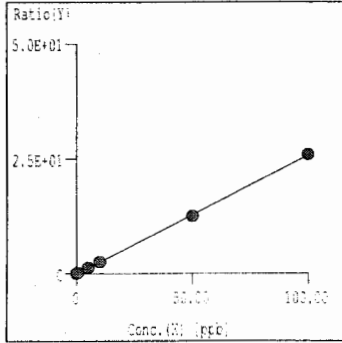
Step Mass Element
(2) 121 Sb

ISTD

115

Unit

ppb



Curve Fit: $Y=aX+[blank]$
 $r = 0.9999$
 $Y = 2.574E-001 \cdot X + 1.492E-002$
 $X = 3.884E+000 \cdot Y - 5.794E-002$
 $DL = 1.030E-02 \text{ ppb}$
 $BEC = 5.794E-02 \text{ ppb}$

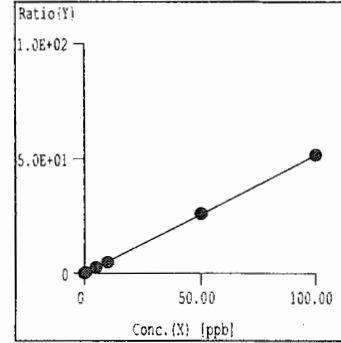
Step Mass Element
(2) 205 Tl

ISTD

165

Unit

ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 5.162E-001 \cdot X + 4.867E-002$
 $X = 1.937E+000 \cdot Y - 9.428E-002$
 $DL = 1.706E-02 \text{ ppb}$
 $BEC = 9.428E-02 \text{ ppb}$

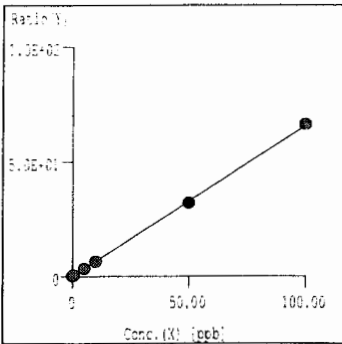
Step Mass Element
(2) 208 Pb

ISTD

165

Unit

ppb



Curve Fit: $Y=aX+[blank]$
 $r = 0.9999$
 $Y = 6.556E-001 \cdot X + 7.136E-002$
 $X = 1.525E+000 \cdot Y - 1.089E-001$
 $DL = 1.422E-02 \text{ ppb}$
 $BEC = 1.089E-01 \text{ ppb}$

C:\ICPCHEM\1\DATA\S112213A.b\001CALB.D\001CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\001CALB.D\001CALB.D#
 Date Acquired: Nov 22 2013 11:13 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 22 2013 11:17 am
 Sample Type: CalBlk

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	330	4.63
23	Na	45	1	137203	1.47
24	Mg	45	1	296	1.92
27	Al	45	1	228	3.97
39	K	45	1	59830	2.25
44	Ca	45	1	306	4.13
51	V	45	1	159	7.02
52	Cr	45	1	891	9.86
55	Mn	45	1	410	2.33
56	Fe	45	1	15283	18.78
59	Co	45	1	534	6.78
60	Ni	45	1	176	2.90
65	Cu	45	1	1101	3.35
66	Zn	45	1	1560	2.76
75	As	115	1	36	11.98
78	Se	115	1	122	9.19
83	Kr	115	2	373	1.55
95	Mo	115	2	222	7.40
107	Ag	115	2	839	7.11
111	Cd	115	2	104	8.70
121	Sb	115	2	449	4.94
137	Ba	159	2	232	8.41
205	Tl	165	2	1817	5.40
206	(Pb)	165	2	870	5.36
207	(Pb)	165	2	671	6.46
208	Pb	165	2	3277	4.00

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
45	Sc	1	92962	3.06
45	Sc	2	1443908	2.01
115	In	1	510622	4.46
115	In	2	1630034	2.39
159	Tb	1	1101949	2.18
159	Tb	2	2193082	1.30
165	Ho	1	1081118	2.87
165	Ho	2	2114801	1.94

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

15726
(27441)

Co, As, Se reported.

U.S. Kalin
11.22.13

C:\ICPCHEM\1\DATA\S112213A.b\002CALB.D\002CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\002CALB.D\002CALB.D#
 Date Acquired: Nov 22 2013 11:19 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 22 2013 11:17 am
 Sample Type: CalBlk

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	708	44.68
23	Na	45	1	147161	0.97
24	Mg	45	1	477	21.70
27	Al	45	1	333	21.33
39	K	45	1	65899	1.22
44	Ca	45	1	376	8.14
51	V	45	1	249	37.99
52	Cr	45	1	988	9.45
55	Mn	45	1	629	19.56
56	Fe	45	1	17572	12.37
59	Co	45	1	677	29.26
60	Ni	45	1	267	15.02
65	Cu	45	1	1189	4.63
66	Zn	45	1	1673	0.83
75	As	115	1	55	38.39
78	Se	115	1	156	4.50
83	Kr	115	2	378	9.52
95	Mo	115	2	473	54.99
107	Ag	115	2	1106	35.67
111	Cd	115	2	242	50.20
121	Sb	115	2	923	43.28
137	Ba	159	2	492	49.55
205	Tl	165	2	3063	37.70
206	(Pb)	165	2	1289	28.55
207	(Pb)	165	2	1139	29.56
208	Pb	165	2	5393	31.33

Internal Standard Elements

Element	Tune	CPS Mean	RSD(%)	
45	Sc	1	96065	0.59
45	Sc	2	1395143	1.06
115	In	1	550732	1.32
115	In	2	1559125	1.63
159	Tb	1	1168008	2.17
159	Tb	2	2104948	0.79
165	Ho	1	1118583	2.22
165	Ho	2	2036228	0.71

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\S112213A.b\003CALI.D\003CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\003CALI.D\003CALI.D#
 Date Acquired: Nov 22 2013 11:25 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 22 2013 11:23 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	3378	3.32
23	Na	45	1	199308	0.11
24	Mg	45	1	30364	0.55
27	Al	45	1	5309	2.15
39	K	45	1	94157	0.32
44	Ca	45	1	1795	1.90
51	V	45	1	2366	3.47
52	Cr	45	1	3615	1.61
55	Mn	45	1	2417	2.98
56	Fe	45	1	264362	0.72
59	Co	45	1	4616	1.39
60	Ni	45	1	1273	4.30
65	Cu	45	1	2587	4.82
66	Zn	45	1	2401	1.26
75	As	115	1	384	4.83
78	Se	115	1	312	3.23
83	Kr	115	2	364	7.34
95	Mo	115	2	2673	2.55
107	Aq	115	2	7663	1.33
111	Cd	115	2	1540	2.39
121	Sb	115	2	5243	3.81
137	Ba	159	2	2277	1.16
205	Tl	165	2	13767	1.38
206	(Pb)	165	2	4838	0.28
207	(Pb)	165	2	4148	3.11
208	Pb	165	2	19373	1.06

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	93393	4.45	96065	80 - 120	
45	Sc	2	1405300	1.06	1395143	100.7	
115	In	1	542470	5.35	550732	98.5	
115	In	2	1576515	1.09	1559125	101.1	
159	Tb	1	1135187	2.69	1168008	97.2	
159	Tb	2	2113439	1.64	2104948	100.4	
165	Ho	1	1115425	5.09	1118583	99.7	
165	Ho	2	2065485	0.68	2036228	101.4	

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\S112213A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112213A.b\004CALI.D\004CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\004CALI.D\004CALI.D#
 Date Acquired: Nov 22 2013 11:31 am
 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 22 2013 11:29 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	31393	2.90
23	Na	45	1	708271	1.07
24	Mg	45	1	310777	1.36
27	Al	45	1	51048	1.16
39	K	45	1	348153	0.99
44	Ca	45	1	15881	0.80
51	V	45	1	23218	2.75
52	Cr	45	1	28328	1.05
55	Mn	45	1	20879	2.14
56	Fe	45	1	2565344	1.80
59	Co	45	1	43574	1.55
60	Ni	45	1	11273	1.00
65	Cu	45	1	15900	2.48
66	Zn	45	1	7632	1.14
75	As	115	1	3520	1.90
78	Se	115	1	2002	2.84
83	Kr	115	2	361	1.92
95	Mo	115	2	26132	5.11
107	Ag	115	2	69753	3.54
111	Cd	115	2	14786	1.52
121	Sb	115	2	51192	2.35
137	Ba	159	2	20358	0.63
205	Tl	165	2	125900	0.60
206	(Pb)	165	2	42021	0.29
207	(Pb)	165	2	35999	0.72
208	Pb	165	2	167600	0.60

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	98277	1.34	96065	102.3	80 - 120
45	Sc	2	1453418	0.63	1395143	104.2	80 - 120
115	In	1	566964	1.05	550732	102.9	80 - 120
115	In	2	1627516	3.24	1559125	104.4	80 - 120
159	Tb	1	1200015	2.61	1168008	102.7	80 - 120
159	Tb	2	2169270	0.57	2104948	103.1	80 - 120
165	Ho	1	1154757	2.47	1118583	103.2	80 - 120
165	Ho	2	2091796	1.70	2036228	102.7	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\S112213A.b\002CALB.D\002CALB.D#

0 : Element Failures 0
 0 : ISTD Failures 0

C:\ICPCHEM\1\DATA\S112213A.B\005CALI.D\005CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.B\005CALI.D\005CALI.D#
 Date Acquired: Nov 22 2013 11:36 am
 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 22 2013 11:35 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
9 Be	45	2	64924	1.15
23 Na	45	1	1318775	0.43
24 Mg	45	1	654799	1.16
27 Al	45	1	104334	0.98
39 K	45	1	678952	1.68
44 Ca	45	1	32193	0.24
51 V	45	1	48768	0.53
52 Cr	45	1	58135	0.43
55 Mn	45	1	43718	0.97
56 Fe	45	1	5349624	1.78
59 Co	45	1	90146	0.53
60 Ni	45	1	23664	0.17
65 Cu	45	1	32276	0.91
66 Zn	45	1	14371	1.94
75 As	115	1	7438	0.50
78 Se	115	1	4012	1.23
83 Kr	115	2	368	15.55
95 Mo	115	2	53519	0.94
107 Ag	115	2	147632	4.37
111 Cd	115	2	30194	0.40
121 Sb	115	2	107062	1.92
137 Ba	159	2	40906	1.30
205 Tl	165	2	254527	0.90
206 (Pb)	165	2	87357	0.57
207 (Pb)	165	2	73136	2.21
208 Pb	165	2	344258	1.71

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	107169	0.25	96065	111.6	80 - 120	
45 Sc	2	1482786	1.58	1395143	106.3	80 - 120	
115 In	1	606286	0.49	550732	110.1	80 - 120	
115 In	2	1665779	1.38	1559125	106.8	80 - 120	
159 Tb	1	1284354	0.56	1168008	110.0	80 - 120	
159 Tb	2	2197713	0.85	2104948	104.4	80 - 120	
165 Ho	1	1234902	0.36	1118583	110.4	80 - 120	
165 Ho	2	2115859	1.50	2036228	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\S112213A.B\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112213A.b\006CALI.D\006CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\006CALI.D\006CALI.D#
 Date Acquired: Nov 22 2013 11:42 am
 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 22 2013 11:40 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	335430	0.95
23	Na	45	1	5774093	1.04
24	Mg	45	1	3194702	1.34
27	Al	45	1	518566	1.81
39	K	45	1	3066320	0.77
44	Ca	45	1	159926	0.67
51	V	45	1	244284	0.64
52	Cr	45	1	288853	1.67
55	Mn	45	1	217726	0.45
56	Fe	45	1	26188620	1.03
59	Co	45	1	451843	0.84
60	Ni	45	1	116607	0.56
65	Cu	45	1	150371	0.79
66	Zn	45	1	61254	0.63
75	As	115	1	37347	0.60
78	Se	115	1	19563	1.79
83	Kr	115	2	392	14.53
95	Mo	115	2	269133	0.61
107	Aq	115	2	722029	1.05
111	Cd	115	2	153572	0.54
121	Sb	115	2	535472	1.25
137	Ba	159	2	205159	1.03
205	Tl	165	2	1390230	1.02
206	(Pb)	165	2	439600	0.02
207	(Pb)	165	2	366883	0.94
208	Pb	165	2	1747670	0.53

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	104215	0.69	96065	108.5	80 - 120
45	Sc	2	1488015	1.00	1395143	106.7	80 - 120
115	In	1	596958	1.93	550732	108.4	80 - 120
115	In	2	1653195	0.81	1559125	106.0	80 - 120
159	Tb	1	1231836	1.09	1168008	105.5	80 - 120
159	Tb	2	2192818	1.13	2104948	104.2	80 - 120
165	Ho	1	1204362	0.31	1118583	107.7	80 - 120
165	Ho	2	2133775	0.68	2036228	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\S112213A.b\002CALB.D\002CALB.D#

0 : Element Failures 0
 0 : ISTD Failures 0

C:\ICPCHEM\1\DATA\S112213A.b\007CALI.D\007CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\007CALI.D\007CALI.D#
 Date Acquired: Nov 22 2013 11:48 am
 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 22 2013 11:46 am
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	660795	2.04
23	Na	45	1	11304100	0.68
24	Mg	45	1	6223167	0.66
27	Al	45	1	1033601	0.27
39	K	45	1	5868424	1.98
44	Ca	45	1	315283	2.22
51	V	45	1	480730	1.40
52	Cr	45	1	563083	1.10
55	Mn	45	1	428334	1.34
56	Fe	45	1	51220328	1.75
59	Co	45	1	910331	0.84
60	Ni	45	1	223613	1.63
65	Cu	45	1	293412	0.53
66	Zn	45	1	117470	0.94
75	As	115	1	73400	0.78
78	Se	115	1	37890	0.91
83	Kr	115	2	366	3.20
95	Mo	115	2	527610	0.70
107	Ag	115	2	1445034	0.90
111	Cd	115	2	297839	0.49
121	Sb	115	2	1073562	0.86
137	Ba	159	2	404162	2.03
205	Tl	165	2	2656467	1.96
206	(Pb)	165	2	864724	1.74
207	(Pb)	165	2	722563	0.70
208	Pb	165	2	3481782	0.67

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	102831	0.95	96065	107.0	80 - 120
45	Sc	2	1420516	1.45	1395143	101.8	80 - 120
115	In	1	586432	1.11	550732	106.5	80 - 120
115	In	2	1594423	0.44	1559125	102.3	80 - 120
159	Tb	1	1259289	0.37	1168008	107.8	80 - 120
159	Tb	2	2126891	2.64	2104948	101.0	80 - 120
165	Ho	1	1231883	0.18	1118583	110.1	80 - 120
165	Ho	2	2074459	0.42	2036228	101.9	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\S112213A.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112213A.b\008_ICV.D\008_ICV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\008_ICV.D\008_ICV.D#
 Date Acquired: Nov 22 2013 11:54 am
 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 22 2013 11:52 am
 Sample Type: 6-ICV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	48.32 ppb	1.70	323083	50	96.6	90 - 110	
23 Na	45	1	4889.00 ppb	0.98	5626741	5000	97.8	90 - 110	
24 Mg	45	1	4910.00 ppb	1.87	3078198	5000	98.2	90 - 110	
27 Al	45	1	4792.00 ppb	2.46	1654283	5000	95.8	90 - 110	
39 K	45	1	4973.00 ppb	0.95	2978575	5000	99.5	90 - 110	
44 Ca	45	1	4744.00 ppb	1.32	150416	5000	94.9	90 - 110	
51 V	45	1	49.59 ppb	0.92	239676	50	99.2	90 - 110	
52 Cr	45	1	48.57 ppb	0.74	275811	50	97.1	90 - 110	
55 Mn	45	1	48.47 ppb	1.39	208881	50	96.9	90 - 110	
56 Fe	45	1	4999.00 ppb	2.32	25775390	5000	100.0	90 - 110	
59 Co	45	1	46.16 ppb	1.22	420523	50	92.3	90 - 110	
60 Ni	45	1	48.58 ppb	0.42	109889	50	97.2	90 - 110	
65 Cu	45	1	49.28 ppb	0.91	146291	50	98.6	90 - 110	
66 Zn	45	1	49.78 ppb	0.86	59829	50	99.6	90 - 110	
75 As	115	1	49.22 ppb	1.27	36218	50	98.4	90 - 110	
78 Se	115	1	50.58 ppb	3.07	4036	50	101.2	90 - 110	
83 Kr	115	2	----- ppb	-----	388	50	#VALUE!	##### - #####	
95 Mo	115	2	48.04 ppb	1.41	258945	50	96.1	90 - 110	
107 Ag	115	2	9.60 ppb	2.16	142032	10	96.0	90 - 110	
111 Cd	115	2	48.39 ppb	0.75	147545	50	96.8	90 - 110	
121 Sb	115	2	45.31 ppb	1.27	494763	50	90.6	90 - 110	
137 Ba	159	2	48.45 ppb	0.42	197825	50	96.9	90 - 110	
205 Tl	165	2	48.22 ppb	0.68	1279656	50	96.4	90 - 110	
206 (Pb)	165	2	49.00 ppb	1.13	421054	50	98.0	90 - 110	
207 (Pb)	165	2	50.97 ppb	2.45	365838	50	101.9	90 - 110	
208 Pb	165	2	49.56 ppb	2.19	1710153	50	99.1	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	103296	0.95	96065	107.5	80 - 120	
45 Sc	2	1445731	1.00	1395143	103.6	80 - 120	
115 In	1	587724	1.45	550732	106.7	80 - 120	
115 In	2	1633490	0.95	1559125	104.8	80 - 120	
159 Tb	1	1254997	1.13	1168008	107.4	80 - 120	
159 Tb	2	2152937	0.46	2104948	102.3	80 - 120	
165 Ho	1	1225960	0.73	1118583	109.6	80 - 120	
165 Ho	2	2064458	1.68	2036228	101.4	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\S112213A.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\S112213A.b\009_CCV.D\009_CCV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\009_CCV.D\009_CCV.D#
 Date Acquired: Nov 22 2013 12:00 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 22 2013 11:52 am
 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	0.44 ppb	1.74	1	88.6	70 - 130	
23 Na	45	1	247.20 ppb	1.09	250	98.9	70 - 130	
24 Mg	45	1	266.30 ppb	0.54	250	106.5	70 - 130	
27 Al	45	1	106.40 ppb	1.03	100	106.4	70 - 130	
39 K	45	1	257.50 ppb	1.47	250	103.0	70 - 130	
44 Ca	45	1	262.30 ppb	1.53	250	104.9	70 - 130	
51 V	45	1	0.99 ppb	1.04	1	98.8	70 - 130	
52 Cr	45	1	1.00 ppb	1.11	1	100.1	70 - 130	
55 Mn	45	1	2.95 ppb	1.58	3	98.3	70 - 130	
56 Fe	45	1	168.70 ppb	2.67	150	112.5	70 - 130	
59 Co	45	1	0.95 ppb	2.28	1	95.4	70 - 130	
60 Ni	45	1	1.46 ppb	1.49	2	97.5	70 - 130	
65 Cu	45	1	4.84 ppb	1.68	5	96.7	70 - 130	
66 Zn	45	1	10.15 ppb	1.04	10	101.5	70 - 130	
75 As	115	1	1.04 ppb	0.31	1	104.0	70 - 130	
78 Se	115	1	4.61 ppb	5.54	5	92.1	70 - 130	
83 Kr	115	2	----- ppb -----		1	#VALUE!	##### - #####	
95 Mo	115	2	0.97 ppb	0.92	1	97.2	70 - 130	
107 Ag	115	2	0.48 ppb	1.85	1	95.8	70 - 130	
111 Cd	115	2	0.94 ppb	1.62	1	93.8	70 - 130	
121 Sb	115	2	1.04 ppb	1.84	1	103.9	70 - 130	
137 Ba	159	2	2.42 ppb	1.85	3	96.7	70 - 130	
205 Tl	165	2	0.91 ppb	1.91	1	91.0	70 - 130	
206 (Pb)	165	2	1.41 ppb	5.49	2	94.0	70 - 130	
207 (Pb)	165	2	1.47 ppb	1.93	2	97.8	70 - 130	
208 Pb	165	2	1.38 ppb	2.02	2	91.9	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	106876	0.98	96065	111.3	80 - 120	
45 Sc	2	1489670	2.59	1395143	106.8	80 - 120	
115 In	1	607214	1.12	550732	110.3	80 - 120	
115 In	2	1689695	1.23	1559125	108.4	80 - 120	
159 Tb	1	1294543	2.47	1168008	110.8	80 - 120	
159 Tb	2	2196717	2.14	2104948	104.4	80 - 120	
165 Ho	1	1265161	2.39	1118583	113.1	80 - 120	
165 Ho	2	2124657	1.34	2036228	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\S112213A.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\S112213A.b\010_ICB.D\010_ICB.D#

Initial Calibration Blank (ICB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\010_ICB.D\010_ICB.D#
 Date Acquired: Nov 22 2013 12:06 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 22 2013 11:52 am
 Sample Type: 6-ICB
 Total Dil Factor: 1.00

QC Summary:

Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.07	ppb	3.85	263	0.50	
23 Na	45	1	-2.27	ppb	188.97	154407	250.00	
24 Mg	45	1	2.62	ppb	20.27	2137	250.00	
27 Al	45	1	1.21	ppb	28.69	768	100.00	
39 K	45	1	1.20	ppb	319.08	70963	250.00	
44 Ca	45	1	0.50	ppb	77.24	417	250.00	
51 V	45	1	-0.01	ppb	163.49	229	1.00	
52 Cr	45	1	-0.01	ppb	149.41	996	1.00	
55 Mn	45	1	-0.04	ppb	40.71	501	3.00	
56 Fe	45	1	2.31	ppb	24.18	30503	150.00	
59 Co	45	1	-0.03	ppb	16.63	445	1.00	
60 Ni	45	1	-0.04	ppb	4.31	199	1.50	
65 Cu	45	1	-0.31	ppb	2.25	797	5.00	
66 Zn	45	1	-0.06	ppb	56.82	1710	10.00	
75 As	115	1	-0.03	ppb	16.20	38	1.00	
78 Se	115	1	-0.64	ppb	12.88	162	5.00	
83 Kr	115	2	-----	ppb	-----	360	1.00	
95 Mo	115	2	-0.05	ppb	8.03	232	1.00	
107 Ag	115	2	-0.03	ppb	20.10	742	0.50	
111 Cd	115	2	-0.05	ppb	2.15	111	1.00	
121 Sb	115	2	-0.01	ppb	23.83	845	1.00	
137 Ba	159	2	-0.07	ppb	3.78	226	2.50	
205 Tl	165	2	-0.07	ppb	5.26	1403	1.00	
206 (Pb)	165	2	-0.08	ppb	0.88	634	1.50	
207 (Pb)	165	2	-0.08	ppb	8.63	580	1.50	
208 Pb	165	2	-0.09	ppb	3.07	2615	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	102479	2.33	96065	106.7	80 - 120	
45 Sc	2	1527970	3.81	1395143	109.5	80 - 120	
115 In	1	587065	3.71	550732	106.6	80 - 120	
115 In	2	1701366	2.46	1559125	109.1	80 - 120	
159 Tb	1	1243494	0.20	1168008	106.5	80 - 120	
159 Tb	2	2237753	2.11	2104948	106.3	80 - 120	
165 Ho	1	1215386	1.45	1118583	108.7	80 - 120	
165 Ho	2	2144471	1.50	2036228	105.3	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\S112213A.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\S112213A.b\011ICSA.D\011ICSA.D#

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\011ICSA.D\011ICSA.D#
 Date Acquired: Nov 22 2013 12:12 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 22 2013 11:52 am
 Sample Type: 6-ICSA
 Dilution Factor: 1.00

QC Summary:

Analytes: Fail
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	45	2	-0.07 ppb	3.99	0.50	
23 Na	45	1	123300.00 ppb	2.38	250.00	
24 Mg	45	1	48220.00 ppb	2.54	250.00	
27 Al	45	1	47410.00 ppb	2.43	100.00	
39 K	45	1	49060.00 ppb	2.36	250.00	
44 Ca	45	1	144500.00 ppb	1.27	250.00	
51 V	45	1	0.03 ppb	58.19	1.00	
52 Cr	45	1	0.75 ppb	5.06	1.00	
55 Mn	45	1	4.41 ppb	2.19	3.00	**
56 Fe	45	1	117900.00 ppb	1.78	150.00	
59 Co	45	1	1.71 ppb	2.88	1.00	**
60 Ni	45	1	3.16 ppb	2.80	1.50	**
65 Cu	45	1	1.20 ppb	3.23	5.00	
66 Zn	45	1	1.38 ppb	7.38	10.00	
75 As	115	1	0.21 ppb	11.09	1.00	
78 Se	115	1	-0.55 ppb	16.35	5.00	
83 Kr	115	2	----- ppb	-----	1.00	
95 Mo	115	2	987.50 ppb	2.08	1.00	
107 Ag	115	2	0.00 ppb	101.87	0.50	
111 Cd	115	2	1.11 ppb	2.93	1.00	**
121 Sb	115	2	0.21 ppb	2.44	1.00	
137 Ba	159	2	0.88 ppb	1.22	2.50	
205 Tl	165	2	-0.06 ppb	4.31	1.00	
206 (Pb)	165	2	0.13 ppb	13.46	1.50	
207 (Pb)	165	2	0.12 ppb	10.53	1.50	
208 Pb	165	2	0.12 ppb	2.70	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	95537	2.32	96065	99.4	70 - 150	
45 Sc	2	1349652	1.15	1395143	96.7	70 - 150	
115 In	1	529449	2.37	550732	96.1	70 - 150	
115 In	2	1455254	1.56	1559125	93.3	70 - 150	
159 Tb	1	1202322	1.71	1168008	102.9	70 - 150	
159 Tb	2	2017346	1.09	2104948	95.8	70 - 150	
165 Ho	1	1163893	0.57	1118583	104.1	70 - 150	
165 Ho	2	1954708	1.11	2036228	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\S112213A.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\S112213A.b\012ICSB.D\012ICSB.D#

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\012ICSB.D\012ICSB.D#
 Date Acquired: Nov 22 2013 12:17 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 22 2013 11:52 am
 Sample Type: 6-ICSAB
 Dilution Factor: 1.00

QC Summary:

Analytes: Pass

ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
9 Be	45	2		-0.06	10.35	---		-	
23 Na	45	1		123500.00	1.63	---		-	
24 Mg	45	1		48400.00	1.76	---		-	
27 Al	45	1		47330.00	1.61	---		-	
39 K	45	1		49030.00	1.02	---		-	
44 Ca	45	1		144700.00	0.51	---		-	
51 V	45	1		206.80	1.78	200	103.4	80 - 120	
52 Cr	45	1		197.50	1.89	200	98.8	80 - 120	
55 Mn	45	1		207.10	1.47	200	103.6	80 - 120	
56 Fe	45	1		118200.00	0.86	---		-	
59 Co	45	1		186.90	1.28	200	93.5	80 - 120	
60 Ni	45	1		183.00	0.40	200	91.5	80 - 120	
65 Cu	45	1		184.60	1.43	---		-	
66 Zn	45	1		91.59	0.84	100	91.6	80 - 120	
75 As	115	1		103.50	1.05	100	103.5	80 - 120	
78 Se	115	1		97.79	0.74	100	97.8	80 - 120	
83 Kr	115	2		-----		---		-	
95 Mo	115	2		983.20	1.83	---		-	
107 Ag	115	2		45.23	0.89	50	90.5	80 - 120	
111 Cd	115	2		95.91	1.02	100	95.9	80 - 120	
121 Sb	115	2		0.20	10.31	---		-	
137 Ba	159	2		0.93	1.55	---		-	
205 Tl	165	2		-0.06	4.06	---		-	
206 (Pb)	165	2		0.13	15.96	---		-	
207 (Pb)	165	2		0.11	10.00	---		-	
208 Pb	165	2		0.12	5.18	---		-	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	90191	1.20	96065	93.9	70 - 150	
45 Sc	2	1255975	0.43	1395143	90.0	70 - 150	
115 In	1	492088	1.36	550732	89.4	70 - 150	
115 In	2	1364628	0.82	1559125	87.5	70 - 150	
159 Tb	1	1136608	1.41	1168008	97.3	70 - 150	
159 Tb	2	1885720	1.63	2104948	89.6	70 - 150	
165 Ho	1	1107693	0.61	1118583	99.0	70 - 150	
165 Ho	2	1825772	0.64	2036228	89.7	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\S112213A.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\S112213A.b\013_CCV.D\013_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\013_CCV.D\013_CCV.D#
 Date Acquired: Nov 22 2013 12:23 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 22 2013 11:52 am
 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	49.87 ppb	2.08	311561	50	99.7	90 - 110	
23 Na	45	1	5546.00 ppb	9.14	5579508	5000	110.9	90 - 110	Fail
24 Mg	45	1	5517.00 ppb	8.16	3035232	5000	110.3	90 - 110	Fail
27 Al	45	1	1669.00 ppb	9.06	505475	1500	111.3	90 - 110	Fail
39 K	45	1	5599.00 ppb	10.18	2931695	5000	112.0	90 - 110	Fail
44 Ca	45	1	5568.00 ppb	9.01	154790	5000	111.4	90 - 110	Fail
51 V	45	1	54.65 ppb	9.31	231591	50	109.3	90 - 110	
52 Cr	45	1	54.22 ppb	8.92	269951	50	108.4	90 - 110	
55 Mn	45	1	55.26 ppb	9.01	208811	50	110.5	90 - 110	Fail
56 Fe	45	1	5666.00 ppb	10.06	25607660	5000	113.3	90 - 110	Fail
59 Co	45	1	53.59 ppb	9.05	428107	50	107.2	90 - 110	
60 Ni	45	1	54.81 ppb	8.95	108714	50	109.6	90 - 110	
65 Cu	45	1	55.44 ppb	8.85	144182	50	110.9	90 - 110	Fail
66 Zn	45	1	55.47 ppb	9.25	58291	50	110.9	90 - 110	Fail
75 As	115	1	54.27 ppb	11.41	35352	50	108.5	90 - 110	
78 Se	115	1	274.50 ppb	12.99	18549	250	109.8	90 - 110	
83 Kr	115	2	----- ppb -----	-----	390	50	#VALUE! #####	-----	
95 Mo	115	2	50.95 ppb	1.99	255235	50	101.9	90 - 110	
107 Ag	115	2	48.97 ppb	1.39	669193	50	97.9	90 - 110	
111 Cd	115	2	50.83 ppb	1.53	144035	50	101.7	90 - 110	
121 Sb	115	2	49.05 ppb	1.63	497779	50	98.1	90 - 110	
137 Ba	159	2	50.59 ppb	1.59	194661	50	101.2	90 - 110	
205 Tl	165	2	52.30 ppb	2.28	1306161	50	104.6	90 - 110	
206 (Pb)	165	2	51.02 ppb	1.63	412746	50	102.0	90 - 110	
207 (Pb)	165	2	51.15 ppb	2.12	345663	50	102.3	90 - 110	
208 Pb	165	2	50.65 ppb	3.14	1645118	50	101.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	91100	9.24	96065	94.8	80 - 120	
45 Sc	2	1351142	2.53	1395143	96.8	80 - 120	
115 In	1	524827	11.39	550732	95.3	80 - 120	
115 In	2	1518564	2.23	1559125	97.4	80 - 120	
159 Tb	1	1153230	8.04	1168008	98.7	80 - 120	
159 Tb	2	2029566	2.42	2104948	96.4	80 - 120	
165 Ho	1	1119000	9.25	1118583	100.0	80 - 120	
165 Ho	2	1943801	1.90	2036228	95.5	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\S112213A.b\002CALB.D\002CALB.D#

9 : Element Failures 0 : Max. Number of Failures Allowed
 0 : ISTD Failures 0 : Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S112213A.b\014_CCV.D\014_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\014_CCV.D\014_CCV.D#
 Date Acquired: Nov 22 2013 12:29 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 22 2013 11:52 am
 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	0.44 ppb	4.12	1	87.1	70 - 130	
23 Na	45	1	292.00 ppb	3.17	250	116.8	70 - 130	
24 Mg	45	1	280.90 ppb	2.15	250	112.4	70 - 130	
27 Al	45	1	119.20 ppb	1.60	100	119.2	70 - 130	
39 K	45	1	274.20 ppb	2.09	250	109.7	70 - 130	
44 Ca	45	1	296.90 ppb	3.43	250	118.8	70 - 130	
51 V	45	1	1.02 ppb	3.40	1	101.6	70 - 130	
52 Cr	45	1	1.04 ppb	1.90	1	103.8	70 - 130	
55 Mn	45	1	2.96 ppb	0.85	3	98.8	70 - 130	
56 Fe	45	1	206.20 ppb	2.80	150	137.5	70 - 130	FAIL
59 Co	45	1	0.97 ppb	2.20	1	96.7	70 - 130	
60 Ni	45	1	1.50 ppb	3.61	2	99.8	70 - 130	
65 Cu	45	1	4.70 ppb	2.78	5	94.0	70 - 130	
66 Zn	45	1	10.15 ppb	1.23	10	101.5	70 - 130	
75 As	115	1	1.02 ppb	3.18	1	101.7	70 - 130	
78 Se	115	1	4.58 ppb	3.24	5	91.6	70 - 130	
83 Kr	115	2	----- ppb	-----	1	#VALUE! #####	70 - 130	
95 Mo	115	2	1.23 ppb	2.14	1	122.6	70 - 130	
107 Ag	115	2	0.47 ppb	5.15	1	93.8	70 - 130	
111 Cd	115	2	0.95 ppb	0.74	1	95.3	70 - 130	
121 Sb	115	2	0.92 ppb	0.87	1	92.1	70 - 130	
137 Ba	159	2	2.36 ppb	2.23	3	94.4	70 - 130	
205 Tl	165	2	0.90 ppb	1.44	1	90.0	70 - 130	
206 (Pb)	165	2	1.38 ppb	4.21	2	92.1	70 - 130	
207 (Pb)	165	2	1.46 ppb	2.39	2	97.5	70 - 130	
208 Pb	165	2	1.38 ppb	2.44	2	91.8	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range(%)	Flag
45 Sc	1	99299	0.86	96065	103.4	80 - 120	
45 Sc	2	1391549	0.96	1395143	99.7	80 - 120	
115 In	1	574717	0.95	550732	104.4	80 - 120	
115 In	2	1556977	1.64	1559125	99.9	80 - 120	
159 Tb	1	1226491	2.02	1168008	105.0	80 - 120	
159 Tb	2	2053509	1.12	2104948	97.6	80 - 120	
165 Ho	1	1188695	0.88	1118583	106.3	80 - 120	
165 Ho	2	1996819	1.96	2036228	98.1	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\S112213A.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\S112213A.b\015_CCB.D\015_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\015_CCB.D\015_CCB.D#
 Date Acquired: Nov 22 2013 12:35 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 22 2013 11:52 am
 Sample Type: 6-CCB
 Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.078	ppb	2.28	209	0.50	
23 Na	45	1	37.510	ppb	28.66	194207	250.00	
24 Mg	45	1	16.360	ppb	32.02	10453	250.00	
27 Al	45	1	14.270	ppb	32.61	5130	100.00	
39 K	45	1	16.500	ppb	29.02	78093	250.00	
44 Ca	45	1	40.190	ppb	37.35	1626	250.00	
51 V	45	1	0.018	ppb	124.31	343	1.00	
52 Cr	45	1	0.013	ppb	164.35	1099	1.00	
55 Mn	45	1	0.011	ppb	367.77	701	3.00	
56 Fe	45	1	37.490	ppb	33.77	205897	150.00	
59 Co	45	1	-0.004	ppb	652.58	671	1.00	
60 Ni	45	1	-0.012	ppb	146.23	253	1.50	
65 Cu	45	1	-0.302	ppb	1.35	788	5.00	
66 Zn	45	1	0.209	ppb	31.72	1981	10.00	
75 As	115	1	-0.017	ppb	134.01	45	1.00	
78 Se	115	1	-0.649	ppb	11.78	158	5.00	
83 Kr	115	2	-----	ppb	-----	347	1.00	
95 Mo	115	2	0.137	ppb	15.31	1195	1.00	
107 Ag	115	2	-0.038	ppb	11.71	590	0.50	
111 Cd	115	2	-0.046	ppb	6.15	110	1.00	
121 Sb	115	2	-0.054	ppb	5.79	370	1.00	
137 Ba	159	2	-0.078	ppb	4.00	180	2.50	
205 Tl	165	2	-0.079	ppb	2.38	992	1.00	
206 (Pb)	165	2	-0.090	ppb	4.98	521	1.50	
207 (Pb)	165	2	-0.093	ppb	10.45	476	1.50	
208 Pb	165	2	-0.093	ppb	2.76	2217	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range(%)	Flag
45 Sc	1	100185	0.50	96065	104.3	80 - 120	
45 Sc	2	1410251	1.68	1395143	101.1	80 - 120	
115 In	1	574525	0.56	550732	104.3	80 - 120	
115 In	2	1576800	1.25	1559125	101.1	80 - 120	
159 Tb	1	1261223	1.39	1168008	108.0	80 - 120	
159 Tb	2	2076003	0.52	2104948	98.6	80 - 120	
165 Ho	1	1199417	0.59	1118583	107.2	80 - 120	
165 Ho	2	2016777	0.77	2036228	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\S112213A.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\S112213A.b\016SMPL.D\016SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\016SMPL.D\016SMPL.D#
 Date Acquired: Nov 22 2013 12:41 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: MB 27441
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	-0.07	-0.07	ppb	27.91	227	2700	
23 Na	45		1	88.17	88.17	ppb	0.43	223157	225000	
24 Mg	45		1	10.13	10.13	ppb	1.08	5962	225000	
27 Al	45		1	15.12	15.12	ppb	1.59	4844	67500	
39 K	45		1	40.08	40.08	ppb	4.65	81925	225000	
44 Ca	45		1	46.84	46.84	ppb	0.72	1638	225000	
51 V	45		1	0.15	0.15	ppb	2.24	860	2700	
52 Cr	45		1	0.09	0.09	ppb	9.80	1352	2700	
55 Mn	45		1	0.33	0.33	ppb	11.66	1832	2700	
56 Fe	45		1	21.77	21.77	ppb	4.86	113852	202500	
59 Co	45		1	-0.04	-0.04	ppb	4.36	347	2700	
60 Ni	45		1	0.00	0.00	ppb	526.62	254	2700	
65 Cu	45		1	2.68	2.68	ppb	2.50	8302	2700	
66 Zn	45		1	3.45	3.45	ppb	3.09	5055	2700	
75 As	115		1	0.08	0.08	ppb	15.82	105	2250	
78 Se	115		1	-0.47	-0.47	ppb	28.53	154	2700	
83 Kr	115		2	----	-----	ppb	-----	382	2700	
95 Mo	115		2	0.15	0.15	ppb	112.65	1115	2700	
107 Ag	115		2	0.04	0.04	ppb	56.93	1510	900	
111 Cd	115		2	-0.04	-0.04	ppb	76.89	124	2700	
121 Sb	115		2	0.02	0.02	ppb	160.33	992	1125	
137 Ba	159		2	-0.01	-0.01	ppb	90.96	400	1350	
205 Tl	165		2	-0.06	-0.06	ppb	35.90	1256	900	
206 (Pb)	165		2	-0.02	-0.02	ppb	107.58	987	2700	
207 (Pb)	165		2	-0.03	-0.03	ppb	123.91	857	2700	
208 Pb	165		2	-0.03	-0.03	ppb	80.65	3908	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89742	0.73	96065	93.4	70 - 150	
45 Sc	2	1262299	1.13	1395143	90.5	70 - 150	
115 In	1	518256	1.45	550732	94.1	70 - 150	
115 In	2	1417097	0.11	1559125	90.9	70 - 150	
159 Tb	1	1149016	2.05	1168008	98.4	70 - 150	
159 Tb	2	1904694	1.69	2104948	90.5	70 - 150	
165 Ho	1	1120534	1.43	1118583	100.2	70 - 150	
165 Ho	2	1835669	1.58	2036228	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\S112213A.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\S112213A.b\017SMPL.D\017SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\017SMPL.D\017SMPL.D#
 Date Acquired: Nov 22 2013 12:47 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW 27441
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	253.80	253.80	ppb	0.91	1434139	2700	
23 Na	45	1	25,550.00	25550.00	ppb	0.76	24896700	225000	
24 Mg	45	1	25,380.00	25380.00	ppb	0.63	13787620	225000	
27 Al	45	1	2,557.00	2557.00	ppb	0.92	765285	67500	
39 K	45	1	24,970.00	24970.00	ppb	0.92	12712530	225000	
44 Ca	45	1	24,590.00	24590.00	ppb	2.37	674345	225000	
51 V	45	1	254.50	254.50	ppb	0.97	1064675	2700	
52 Cr	45	1	253.40	253.40	ppb	0.74	1242960	2700	
55 Mn	45	1	253.40	253.40	ppb	1.34	943899	2700	
56 Fe	45	1	2,543.00	2543.00	ppb	1.25	11372120	202500	
59 Co	45	1	241.20	241.20	ppb	1.83	1901680	2700	
60 Ni	45	1	245.20	245.20	ppb	1.01	479638	2700	
65 Cu	45	1	248.90	248.90	ppb	1.12	634348	2700	
66 Zn	45	1	246.00	246.00	ppb	0.96	250087	2700	
75 As	115	1	245.90	245.90	ppb	0.41	158506	2250	
78 Se	115	1	244.30	244.30	ppb	0.97	16395	2700	
83 Kr	115	2	----	-----	ppb	-----	380	2700	
95 Mo	115	2	256.60	256.60	ppb	1.46	1111406	2700	
107 Ag	115	2	48.72	48.72	ppb	3.39	576392	900	
111 Cd	115	2	252.90	252.90	ppb	1.05	619660	2700	
121 Sb	115	2	261.00	261.00	ppb	1.71	2289605	1125	
137 Ba	159	2	244.50	244.50	ppb	1.34	860732	1350	
205 Tl	165	2	233.90	233.90	ppb	1.79	5365190	900	
206 (Pb)	165	2	242.90	242.90	ppb	1.22	1803572	2700	
207 (Pb)	165	2	265.80	265.80	ppb	2.22	1648596	2700	
208 Pb	165	2	243.90	243.90	ppb	1.86	7271783	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89513	0.55	96065	93.2	70 - 150	
45 Sc	2	1223951	0.89	1395143	87.7	70 - 150	
115 In	1	515491	0.62	550732	93.6	70 - 150	
115 In	2	1314520	1.06	1559125	84.3	70 - 150	
159 Tb	1	1177250	1.21	1168008	100.8	70 - 150	
159 Tb	2	1860022	0.96	2104948	88.4	70 - 150	
165 Ho	1	1144495	1.55	1118583	102.3	70 - 150	
165 Ho	2	1788223	1.96	2036228	87.8	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\S112213A.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\S112213A.b\018SMPL.D\018SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\018SMPL.D\018SMPL.D#
 Date Acquired: Nov 22 2013 12:52 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW MR 27441
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		247.30	247.30	ppb	0.61	1417028	2700	
23 Na	45	1		25,110.00	25110.00	ppb	0.98	23898390	225000	
24 Mg	45	1		24,950.00	24950.00	ppb	1.39	13236140	225000	
27 Al	45	1		2,474.00	2474.00	ppb	1.99	723071	67500	
39 K	45	1		23,980.00	23980.00	ppb	1.72	11926460	225000	
44 Ca	45	1		23,800.00	23800.00	ppb	1.11	637264	225000	
51 V	45	1		246.50	246.50	ppb	1.46	1007024	2700	
52 Cr	45	1		246.10	246.10	ppb	2.41	1178562	2700	
55 Mn	45	1		244.00	244.00	ppb	1.20	887616	2700	
56 Fe	45	1		2,487.00	2487.00	ppb	1.98	10858370	202500	
59 Co	45	1		236.60	236.60	ppb	2.53	1820608	2700	
60 Ni	45	1		240.30	240.30	ppb	1.03	458991	2700	
65 Cu	45	1		245.50	245.50	ppb	1.37	611019	2700	
66 Zn	45	1		243.70	243.70	ppb	1.29	241960	2700	
75 As	115	1		239.60	239.60	ppb	1.61	151675	2250	
78 Se	115	1		236.30	236.30	ppb	1.00	15578	2700	
83 Kr	115	2		----	-----	ppb	-----	396	2700	
95 Mo	115	2		238.10	238.10	ppb	1.33	1068969	2700	
107 Ag	115	2		45.62	45.62	ppb	0.79	559413	900	
111 Cd	115	2		236.70	236.70	ppb	0.29	601126	2700	
121 Sb	115	2		243.50	243.50	ppb	0.80	2213834	1125	
137 Ba	159	2		236.50	236.50	ppb	1.25	835520	1350	
205 Tl	165	2		223.10	223.10	ppb	1.86	5201911	900	
206 (Pb)	165	2		230.00	230.00	ppb	2.39	1736112	2700	
207 (Pb)	165	2		250.90	250.90	ppb	2.23	1581932	2700	
208 Pb	165	2		230.50	230.50	ppb	2.37	6985946	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	87431	3.50	96065	91.0	70 - 150	
45 Sc	2	1241227	0.73	1395143	89.0	70 - 150	
115 In	1	506320	3.58	550732	91.9	70 - 150	
115 In	2	1362353	1.29	1559125	87.4	70 - 150	
159 Tb	1	1149253	3.51	1168008	98.4	70 - 150	
159 Tb	2	1866498	0.95	2104948	88.7	70 - 150	
165 Ho	1	1119704	2.19	1118583	100.1	70 - 150	
165 Ho	2	1817628	1.32	2036228	89.3	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\S112213A.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\S112213A.b\019SMPL.D\019SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\019SMPL.D\019SMPL.D#
 Date Acquired: Nov 22 2013 12:58 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-001
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.27	0.27	ppb	5.52	2326	2700	
23 Na	45	1	19,600.00	19600.00	ppb	1.68	20187060	225000	
24 Mg	45	1	2,320.00	2320.00	ppb	0.16	1330284	225000	
27 Al	45	1	51.96	51.96	ppb	4.02	16728	67500	
39 K	45	1	844.10	844.10	ppb	1.00	516131	225000	
44 Ca	45	1	7,109.00	7109.00	ppb	1.88	205938	225000	
51 V	45	1	0.55	0.55	ppb	5.63	2668	2700	
52 Cr	45	1	0.54	0.54	ppb	1.67	3751	2700	
55 Mn	45	1	88.05	88.05	ppb	0.90	346523	2700	
56 Fe	45	1	1,660.00	1660.00	ppb	1.02	7840665	202500	
59 Co	45	1	0.82	0.82	ppb	0.52	7451	2700	
60 Ni	45	1	0.98	0.98	ppb	1.13	2278	2700	
65 Cu	45	1	1.66	1.66	ppb	3.10	6017	2700	
66 Zn	45	1	8.31	8.31	ppb	1.54	10501	2700	
75 As	115	1	0.69	0.69	ppb	4.85	540	2250	
78 Se	115	1	-0.45	-0.45	ppb	39.37	169	2700	
83 Kr	115	2	----	-----	ppb	-----	373	2700	
95 Mo	115	2	0.32	0.32	ppb	4.09	1989	2700	
107 Ag	115	2	0.02	0.02	ppb	38.84	1263	900	
111 Cd	115	2	0.27	0.27	ppb	5.64	972	2700	
121 Sb	115	2	0.32	0.32	ppb	4.02	4021	1125	
137 Ba	159	2	14.22	14.22	ppb	1.26	54594	1350	
205 Tl	165	2	0.42	0.42	ppb	1.11	13306	900	
206 (Pb)	165	2	0.52	0.52	ppb	0.35	5455	2700	
207 (Pb)	165	2	0.54	0.54	ppb	2.32	4693	2700	
208 Pb	165	2	0.52	0.52	ppb	1.21	21991	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	94460	1.56	96065	98.3	70 - 150	
45 Sc	2	1311323	1.81	1395143	94.0	70 - 150	
115 In	1	562501	1.26	550732	102.1	70 - 150	
115 In	2	1479585	1.94	1559125	94.9	70 - 150	
159 Tb	1	1271017	0.96	1168008	108.8	70 - 150	
159 Tb	2	2012819	0.79	2104948	95.6	70 - 150	
165 Ho	1	1243291	1.72	1118583	111.1	70 - 150	
165 Ho	2	1940865	0.65	2036228	95.3	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\S112213A.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\S112213A.b\020SMPL.D\020SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\020SMPL.D\020SMPL.D#
 Date Acquired: Nov 22 2013 01:04 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-001 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.06	0.06	ppb	16.52	1018	2700	
23 Na	45	1	20,280.00	20280.00	ppb	0.21	20595890	225000	
24 Mg	45	1	2,398.00	2398.00	ppb	1.23	1355804	225000	
27 Al	45	1	69.84	69.84	ppb	2.69	22060	67500	
39 K	45	1	853.60	853.60	ppb	0.56	513863	225000	
44 Ca	45	1	7,232.00	7232.00	ppb	1.29	206561	225000	
51 V	45	1	0.36	0.36	ppb	6.89	1793	2700	
52 Cr	45	1	0.28	0.28	ppb	3.17	2400	2700	
55 Mn	45	1	90.88	90.88	ppb	0.98	352614	2700	
56 Fe	45	1	1,757.00	1757.00	ppb	0.63	8181826	202500	
59 Co	45	1	0.62	0.62	ppb	2.08	5744	2700	
60 Ni	45	1	0.70	0.70	ppb	2.96	1682	2700	
65 Cu	45	1	1.29	1.29	ppb	5.33	4940	2700	
66 Zn	45	1	7.14	7.14	ppb	0.75	9125	2700	
75 As	115	1	0.50	0.50	ppb	1.52	405	2250	
78 Se	115	1	-0.70	-0.70	ppb	3.92	150	2700	
83 Kr	115	2	----	-----	ppb	-----	361	2700	
95 Mo	115	2	0.09	0.09	ppb	4.72	866	2700	
107 Ag	115	2	-0.03	-0.03	ppb	2.67	667	900	
111 Cd	115	2	0.07	0.07	ppb	9.60	417	2700	
121 Sb	115	2	0.09	0.09	ppb	0.46	1747	1125	
137 Ba	159	2	14.63	14.63	ppb	1.64	55450	1350	
205 Tl	165	2	0.08	0.08	ppb	6.07	4920	900	
206 (Pb)	165	2	0.26	0.26	ppb	4.53	3327	2700	
207 (Pb)	165	2	0.26	0.26	ppb	6.76	2856	2700	
208 Pb	165	2	0.25	0.25	ppb	5.45	13402	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93126	0.77	96065	96.9	70 - 150	
45 Sc	2	1317602	0.64	1395143	94.4	70 - 150	
115 In	1	559400	1.32	550732	101.6	70 - 150	
115 In	2	1478458	1.32	1559125	94.8	70 - 150	
159 Tb	1	1241049	1.14	1168008	106.3	70 - 150	
159 Tb	2	1986292	0.86	2104948	94.4	70 - 150	
165 Ho	1	1230774	0.66	1118583	110.0	70 - 150	
165 Ho	2	1950242	1.41	2036228	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\S112213A.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\S112213A.b\021SMPL.D\021SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\021SMPL.D\021SMPL.D#
 Date Acquired: Nov 22 2013 01:10 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-001 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.03	-0.03	ppb	34.15	522	2700	
23 Na	45	1	3,859.00	3859.00	ppb	10.09	4430305	225000	
24 Mg	45	1	457.20	457.20	ppb	10.07	284243	225000	
27 Al	45	1	13.25	13.25	ppb	14.12	4873	67500	
39 K	45	1	196.00	196.00	ppb	16.47	183619	225000	
44 Ca	45	1	1,404.00	1404.00	ppb	11.70	44322	225000	
51 V	45	1	0.10	0.10	ppb	20.92	733	2700	
52 Cr	45	1	0.09	0.09	ppb	24.50	1551	2700	
55 Mn	45	1	17.10	17.10	ppb	10.35	73381	2700	
56 Fe	45	1	343.90	343.90	ppb	9.99	1773415	202500	
59 Co	45	1	0.13	0.13	ppb	20.60	1910	2700	
60 Ni	45	1	0.21	0.21	ppb	23.11	763	2700	
65 Cu	45	1	0.21	0.21	ppb	36.97	2284	2700	
66 Zn	45	1	2.87	2.87	ppb	10.62	5104	2700	
75 As	115	1	0.12	0.12	ppb	35.14	153	2250	
78 Se	115	1	-0.76	-0.76	ppb	40.10	158	2700	
83 Kr	115	2	----	-----	ppb	-----	366	2700	
95 Mo	115	2	0.03	0.03	ppb	87.16	653	2700	
107 Ag	115	2	-0.05	-0.05	ppb	3.83	410	900	
111 Cd	115	2	0.00	0.00	ppb	1928.00	257	2700	
121 Sb	115	2	0.01	0.01	ppb	101.23	1063	1125	
137 Ba	159	2	2.75	2.75	ppb	2.38	11750	1350	
205 Tl	165	2	0.00	0.00	ppb	137.89	3043	900	
206 (Pb)	165	2	0.05	0.05	ppb	3.38	1805	2700	
207 (Pb)	165	2	0.05	0.05	ppb	13.84	1561	2700	
208 Pb	165	2	0.05	0.05	ppb	12.57	7213	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	102841	8.31	96065	107.1	70 - 150	
45 Sc	2	1454265	1.12	1395143	104.2	70 - 150	
115 In	1	614668	8.82	550732	111.6	70 - 150	
115 In	2	1643955	2.44	1559125	105.4	70 - 150	
159 Tb	1	1365375	7.41	1168008	116.9	70 - 150	
159 Tb	2	2162249	1.29	2104948	102.7	70 - 150	
165 Ho	1	1339690	7.27	1118583	119.8	70 - 150	
165 Ho	2	2098829	0.76	2036228	103.1	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\S112213A.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\S112213A.b\022SMPL.D\022SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\022SMPL.D\022SMPL.D#
 Date Acquired: Nov 22 2013 01:16 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-003 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		245.10	245.10	ppb	0.55	1450144	2700	
23 Na	45	1		44,040.00	44040.00	ppb	1.73	45355840	225000	
24 Mg	45	1		26,470.00	26470.00	ppb	1.57	15232250	225000	
27 Al	45	1		2,431.00	2431.00	ppb	2.12	770549	67500	
39 K	45	1		24,420.00	24420.00	ppb	1.53	13174320	225000	
44 Ca	45	1		31,210.00	31210.00	ppb	2.10	906451	225000	
51 V	45	1		242.20	242.20	ppb	1.19	1073304	2700	
52 Cr	45	1		239.40	239.40	ppb	1.94	1244250	2700	
55 Mn	45	1		328.40	328.40	ppb	1.52	1295682	2700	
56 Fe	45	1		4,024.00	4024.00	ppb	0.76	19052980	202500	
59 Co	45	1		230.50	230.50	ppb	0.89	1925360	2700	
60 Ni	45	1		234.50	234.50	ppb	1.40	485908	2700	
65 Cu	45	1		237.90	237.90	ppb	0.35	642209	2700	
66 Zn	45	1		238.60	238.60	ppb	0.88	256975	2700	
75 As	115	1		241.60	241.60	ppb	0.89	162630	2250	
78 Se	115	1		232.70	232.70	ppb	1.83	16313	2700	
83 Kr	115	2		----	-----	ppb	-----	384	2700	
95 Mo	115	2		240.90	240.90	ppb	1.70	1104211	2700	
107 Ag	115	2		46.21	46.21	ppb	1.59	578722	900	
111 Cd	115	2		239.70	239.70	ppb	0.88	621815	2700	
121 Sb	115	2		248.20	248.20	ppb	0.91	2304336	1125	
137 Ba	159	2		254.30	254.30	ppb	1.19	915506	1350	
205 Tl	165	2		223.20	223.20	ppb	1.17	5262330	900	
206 (Pb)	165	2		232.90	232.90	ppb	1.73	1776768	2700	
207 (Pb)	165	2		255.40	255.40	ppb	1.62	1627930	2700	
208 Pb	165	2		235.20	235.20	ppb	1.40	7204676	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	94820	0.97	96065	98.7	70 - 150	
45 Sc	2	1281508	1.03	1395143	91.9	70 - 150	
115 In	1	538194	0.09	550732	97.7	70 - 150	
115 In	2	1391480	1.68	1559125	89.2	70 - 150	
159 Tb	1	1274435	3.50	1168008	109.1	70 - 150	
159 Tb	2	1902304	1.97	2104948	90.4	70 - 150	
165 Ho	1	1253283	1.65	1118583	112.0	70 - 150	
165 Ho	2	1837548	1.69	2036228	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\S112213A.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\S112213A.b\023SMPL.D\023SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\023SMPL.D\023SMPL.D#
 Date Acquired: Nov 22 2013 01:21 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-033 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		246.20	246.20	ppb	0.86	1455378	2700	
23 Na	45	1		45,260.00	45260.00	ppb	1.05	43800488	225000	
24 Mg	45	1		27,980.00	27980.00	ppb	0.86	15128890	225000	
27 Al	45	1		2,588.00	2588.00	ppb	1.22	770807	67500	
39 K	45	1		25,470.00	25470.00	ppb	1.48	12907380	225000	
44 Ca	45	1		32,690.00	32690.00	ppb	1.85	892198	225000	
51 V	45	1		257.10	257.10	ppb	2.57	1070861	2700	
52 Cr	45	1		254.90	254.90	ppb	2.43	1244671	2700	
55 Mn	45	1		344.80	344.80	ppb	2.08	1278261	2700	
56 Fe	45	1		4,125.00	4125.00	ppb	2.10	18350010	202500	
59 Co	45	1		245.90	245.90	ppb	1.41	1929921	2700	
60 Ni	45	1		249.30	249.30	ppb	1.66	485337	2700	
65 Cu	45	1		253.20	253.20	ppb	1.72	642149	2700	
66 Zn	45	1		254.80	254.80	ppb	1.26	257710	2700	
75 As	115	1		251.00	251.00	ppb	0.36	161827	2250	
78 Se	115	1		244.60	244.60	ppb	1.38	16419	2700	
83 Kr	115	2		----	-----	ppb	-----	402	2700	
95 Mo	115	2		251.00	251.00	ppb	0.87	1133863	2700	
107 Ag	115	2		48.20	48.20	ppb	0.73	594684	900	
111 Cd	115	2		247.80	247.80	ppb	1.26	633171	2700	
121 Sb	115	2		258.70	258.70	ppb	1.79	2366335	1125	
137 Ba	159	2		264.00	264.00	ppb	1.97	928306	1350	
205 Tl	165	2		234.40	234.40	ppb	0.41	5402566	900	
206 (Pb)	165	2		246.10	246.10	ppb	0.61	1835934	2700	
207 (Pb)	165	2		267.30	267.30	ppb	0.88	1666214	2700	
208 Pb	165	2		246.80	246.80	ppb	1.35	7395231	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range (%)	Flag
45 Sc	1	89101	0.80	96065	92.8	70 - 150	
45 Sc	2	1280566	1.61	1395143	91.8	70 - 150	
115 In	1	515662	0.80	550732	93.6	70 - 150	
115 In	2	1370836	1.74	1559125	87.9	70 - 150	
159 Tb	1	1204227	1.89	1168008	103.1	70 - 150	
159 Tb	2	1858199	2.23	2104948	88.3	70 - 150	
165 Ho	1	1172694	1.06	1118583	104.8	70 - 150	
165 Ho	2	1796728	0.76	2036228	88.2	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112213A.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\S112213A.b\024SMPL.D\024SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\024SMPL.D\024SMPL.D#
 Date Acquired: Nov 22 2013 01:27 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-001 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		53.34	53.34	ppb	3.61	304137	2700	
23 Na	45	1		25,160.00	25160.00	ppb	10.95	24100810	225000	
24 Mg	45	1		7,483.00	7483.00	ppb	10.98	3995710	225000	
27 Al	45	1		1,577.00	1577.00	ppb	11.27	463843	67500	
39 K	45	1		5,990.00	5990.00	ppb	10.69	3043886	225000	
44 Ca	45	1		12,170.00	12170.00	ppb	10.10	328405	225000	
51 V	45	1		52.23	52.23	ppb	11.90	214806	2700	
52 Cr	45	1		52.25	52.25	ppb	10.68	252671	2700	
55 Mn	45	1		141.10	141.10	ppb	11.04	516675	2700	
56 Fe	45	1		6,842.00	6842.00	ppb	10.48	30052020	202500	
59 Co	45	1		51.92	51.92	ppb	11.56	402602	2700	
60 Ni	45	1		53.43	53.43	ppb	11.44	102868	2700	
65 Cu	45	1		55.85	55.85	ppb	10.93	141005	2700	
66 Zn	45	1		59.77	59.77	ppb	12.32	60831	2700	
75 As	115	1		50.92	50.92	ppb	9.64	33431	2250	
78 Se	115	1		242.60	242.60	ppb	11.51	16540	2700	
83 Kr	115	2		----	-----	ppb	-----	406	2700	
95 Mo	115	2		51.94	51.94	ppb	3.63	231659	2700	
107 Ag	115	2		49.93	49.93	ppb	4.25	607433	900	
111 Cd	115	2		51.66	51.66	ppb	3.11	130341	2700	
121 Sb	115	2		51.58	51.58	ppb	3.75	466016	1125	
137 Ba	159	2		66.23	66.23	ppb	2.02	230875	1350	
205 Tl	165	2		52.51	52.51	ppb	1.02	1196393	900	
206 (Pb)	165	2		51.29	51.29	ppb	1.84	378515	2700	
207 (Pb)	165	2		51.00	51.00	ppb	3.92	314359	2700	
208 Pb	165	2		49.90	49.90	ppb	3.33	1478495	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	88609	9.90	96065	92.2	70 - 150	
45 Sc	2	1233869	2.78	1395143	88.4	70 - 150	
115 In	1	527434	9.20	550732	95.8	70 - 150	
115 In	2	1352622	2.62	1559125	86.8	70 - 150	
159 Tb	1	1192342	9.33	1168008	102.1	70 - 150	
159 Tb	2	1839589	1.21	2104948	87.4	70 - 150	
165 Ho	1	1183098	9.05	1118583	105.8	70 - 150	
165 Ho	2	1773232	2.06	2036228	87.1	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\S112213A.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\S112213A.b\025SMPL.D\025SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\025SMPL.D\025SMPL.D#
 Date Acquired: Nov 22 2013 01:33 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.36	0.36	ppb	2.12	3219	2700	
23 Na	45	1	132.70	132.70	ppb	30.48	328531	225000	
24 Mg	45	1	74.56	74.56	ppb	19.51	50465	225000	
27 Al	45	1	29.36	29.36	ppb	18.08	11212	67500	
39 K	45	1	62.35	62.35	ppb	42.97	114938	225000	
44 Ca	45	1	128.50	128.50	ppb	18.23	4779	225000	
51 V	45	1	0.45	0.45	ppb	22.63	2596	2700	
52 Cr	45	1	0.41	0.41	ppb	27.23	3631	2700	
55 Mn	45	1	0.66	0.66	ppb	22.08	3761	2700	
56 Fe	45	1	72.96	72.96	ppb	18.07	422221	202500	
59 Co	45	1	0.40	0.40	ppb	24.06	4665	2700	
60 Ni	45	1	0.43	0.43	ppb	26.48	1353	2700	
65 Cu	45	1	0.16	0.16	ppb	60.87	2321	2700	
66 Zn	45	1	0.65	0.65	ppb	22.83	2755	2700	
75 As	115	1	0.43	0.43	ppb	18.99	416	2250	
78 Se	115	1	0.03	0.03	ppb	922.89	237	2700	
83 Kr	115	2	----	-----	ppb	-----	372	2700	
95 Mo	115	2	0.81	0.81	ppb	0.89	4848	2700	
107 Ag	115	2	0.11	0.11	ppb	4.72	2848	900	
111 Cd	115	2	0.41	0.41	ppb	3.17	1519	2700	
121 Sb	115	2	0.40	0.40	ppb	1.63	5391	1125	
137 Ba	159	2	0.39	0.39	ppb	7.41	2126	1350	
205 Tl	165	2	0.52	0.52	ppb	1.77	17347	900	
206 (Pb)	165	2	0.40	0.40	ppb	4.31	4835	2700	
207 (Pb)	165	2	0.44	0.44	ppb	7.27	4420	2700	
208 Pb	165	2	0.40	0.40	ppb	2.72	19630	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	111890	11.61	96065	116.5	70 - 150	
45 Sc	2	1479657	1.23	1395143	106.1	70 - 150	
115 In	1	660494	10.98	550732	119.9	70 - 150	
115 In	2	1638103	1.60	1559125	105.1	70 - 150	
159 Tb	1	1456095	11.18	1168008	124.7	70 - 150	
159 Tb	2	2189197	0.20	2104948	104.0	70 - 150	
165 Ho	1	1429932	10.96	1118583	127.8	70 - 150	
165 Ho	2	2119093	0.35	2036228	104.1	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\S112213A.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\S112213A.b\026_CCV.D\026_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\026_CCV.D\026_CCV.D#
 Date Acquired: Nov 22 2013 01:39 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 22 2013 11:52 am
 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	49.63 ppb	0.72	345775	50	99.3	90 - 110	
23 Na	45	1	5459.00 ppb	5.30	6095576	5000	109.2	90 - 110	
24 Mg	45	1	5456.00 ppb	5.39	3327974	5000	109.1	90 - 110	
27 Al	45	1	1654.00 ppb	5.21	555807	1500	110.3	90 - 110	Fail
39 K	45	1	5414.00 ppb	4.27	3150283	5000	108.3	90 - 110	
44 Ca	45	1	5412.00 ppb	5.00	166942	5000	108.2	90 - 110	
51 V	45	1	53.80 ppb	4.89	253021	50	107.6	90 - 110	
52 Cr	45	1	54.07 ppb	5.14	298643	50	108.1	90 - 110	
55 Mn	45	1	54.48 ppb	5.13	228401	50	109.0	90 - 110	
56 Fe	45	1	5518.00 ppb	5.16	27685820	5000	110.4	90 - 110	Fail
59 Co	45	1	53.10 ppb	4.50	470715	50	106.2	90 - 110	
60 Ni	45	1	54.61 ppb	4.51	120201	50	109.2	90 - 110	
65 Cu	45	1	54.75 ppb	6.26	157894	50	109.5	90 - 110	
66 Zn	45	1	54.68 ppb	4.83	63787	50	109.4	90 - 110	
75 As	115	1	53.67 ppb	6.02	38820	50	107.3	90 - 110	
78 Se	115	1	269.80 ppb	5.83	20274	250	107.9	90 - 110	
83 Kr	115	2	----- ppb	-----	369	50	#VALUE!	#### - ####	
95 Mo	115	2	50.48 ppb	0.59	274928	50	101.0	90 - 110	
107 Ag	115	2	49.12 ppb	0.80	729838	50	98.2	90 - 110	
111 Cd	115	2	49.97 ppb	2.27	153954	50	99.9	90 - 110	
121 Sb	115	2	48.98 ppb	0.27	540358	50	98.0	90 - 110	
137 Ba	159	2	49.78 ppb	0.81	208217	50	99.6	90 - 110	
205 Tl	165	2	50.39 ppb	1.64	1381094	50	100.8	90 - 110	
206 (Pb)	165	2	49.06 ppb	1.03	435495	50	98.1	90 - 110	
207 (Pb)	165	2	48.65 ppb	1.89	360836	50	97.3	90 - 110	
208 Pb	165	2	48.87 ppb	2.94	1742214	50	97.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	100703	5.46	96065	104.8	80 - 120	
45 Sc	2	1506518	1.45	1395143	108.0	80 - 120	
115 In	1	579276	6.52	550732	105.2	80 - 120	
115 In	2	1650676	1.44	1559125	105.9	80 - 120	
159 Tb	1	1308309	5.73	1168008	112.0	80 - 120	
159 Tb	2	2205866	1.11	2104948	104.8	80 - 120	
165 Ho	1	1278800	4.48	1118583	114.3	80 - 120	
165 Ho	2	2132342	0.86	2036228	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\S112213A.b\002CALB.D\002CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

C:\ICPCHEM\1\DATA\S112213A.b\027_CCV.D\027_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\027_CCV.D\027_CCV.D#
 Date Acquired: Nov 22 2013 01:45 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 22 2013 11:52 am
 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	0.43 ppb	10.12	1	86.1	70 - 130	
23 Na	45	1	275.10 ppb	2.22	250	110.0	70 - 130	
24 Mg	45	1	277.70 ppb	1.92	250	111.1	70 - 130	
27 Al	45	1	107.40 ppb	0.94	100	107.4	70 - 130	
39 K	45	1	266.40 ppb	2.41	250	106.6	70 - 130	
44 Ca	45	1	266.50 ppb	3.01	250	106.6	70 - 130	
51 V	45	1	1.07 ppb	1.23	1	107.2	70 - 130	
52 Cr	45	1	1.08 ppb	2.20	1	107.5	70 - 130	
55 Mn	45	1	3.05 ppb	1.01	3	101.7	70 - 130	
56 Fe	45	1	174.40 ppb	1.16	150	116.3	70 - 130	
59 Co	45	1	1.02 ppb	1.86	1	101.5	70 - 130	
60 Ni	45	1	1.53 ppb	0.97	2	101.7	70 - 130	
65 Cu	45	1	5.02 ppb	3.31	5	100.4	70 - 130	
66 Zn	45	1	10.57 ppb	1.13	10	105.7	70 - 130	
75 As	115	1	1.02 ppb	4.62	1	102.2	70 - 130	
78 Se	115	1	4.73 ppb	7.58	5	94.6	70 - 130	
83 Kr	115	2	----- ppb	-----	1	#VALUE! #####	70 - 130	
95 Mo	115	2	0.92 ppb	8.79	1	92.2	70 - 130	
107 Ag	115	2	0.40 ppb	7.90	1	79.8	70 - 130	
111 Cd	115	2	0.87 ppb	5.81	1	86.6	70 - 130	
121 Sb	115	2	0.85 ppb	4.44	1	84.6	70 - 130	
137 Ba	159	2	2.19 ppb	6.88	3	87.7	70 - 130	
205 Tl	165	2	0.89 ppb	9.37	1	89.1	70 - 130	
206 (Pb)	165	2	1.28 ppb	8.02	2	85.0	70 - 130	
207 (Pb)	165	2	1.33 ppb	6.99	2	88.9	70 - 130	
208 Pb	165	2	1.26 ppb	6.26	2	83.9	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97164	0.67	96065	101.1	80 - 120	
45 Sc	2	1564829	5.98	1395143	112.2	80 - 120	
115 In	1	570370	1.42	550732	103.6	80 - 120	
115 In	2	1757536	5.76	1559125	112.7	80 - 120	
159 Tb	1	1270863	2.86	1168008	108.8	80 - 120	
159 Tb	2	2268024	5.79	2104948	107.7	80 - 120	
165 Ho	1	1251020	3.39	1118583	111.8	80 - 120	
165 Ho	2	2221606	6.27	2036228	109.1	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\S112213A.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\S112213A.b\028_CCB.D\028_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\028_CCB.D\028_CCB.D#
 Date Acquired: Nov 22 2013 01:51 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 22 2013 11:52 am
 Sample Type: 6-CCB
 Total Dil Factor: 1.00

QC Summary:

Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.049	ppb	37.37	403	0.50	
23 Na	45	1	10.340	ppb	29.83	167642	250.00	
24 Mg	45	1	6.884	ppb	3.34	4767	250.00	
27 Al	45	1	1.744	ppb	16.29	947	100.00	
39 K	45	1	9.155	ppb	30.93	75248	250.00	
44 Ca	45	1	7.698	ppb	18.78	639	250.00	
51 V	45	1	0.009	ppb	50.46	306	1.00	
52 Cr	45	1	0.005	ppb	146.66	1075	1.00	
55 Mn	45	1	-0.003	ppb	164.82	654	3.00	
56 Fe	45	1	4.784	ppb	4.76	42984	150.00	
59 Co	45	1	-0.018	ppb	16.25	560	1.00	
60 Ni	45	1	-0.008	ppb	48.64	265	1.50	
65 Cu	45	1	-0.351	ppb	3.20	661	5.00	
66 Zn	45	1	-0.026	ppb	151.94	1746	10.00	
75 As	115	1	-0.009	ppb	38.56	53	1.00	
78 Se	115	1	-0.483	ppb	9.27	177	5.00	
83 Kr	115	2	-----	ppb	-----	398	1.00	
95 Mo	115	2	-0.003	ppb	124.44	479	1.00	
107 Ag	115	2	-0.051	ppb	7.92	402	0.50	
111 Cd	115	2	-0.022	ppb	13.01	184	1.00	
121 Sb	115	2	-0.012	ppb	7.97	832	1.00	
137 Ba	159	2	-0.039	ppb	43.84	338	2.50	
205 Tl	165	2	-0.005	ppb	197.08	2904	1.00	
206 (Pb)	165	2	-0.043	ppb	48.29	917	1.50	
207 (Pb)	165	2	-0.050	ppb	29.77	783	1.50	
208 Pb	165	2	-0.049	ppb	29.99	3712	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	101983	1.15	96065	106.2	80 - 120	
45 Sc	2	1438690	2.82	1395143	103.1	80 - 120	
115 In	1	597679	1.76	550732	108.5	80 - 120	
115 In	2	1614399	0.42	1559125	103.5	80 - 120	
159 Tb	1	1294899	1.13	1168008	110.9	80 - 120	
159 Tb	2	2115690	2.68	2104948	100.5	80 - 120	
165 Ho	1	1264076	1.49	1118583	113.0	80 - 120	
165 Ho	2	2026277	2.59	2036228	99.5	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\S112213A.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\S112213A.b\029SMPL.D\029SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\029SMPL.D\029SMPL.D#
 Date Acquired: Nov 22 2013 01:57 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-005
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.05	-0.05	ppb	3.72	319	2700	
23 Na	45	1	12,580.00	12580.00	ppb	1.21	12260830	225000	
24 Mg	45	1	2,123.00	2123.00	ppb	0.57	1146980	225000	
27 Al	45	1	196.50	196.50	ppb	1.49	58752	67500	
39 K	45	1	713.50	713.50	ppb	0.94	420418	225000	
44 Ca	45	1	8,009.00	8009.00	ppb	0.99	218556	225000	
51 V	45	1	0.47	0.47	ppb	1.38	2180	2700	
52 Cr	45	1	0.41	0.41	ppb	3.45	2914	2700	
55 Mn	45	1	89.89	89.89	ppb	0.96	333263	2700	
56 Fe	45	1	4,887.00	4887.00	ppb	0.99	21707790	202500	
59 Co	45	1	1.30	1.30	ppb	2.61	10841	2700	
60 Ni	45	1	0.91	0.91	ppb	2.96	2008	2700	
65 Cu	45	1	1.45	1.45	ppb	1.09	5116	2700	
66 Zn	45	1	8.90	8.90	ppb	3.55	10492	2700	
75 As	115	1	1.48	1.48	ppb	1.63	1023	2250	
78 Se	115	1	-0.42	-0.42	ppb	26.08	160	2700	
83 Kr	115	2	----	-----	ppb	-----	408	2700	
95 Mo	115	2	0.08	0.08	ppb	18.23	792	2700	
107 Ag	115	2	-0.04	-0.04	ppb	2.81	451	900	
111 Cd	115	2	0.40	0.40	ppb	3.34	1255	2700	
121 Sb	115	2	0.02	0.02	ppb	38.21	1058	1125	
137 Ba	159	2	11.94	11.94	ppb	0.67	43274	1350	
205 Tl	165	2	-0.01	-0.01	ppb	28.97	2483	900	
206 (Pb)	165	2	0.65	0.65	ppb	2.55	6133	2700	
207 (Pb)	165	2	0.65	0.65	ppb	3.13	5208	2700	
208 Pb	165	2	0.62	0.62	ppb	2.25	24027	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	88985	0.64	96065	92.6	70 - 150	
45 Sc	2	1257711	1.31	1395143	90.1	70 - 150	
115 In	1	526045	1.50	550732	95.5	70 - 150	
115 In	2	1403019	0.36	1559125	90.0	70 - 150	
159 Tb	1	1210463	1.27	1168008	103.6	70 - 150	
159 Tb	2	1895526	0.53	2104948	90.1	70 - 150	
165 Ho	1	1187831	2.66	1118583	106.2	70 - 150	
165 Ho	2	1851430	0.51	2036228	90.9	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\S112213A.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\S112213A.b\030SMPL.D\030SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\030SMPL.D\030SMPL.D#
 Date Acquired: Nov 22 2013 02:03 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-007
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		-0.07	-0.07	ppb	9.34	232	2700	
23 Na	45	1		11,110.00	11110.00	ppb	16.00	11864490	225000	
24 Mg	45	1		1,847.00	1847.00	ppb	15.87	1092394	225000	
27 Al	45	1		33.45	33.45	ppb	16.60	11222	67500	
39 K	45	1		623.10	623.10	ppb	18.89	410417	225000	
44 Ca	45	1		7,237.00	7237.00	ppb	16.25	216124	225000	
51 V	45	1		0.19	0.19	ppb	18.20	1118	2700	
52 Cr	45	1		0.19	0.19	ppb	25.03	2022	2700	
55 Mn	45	1		79.50	79.50	ppb	15.26	322920	2700	
56 Fe	45	1		2,076.00	2076.00	ppb	14.80	10117050	202500	
59 Co	45	1		1.04	1.04	ppb	16.88	9646	2700	
60 Ni	45	1		0.63	0.63	ppb	16.90	1606	2700	
65 Cu	45	1		1.41	1.41	ppb	19.31	5500	2700	
66 Zn	45	1		5.18	5.18	ppb	15.89	7417	2700	
75 As	115	1		0.86	0.86	ppb	13.82	690	2250	
78 Se	115	1		-0.91	-0.91	ppb	35.89	141	2700	
83 Kr	115	2		----	-----	ppb	-----	380	2700	
95 Mo	115	2		-0.01	-0.01	ppb	73.78	417	2700	
107 Ag	115	2		-0.05	-0.05	ppb	1.57	401	900	
111 Cd	115	2		0.20	0.20	ppb	7.28	813	2700	
121 Sb	115	2		-0.01	-0.01	ppb	89.89	841	1125	
137 Ba	159	2		9.60	9.60	ppb	1.80	37732	1350	
205 Tl	165	2		-0.04	-0.04	ppb	17.88	2016	900	
206 (Pb)	165	2		0.08	0.08	ppb	8.11	1939	2700	
207 (Pb)	165	2		0.08	0.08	ppb	18.17	1647	2700	
208 Pb	165	2		0.07	0.07	ppb	12.31	7756	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range (%)	Flag
45 Sc	1	98782	13.17	96065	102.8	70 - 150	
45 Sc	2	1378347	1.91	1395143	98.8	70 - 150	
115 In	1	593666	12.63	550732	107.8	70 - 150	
115 In	2	1539630	1.72	1559125	98.7	70 - 150	
159 Tb	1	1362552	15.05	1168008	116.7	70 - 150	
159 Tb	2	2051198	2.94	2104948	97.4	70 - 150	
165 Ho	1	1336197	14.01	1118583	119.5	70 - 150	
165 Ho	2	2001350	1.96	2036228	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\S112213A.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\S112213A.b\031SMPL.D\031SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\031SMPL.D\031SMPL.D#
 Date Acquired: Nov 22 2013 02:08 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-009
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	-0.05	-0.05	ppb	12.59	398	2700	
23 Na	45		1	10,400.00	10400.00	ppb	0.62	11195650	225000	
24 Mg	45		1	1,377.00	1377.00	ppb	0.82	820412	225000	
27 Al	45		1	429.30	429.30	ppb	0.51	141128	67500	
39 K	45		1	1,175.00	1175.00	ppb	1.34	720114	225000	
44 Ca	45		1	7,215.00	7215.00	ppb	0.84	217144	225000	
51 V	45		1	1.10	1.10	ppb	0.84	5279	2700	
52 Cr	45		1	1.69	1.69	ppb	0.65	10078	2700	
55 Mn	45		1	1,045.00	1045.00	ppb	1.69	4265589	2700	
56 Fe	45		1	636.00	636.00	ppb	0.51	3131424	202500	
59 Co	45		1	0.72	0.72	ppb	4.48	6902	2700	
60 Ni	45		1	4.88	4.88	ppb	1.03	10734	2700	
65 Cu	45		1	7.74	7.74	ppb	1.29	23176	2700	
66 Zn	45		1	12.16	12.16	ppb	0.94	15179	2700	
75 As	115		1	0.40	0.40	ppb	10.04	351	2250	
78 Se	115		1	-0.50	-0.50	ppb	21.16	171	2700	
83 Kr	115		2	----	-----	ppb	-----	396	2700	
95 Mo	115		2	0.02	0.02	ppb	47.11	578	2700	
107 Ag	115		2	-0.05	-0.05	ppb	8.96	452	900	
111 Cd	115		2	37.12	37.12	ppb	8.05	103730	2700	
121 Sb	115		2	0.06	0.06	ppb	23.46	1485	1125	
137 Ba	159		2	13.20	13.20	ppb	9.61	50381	1350	
205 Tl	165		2	0.01	0.01	ppb	177.82	3095	900	
206 (Pb)	165		2	4.26	4.26	ppb	9.26	35837	2700	
207 (Pb)	165		2	4.19	4.19	ppb	9.66	29531	2700	
208 Pb	165		2	4.08	4.08	ppb	8.32	138308	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	98132	1.14	96065	102.2	70 - 150	
45 Sc	2	1346506	7.70	1395143	96.5	70 - 150	
115 In	1	582512	0.70	550732	105.8	70 - 150	
115 In	2	1503078	8.32	1559125	96.4	70 - 150	
159 Tb	1	1346299	0.06	1168008	115.3	70 - 150	
159 Tb	2	2010727	9.12	2104948	95.5	70 - 150	
165 Ho	1	1325648	0.05	1118583	118.5	70 - 150	
165 Ho	2	1968802	8.96	2036228	96.7	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\S112213A.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\S112213A.b\032SMPL.D\032SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\032SMPL.D\032SMPL.D#
 Date Acquired: Nov 22 2013 02:14 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-011
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.06	-0.06	ppb	12.31	301	2700	
23 Na	45	1	22,090.00	22090.00	ppb	4.04	22387020	225000	
24 Mg	45	1	1,031.00	1031.00	ppb	2.06	582274	225000	
27 Al	45	1	191.60	191.60	ppb	3.69	59860	67500	
39 K	45	1	791.20	791.20	ppb	3.43	480205	225000	
44 Ca	45	1	4,842.00	4842.00	ppb	3.28	138226	225000	
51 V	45	1	0.43	0.43	ppb	5.93	2103	2700	
52 Cr	45	1	0.45	0.45	ppb	1.10	3225	2700	
55 Mn	45	1	16.52	16.52	ppb	1.19	64512	2700	
56 Fe	45	1	193.00	193.00	ppb	2.48	912094	202500	
59 Co	45	1	0.07	0.07	ppb	15.11	1260	2700	
60 Ni	45	1	0.41	0.41	ppb	4.32	1101	2700	
65 Cu	45	1	1.57	1.57	ppb	3.71	5670	2700	
66 Zn	45	1	5.15	5.15	ppb	1.54	7018	2700	
75 As	115	1	0.16	0.16	ppb	12.93	167	2250	
78 Se	115	1	-0.76	-0.76	ppb	8.97	148	2700	
83 Kr	115	2	----	-----	ppb	-----	358	2700	
95 Mo	115	2	-0.03	-0.03	ppb	17.89	299	2700	
107 Ag	115	2	-0.06	-0.06	ppb	4.23	308	900	
111 Cd	115	2	5.75	5.75	ppb	0.17	16639	2700	
121 Sb	115	2	0.02	0.02	ppb	77.31	1071	1125	
137 Ba	159	2	15.30	15.30	ppb	1.55	60274	1350	
205 Tl	165	2	-0.06	-0.06	ppb	12.83	1356	900	
206 (Pb)	165	2	0.14	0.14	ppb	8.08	2430	2700	
207 (Pb)	165	2	0.13	0.13	ppb	17.88	2006	2700	
208 Pb	165	2	0.12	0.12	ppb	10.28	9393	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	92981	0.72	96065	96.8	70 - 150	
45 Sc	2	1353498	1.22	1395143	97.0	70 - 150	
115 In	1	566081	0.65	550732	102.8	70 - 150	
115 In	2	1530834	0.53	1559125	98.2	70 - 150	
159 Tb	1	1317298	1.41	1168008	112.8	70 - 150	
159 Tb	2	2066048	1.36	2104948	98.2	70 - 150	
165 Ho	1	1289581	1.94	1118583	115.3	70 - 150	
165 Ho	2	1998180	2.11	2036228	98.1	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\S112213A.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\S112213A.b\033SMPL.D\033SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\033SMPL.D\033SMPL.D#
 Date Acquired: Nov 22 2013 02:20 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-013
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.09	-0.09	ppb	5.21	150	2700	
23 Na	45	1	5,355.00	5355.00	ppb	1.60	5741959	225000	
24 Mg	45	1	1,042.00	1042.00	ppb	0.48	610520	225000	
27 Al	45	1	17.80	17.80	ppb	2.21	6073	67500	
39 K	45	1	827.20	827.20	ppb	0.74	518089	225000	
44 Ca	45	1	5,847.00	5847.00	ppb	0.95	173136	225000	
51 V	45	1	0.19	0.19	ppb	7.00	1104	2700	
52 Cr	45	1	0.20	0.20	ppb	3.95	2045	2700	
55 Mn	45	1	7.14	7.14	ppb	0.58	29274	2700	
56 Fe	45	1	16.43	16.43	ppb	2.45	96732	202500	
59 Co	45	1	-0.02	-0.02	ppb	5.02	543	2700	
60 Ni	45	1	0.13	0.13	ppb	2.11	540	2700	
65 Cu	45	1	0.63	0.63	ppb	10.25	3324	2700	
66 Zn	45	1	6.23	6.23	ppb	2.82	8466	2700	
75 As	115	1	0.12	0.12	ppb	8.84	142	2250	
78 Se	115	1	-0.88	-0.88	ppb	15.95	143	2700	
83 Kr	115	2	-----	-----	ppb	-----	354	2700	
95 Mo	115	2	-0.06	-0.06	ppb	0.34	173	2700	
107 Ag	115	2	-0.05	-0.05	ppb	2.27	339	900	
111 Cd	115	2	-0.03	-0.03	ppb	7.53	153	2700	
121 Sb	115	2	-0.02	-0.02	ppb	13.21	697	1125	
137 Ba	159	2	7.60	7.60	ppb	1.56	30130	1350	
205 Tl	165	2	-0.08	-0.08	ppb	1.97	1006	900	
206 (Pb)	165	2	0.01	0.01	ppb	77.64	1357	2700	
207 (Pb)	165	2	0.01	0.01	ppb	194.38	1168	2700	
208 Pb	165	2	0.00	0.00	ppb	85.66	5419	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	96500	1.58	96065	100.5	70 - 150	
45 Sc	2	1349487	1.69	1395143	96.7	70 - 150	
115 In	1	585407	2.14	550732	106.3	70 - 150	
115 In	2	1538458	0.59	1559125	98.7	70 - 150	
159 Tb	1	1339977	1.64	1168008	114.7	70 - 150	
159 Tb	2	2061524	0.72	2104948	97.9	70 - 150	
165 Ho	1	1323345	1.28	1118583	118.3	70 - 150	
165 Ho	2	1986340	1.28	2036228	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\S112213A.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\S112213A.b\034SMPL.D\034SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\034SMPL.D\034SMPL.D#
 Date Acquired: Nov 22 2013 02:26 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-015
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		-0.07	-0.07	ppb	2.23	221	2700	
23 Na	45	1		14,080.00	14080.00	ppb	1.50	14039890	225000	
24 Mg	45	1		2,072.00	2072.00	ppb	0.58	1146727	225000	
27 Al	45	1		120.60	120.60	ppb	1.13	37061	67500	
39 K	45	1		1,491.00	1491.00	ppb	1.05	832321	225000	
44 Ca	45	1		11,770.00	11770.00	ppb	0.92	329051	225000	
51 V	45	1		0.42	0.42	ppb	6.28	2005	2700	
52 Cr	45	1		0.33	0.33	ppb	4.69	2590	2700	
55 Mn	45	1		247.80	247.80	ppb	1.35	940345	2700	
56 Fe	45	1		129.10	129.10	ppb	0.15	604075	202500	
59 Co	45	1		0.41	0.41	ppb	1.55	3966	2700	
60 Ni	45	1		1.37	1.37	ppb	2.83	2983	2700	
65 Cu	45	1		2.25	2.25	ppb	2.42	7336	2700	
66 Zn	45	1		6.50	6.50	ppb	0.94	8274	2700	
75 As	115	1		0.24	0.24	ppb	2.61	221	2250	
78 Se	115	1		-0.18	-0.18	ppb	135.06	185	2700	
83 Kr	115	2		----	-----	ppb	-----	342	2700	
95 Mo	115	2		0.13	0.13	ppb	1.23	1068	2700	
107 Ag	115	2		-0.05	-0.05	ppb	9.39	374	900	
111 Cd	115	2		0.06	0.06	ppb	14.22	379	2700	
121 Sb	115	2		0.07	0.07	ppb	13.88	1520	1125	
137 Ba	159	2		16.95	16.95	ppb	0.91	62670	1350	
205 Tl	165	2		-0.06	-0.06	ppb	2.80	1426	900	
206 (Pb)	165	2		0.26	0.26	ppb	4.67	3221	2700	
207 (Pb)	165	2		0.26	0.26	ppb	2.09	2779	2700	
208 Pb	165	2		0.24	0.24	ppb	3.51	12707	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	91186	0.76	96065	94.9	70 - 150	
45 Sc	2	1275291	1.84	1395143	91.4	70 - 150	
115 In	1	553032	0.87	550732	100.4	70 - 150	
115 In	2	1439531	2.07	1559125	92.3	70 - 150	
159 Tb	1	1290956	1.39	1168008	110.5	70 - 150	
159 Tb	2	1940435	0.94	2104948	92.2	70 - 150	
165 Ho	1	1271757	2.78	1118583	113.7	70 - 150	
165 Ho	2	1888470	0.61	2036228	92.7	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\S112213A.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\S112213A.b\035SMPL.D\035SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\035SMPL.D\035SMPL.D#
 Date Acquired: Nov 22 2013 02:32 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-017
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.09	-0.09	ppb	1.07	99	2700	
23 Na	45	1	145.80	145.80	ppb	1.47	279079	225000	
24 Mg	45	1	6.26	6.26	ppb	4.86	3852	225000	
27 Al	45	1	10.84	10.84	ppb	1.99	3562	67500	
39 K	45	1	29.06	29.06	ppb	1.40	76320	225000	
44 Ca	45	1	70.08	70.08	ppb	1.22	2276	225000	
51 V	45	1	0.21	0.21	ppb	2.68	1109	2700	
52 Cr	45	1	0.27	0.27	ppb	0.23	2244	2700	
55 Mn	45	1	0.75	0.75	ppb	3.33	3391	2700	
56 Fe	45	1	20.39	20.39	ppb	1.28	107686	202500	
59 Co	45	1	0.85	0.85	ppb	3.42	7319	2700	
60 Ni	45	1	0.50	0.50	ppb	5.08	1221	2700	
65 Cu	45	1	0.86	0.86	ppb	6.87	3678	2700	
66 Zn	45	1	5.83	5.83	ppb	2.74	7466	2700	
75 As	115	1	0.08	0.08	ppb	13.23	110	2250	
78 Se	115	1	-0.77	-0.77	ppb	14.51	141	2700	
83 Kr	115	2	----	-----	ppb	-----	340	2700	
95 Mo	115	2	-0.06	-0.06	ppb	5.72	152	2700	
107 Ag	115	2	-0.06	-0.06	ppb	1.43	216	900	
111 Cd	115	2	-0.06	-0.06	ppb	1.62	59	2700	
121 Sb	115	2	-0.02	-0.02	ppb	17.36	612	1125	
137 Ba	159	2	0.05	0.05	ppb	28.09	620	1350	
205 Tl	165	2	-0.09	-0.09	ppb	2.66	636	900	
206 (Pb)	165	2	-0.07	-0.07	ppb	3.48	641	2700	
207 (Pb)	165	2	-0.07	-0.07	ppb	13.14	577	2700	
208 Pb	165	2	-0.07	-0.07	ppb	6.93	2689	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89732	0.34	96065	93.4	70 - 150	
45 Sc	2	1263535	2.16	1395143	90.6	70 - 150	
115 In	1	546378	1.91	550732	99.2	70 - 150	
115 In	2	1427581	2.27	1559125	91.6	70 - 150	
159 Tb	1	1255298	0.10	1168008	107.5	70 - 150	
159 Tb	2	1929538	0.82	2104948	91.7	70 - 150	
165 Ho	1	1216325	0.74	1118583	108.7	70 - 150	
165 Ho	2	1852659	0.91	2036228	91.0	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\S112213A.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\S112213A.b\036SMPL.D\036SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\036SMPL.D\036SMPL.D#
 Date Acquired: Nov 22 2013 02:38 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-019
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.08	-0.08	ppb	8.47	146	2700	
23 Na	45	1	21,080.00	21080.00	ppb	0.71	20619470	225000	
24 Mg	45	1	2,476.00	2476.00	ppb	1.88	1348887	225000	
27 Al	45	1	15.63	15.63	ppb	4.19	5001	67500	
39 K	45	1	1,628.00	1628.00	ppb	2.09	888632	225000	
44 Ca	45	1	15,720.00	15720.00	ppb	2.26	432237	225000	
51 V	45	1	0.31	0.31	ppb	5.91	1542	2700	
52 Cr	45	1	0.67	0.67	ppb	1.20	4208	2700	
55 Mn	45	1	212.80	212.80	ppb	2.02	795079	2700	
56 Fe	45	1	1,369.00	1369.00	ppb	0.85	6145839	202500	
59 Co	45	1	0.08	0.08	ppb	1.55	1262	2700	
60 Ni	45	1	0.10	0.10	ppb	21.46	448	2700	
65 Cu	45	1	0.39	0.39	ppb	14.04	2467	2700	
66 Zn	45	1	8.22	8.22	ppb	0.99	9886	2700	
75 As	115	1	0.35	0.35	ppb	9.98	292	2250	
78 Se	115	1	-0.65	-0.65	ppb	20.21	148	2700	
83 Kr	115	2	----	-----	ppb	-----	362	2700	
95 Mo	115	2	-0.03	-0.03	ppb	13.59	307	2700	
107 Ag	115	2	-0.06	-0.06	ppb	5.01	192	900	
111 Cd	115	2	0.01	0.01	ppb	27.22	243	2700	
121 Sb	115	2	-0.01	-0.01	ppb	31.39	699	1125	
137 Ba	159	2	16.43	16.43	ppb	1.02	60202	1350	
205 Tl	165	2	-0.09	-0.09	ppb	2.48	637	900	
206 (Pb)	165	2	-0.01	-0.01	ppb	157.36	1128	2700	
207 (Pb)	165	2	-0.01	-0.01	ppb	263.63	996	2700	
208 Pb	165	2	-0.01	-0.01	ppb	70.93	4633	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89732	1.25	96065	93.4	70 - 150	
45 Sc	2	1223106	1.89	1395143	87.7	70 - 150	
115 In	1	539717	1.91	550732	98.0	70 - 150	
115 In	2	1408470	1.44	1559125	90.3	70 - 150	
159 Tb	1	1251402	1.68	1168008	107.1	70 - 150	
159 Tb	2	1922645	0.74	2104948	91.3	70 - 150	
165 Ho	1	1227700	1.94	1118583	109.8	70 - 150	
165 Ho	2	1857572	1.89	2036228	91.2	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112213A.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\S112213A.b\037SMPL.D\037SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\037SMPL.D\037SMPL.D#
 Date Acquired: Nov 22 2013 02:44 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-021
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	-0.08	-0.08	ppb	37.88	171	2700	
23 Na	45		1	14,130.00	14130.00	ppb	0.48	13560210	225000	
24 Mg	45		1	1,042.00	1042.00	ppb	1.15	555388	225000	
27 Al	45		1	52.83	52.83	ppb	2.39	15798	67500	
39 K	45		1	1,809.00	1809.00	ppb	1.64	958749	225000	
44 Ca	45		1	6,534.00	6534.00	ppb	0.39	175908	225000	
51 V	45		1	0.17	0.17	ppb	15.28	910	2700	
52 Cr	45		1	0.17	0.17	ppb	5.59	1703	2700	
55 Mn	45		1	789.00	789.00	ppb	0.87	2880350	2700	
56 Fe	45		1	3,479.00	3479.00	ppb	1.08	15248430	202500	
59 Co	45		1	8.17	8.17	ppb	0.45	63773	2700	
60 Ni	45		1	0.22	0.22	ppb	1.63	667	2700	
65 Cu	45		1	0.66	0.66	ppb	4.81	3085	2700	
66 Zn	45		1	4.99	4.99	ppb	1.69	6472	2700	
75 As	115		1	0.40	0.40	ppb	7.43	322	2250	
78 Se	115		1	-0.74	-0.74	ppb	22.56	140	2700	
83 Kr	115		2	----	-----	ppb	-----	348	2700	
95 Mo	115		2	0.46	0.46	ppb	5.21	2611	2700	
107 Ag	115		2	-0.04	-0.04	ppb	26.66	523	900	
111 Cd	115		2	60.10	60.10	ppb	0.56	160004	2700	
121 Sb	115		2	-0.01	-0.01	ppb	193.36	768	1125	
137 Ba	159		2	19.70	19.70	ppb	0.59	72103	1350	
205 Tl	165		2	0.05	0.05	ppb	46.03	3933	900	
206 (Pb)	165		2	-0.01	-0.01	ppb	165.40	1062	2700	
207 (Pb)	165		2	-0.03	-0.03	ppb	50.48	816	2700	
208 Pb	165		2	-0.03	-0.03	ppb	90.37	4126	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	87757	0.14	96065	91.4	70 - 150	
45 Sc	2	1245192	0.95	1395143	89.3	70 - 150	
115 In	1	532688	0.97	550732	96.7	70 - 150	
115 In	2	1426901	1.32	1559125	91.5	70 - 150	
159 Tb	1	1261152	1.54	1168008	108.0	70 - 150	
159 Tb	2	1922316	0.68	2104948	91.3	70 - 150	
165 Ho	1	1222596	2.04	1118583	109.3	70 - 150	
165 Ho	2	1851873	0.65	2036228	90.9	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\S112213A.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\S112213A.b\038SMPL.D\038SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\038SMPL.D\038SMPL.D#
 Date Acquired: Nov 22 2013 02:50 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	0.27	0.27	ppb	3.41	2408	2700	
23 Na	45	1	183.00	183.00	ppb	12.79	311941	225000	
24 Mg	45	1	73.18	73.18	ppb	6.67	39876	225000	
27 Al	45	1	31.03	31.03	ppb	5.93	9520	67500	
39 K	45	1	81.07	81.07	ppb	12.55	101758	225000	
44 Ca	45	1	150.40	150.40	ppb	6.27	4438	225000	
51 V	45	1	0.41	0.41	ppb	9.18	1951	2700	
52 Cr	45	1	0.40	0.40	ppb	12.40	2840	2700	
55 Mn	45	1	1.62	1.62	ppb	8.61	6564	2700	
56 Fe	45	1	83.53	83.53	ppb	8.59	385985	202500	
59 Co	45	1	0.37	0.37	ppb	8.79	3517	2700	
60 Ni	45	1	0.40	0.40	ppb	19.50	1015	2700	
65 Cu	45	1	0.17	0.17	ppb	32.48	1878	2700	
66 Zn	45	1	0.77	0.77	ppb	13.30	2327	2700	
75 As	115	1	0.36	0.36	ppb	5.43	301	2250	
78 Se	115	1	0.00	0.00	ppb	5512.20	197	2700	
83 Kr	115	2	----	-----	ppb	-----	376	2700	
95 Mo	115	2	0.68	0.68	ppb	1.62	4010	2700	
107 Ag	115	2	0.09	0.09	ppb	9.75	2448	900	
111 Cd	115	2	0.35	0.35	ppb	2.47	1273	2700	
121 Sb	115	2	0.26	0.26	ppb	2.78	3713	1125	
137 Ba	159	2	0.32	0.32	ppb	6.89	1739	1350	
205 Tl	165	2	0.25	0.25	ppb	1.98	9576	900	
206 (Pb)	165	2	0.29	0.29	ppb	1.53	3740	2700	
207 (Pb)	165	2	0.29	0.29	ppb	7.17	3148	2700	
208 Pb	165	2	0.28	0.28	ppb	1.81	14651	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89083	7.09	96065	92.7	70 - 150	
45 Sc	2	1387405	1.53	1395143	99.4	70 - 150	
115 In	1	549556	6.29	550732	99.8	70 - 150	
115 In	2	1574056	1.20	1559125	101.0	70 - 150	
159 Tb	1	1255567	5.79	1168008	107.5	70 - 150	
159 Tb	2	2091637	0.70	2104948	99.4	70 - 150	
165 Ho	1	1215494	5.26	1118583	108.7	70 - 150	
165 Ho	2	2017922	2.01	2036228	99.1	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112213A.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\S112213A.b\039_CCV.D\039_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\039_CCV.D\039_CCV.D#
 Date Acquired: Nov 22 2013 02:56 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 22 2013 11:52 am
 Sample Type: 6-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	50.22	ppb	0.96	328015	50	100.4	90 - 110	
23 Na	45	1	5443.00	ppb	5.71	5570254	5000	108.9	90 - 110	
24 Mg	45	1	5422.00	ppb	6.46	3029846	5000	108.4	90 - 110	
27 Al	45	1	1646.00	ppb	5.57	506919	1500	109.7	90 - 110	
39 K	45	1	5400.00	ppb	6.61	2877687	5000	108.0	90 - 110	
44 Ca	45	1	5391.00	ppb	4.94	152408	5000	107.8	90 - 110	
51 V	45	1	53.17	ppb	4.21	229175	50	106.3	90 - 110	
52 Cr	45	1	53.76	ppb	5.33	272115	50	107.5	90 - 110	
55 Mn	45	1	54.04	ppb	5.16	207632	50	108.1	90 - 110	
56 Fe	45	1	5460.00	ppb	5.55	25103700	5000	109.2	90 - 110	
59 Co	45	1	52.74	ppb	5.23	428293	50	105.5	90 - 110	
60 Ni	45	1	54.22	ppb	5.33	109335	50	108.4	90 - 110	
65 Cu	45	1	54.05	ppb	6.03	142883	50	108.1	90 - 110	
66 Zn	45	1	54.65	ppb	5.04	58420	50	109.3	90 - 110	
75 As	115	1	52.29	ppb	6.68	35400	50	104.6	90 - 110	
78 Se	115	1	265.30	ppb	6.79	18657	250	106.1	90 - 110	
83 Kr	115	2	-----	ppb	-----	360	50	#VALUE!	#### - ####	
95 Mo	115	2	48.18	ppb	0.88	250394	50	96.4	90 - 110	
107 Ag	115	2	47.95	ppb	2.25	679627	50	95.9	90 - 110	
111 Cd	115	2	49.20	ppb	2.09	144596	50	98.4	90 - 110	
121 Sb	115	2	47.76	ppb	0.10	502768	50	95.5	90 - 110	
137 Ba	159	2	49.03	ppb	1.13	195821	50	98.1	90 - 110	
205 Tl	165	2	50.62	ppb	1.77	1327750	50	101.2	90 - 110	
206 (Pb)	165	2	49.43	ppb	0.49	419989	50	98.9	90 - 110	
207 (Pb)	165	2	48.49	ppb	1.37	344269	50	97.0	90 - 110	
208 Pb	165	2	47.86	ppb	1.14	1633008	50	95.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	92251	4.56	96065	96.0	80 - 120	
45 Sc	2	1412374	2.09	1395143	101.2	80 - 120	
115 In	1	542167	5.85	550732	98.4	80 - 120	
115 In	2	1574801	1.33	1559125	101.0	80 - 120	
159 Tb	1	1251612	4.25	1168008	107.2	80 - 120	
159 Tb	2	2105959	0.47	2104948	100.0	80 - 120	
165 Ho	1	1214317	4.04	1118583	108.6	80 - 120	
165 Ho	2	2041056	1.21	2036228	100.2	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\S112213A.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\S112213A.b\040_CCV.D\040_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\040_CCV.D\040_CCV.D#
 Date Acquired: Nov 22 2013 03:02 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 22 2013 11:52 am
 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	0.44 ppb	3.22	1	88.1	70 - 130	
23 Na	45	1	260.60 ppb	2.28	250	104.2	70 - 130	
24 Mg	45	1	271.10 ppb	0.29	250	108.4	70 - 130	
27 Al	45	1	105.90 ppb	1.00	100	105.9	70 - 130	
39 K	45	1	258.80 ppb	1.85	250	103.5	70 - 130	
44 Ca	45	1	257.50 ppb	1.45	250	103.0	70 - 130	
51 V	45	1	1.02 ppb	1.14	1	101.5	70 - 130	
52 Cr	45	1	0.98 ppb	1.22	1	98.1	70 - 130	
55 Mn	45	1	3.04 ppb	2.24	3	101.3	70 - 130	
56 Fe	45	1	171.30 ppb	1.14	150	114.2	70 - 130	
59 Co	45	1	0.95 ppb	2.98	1	94.6	70 - 130	
60 Ni	45	1	1.47 ppb	0.86	2	98.1	70 - 130	
65 Cu	45	1	4.78 ppb	1.79	5	95.7	70 - 130	
66 Zn	45	1	10.48 ppb	0.84	10	104.8	70 - 130	
75 As	115	1	0.91 ppb	7.43	1	91.1	70 - 130	
78 Se	115	1	4.36 ppb	3.27	5	87.2	70 - 130	
83 Kr	115	2	----- ppb -----	-----	1	#VALUE! ##### - #####		
95 Mo	115	2	0.99 ppb	4.09	1	98.8	70 - 130	
107 Ag	115	2	0.43 ppb	4.99	1	86.4	70 - 130	
111 Cd	115	2	0.93 ppb	1.95	1	93.4	70 - 130	
121 Sb	115	2	0.92 ppb	1.44	1	92.2	70 - 130	
137 Ba	159	2	2.32 ppb	1.01	3	92.8	70 - 130	
205 Tl	165	2	0.89 ppb	3.32	1	89.5	70 - 130	
206 (Pb)	165	2	1.40 ppb	3.96	2	93.6	70 - 130	
207 (Pb)	165	2	1.42 ppb	2.14	2	94.8	70 - 130	
208 Pb	165	2	1.38 ppb	1.50	2	92.2	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	98645	1.93	96065	102.7	80 - 120	
45 Sc	2	1469800	1.21	1395143	105.4	80 - 120	
115 In	1	596830	2.70	550732	108.4	80 - 120	
115 In	2	1655695	1.14	1559125	106.2	80 - 120	
159 Tb	1	1350125	2.75	1168008	115.6	80 - 120	
159 Tb	2	2221520	1.01	2104948	105.5	80 - 120	
165 Ho	1	1309933	2.49	1118583	117.1	80 - 120	
165 Ho	2	2139747	1.02	2036228	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\S112213A.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\S112213A.b\041_CCB.D\041_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\041_CCB.D\041_CCB.D#
 Date Acquired: Nov 22 2013 03:07 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 22 2013 11:52 am
 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	-0.084 ppb	3.15	174	0.50	
23 Na	45	1	-4.435 ppb	25.55	152135	250.00	
24 Mg	45	1	1.989 ppb	3.10	1747	250.00	
27 Al	45	1	0.403 ppb	20.31	493	100.00	
39 K	45	1	-3.418 ppb	46.84	68363	250.00	
44 Ca	45	1	2.294 ppb	28.20	473	250.00	
51 V	45	1	-0.028 ppb	9.74	130	1.00	
52 Cr	45	1	-0.048 ppb	22.65	787	1.00	
55 Mn	45	1	0.013 ppb	71.64	725	3.00	
56 Fe	45	1	1.916 ppb	2.62	28551	150.00	
59 Co	45	1	-0.056 ppb	3.86	221	1.00	
60 Ni	45	1	-0.056 ppb	9.51	160	1.50	
65 Cu	45	1	-0.421 ppb	3.68	460	5.00	
66 Zn	45	1	-0.030 ppb	187.52	1750	10.00	
75 As	115	1	-0.046 ppb	22.15	26	1.00	
78 Se	115	1	-0.867 ppb	9.39	152	5.00	
83 Kr	115	2	----- ppb	-----	357	1.00	
95 Mo	115	2	-0.064 ppb	10.88	160	1.00	
107 Ag	115	2	-0.064 ppb	2.63	222	0.50	
111 Cd	115	2	-0.061 ppb	1.84	72	1.00	
121 Sb	115	2	-0.065 ppb	2.31	267	1.00	
137 Ba	159	2	-0.085 ppb	8.03	164	2.50	
205 Tl	165	2	-0.083 ppb	2.61	932	1.00	
206 (Pb)	165	2	-0.098 ppb	4.54	484	1.50	
207 (Pb)	165	2	-0.103 ppb	4.70	432	1.50	
208 Pb	165	2	-0.102 ppb	2.07	2040	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	102530	2.26	96065	106.7	80 - 120	
45 Sc	2	1464973	2.05	1395143	105.0	80 - 120	
115 In	1	617014	2.51	550732	112.0	80 - 120	
115 In	2	1663693	1.06	1559125	106.7	80 - 120	
159 Tb	1	1376729	1.87	1168008	117.9	80 - 120	
159 Tb	2	2234424	1.16	2104948	106.2	80 - 120	
165 Ho	1	1351180	2.22	1118583	120.8	80 - 120	ISFail
165 Ho	2	2143758	1.53	2036228	105.3	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\S112213A.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\S112213A.b\042SMPL.D\042SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\042SMPL.D\042SMPL.D#
 Date Acquired: Nov 22 2013 03:13 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-023
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.05	-0.05	ppb	15.35	354	2700	
23 Na	45	1	10,770.00	10770.00	ppb	2.12	10387330	225000	
24 Mg	45	1	4,548.00	4548.00	ppb	0.20	2427010	225000	
27 Al	45	1	886.00	886.00	ppb	1.05	260651	67500	
39 K	45	1	4,672.00	4672.00	ppb	1.29	2385982	225000	
44 Ca	45	1	13,690.00	13690.00	ppb	0.69	368747	225000	
51 V	45	1	19.83	19.83	ppb	1.24	81726	2700	
52 Cr	45	1	5.10	5.10	ppb	0.94	25468	2700	
55 Mn	45	1	116.30	116.30	ppb	1.20	426062	2700	
56 Fe	45	1	2,399.00	2399.00	ppb	1.32	10540010	202500	
59 Co	45	1	1.57	1.57	ppb	0.31	12736	2700	
60 Ni	45	1	6.68	6.68	ppb	2.62	13069	2700	
65 Cu	45	1	29.61	29.61	ppb	1.50	75380	2700	
66 Zn	45	1	172.60	172.60	ppb	0.49	172818	2700	
75 As	115	1	0.88	0.88	ppb	3.15	633	2250	
78 Se	115	1	-0.36	-0.36	ppb	12.14	165	2700	
83 Kr	115	2	----	-----	ppb	-----	376	2700	
95 Mo	115	2	1.30	1.30	ppb	15.04	6877	2700	
107 Ag	115	2	0.00	0.00	ppb	1029.50	1081	900	
111 Cd	115	2	4.78	4.78	ppb	11.25	13580	2700	
121 Sb	115	2	1.33	1.33	ppb	12.45	14212	1125	
137 Ba	159	2	19.34	19.34	ppb	10.64	75643	1350	
205 Tl	165	2	-0.07	-0.07	ppb	5.21	1291	900	
206 (Pb)	165	2	6.76	6.76	ppb	9.28	58271	2700	
207 (Pb)	165	2	6.51	6.51	ppb	8.48	46997	2700	
208 Pb	165	2	6.38	6.38	ppb	10.47	221313	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	87925	1.04	96065	91.5	70 - 150	
45 Sc	2	1366197	13.64	1395143	97.9	70 - 150	
115 In	1	530123	1.70	550732	96.3	70 - 150	
115 In	2	1511577	11.68	1559125	97.0	70 - 150	
159 Tb	1	1238485	0.75	1168008	106.0	70 - 150	
159 Tb	2	2069755	10.18	2104948	98.3	70 - 150	
165 Ho	1	1239342	0.38	1118583	110.8	70 - 150	
165 Ho	2	2045458	10.78	2036228	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\S112213A.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\S112213A.b\043SMPL.D\043SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\043SMPL.D\043SMPL.D#
 Date Acquired: Nov 22 2013 03:19 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-025
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.06	-0.06	ppb	6.90	286	2700	
23 Na	45	1	5,810.00	5810.00	ppb	0.04	5642854	225000	
24 Mg	45	1	1,053.00	1053.00	ppb	0.30	560019	225000	
27 Al	45	1	572.80	572.80	ppb	1.14	167921	67500	
39 K	45	1	869.40	869.40	ppb	2.04	491127	225000	
44 Ca	45	1	5,881.00	5881.00	ppb	0.86	158006	225000	
51 V	45	1	4.35	4.35	ppb	2.59	18030	2700	
52 Cr	45	1	32.60	32.60	ppb	1.67	157168	2700	
55 Mn	45	1	28.57	28.57	ppb	0.96	104604	2700	
56 Fe	45	1	1,247.00	1247.00	ppb	0.80	5464309	202500	
59 Co	45	1	0.29	0.29	ppb	4.15	2871	2700	
60 Ni	45	1	2.95	2.95	ppb	4.07	5879	2700	
65 Cu	45	1	10.36	10.36	ppb	3.57	27198	2700	
66 Zn	45	1	52.62	52.62	ppb	1.19	53509	2700	
75 As	115	1	0.42	0.42	ppb	1.59	330	2250	
78 Se	115	1	-0.79	-0.79	ppb	21.72	136	2700	
83 Kr	115	2	----	-----	ppb	-----	346	2700	
95 Mo	115	2	0.06	0.06	ppb	20.29	702	2700	
107 Ag	115	2	-0.02	-0.02	ppb	39.21	770	900	
111 Cd	115	2	22.78	22.78	ppb	0.65	61141	2700	
121 Sb	115	2	0.09	0.09	ppb	7.92	1724	1125	
137 Ba	159	2	11.29	11.29	ppb	0.56	42620	1350	
205 Tl	165	2	-0.02	-0.02	ppb	26.80	2347	900	
206 (Pb)	165	2	4.50	4.50	ppb	1.52	36898	2700	
207 (Pb)	165	2	4.40	4.40	ppb	2.58	30203	2700	
208 Pb	165	2	4.26	4.26	ppb	1.28	140594	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	87563	2.91	96065	91.2	70 - 150	
45 Sc	2	1263459	2.98	1395143	90.6	70 - 150	
115 In	1	528695	1.22	550732	96.0	70 - 150	
115 In	2	1435001	0.79	1559125	92.0	70 - 150	
159 Tb	1	1270525	2.37	1168008	108.8	70 - 150	
159 Tb	2	1973324	1.52	2104948	93.7	70 - 150	
165 Ho	1	1245212	1.74	1118583	111.3	70 - 150	
165 Ho	2	1911073	0.15	2036228	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\S112213A.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\S112213A.b\044SMPL.D\044SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\044SMPL.D\044SMPL.D#
 Date Acquired: Nov 22 2013 03:25 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-027
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		-0.07	-0.07	ppb	8.77	203	2700	
23 Na	45	1		14,290.00	14290.00	ppb	0.91	13948060	225000	
24 Mg	45	1		1,890.00	1890.00	ppb	0.87	1024200	225000	
27 Al	45	1		113.50	113.50	ppb	1.61	34175	67500	
39 K	45	1		2,674.00	2674.00	ppb	1.99	1412456	225000	
44 Ca	45	1		10,570.00	10570.00	ppb	0.51	289311	225000	
51 V	45	1		2.58	2.58	ppb	0.44	11000	2700	
52 Cr	45	1		0.38	0.38	ppb	5.53	2781	2700	
55 Mn	45	1		528.70	528.70	ppb	0.83	1963300	2700	
56 Fe	45	1		522.30	522.30	ppb	0.21	2342023	202500	
59 Co	45	1		0.08	0.08	ppb	4.67	1245	2700	
60 Ni	45	1		0.41	0.41	ppb	3.05	1042	2700	
65 Cu	45	1		17.24	17.24	ppb	1.74	45179	2700	
66 Zn	45	1		18.64	18.64	ppb	1.58	20330	2700	
75 As	115	1		0.44	0.44	ppb	4.04	349	2250	
78 Se	115	1		-0.54	-0.54	ppb	57.95	156	2700	
83 Kr	115	2		----	-----	ppb	-----	368	2700	
95 Mo	115	2		0.37	0.37	ppb	3.06	2098	2700	
107 Ag	115	2		-0.06	-0.06	ppb	3.87	294	900	
111 Cd	115	2		12.02	12.02	ppb	0.63	31291	2700	
121 Sb	115	2		0.10	0.10	ppb	2.19	1768	1125	
137 Ba	159	2		8.24	8.24	ppb	1.90	30187	1350	
205 Tl	165	2		-0.04	-0.04	ppb	7.03	1805	900	
206 (Pb)	165	2		0.66	0.66	ppb	2.45	6278	2700	
207 (Pb)	165	2		0.63	0.63	ppb	1.50	5107	2700	
208 Pb	165	2		0.62	0.62	ppb	2.16	24179	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	89265	0.46	96065	92.9	70 - 150	
45 Sc	2	1235972	1.19	1395143	88.6	70 - 150	
115 In	1	539668	0.60	550732	98.0	70 - 150	
115 In	2	1386722	0.71	1559125	88.9	70 - 150	
159 Tb	1	1256024	0.59	1168008	107.5	70 - 150	
159 Tb	2	1909479	3.14	2104948	90.7	70 - 150	
165 Ho	1	1230245	0.98	1118583	110.0	70 - 150	
165 Ho	2	1865306	2.12	2036228	91.6	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\S112213A.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\S112213A.b\045SMPL.D\045SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\045SMPL.D\045SMPL.D#
 Date Acquired: Nov 22 2013 03:31 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-029
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	-0.10	-0.10	ppb	4.69	82	2700	
23 Na	45		1	6,195.00	6195.00	ppb	0.89	6056077	225000	
24 Mg	45		1	2,317.00	2317.00	ppb	1.21	1241565	225000	
27 Al	45		1	7.45	7.45	ppb	1.65	2503	67500	
39 K	45		1	1,791.00	1791.00	ppb	2.03	955132	225000	
44 Ca	45		1	12,370.00	12370.00	ppb	1.40	334657	225000	
51 V	45		1	0.17	0.17	ppb	6.88	931	2700	
52 Cr	45		1	0.11	0.11	ppb	7.50	1419	2700	
55 Mn	45		1	299.00	299.00	ppb	2.13	1098140	2700	
56 Fe	45		1	9.66	9.66	ppb	0.88	58675	202500	
59 Co	45		1	0.22	0.22	ppb	1.50	2317	2700	
60 Ni	45		1	0.35	0.35	ppb	10.77	916	2700	
65 Cu	45		1	0.09	0.09	ppb	27.51	1672	2700	
66 Zn	45		1	4.49	4.49	ppb	2.98	6012	2700	
75 As	115		1	0.08	0.08	ppb	19.49	106	2250	
78 Se	115		1	-0.96	-0.96	ppb	7.29	127	2700	
83 Kr	115		2	----	-----	ppb	-----	356	2700	
95 Mo	115		2	-0.07	-0.07	ppb	1.07	110	2700	
107 Ag	115		2	-0.07	-0.07	ppb	1.68	181	900	
111 Cd	115		2	0.00	0.00	ppb	179.03	239	2700	
121 Sb	115		2	-0.04	-0.04	ppb	6.04	452	1125	
137 Ba	159		2	15.27	15.27	ppb	2.56	57781	1350	
205 Tl	165		2	-0.09	-0.09	ppb	1.76	599	900	
206 (Pb)	165		2	-0.04	-0.04	ppb	15.89	880	2700	
207 (Pb)	165		2	-0.05	-0.05	ppb	14.46	713	2700	
208 Pb	165		2	-0.05	-0.05	ppb	13.16	3468	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	88270	1.05	96065	91.9	70 - 150	
45 Sc	2	1279484	1.25	1395143	91.7	70 - 150	
115 In	1	542149	0.52	550732	98.4	70 - 150	
115 In	2	1458939	1.17	1559125	93.6	70 - 150	
159 Tb	1	1288207	1.83	1168008	110.3	70 - 150	
159 Tb	2	1984671	1.48	2104948	94.3	70 - 150	
165 Ho	1	1271283	2.92	1118583	113.7	70 - 150	
165 Ho	2	1911365	2.17	2036228	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\S112213A.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\S112213A.b\046SMPL.D\046SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\046SMPL.D\046SMPL.D#
 Date Acquired: Nov 22 2013 03:37 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-031
 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45	2		-0.09	-0.09	ppb	5.49	150	2700	
23 Na	45	1		5,423.00	5423.00	ppb	8.33	5783915	225000	
24 Mg	45	1		1,395.00	1395.00	ppb	8.93	812730	225000	
27 Al	45	1		24.18	24.18	ppb	8.92	8089	67500	
39 K	45	1		459.80	459.80	ppb	11.13	315629	225000	
44 Ca	45	1		5,825.00	5825.00	ppb	8.24	171568	225000	
51 V	45	1		0.28	0.28	ppb	14.77	1501	2700	
52 Cr	45	1		2.20	2.20	ppb	8.17	12539	2700	
55 Mn	45	1		1.31	1.31	ppb	5.50	5854	2700	
56 Fe	45	1		58.53	58.53	ppb	9.09	297845	202500	
59 Co	45	1		0.01	0.01	ppb	88.49	761	2700	
60 Ni	45	1		0.31	0.31	ppb	12.21	918	2700	
65 Cu	45	1		0.54	0.54	ppb	17.03	3045	2700	
66 Zn	45	1		5.59	5.59	ppb	8.33	7735	2700	
75 As	115	1		0.16	0.16	ppb	18.29	181	2250	
78 Se	115	1		-0.99	-0.99	ppb	9.70	137	2700	
83 Kr	115	2		----	-----	ppb	-----	336	2700	
95 Mo	115	2		-0.07	-0.07	ppb	3.37	134	2700	
107 Ag	115	2		-0.07	-0.07	ppb	3.04	181	900	
111 Cd	115	2		1.68	1.68	ppb	1.90	5084	2700	
121 Sb	115	2		-0.03	-0.03	ppb	13.25	629	1125	
137 Ba	159	2		5.65	5.65	ppb	2.42	23003	1350	
205 Tl	165	2		-0.09	-0.09	ppb	2.42	602	900	
206 (Pb)	165	2		-0.04	-0.04	ppb	28.83	989	2700	
207 (Pb)	165	2		-0.05	-0.05	ppb	17.66	769	2700	
208 Pb	165	2		-0.05	-0.05	ppb	4.76	3822	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	96303	5.99	96065	100.2	70 - 150	
45 Sc	2	1361172	0.45	1395143	97.6	70 - 150	
115 In	1	598335	6.64	550732	108.6	70 - 150	
115 In	2	1544160	1.00	1559125	99.0	70 - 150	
159 Tb	1	1388521	7.18	1168008	118.9	70 - 150	
159 Tb	2	2105562	0.87	2104948	100.0	70 - 150	
165 Ho	1	1380317	8.28	1118583	123.4	70 - 150	
165 Ho	2	2049488	0.57	2036228	100.7	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\S112213A.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\S112213A.b\047SMPL.D\047SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\047SMPL.D\047SMPL.D#
 Date Acquired: Nov 22 2013 03:43 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 22 2013 11:52 am
 Sample Type: Sample
 Dilution Factor: 1.00
 Autodil Factor: Undiluted
 Final Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	CPS	High Limit	Flag
9 Be	45		2	0.27	0.27	ppb	1.29	2629	2700	
23 Na	45		1	148.30	148.30	ppb	1.24	334228	225000	
24 Mg	45		1	72.19	72.19	ppb	0.95	47190	225000	
27 Al	45		1	28.69	28.69	ppb	2.38	10582	67500	
39 K	45		1	59.27	59.27	ppb	3.63	108814	225000	
44 Ca	45		1	148.80	148.80	ppb	0.36	5268	225000	
51 V	45		1	0.39	0.39	ppb	1.32	2214	2700	
52 Cr	45		1	0.35	0.35	ppb	2.23	3163	2700	
55 Mn	45		1	1.47	1.47	ppb	2.91	7217	2700	
56 Fe	45		1	75.61	75.61	ppb	0.79	421258	202500	
59 Co	45		1	0.34	0.34	ppb	2.86	3917	2700	
60 Ni	45		1	0.37	0.37	ppb	4.51	1146	2700	
65 Cu	45		1	0.10	0.10	ppb	4.25	2052	2700	
66 Zn	45		1	0.71	0.71	ppb	3.63	2703	2700	
75 As	115		1	0.33	0.33	ppb	3.34	332	2250	
78 Se	115		1	-0.19	-0.19	ppb	104.80	215	2700	
83 Kr	115		2	----	-----	ppb	-----	393	2700	
95 Mo	115		2	0.67	0.67	ppb	3.60	4280	2700	
107 Ag	115		2	0.11	0.11	ppb	9.77	2890	900	
111 Cd	115		2	0.35	0.35	ppb	6.83	1378	2700	
121 Sb	115		2	0.28	0.28	ppb	4.53	4275	1125	
137 Ba	159		2	0.36	0.36	ppb	6.16	2082	1350	
205 Tl	165		2	0.25	0.25	ppb	2.78	10579	900	
206 (Pb)	165		2	0.29	0.29	ppb	2.10	4100	2700	
207 (Pb)	165		2	0.28	0.28	ppb	6.57	3468	2700	
208 Pb	165		2	0.27	0.27	ppb	4.74	15902	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	106520	0.22	96065	110.9	70 - 150	
45 Sc	2	1507151	2.87	1395143	108.0	70 - 150	
115 In	1	646205	1.86	550732	117.3	70 - 150	
115 In	2	1715916	2.96	1559125	110.1	70 - 150	
159 Tb	1	1459416	0.78	1168008	124.9	70 - 150	
159 Tb	2	2298826	1.58	2104948	109.2	70 - 150	
165 Ho	1	1417948	1.58	1118583	126.8	70 - 150	
165 Ho	2	2243934	1.50	2036228	110.2	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\S112213A.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\S112213A.b\048_CCV.D\048_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\048_CCV.D\048_CCV.D#
 Date Acquired: Nov 22 2013 03:49 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 22 2013 11:52 am
 Sample Type: 6-CCV
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	CPS	Expected	Rec(%)	QC Range(%)	Flag
9 Be	45	2	50.40	ppb	1.95	317725	50	100.8	90 - 110	
23 Na	45	1	5022.00	ppb	0.43	5403662	5000	100.4	90 - 110	
24 Mg	45	1	5032.00	ppb	0.47	2951877	5000	100.6	90 - 110	
27 Al	45	1	1515.00	ppb	0.92	489707	1500	101.0	90 - 110	
39 K	45	1	5032.00	ppb	1.73	2819363	5000	100.6	90 - 110	
44 Ca	45	1	4988.00	ppb	1.09	147958	5000	99.8	90 - 110	
51 V	45	1	50.13	ppb	0.66	226668	50	100.3	90 - 110	
52 Cr	45	1	50.04	ppb	1.64	265818	50	100.1	90 - 110	
55 Mn	45	1	50.40	ppb	0.48	203251	50	100.8	90 - 110	
56 Fe	45	1	5107.00	ppb	0.64	24639990	5000	102.1	90 - 110	
59 Co	45	1	49.29	ppb	0.82	420088	50	98.6	90 - 110	
60 Ni	45	1	51.29	ppb	0.70	108540	50	102.6	90 - 110	
65 Cu	45	1	51.54	ppb	0.27	143083	50	103.1	90 - 110	
66 Zn	45	1	51.80	ppb	1.50	58177	50	103.6	90 - 110	
75 As	115	1	47.46	ppb	0.38	34835	50	94.9	90 - 110	
78 Se	115	1	236.50	ppb	2.48	18053	250	94.6	90 - 110	
83 Kr	115	2	-----	ppb	-----	386	50	#VALUE!	##### - #####	
95 Mo	115	2	48.48	ppb	0.70	246714	50	97.0	90 - 110	
107 Ag	115	2	47.78	ppb	0.56	663242	50	95.6	90 - 110	
111 Cd	115	2	48.76	ppb	0.27	140357	50	97.5	90 - 110	
121 Sb	115	2	48.08	ppb	0.69	495585	50	96.2	90 - 110	
137 Ba	159	2	48.40	ppb	0.35	191133	50	96.8	90 - 110	
205 Tl	165	2	51.32	ppb	1.94	1319205	50	102.6	90 - 110	
206 (Pb)	165	2	50.35	ppb	2.05	419241	50	100.7	90 - 110	
207 (Pb)	165	2	49.75	ppb	0.75	346067	50	99.5	90 - 110	
208 Pb	165	2	48.98	ppb	1.83	1637642	50	98.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	96649	0.74	96065	100.6	80 - 120	
45 Sc	2	1363472	1.61	1395143	97.7	80 - 120	
115 In	1	586146	0.74	550732	106.4	80 - 120	
115 In	2	1542217	1.08	1559125	98.9	80 - 120	
159 Tb	1	1339094	0.15	1168008	114.6	80 - 120	
159 Tb	2	2082388	1.39	2104948	98.9	80 - 120	
165 Ho	1	1293323	0.67	1118583	115.6	80 - 120	
165 Ho	2	2000256	1.77	2036228	98.2	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\S112213A.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\S112213A.b\049_CCV.D\049_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\049_CCV.D\049_CCV.D#
 Date Acquired: Nov 22 2013 03:55 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 22 2013 11:52 am
 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	0.42 ppb	4.41	1	83.4	70 - 130	
23 Na	45	1	246.20 ppb	2.24	250	98.5	70 - 130	
24 Mg	45	1	268.60 ppb	0.44	250	107.4	70 - 130	
27 Al	45	1	105.50 ppb	0.39	100	105.5	70 - 130	
39 K	45	1	252.40 ppb	1.94	250	101.0	70 - 130	
44 Ca	45	1	254.60 ppb	2.32	250	101.8	70 - 130	
51 V	45	1	0.95 ppb	2.44	1	94.8	70 - 130	
52 Cr	45	1	0.94 ppb	1.18	1	94.3	70 - 130	
55 Mn	45	1	2.98 ppb	1.37	3	99.2	70 - 130	
56 Fe	45	1	168.60 ppb	1.49	150	112.4	70 - 130	
59 Co	45	1	0.91 ppb	1.94	1	91.4	70 - 130	
60 Ni	45	1	1.44 ppb	4.29	2	95.9	70 - 130	
65 Cu	45	1	4.74 ppb	2.79	5	94.8	70 - 130	
66 Zn	45	1	10.06 ppb	1.01	10	100.6	70 - 130	
75 As	115	1	0.90 ppb	4.35	1	89.9	70 - 130	
78 Se	115	1	4.21 ppb	0.68	5	84.2	70 - 130	
83 Kr	115	2	----- ppb	-----	1	#VALUE! #####	70 - 130	
95 Mo	115	2	0.91 ppb	4.09	1	90.6	70 - 130	
107 Ag	115	2	0.44 ppb	5.95	1	87.3	70 - 130	
111 Cd	115	2	0.91 ppb	5.32	1	90.8	70 - 130	
121 Sb	115	2	0.91 ppb	3.22	1	91.2	70 - 130	
137 Ba	159	2	2.27 ppb	1.07	3	90.7	70 - 130	
205 Tl	165	2	0.87 ppb	2.18	1	87.3	70 - 130	
206 (Pb)	165	2	1.36 ppb	6.09	2	90.6	70 - 130	
207 (Pb)	165	2	1.44 ppb	5.20	2	96.2	70 - 130	
208 Pb	165	2	1.35 ppb	4.11	2	90.0	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	100293	2.27	96065	104.4	80 - 120	
45 Sc	2	1413182	0.56	1395143	101.3	80 - 120	
115 In	1	606197	2.42	550732	110.1	80 - 120	
115 In	2	1617261	3.11	1559125	103.7	80 - 120	
159 Tb	1	1373311	0.97	1168008	117.6	80 - 120	
159 Tb	2	2185564	0.77	2104948	103.8	80 - 120	
165 Ho	1	1341300	0.75	1118583	119.9	80 - 120	
165 Ho	2	2124075	1.57	2036228	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\S112213A.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\S112213A.b\050_CCB.D\050_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213A.b\050_CCB.D\050_CCB.D#
 Date Acquired: Nov 22 2013 04:00 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 22 2013 11:52 am
 Sample Type: 6-CCB
 Total Dil Factor: 1.00

QC Summary:
 Analytes: Pass
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	CPS	High Limit	Flag
9 Be	45	2	-0.087 ppb	12.60	141	0.50	
23 Na	45	1	-1.021 ppb	184.62	148357	250.00	
24 Mg	45	1	2.443 ppb	14.84	1930	250.00	
27 Al	45	1	0.687 ppb	19.57	562	100.00	
39 K	45	1	1.574 ppb	102.73	67789	250.00	
44 Ca	45	1	3.741 ppb	27.56	493	250.00	
51 V	45	1	-0.025 ppb	18.02	139	1.00	
52 Cr	45	1	-0.036 ppb	18.60	810	1.00	
55 Mn	45	1	-0.006 ppb	11.36	614	3.00	
56 Fe	45	1	2.284 ppb	20.47	28958	150.00	
59 Co	45	1	-0.054 ppb	2.89	221	1.00	
60 Ni	45	1	-0.051 ppb	16.55	163	1.50	
65 Cu	45	1	-0.421 ppb	1.32	438	5.00	
66 Zn	45	1	-0.042 ppb	67.84	1652	10.00	
75 As	115	1	-0.044 ppb	8.82	26	1.00	
78 Se	115	1	-0.819 ppb	10.48	150	5.00	
83 Kr	115	2	----- ppb	-----	389	1.00	
95 Mo	115	2	-0.061 ppb	7.30	167	1.00	
107 Ag	115	2	-0.062 ppb	1.26	238	0.50	
111 Cd	115	2	-0.059 ppb	7.86	73	1.00	
121 Sb	115	2	-0.065 ppb	6.86	250	1.00	
137 Ba	159	2	-0.086 ppb	4.03	153	2.50	
205 Tl	165	2	-0.083 ppb	4.30	918	1.00	
206 (Pb)	165	2	-0.100 ppb	1.99	453	1.50	
207 (Pb)	165	2	-0.104 ppb	6.55	410	1.50	
208 Pb	165	2	-0.101 ppb	2.76	1981	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97553	1.08	96065	101.5	80 - 120	
45 Sc	2	1376790	2.44	1395143	98.7	80 - 120	
115 In	1	596130	1.20	550732	108.2	80 - 120	
115 In	2	1575949	1.79	1559125	101.1	80 - 120	
159 Tb	1	1355717	0.90	1168008	116.1	80 - 120	
159 Tb	2	2131253	2.01	2104948	101.2	80 - 120	
165 Ho	1	1335533	1.64	1118583	119.4	80 - 120	
165 Ho	2	2059458	2.34	2036228	101.1	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\S112213A.b\002CALB.D\002CALB.D#

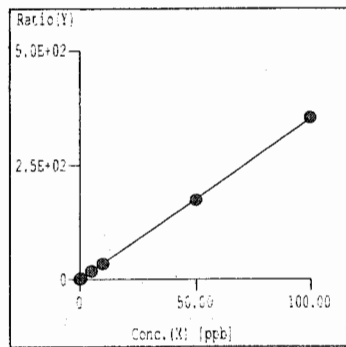
0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

=== Graph Detail ===

Step Mass Element
(1) 59 Co

ISTD
45

Unit
ppb

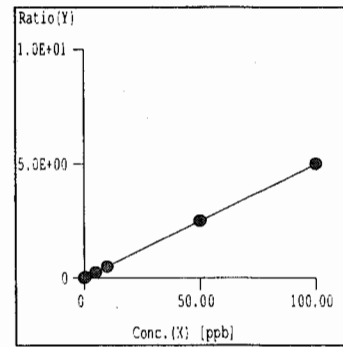


Curve Fit: $Y=aX+[blank]$
 $r = 0.9999$
 $Y = 3.522E+000 \cdot X + 2.821E-001$
 $X = 2.840E-001 \cdot Y - 8.011E-002$
DL = $7.033E-02$ ppb
BEC = $8.011E-02$ ppb

Step Mass Element
(1) 75 As

ISTD
115

Unit
ppb

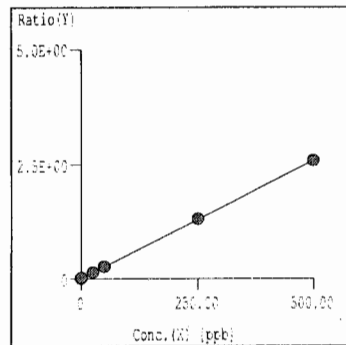


Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 5.001E-002 \cdot X + 3.965E-003$
 $X = 2.000E+001 \cdot Y - 7.928E-002$
DL = $9.021E-02$ ppb
BEC = $7.928E-02$ ppb

Step Mass Element
(1) 78 Se

ISTD
115

Unit
ppb



Curve Fit: $Y=aX+b$
 $r = 1.0000$
 $Y = 5.149E-003 \cdot X + 1.432E-002$
 $X = 1.942E+002 \cdot Y - 2.780E+000$
DL = $2.746E-01$ ppb
BEC = 2.780 ppb

Analyst *S Be* 11/23/13=====
Analysis Begun

Start Time: 11/22/2013 6:04:41 PM

Plasma On Time: 11/22/2013 9:51:33 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\11.22.13.sif

Batch ID: PEICP 2

Results Data Set: SW15727C2

Results Library: C:\pe\administrator\Results\Results.mdb

=====
Method Loaded

Method Name: PE2 4300DV AXIAL

Method Last Saved: 11/22/2013 5:26:16 PM

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: 11/22/2013 6:04:42 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		Std.Dev.	RSD	Calib	
	Intensity				Conc.	Units
Sc 361.383	996436.5		11300.47	1.13%	100	%
Y 371.029	324137.7		2410.98	0.74%	100	%
Ag 328.068†	1480.0		16.21	1.10%	[0.00]	mg/L
Al 308.215†	7942.0		132.60	1.67%	[0.00]	mg/L
As 188.979†	12.7		0.10	0.79%	[0.00]	mg/L
Ba 233.527†	-443.4		4.79	1.08%	[0.00]	mg/L
Be 313.107†	-1132.9		26.39	2.33%	[0.00]	mg/L
Ca 315.887†	-10298.9		374.35	3.63%	[0.00]	mg/L
Cd 228.802†	483.7		13.57	2.81%	[0.00]	mg/L
Co 228.616†	59.7		6.07	10.17%	[0.00]	mg/L
Cr 267.716†	-297.4		1.54	0.52%	[0.00]	mg/L
Cu 327.393†	-6829.8		188.91	2.77%	[0.00]	mg/L
Fe 273.955†	531.0		21.57	4.06%	[0.00]	mg/L
K 404.721†	-4894.5		25.99	0.53%	[0.00]	mg/L
Mg 279.077†	-2010.2		32.40	1.61%	[0.00]	mg/L
Mn 257.610†	891.5		10.18	1.14%	[0.00]	mg/L
Mo 202.031†	114.2		2.50	2.19%	[0.00]	mg/L
Na 330.237†	379.3		64.86	17.10%	[0.00]	mg/L
Ni 231.604†	147.8		16.66	11.27%	[0.00]	mg/L
Pb 220.353†	238.1		9.91	4.16%	[0.00]	mg/L
Sb 206.836†	0.7		1.14	166.71%	[0.00]	mg/L
Se 196.026†	15.4		3.36	21.81%	[0.00]	mg/L
Sn 189.927†	18.4		3.99	21.68%	[0.00]	mg/L
Ti 334.940†	-568.5		5.26	0.93%	[0.00]	mg/L
Tl 190.801†	-2.3		2.34	103.75%	[0.00]	mg/L
V 290.880†	3037.3		31.02	1.02%	[0.00]	mg/L
Zn 206.200†	85.8		2.40	2.80%	[0.00]	mg/L

15727
27442all elements reported
except Al, Na, K

Sequence No.: 2

Sample ID: Calib 1 V-173067

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 11/22/2013 6:08:04 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	1005490.9	4332.31	0.43%	101 %
Y 371.029	322501.8	1677.06	0.52%	99.5 %
As 188.979†	7.8	3.38	43.19%	[0.005] mg/L
Be 313.107†	8577.9	47.66	0.56%	[0.003] mg/L
Cd 228.802†	154.7	12.23	7.90%	[0.003] mg/L
Pb 220.353†	38.6	8.02	20.81%	[0.004] mg/L
Tl 190.801†	3.3	2.82	85.20%	[0.005] mg/L

Sequence No.: 3
 Sample ID: Calib 2 V-173273
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 9
 Date Collected: 11/22/2013 6:11:28 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	997615.6	2846.77	0.29%	100 %
Y 371.029	320560.9	70.47	0.02%	98.9 %
Ag 328.068†	344.7	11.93	3.46%	[0.002] mg/L
Al 308.215†	3271.0	29.57	0.90%	[0.10] mg/L
As 188.979†	13.9	2.54	18.24%	[0.010] mg/L
Ba 233.527†	1385.7	1.00	0.07%	[0.010] mg/L
Be 313.107†	25999.8	27.85	0.11%	[0.010] mg/L
Ca 315.887†	91467.9	310.19	0.34%	[1.0] mg/L
Cd 228.802†	490.8	1.30	0.27%	[0.010] mg/L
Co 228.616†	426.1	7.17	1.68%	[0.010] mg/L
Cr 267.716†	785.5	6.27	0.80%	[0.010] mg/L
Cu 327.393†	1406.1	370.25	26.33%	[0.010] mg/L
Fe 273.955†	2421.1	23.62	0.98%	[0.10] mg/L
K 404.721†	108.0	124.85	115.57%	[1.0] mg/L
Mg 279.077†	15366.7	40.10	0.26%	[1.0] mg/L
Mn 257.610†	7555.0	39.13	0.52%	[0.010] mg/L
Mo 202.031†	183.0	5.27	2.88%	[0.010] mg/L
Na 330.237†	811.7	47.71	5.88%	[1.0] mg/L
Ni 231.604†	455.6	6.25	1.37%	[0.010] mg/L
Pb 220.353†	99.3	0.65	0.66%	[0.010] mg/L
Sb 206.836†	22.6	0.47	2.09%	[0.010] mg/L
Se 196.026†	14.2	2.54	17.92%	[0.010] mg/L
Sn 189.927†	37.8	3.14	8.30%	[0.010] mg/L
Ti 334.940†	7134.4	50.80	0.71%	[0.010] mg/L
Tl 190.801†	13.9	1.20	8.64%	[0.010] mg/L
V 290.880†	1462.8	53.86	3.68%	[0.010] mg/L
Zn 206.200†	453.7	2.30	0.51%	[0.010] mg/L

Sequence No.: 4
 Sample ID: Calib 3 V-173274
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 11/22/2013 6:14:53 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	938990.0	1623.11	0.17%	94.2 %
Y 371.029	292550.7	924.36	0.32%	90.3 %
Ag 328.068†	20003.8	307.82	1.54%	[0.10] mg/L
Al 308.215†	148848.0	1662.13	1.12%	[5.0] mg/L
As 188.979†	686.1	5.52	0.80%	[0.50] mg/L
Ba 233.527†	71707.5	699.99	0.98%	[0.50] mg/L
Be 313.107†	1422252.7	563.29	0.04%	[0.50] mg/L
Ca 315.887†	5151367.2	6477.47	0.13%	[50] mg/L
Cd 228.802†	27426.2	313.88	1.14%	[0.50] mg/L
Co 228.616†	21744.3	249.12	1.15%	[0.50] mg/L
Cr 267.716†	41310.3	643.38	1.56%	[0.50] mg/L
Cu 327.393†	69648.1	826.85	1.19%	[0.50] mg/L
Fe 273.955†	120634.7	1565.52	1.30%	[5.0] mg/L
K 404.721†	5092.2	181.29	3.56%	[50] mg/L
Mg 279.077†	839508.7	658.61	0.08%	[50] mg/L
Mn 257.610†	382375.5	4182.70	1.09%	[0.50] mg/L
Mo 202.031†	9979.1	27.83	0.28%	[0.50] mg/L
Na 330.237†	56822.7	600.65	1.06%	[50] mg/L
Ni 231.604†	23210.3	320.84	1.38%	[0.50] mg/L
Pb 220.353†	5945.0	21.68	0.36%	[0.50] mg/L
Sb 206.836†	1110.5	0.03	0.00%	[0.50] mg/L
Se 196.026†	610.1	1.28	0.21%	[0.50] mg/L
Sn 189.927†	1983.8	1.36	0.07%	[0.50] mg/L
Ti 334.940†	377695.0	3820.99	1.01%	[0.50] mg/L
Tl 190.801†	758.4	6.69	0.88%	[0.50] mg/L
V 290.880†	74617.6	824.47	1.10%	[0.50] mg/L
Zn 206.200†	24471.7	290.70	1.19%	[0.50] mg/L

Sequence No.: 5

Sample ID: Calib 4 V-174144

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 11/22/2013 6:18:23 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	907011.2	3153.60	0.35%	91.0 %
Y 371.029	284324.9	1044.83	0.37%	87.7 %
Ag 328.068†	38325.4	130.43	0.34%	[0.20] mg/L
Al 308.215†	280142.0	496.12	0.18%	[10] mg/L
As 188.979†	1323.6	0.85	0.06%	[1.0] mg/L
Ba 233.527†	135610.7	123.55	0.09%	[1.0] mg/L
Be 313.107†	2719369.7	10848.62	0.40%	[1.0] mg/L
Ca 315.887†	9764981.2	52763.51	0.54%	[100] mg/L
Cd 228.802†	52650.1	208.77	0.40%	[1.0] mg/L
Co 228.616†	41084.4	248.31	0.60%	[1.0] mg/L
Cr 267.716†	78493.7	510.76	0.65%	[1.0] mg/L
Cu 327.393†	132702.7	148.90	0.11%	[1.0] mg/L
Fe 273.955†	227062.7	932.38	0.41%	[10] mg/L
K 404.721†	10088.5	47.73	0.47%	[100] mg/L
Mg 279.077†	1589002.9	4323.65	0.27%	[100] mg/L
Mn 257.610†	723517.9	1848.47	0.26%	[1.0] mg/L
Mo 202.031†	19112.8	5.41	0.03%	[1.0] mg/L
Na 330.237†	114194.7	7.64	0.01%	[100] mg/L
Ni 231.604†	43721.5	113.81	0.26%	[1.0] mg/L
Pb 220.353†	11342.8	9.60	0.08%	[1.0] mg/L
Sb 206.836†	2146.6	3.52	0.16%	[1.0] mg/L
Se 196.026†	1162.2	0.48	0.04%	[1.0] mg/L
Sn 189.927†	3822.8	15.63	0.41%	[1.0] mg/L
Ti 334.940†	726543.7	72.02	0.01%	[1.0] mg/L
Tl 190.801†	1420.9	0.39	0.03%	[1.0] mg/L
V 290.880†	139501.8	618.77	0.44%	[1.0] mg/L
Zn 206.200†	46196.3	53.12	0.11%	[1.0] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	135.6	192500	0.00000	0.999738	
Al 308.215	3	Lin, Calc Int	1810.6	28150	0.00000	0.999493	
As 188.979	4	Lin, Calc Int	3.6	1329	0.00000	0.999845	
Ba 233.527	3	Lin, Calc Int	723.6	136300	0.00000	0.999563	
Be 313.107	4	Lin, Calc Int	7556.1	2735000	0.00000	0.999751	
Ca 315.887	3	Lin, Calc Int	46129.5	98170	0.00000	0.999594	
Cd 228.802	4	Lin, Calc Int	125.1	52940	0.00000	0.999792	
Co 228.616	3	Lin, Calc Int	225.7	41290	0.00000	0.999550	
Cr 267.716	3	Lin, Calc Int	375.8	78870	0.00000	0.999634	
Cu 327.393	3	Lin, Calc Int	635.9	133300	0.00000	0.999676	
Fe 273.955	3	Lin, Calc Int	1361.2	22830	0.00000	0.999487	
K 404.721	3	Lin, Calc Int	12.0	100.9	0.00000	0.999989	
Mg 279.077	3	Lin, Calc Int	7953.8	15970	0.00000	0.999573	
Mn 257.610	3	Lin, Calc Int	3897.4	727100	0.00000	0.999573	
Mo 202.031	3	Lin, Calc Int	73.3	19190	0.00000	0.999738	
Na 330.237	3	Lin, Calc Int	-199.9	1143	0.00000	0.999995	
Ni 231.604	3	Lin, Calc Int	254.0	43950	0.00000	0.999499	
Pb 220.353	4	Lin, Calc Int	27.5	11420	0.00000	0.999720	
Sb 206.836	3	Lin, Calc Int	7.3	2153	0.00000	0.999843	
Se 196.026	3	Lin, Calc Int	6.4	1166	0.00000	0.999682	
Sn 189.927	3	Lin, Calc Int	13.0	3836	0.00000	0.999809	
Ti 334.940	3	Lin, Calc Int	2565.5	729200	0.00000	0.999790	
Tl 190.801	4	Lin, Calc Int	4.7	1434	0.00000	0.999452	
V 290.880	3	Lin, Calc Int	916.5	140300	0.00000	0.999361	
Zn 206.200	3	Lin, Calc Int	246.2	46450	0.00000	0.999531	

Sequence No.: 6

Sample ID: ICS3 V-173274

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 11/22/2013 6:22:51 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	941196.4	94.5 %		1.09			1.15%
Y 371.029	294437.2	90.8 %		0.26			0.29%
Ag 328.068†	19970.3	0.103499 mg/L		0.0009295	0.103499 mg/L	0.0009295	0.90%
QC value within limits for Ag	328.068	Recovery = 103.50%					
Al 308.215†	148537.7	5.20442 mg/L		0.041808	5.20442 mg/L	0.041808	0.80%
QC value within limits for Al	308.215	Recovery = 104.09%					
As 188.979†	682.9	0.510315 mg/L		0.0023658	0.510315 mg/L	0.0023658	0.46%
QC value within limits for As	188.979	Recovery = 102.06%					
Ba 233.527†	71605.7	0.519855 mg/L		0.0043745	0.519855 mg/L	0.0043745	0.84%
QC value within limits for Ba	233.527	Recovery = 103.97%					
Be 313.107†	1423557.2	0.517503 mg/L		0.0027059	0.517503 mg/L	0.0027059	0.52%
QC value within limits for Be	313.107	Recovery = 103.50%					
Ca 315.887†	5152893.6	52.0070 mg/L		0.23385	52.0070 mg/L	0.23385	0.45%
QC value within limits for Ca	315.887	Recovery = 104.01%					
Cd 228.802†	27395.8	0.514789 mg/L		0.0033945	0.514789 mg/L	0.0033945	0.66%
QC value within limits for Cd	228.802	Recovery = 102.96%					
Co 228.616†	21796.6	0.523268 mg/L		0.0026150	0.523268 mg/L	0.0026150	0.50%
QC value within limits for Co	228.616	Recovery = 104.65%					
Cr 267.716†	41284.3	0.521556 mg/L		0.0047180	0.521556 mg/L	0.0047180	0.90%
QC value within limits for Cr	267.716	Recovery = 104.31%					
Cu 327.393†	69737.9	0.517838 mg/L		0.0023793	0.517838 mg/L	0.0023793	0.46%
QC value within limits for Cu	327.393	Recovery = 103.57%					
Fe 273.955†	120915.1	5.23760 mg/L		0.034176	5.23760 mg/L	0.034176	0.65%
QC value within limits for Fe	273.955	Recovery = 104.75%					
K 404.721†	5055.4	49.9683 mg/L		0.11919	49.9683 mg/L	0.11919	0.24%
QC value within limits for K	404.721	Recovery = 99.94%					
Mg 279.077†	839653.6	52.0713 mg/L		0.25615	52.0713 mg/L	0.25615	0.49%
QC value within limits for Mg	279.077	Recovery = 104.14%					
Mn 257.610†	382866.8	0.519462 mg/L		0.0036367	0.519462 mg/L	0.0036367	0.70%
QC value within limits for Mn	257.610	Recovery = 103.89%					
Mo 202.031†	9934.0	0.511693 mg/L		0.0050107	0.511693 mg/L	0.0050107	0.98%
QC value within limits for Mo	202.031	Recovery = 102.34%					
Na 330.237†	56730.5	49.7975 mg/L		0.43760	49.7975 mg/L	0.43760	0.88%
QC value within limits for Na	330.237	Recovery = 99.60%					
Ni 231.604†	23246.7	0.523696 mg/L		0.0035012	0.523696 mg/L	0.0035012	0.67%
QC value within limits for Ni	231.604	Recovery = 104.74%					
Pb 220.353†	5920.2	0.515948 mg/L		0.0052420	0.515948 mg/L	0.0052420	1.02%
QC value within limits for Pb	220.353	Recovery = 103.19%					
Sb 206.836†	1111.4	0.513548 mg/L		0.0065140	0.513548 mg/L	0.0065140	1.27%
QC value within limits for Sb	206.836	Recovery = 102.71%					
Se 196.026†	605.4	0.513139 mg/L		0.0040453	0.513139 mg/L	0.0040453	0.79%
QC value within limits for Se	196.026	Recovery = 102.63%					
Sn 189.927†	1976.6	0.513711 mg/L		0.0056014	0.513711 mg/L	0.0056014	1.09%
QC value within limits for Sn	189.927	Recovery = 102.74%					
Ti 334.940†	377543.3	0.514223 mg/L		0.0027534	0.514223 mg/L	0.0027534	0.54%
QC value within limits for Ti	334.940	Recovery = 102.84%					
Tl 190.801†	762.7	0.533550 mg/L		0.0026591	0.533550 mg/L	0.0026591	0.50%
QC value within limits for Tl	190.801	Recovery = 106.71%					
V 290.880†	74550.7	0.517841 mg/L		0.0052073	0.517841 mg/L	0.0052073	1.01%
QC value within limits for V	290.880	Recovery = 103.57%					
Zn 206.200†	24497.8	0.521690 mg/L		0.0027574	0.521690 mg/L	0.0027574	0.53%
QC value within limits for Zn	206.200	Recovery = 104.34%					

All analyte(s) passed QC.

Sample Prep Vol:

Analyte		Mean Corrected	Calib	Std.Dev.	Sample	Std.Dev.	RSD
		Intensity	Conc. Units		Conc. Units		
Sc	361.383	942215.3	94.6 %	0.04			0.04%
Y	371.029	295076.9	91.0 %	0.50			0.55%
Ag	328.068†	19182.9	0.0993928 mg/L	0.00007620	0.0993928 mg/L	0.00007620	0.08%
	QC value within limits for Ag	328.068	Recovery = 99.39%				
Al	308.215†	143074.4	5.01066 mg/L	0.015052	5.01066 mg/L	0.015052	0.30%
	QC value within limits for Al	308.215	Recovery = 100.21%				
As	188.979†	646.2	0.482728 mg/L	0.0018860	0.482728 mg/L	0.0018860	0.39%
	QC value within limits for As	188.979	Recovery = 96.55%				
Ba	233.527†	69532.3	0.504649 mg/L	0.0018227	0.504649 mg/L	0.0018227	0.36%
	QC value within limits for Ba	233.527	Recovery = 100.93%				
Be	313.107†	1352488.9	0.491528 mg/L	0.0025014	0.491528 mg/L	0.0025014	0.51%
	QC value within limits for Be	313.107	Recovery = 98.31%				
Ca	315.887†	4959113.4	50.0335 mg/L	0.29243	50.0335 mg/L	0.29243	0.58%
	QC value within limits for Ca	315.887	Recovery = 100.07%				
Cd	228.802†	26638.4	0.500494 mg/L	0.0016156	0.500494 mg/L	0.0016156	0.32%
	QC value within limits for Cd	228.802	Recovery = 100.10%				
Co	228.616†	20934.5	0.502361 mg/L	0.0016649	0.502361 mg/L	0.0016649	0.33%
	QC value within limits for Co	228.616	Recovery = 100.47%				
Cr	267.716†	40205.7	0.507766 mg/L	0.0008601	0.507766 mg/L	0.0008601	0.17%
	QC value within limits for Cr	267.716	Recovery = 101.55%				
Cu	327.393†	66142.1	0.490882 mg/L	0.0016657	0.490882 mg/L	0.0016657	0.34%
	QC value within limits for Cu	327.393	Recovery = 98.18%				
Fe	273.955†	117008.3	5.06644 mg/L	0.010707	5.06644 mg/L	0.010707	0.21%
	QC value within limits for Fe	273.955	Recovery = 101.33%				
K	404.721†	4765.5	47.0957 mg/L	1.54432	47.0957 mg/L	1.54432	3.28%
	QC value within limits for K	404.721	Recovery = 94.19%				
Mg	279.077†	821162.8	50.9135 mg/L	0.28388	50.9135 mg/L	0.28388	0.56%
	QC value within limits for Mg	279.077	Recovery = 101.83%				
Mn	257.610†	364696.5	0.494507 mg/L	0.0017614	0.494507 mg/L	0.0017614	0.36%
	QC value within limits for Mn	257.610	Recovery = 98.90%				
Mo	202.031†	9542.2	0.491356 mg/L	0.0001247	0.491356 mg/L	0.0001247	0.03%
	QC value within limits for Mo	202.031	Recovery = 98.27%				
Na	330.237†	54146.7	47.5375 mg/L	0.12642	47.5375 mg/L	0.12642	0.27%
	QC value within limits for Na	330.237	Recovery = 95.08%				
Ni	231.604†	22363.4	0.503579 mg/L	0.0018586	0.503579 mg/L	0.0018586	0.37%
	QC value within limits for Ni	231.604	Recovery = 100.72%				
Pb	220.353†	5636.1	0.491051 mg/L	0.0012354	0.491051 mg/L	0.0012354	0.25%
	QC value within limits for Pb	220.353	Recovery = 98.21%				
Sb	206.836†	1085.2	0.501341 mg/L	0.0012664	0.501341 mg/L	0.0012664	0.25%
	QC value within limits for Sb	206.836	Recovery = 100.27%				
Se	196.026†	570.3	0.483088 mg/L	0.0070152	0.483088 mg/L	0.0070152	1.45%
	QC value within limits for Se	196.026	Recovery = 96.62%				
Sn	189.927†	1933.8	0.502476 mg/L	0.0027410	0.502476 mg/L	0.0027410	0.55%

Autosampler Location: 5
Date Collected: 11/22/2013 6:29:48 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analyte	Mean Corrected	Calib	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	986627.3	99.0 %	1.27			1.28%
Y 371.029	316155.2	97.5 %	1.03			1.05%
Ag 328.068†	3847.1	0.0193034 mg/L	0.00064206	0.0193034 mg/L	0.00064206	3.33%
QC value within limits for Ag		328.068 Recovery =	96.52%			
Al 308.215†	5627.6	0.135319 mg/L	0.0085205	0.135319 mg/L	0.0085205	6.30%
QC value less than the lower limit for Al 308.215		Recovery =	67.66%			
As 188.979†	27.0	0.0175526 mg/L	0.00117874	0.0175526 mg/L	0.00117874	6.72%
QC value within limits for As		188.979 Recovery =	87.76%			
Ba 233.527†	7015.4	0.0461526 mg/L	0.00120882	0.0461526 mg/L	0.00120882	2.62%
QC value within limits for Ba		233.527 Recovery =	92.31%			
Be 313.107†	31706.5	0.0088136 mg/L	0.00027068	0.0088136 mg/L	0.00027068	3.07%
QC value within limits for Be		313.107 Recovery =	73.45%			
Ca 315.887†	498412.1	4.60660 mg/L	0.004308	4.60660 mg/L	0.004308	0.09%
QC value within limits for Ca		315.887 Recovery =	92.13%			
Cd 228.802†	620.4	0.0093326 mg/L	0.00046030	0.0093326 mg/L	0.00046030	4.93%
QC value within limits for Cd		228.802 Recovery =	77.77%			
Co 228.616†	847.3	0.0150297 mg/L	0.00037070	0.0150297 mg/L	0.00037070	2.47%
QC value within limits for Co		228.616 Recovery =	75.15%			
Cr 267.716†	4000.4	0.0460621 mg/L	0.00110612	0.0460621 mg/L	0.00110612	2.40%
QC value within limits for Cr		267.716 Recovery =	92.12%			
Cu 327.393†	6925.4	0.0471245 mg/L	0.00104156	0.0471245 mg/L	0.00104156	2.21%
QC value within limits for Cu		327.393 Recovery =	94.25%			
Fe 273.955†	7130.4	0.252747 mg/L	0.0075800	0.252747 mg/L	0.0075800	3.00%
QC value within limits for Fe		273.955 Recovery =	84.25%			
K 404.721†	525.8	5.09092 mg/L	0.943940	5.09092 mg/L	0.943940	18.54%
QC value within limits for K 404.721		Recovery =	101.82%			
Mg 279.077†	83059.6	4.70200 mg/L	0.137523	4.70200 mg/L	0.137523	2.92%
QC value within limits for Mg		279.077 Recovery =	94.04%			
Mn 257.610†	29683.7	0.0352974 mg/L	0.00102068	0.0352974 mg/L	0.00102068	2.89%
QC value within limits for Mn		257.610 Recovery =	88.24%			
Mo 202.031†	409.4	0.0173352 mg/L	0.00013330	0.0173352 mg/L	0.00013330	0.77%
QC value within limits for Mo		202.031 Recovery =	86.68%			
Na 330.237†	4640.7	4.23412 mg/L	0.048249	4.23412 mg/L	0.048249	1.14%
QC value within limits for Na		330.237 Recovery =	84.68%			
Ni 231.604†	2302.6	0.0466273 mg/L	0.00097309	0.0466273 mg/L	0.00097309	2.09%
QC value within limits for Ni		231.604 Recovery =	93.25%			
Pb 220.353†	143.3	0.0100796 mg/L	0.00094284	0.0100796 mg/L	0.00094284	9.35%
QC value within limits for Pb		220.353 Recovery =	84.00%			
Sb 206.836†	43.8	0.0169813 mg/L	0.00129976	0.0169813 mg/L	0.00129976	7.65%
QC value within limits for Sb		206.836 Recovery =	84.91%			
Se 196.026†	49.4	0.0367861 mg/L	0.00618289	0.0367861 mg/L	0.00618289	16.81%
QC value within limits for Se		196.026 Recovery =	91.97%			
Sn 189.927†	178.6	0.0433524 mg/L	0.00021121	0.0433524 mg/L	0.00021121	0.49%
QC value within limits for Sn		189.927 Recovery =	86.70%			
Ti 334.940†	34392.5	0.0436456 mg/L	0.00100021	0.0436456 mg/L	0.00100021	2.29%
QC value within limits for Ti		334.940 Recovery =	87.29%			
Tl 190.801†	27.9	0.0165547 mg/L	0.00096903	0.0165547 mg/L	0.00096903	5.85%
QC value within limits for Tl		190.801 Recovery =	82.77%			
V 290.880†	7386.1	0.0454827 mg/L	0.00258330	0.0454827 mg/L	0.00258330	5.68%
QC value within limits for V 290.880		Recovery =	90.97%			
Zn 206.200†	2336.5	0.0449846 mg/L				

Sequence No.: 9

Sample ID: ICB V-174666

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 11/22/2013 6:33:15 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	988955.0	99.2 %		0.54			0.54%
Y 371.029	321873.7	99.3 %		0.46			0.47%
Ag 328.068†	-18.5 -0.0008057 mg/L		0.00017061 -0.0008057 mg/L		0.00017061		21.18%
QC value within limits for Ag 328.068	Recovery = Not calculated						
Al 308.215†	-196.4 -0.0712436 mg/L		0.00172384 -0.0712436 mg/L		0.00172384		2.42%
QC value within limits for Al 308.215	Recovery = Not calculated						
As 188.979†	2.0 -0.0012435 mg/L		0.00099606 -0.0012435 mg/L		0.00099606		80.10%
QC value within limits for As 188.979	Recovery = Not calculated						
Ba 233.527†	6.2 -0.0052616 mg/L		0.00003463 -0.0052616 mg/L		0.00003463		0.66%
QC value within limits for Ba 233.527	Recovery = Not calculated						
Be 313.107†	-55.7 -0.0027816 mg/L		0.00001744 -0.0027816 mg/L		0.00001744		0.63%
QC value within limits for Be 313.107	Recovery = Not calculated						
Ca 315.887†	157.1 -0.468161 mg/L		0.0081379 -0.468161 mg/L		0.0081379		1.74%
QC value within limits for Ca 315.887	Recovery = Not calculated						
Cd 228.802†	4.4 -0.0022762 mg/L		0.00008797 -0.0022762 mg/L		0.00008797		3.86%
QC value within limits for Cd 228.802	Recovery = Not calculated						
Co 228.616†	-5.2 -0.0055993 mg/L		0.00016144 -0.0055993 mg/L		0.00016144		2.88%
QC value within limits for Co 228.616	Recovery = Not calculated						
Cr 267.716†	3.6 -0.0047415 mg/L		0.00015075 -0.0047415 mg/L		0.00015075		3.18%
QC value within limits for Cr 267.716	Recovery = Not calculated						
Cu 327.393†	19.8 -0.0046172 mg/L		0.00184027 -0.0046172 mg/L		0.00184027		39.86%
QC value within limits for Cu 327.393	Recovery = Not calculated						
Fe 273.955†	-3.7 -0.0597933 mg/L		0.00001893 -0.0597933 mg/L		0.00001893		0.03%
QC value within limits for Fe 273.955	Recovery = Not calculated						
K 404.721†	53.0 0.406698 mg/L		1.3229290 0.406698 mg/L		1.3229290		325.29%
QC value within limits for K 404.721	Recovery = Not calculated						
Mg 279.077†	-35.0 -0.500150 mg/L		0.0057130 -0.500150 mg/L		0.0057130		1.14%
QC value within limits for Mg 279.077	Recovery = Not calculated						
Mn 257.610†	-11.4 -0.0053588 mg/L		0.00000957 -0.0053588 mg/L		0.00000957		0.18%
QC value within limits for Mn 257.610	Recovery = Not calculated						
Mo 202.031†	0.3 -0.0037824 mg/L		0.00030487 -0.0037824 mg/L		0.00030487		8.06%
QC value within limits for Mo 202.031	Recovery = Not calculated						
Na 330.237†	-39.0 0.140753 mg/L		0.0042300 0.140753 mg/L		0.0042300		3.01%
QC value within limits for Na 330.237	Recovery = Not calculated						
Ni 231.604†	5.6 -0.0056562 mg/L		0.00002699 -0.0056562 mg/L		0.00002699		0.48%
QC value within limits for Ni 231.604	Recovery = Not calculated						
Pb 220.353†	0.7 -0.0023544 mg/L		0.00066289 -0.0023544 mg/L		0.00066289		28.15%
QC value within limits for Pb 220.353	Recovery = Not calculated						
Sb 206.836†	-2.6 -0.0046092 mg/L		0.00142115 -0.0046092 mg/L		0.00142115		30.83%
QC value within limits for Sb 206.836	Recovery = Not calculated						
Se 196.026†	8.0 0.0013165 mg/L		0.00174703 0.0013165 mg/L		0.00174703		132.71%
QC value within limits for Se 196.026	Recovery = Not calculated						
Sn 189.927†	9.2 -0.0010156 mg/L		0.00049365 -0.0010156 mg/L		0.00049365		48.61%
QC value within limits for Sn 189.927	Recovery = Not calculated						
Ti 334.940†	-15.8 -0.0035399 mg/L		0.00015959 -0.0035399 mg/L		0.00015959		4.51%
QC value within limits for Ti 334.940	Recovery = Not calculated						
Tl 190.801†	1.7 -0.0021095 mg/L		0.00190666 -0.0021095 mg/L		0.00190666		90.38%
QC value within limits for Tl 190.801	Recovery = Not calculated						
V 290.880†	-48.2 -0.0068084 mg/L		0.00009550 -0.0068084 mg/L		0.00009550		1.40%
QC value within limits for V 290.880	Recovery = Not calculated						
Zn 206.200†	2.2 -0.0052491 mg/L		0.00005037 -0.0052491 mg/L		0.00005037		0.96%
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: 11/22/2013 6:36:37 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	840166.5	84.3 %		0.49			0.59%
Y 371.029	262992.2	81.1 %		0.33			0.41%
Ag 328.068†	-3023.9	0.0004949 mg/L		0.00025574	0.0004949 mg/L	0.00025574	51.67%
Al 308.215†	13875830.7	492.914 mg/L		0.3867	492.914 mg/L	0.3867	0.08%
QC value within limits for Al 308.215 Recovery = 98.58%							
As 188.979†	44.8	0.0008122 mg/L		0.00411635	0.0008122 mg/L	0.00411635	506.83%
Ba 233.527†	1712.5	-0.0001247 mg/L		0.00011454	-0.0001247 mg/L	0.00011454	91.86%
Be 313.107†	-2417.5	-0.0036455 mg/L		0.00005847	-0.0036455 mg/L	0.00005847	1.60%
Ca 315.887†	48409998.3	492.316 mg/L		3.6251	492.316 mg/L	3.6251	0.74%
QC value within limits for Ca 315.887 Recovery = 98.46%							
Cd 228.802†	295.0	-0.0027327 mg/L		0.00042420	-0.0027327 mg/L	0.00042420	15.52%
Co 228.616†	-30.8	-0.0061019 mg/L		0.00007978	-0.0061019 mg/L	0.00007978	1.31%
Cr 267.716†	-334.9	-0.0088685 mg/L		0.00030028	-0.0088685 mg/L	0.00030028	3.39%
Cu 327.393†	605.1	-0.0129265 mg/L		0.00028482	-0.0129265 mg/L	0.00028482	2.20%
Fe 273.955†	4444404.9	194.648 mg/L		2.1324	194.648 mg/L	2.1324	1.10%
QC value within limits for Fe 273.955 Recovery = 97.32%							
K 404.721†	-2675.9	-26.6303 mg/L		2.65350	-26.6303 mg/L	2.65350	9.96%
Mg 279.077†	8588652.7	537.033 mg/L		6.1474	537.033 mg/L	6.1474	1.14%
QC value within limits for Mg 279.077 Recovery = 107.41%							
Mn 257.610†	1557.9	-0.0231350 mg/L		0.00023795	-0.0231350 mg/L	0.00023795	1.03%
Mo 202.031†	611.3	0.0019442 mg/L		0.00033548	0.0019442 mg/L	0.00033548	17.26%
Na 330.237†	233.3	0.378921 mg/L		0.0091024	0.378921 mg/L	0.0091024	2.40%
Ni 231.604†	24.4	-0.0051913 mg/L		0.00020684	-0.0051913 mg/L	0.00020684	3.98%
Pb 220.353†	-560.3	-0.0122548 mg/L		0.00168975	-0.0122548 mg/L	0.00168975	13.79%
Sb 206.836†	-64.9	-0.0099430 mg/L		0.00115114	-0.0099430 mg/L	0.00115114	11.58%
Se 196.026†	-20.8	-0.0163834 mg/L		0.01091753	-0.0163834 mg/L	0.01091753	66.64%
Sn 189.927†	1.0	-0.0012690 mg/L		0.00200332	-0.0012690 mg/L	0.00200332	157.87%
Ti 334.940†	834.4	-0.0023740 mg/L		0.00002771	-0.0023740 mg/L	0.00002771	1.17%
Tl 190.801†	20.0	-0.0116686 mg/L		0.00002512	-0.0116686 mg/L	0.00002512	0.22%
V 290.880†	13807.4	0.0138917 mg/L		0.00128719	0.0138917 mg/L	0.00128719	9.27%
Zn 206.200†	706.8	-0.0061104 mg/L		0.00017083	-0.0061104 mg/L	0.00017083	2.80%

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/22/2013 6:41:30 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	839511.3	84.3 %		0.40			0.48%
Y 371.029	261529.1	80.7 %		0.72			0.89%
Ag 328.068†	212559.0	1.12086 mg/L		0.015112	1.12086 mg/L	0.015112	1.35%
QC value within limits for Ag	328.068	Recovery = 112.09%					
Al 308.215†	13957793.3	495.826 mg/L		0.4656	495.826 mg/L	0.4656	0.09%
QC value within limits for Al	308.215	Recovery = 99.17%					
As 188.979†	1581.8	1.15716 mg/L		0.049809	1.15716 mg/L	0.049809	4.30%
QC value within limits for As	188.979	Recovery = 115.72%					
Ba 233.527†	77532.1	0.555986 mg/L		0.0148952	0.555986 mg/L	0.0148952	2.68%
QC value within limits for Ba	233.527	Recovery = 111.20%					
Be 313.107†	1520986.5	0.553309 mg/L		0.0143068	0.553309 mg/L	0.0143068	2.59%
QC value within limits for Be	313.107	Recovery = 112.66%					
Ca 315.887†	50240806.7	510.957 mg/L		13.4748	510.957 mg/L	13.4748	2.64%
QC value within limits for Ca	315.887	Recovery = 102.19%					
Cd 228.802†	59925.7	1.12354 mg/L		0.031680	1.12354 mg/L	0.031680	2.82%
QC value within limits for Cd	228.802	Recovery = 112.72%					
Co 228.616†	21936.3	0.525890 mg/L		0.0191873	0.525890 mg/L	0.0191873	3.65%
QC value within limits for Co	228.616	Recovery = 105.18%					
Cr 267.716†	42095.7	0.529353 mg/L		0.0197721	0.529353 mg/L	0.0197721	3.74%
QC value within limits for Cr	267.716	Recovery = 105.87%					
Cu 327.393†	73527.1	0.534025 mg/L		0.0026799	0.534025 mg/L	0.0026799	0.50%
QC value within limits for Cu	327.393	Recovery = 106.80%					
Fe 273.955†	4546412.1	199.116 mg/L		5.3125	199.116 mg/L	5.3125	2.67%
QC value within limits for Fe	273.955	Recovery = 99.56%					
K 404.721†	-3390.3	-33.7079 mg/L		5.86423	-33.7079 mg/L	5.86423	17.40%
Mg 279.077†	8880442.9	555.300 mg/L		22.8951	555.300 mg/L	22.8951	4.12%
QC value within limits for Mg	279.077	Recovery = 111.06%					
Mn 257.610†	392532.3	0.513936 mg/L		0.0151591	0.513936 mg/L	0.0151591	2.95%
QC value within limits for Mn	257.610	Recovery = 102.79%					
Mo 202.031†	645.5	0.0030250 mg/L		0.00114592	0.0030250 mg/L	0.00114592	37.88%
Na 330.237†	1395.8	1.39578 mg/L		0.035608	1.39578 mg/L	0.035608	2.55%
Ni 231.604†	46500.4	1.05217 mg/L		0.049089	1.05217 mg/L	0.049089	4.67%
QC value within limits for Ni	231.604	Recovery = 105.22%					
Pb 220.353†	11645.2	1.05636 mg/L		0.040462	1.05636 mg/L	0.040462	3.83%
QC value within limits for Pb	220.353	Recovery = 105.64%					
Sb 206.836†	2323.1	1.09974 mg/L		0.023848	1.09974 mg/L	0.023848	2.17%
QC value within limits for Sb	206.836	Recovery = 109.97%					
Se 196.026†	1324.8	1.13764 mg/L		0.046875	1.13764 mg/L	0.046875	4.12%
QC value within limits for Se	196.026	Recovery = 113.76%					
Sn 189.927†	7.2	0.0008701 mg/L		0.00117460	0.0008701 mg/L	0.00117460	135.00%
Ti 334.940†	1049.3	-0.0020793 mg/L		0.00028706	-0.0020793 mg/L	0.00028706	13.81%
Tl 190.801†	1534.3	1.04331 mg/L		0.040046	1.04331 mg/L	0.040046	3.84%
QC value within limits for Tl	190.801	Recovery = 104.33%					
V 290.880†	85710.7	0.523820 mg/L		0.0141982	0.523820 mg/L	0.0141982	2.71%
QC value within limits for V	290.880	Recovery = 104.76%					
Zn 206.200†	52850.2	1.11628 mg/L		0.077509	1.11628 mg/L	0.077509	6.94%
QC value within limits for Zn	206.200	Recovery = 111.63%					

All analyte(s) passed QC.

Sequence No.: 12
 Sample ID: MB 27442 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 81
 Date Collected: 11/22/2013 6:46:34 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 27442 (1)

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1007668.2	101	%	0.2			0.17%
Y 371.029	324218.8	100	%	0.1			0.12%
Ag 328.068†	113.7	-0.0001177	mg/L	0.00023518	-0.0001177 mg/L	0.00023518	199.85%
Al 308.215†	1007.0	-0.0284969	mg/L	0.02245509	-0.0284969 mg/L	0.02245509	78.80%
As 188.979†	4.7	0.0007866	mg/L	0.00108687	0.0007866 mg/L	0.00108687	138.17%
Ba 233.527†	-34.6	-0.0055612	mg/L	0.00007079	-0.0055612 mg/L	0.00007079	1.27%
Be 313.107†	-139.8	-0.0028123	mg/L	0.00000534	-0.0028123 mg/L	0.00000534	0.19%
Ca 315.887†	3801.0	-0.431075	mg/L	0.0218143	-0.431075 mg/L	0.0218143	5.06%
Cd 228.802†	20.4	-0.0019738	mg/L	0.00005631	-0.0019738 mg/L	0.00005631	2.85%
Co 228.616†	7.2	-0.0052971	mg/L	0.00019420	-0.0052971 mg/L	0.00019420	3.67%
Cr 267.716†	-48.2	-0.0053954	mg/L	0.00021930	-0.0053954 mg/L	0.00021930	4.06%
Cu 327.393†	-34.0	-0.0050216	mg/L	0.00095254	-0.0050216 mg/L	0.00095254	18.97%
Fe 273.955†	366.3	-0.0435844	mg/L	0.00670726	-0.0435844 mg/L	0.00670726	15.39%
K 404.721†	-248.0	-2.57598	mg/L	1.886333	-2.57598 mg/L	1.886333	73.23%
Mg 279.077†	404.2	-0.472661	mg/L	0.0218302	-0.472661 mg/L	0.0218302	4.62%
Mn 257.610†	95.9	-0.0052122	mg/L	0.00004616	-0.0052122 mg/L	0.00004616	0.89%
Mo 202.031†	8.7	-0.0033487	mg/L	0.00012952	-0.0033487 mg/L	0.00012952	3.87%
Na 330.237†	-3.7	0.171589	mg/L	0.0631883	0.171589 mg/L	0.0631883	36.83%
Ni 231.604†	6.8	-0.0056278	mg/L	0.00007391	-0.0056278 mg/L	0.00007391	1.31%
Pb 220.353†	14.1	-0.0011743	mg/L	0.00062291	-0.0011743 mg/L	0.00062291	53.04%
Sb 206.836†	-1.1	-0.0038933	mg/L	0.00164131	-0.0038933 mg/L	0.00164131	42.16%
Se 196.026†	3.7	-0.0023594	mg/L	0.00057310	-0.0023594 mg/L	0.00057310	24.29%
Sn 189.927†	5.8	-0.0018945	mg/L	0.00033751	-0.0018945 mg/L	0.00033751	17.82%
Ti 334.940†	-25.5	-0.0035532	mg/L	0.00002477	-0.0035532 mg/L	0.00002477	0.70%
Tl 190.801†	1.7	-0.0021076	mg/L	0.00014620	-0.0021076 mg/L	0.00014620	6.94%
V 290.880†	131.1	-0.0055343	mg/L	0.00010981	-0.0055343 mg/L	0.00010981	1.98%
Zn 206.200†	134.6	-0.0023998	mg/L	0.00011227	-0.0023998 mg/L	0.00011227	4.68%

Sequence No.: 13
 Sample ID: LCSW 27442
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 82
 Date Collected: 11/22/2013 6:49:58 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW 27442

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	950411.2	95.4	%	0.01			0.01%
Y 371.029	295519.9	91.2	%	0.13			0.15%
Ag 328.068†	18911.0	0.0979856	mg/L	0.00028336	0.0979856 mg/L	0.00028336	0.29%
Al 308.215†	143083.2	5.01092	mg/L	0.009422	5.01092 mg/L	0.009422	0.19%
As 188.979†	657.8	0.491448	mg/L	0.0018869	0.491448 mg/L	0.0018869	0.38%
Ba 233.527†	70284.4	0.510165	mg/L	0.0012738	0.510165 mg/L	0.0012738	0.25%
Be 313.107†	1365867.6	0.496419	mg/L	0.0003056	0.496419 mg/L	0.0003056	0.06%
Ca 315.887†	5042948.7	50.8874	mg/L	0.06039	50.8874 mg/L	0.06039	0.12%
Cd 228.802†	26814.8	0.503822	mg/L	0.0015855	0.503822 mg/L	0.0015855	0.31%
Co 228.616†	21306.7	0.511384	mg/L	0.0006211	0.511384 mg/L	0.0006211	0.12%
Cr 267.716†	40681.3	0.513815	mg/L	0.0003169	0.513815 mg/L	0.0003169	0.06%
Cu 327.393†	66555.2	0.493972	mg/L	0.0005033	0.493972 mg/L	0.0005033	0.10%
Fe 273.955†	118446.9	5.12947	mg/L	0.015131	5.12947 mg/L	0.015131	0.29%
K 404.721†	4390.3	43.3786	mg/L	0.83768	43.3786 mg/L	0.83768	1.93%
Mg 279.077†	837493.5	51.9358	mg/L	0.07856	51.9358 mg/L	0.07856	0.15%
Mn 257.610†	369064.6	0.500478	mg/L	0.0008522	0.500478 mg/L	0.0008522	0.17%
Mo 202.031†	9602.8	0.494483	mg/L	0.0027060	0.494483 mg/L	0.0027060	0.55%
Na 330.237†	53362.4	46.8515	mg/L	0.11442	46.8515 mg/L	0.11442	0.24%
Ni 231.604†	22775.6	0.512960	mg/L	0.0009686	0.512960 mg/L	0.0009686	0.19%
Pb 220.353†	5724.9	0.498810	mg/L	0.0042251	0.498810 mg/L	0.0042251	0.85%
Sb 206.836†	1087.9	0.502603	mg/L	0.0027104	0.502603 mg/L	0.0027104	0.54%
Se 196.026†	577.2	0.488932	mg/L	0.0080891	0.488932 mg/L	0.0080891	1.65%
Sn 189.927†	1954.9	0.508004	mg/L	0.0057321	0.508004 mg/L	0.0057321	1.13%
Ti 334.940†	362069.2	0.493003	mg/L	0.0001225	0.493003 mg/L	0.0001225	0.02%
Tl 190.801†	735.7	0.514568	mg/L	0.0025906	0.514568 mg/L	0.0025906	0.50%
V 290.880†	71841.7	0.498553	mg/L	0.0010100	0.498553 mg/L	0.0010100	0.20%
Zn 206.200†	24109.6	0.513344	mg/L	0.0031537	0.513344 mg/L	0.0031537	0.61%

Sequence No.: 14
 Sample ID: LCSW MR 27442
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 83
 Date Collected: 11/22/2013 6:53:28 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW MR 27442

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	943317.5	94.7 %	0.01			0.02%
Y 371.029	294536.4	90.9 %	0.53			0.58%
Ag 328.068†	18689.1	0.0968255 mg/L	0.00017644	0.0968255 mg/L	0.00017644	0.18%
Al 308.215†	141783.1	4.96486 mg/L	0.029129	4.96486 mg/L	0.029129	0.59%
As 188.979†	644.3	0.481256 mg/L	0.0012520	0.481256 mg/L	0.0012520	0.26%
Ba 233.527†	69108.6	0.501542 mg/L	0.0023079	0.501542 mg/L	0.0023079	0.46%
Be 313.107†	1334100.2	0.484807 mg/L	0.0012086	0.484807 mg/L	0.0012086	0.25%
Ca 315.887†	4903882.3	49.4710 mg/L	0.03266	49.4710 mg/L	0.03266	0.07%
Cd 228.802†	26316.7	0.494421 mg/L	0.0018229	0.494421 mg/L	0.0018229	0.37%
Co 228.616†	20858.0	0.500503 mg/L	0.0016405	0.500503 mg/L	0.0016405	0.33%
Cr 267.716†	40073.3	0.506062 mg/L	0.0007990	0.506062 mg/L	0.0007990	0.16%
Cu 327.393†	65908.2	0.489136 mg/L	0.0026163	0.489136 mg/L	0.0026163	0.53%
Fe 273.955†	116508.8	5.04456 mg/L	0.026429	5.04456 mg/L	0.026429	0.52%
K 404.721†	4688.0	46.3276 mg/L	3.09826	46.3276 mg/L	3.09826	6.69%
Mg 279.077†	811299.3	50.2960 mg/L	0.00560	50.2960 mg/L	0.00560	0.01%
Mn 257.610†	362869.6	0.492016 mg/L	0.0021419	0.492016 mg/L	0.0021419	0.44%
Mo 202.031†	9452.9	0.486728 mg/L	0.0008484	0.486728 mg/L	0.0008484	0.17%
Na 330.237†	53103.2	46.6248 mg/L	0.33667	46.6248 mg/L	0.33667	0.72%
Ni 231.604†	22240.5	0.500776 mg/L	0.0013965	0.500776 mg/L	0.0013965	0.28%
Pb 220.353†	5597.1	0.487644 mg/L	0.0027323	0.487644 mg/L	0.0027323	0.56%
Sb 206.836†	1063.6	0.491315 mg/L	0.0010228	0.491315 mg/L	0.0010228	0.21%
Se 196.026†	562.3	0.476181 mg/L	0.0038296	0.476181 mg/L	0.0038296	0.80%
Sn 189.927†	1916.7	0.498005 mg/L	0.0022429	0.498005 mg/L	0.0022429	0.45%
Ti 334.940†	356831.5	0.485820 mg/L	0.0025826	0.485820 mg/L	0.0025826	0.53%
Tl 190.801†	727.1	0.508486 mg/L	0.0001955	0.508486 mg/L	0.0001955	0.04%
V 290.880†	71075.8	0.493310 mg/L	0.0023985	0.493310 mg/L	0.0023985	0.49%
Zn 206.200†	23269.4	0.495262 mg/L	0.0004147	0.495262 mg/L	0.0004147	0.08%

Sequence No.: 15
 Sample ID: 75646-002
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 84
 Date Collected: 11/22/2013 6:56:58 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-002

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	968869.1	97.2 %		0.55			0.57%
Y 371.029	307932.2	95.0 %		0.42			0.44%
Ag 328.068†	30.8	-0.0005459 mg/L		0.00013544	-0.0005459 mg/L	0.00013544	24.81%
Al 308.215†	682.6	-0.0400585 mg/L		0.00029069	-0.0400585 mg/L	0.00029069	0.73%
As 188.979†	3.3	-0.0004588 mg/L		0.00145178	-0.0004588 mg/L	0.00145178	316.44%
Ba 233.527†	3949.4	0.0236676 mg/L		0.00013346	0.0236676 mg/L	0.00013346	0.56%
Be 313.107†	191.7	-0.0026911 mg/L		0.00001747	-0.0026911 mg/L	0.00001747	0.65%
Ca 315.887†	1244908.1	12.2108 mg/L		0.05648	12.2108 mg/L	0.05648	0.46%
Cd 228.802†	13.7	-0.0021552 mg/L		0.00010414	-0.0021552 mg/L	0.00010414	4.83%
Co 228.616†	17.8	-0.0050314 mg/L		0.00004659	-0.0050314 mg/L	0.00004659	0.93%
Cr 267.716†	-11.9	-0.0048704 mg/L		0.00014440	-0.0048704 mg/L	0.00014440	2.96%
Cu 327.393†	123.6	-0.0040107 mg/L		0.00046339	-0.0040107 mg/L	0.00046339	11.55%
Fe 273.955†	1030.2	-0.0145002 mg/L		0.00006179	-0.0145002 mg/L	0.00006179	0.43%
K 404.721†	128.1	1.15080 mg/L		1.123183	1.15080 mg/L	1.123183	97.60%
Mg 279.077†	72791.2	4.05978 mg/L		0.002625	4.05978 mg/L	0.002625	0.06%
Mn 257.610†	108337.9	0.143497 mg/L		0.0003401	0.143497 mg/L	0.0003401	0.24%
Mo 202.031†	50.3	-0.0016231 mg/L		0.00018321	-0.0016231 mg/L	0.00018321	11.29%
Na 330.237†	38064.1	33.4699 mg/L		0.08450	33.4699 mg/L	0.08450	0.25%
Ni 231.604†	56.5	-0.0044953 mg/L		0.00015857	-0.0044953 mg/L	0.00015857	3.53%
Pb 220.353†	25.3	-0.0002493 mg/L		0.00152059	-0.0002493 mg/L	0.00152059	609.89%
Sb 206.836†	1.5	-0.0026950 mg/L		0.00167195	-0.0026950 mg/L	0.00167195	62.04%
Se 196.026†	10.5	0.0030999 mg/L		0.00680265	0.0030999 mg/L	0.00680265	219.44%
Sn 189.927†	-2.4	-0.0036805 mg/L		0.00037765	-0.0036805 mg/L	0.00037765	10.26%
Ti 334.940†	-110.7	-0.0036701 mg/L		0.00009665	-0.0036701 mg/L	0.00009665	2.63%
Tl 190.801†	0.7	-0.0029084 mg/L		0.00010323	-0.0029084 mg/L	0.00010323	3.55%
V 290.880†	763.3	-0.0015845 mg/L		0.00002921	-0.0015845 mg/L	0.00002921	1.84%
Zn 206.200†	573.4	0.0070441 mg/L		0.00019913	0.0070441 mg/L	0.00019913	2.83%

Sequence No.: 16
 Sample ID: 75646-002 MR
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 85
 Date Collected: 11/22/2013 7:00:25 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-002 MR

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	969935.7	97.3 %		0.43			0.44%
Y 371.029	307603.8	94.9 %		0.55			0.58%
Ag 328.068†	4.7	-0.0006808 mg/L		0.00015595	-0.0006808 mg/L	0.00015595	22.91%
Al 308.215†	582.7	-0.0435933 mg/L		0.00187762	-0.0435933 mg/L	0.00187762	4.31%
As 188.979†	0.6	-0.0024995 mg/L		0.00087714	-0.0024995 mg/L	0.00087714	35.09%
Ba 233.527†	3794.3	0.0225296 mg/L		0.00010270	0.0225296 mg/L	0.00010270	0.46%
Be 313.107†	268.3	-0.0026631 mg/L		0.00000185	-0.0026631 mg/L	0.00000185	0.07%
Ca 315.887†	1203078.1	11.7848 mg/L		0.01392	11.7848 mg/L	0.01392	0.12%
Cd 228.802†	-3.7	-0.0024815 mg/L		0.00004357	-0.0024815 mg/L	0.00004357	1.76%
Co 228.616†	24.7	-0.0048681 mg/L		0.00001993	-0.0048681 mg/L	0.00001993	0.41%
Cr 267.716†	-10.1	-0.0048537 mg/L		0.00004199	-0.0048537 mg/L	0.00004199	0.87%
Cu 327.393†	147.8	-0.0038237 mg/L		0.00013392	-0.0038237 mg/L	0.00013392	3.50%
Fe 273.955†	1207.6	-0.0067275 mg/L		0.00022308	-0.0067275 mg/L	0.00022308	3.32%
K 404.721†	225.5	2.11548 mg/L		2.453942	2.11548 mg/L	2.453942	116.00%
Mg 279.077†	69416.4	3.84846 mg/L		0.007769	3.84846 mg/L	0.007769	0.20%
Mn 257.610†	103570.0	0.136947 mg/L		0.0000815	0.136947 mg/L	0.0000815	0.06%
Mo 202.031†	37.1	-0.0022959 mg/L		0.00008706	-0.0022959 mg/L	0.00008706	3.79%
Na 330.237†	36302.7	31.9292 mg/L		0.01879	31.9292 mg/L	0.01879	0.06%
Ni 231.604†	59.1	-0.0044348 mg/L		0.00017269	-0.0044348 mg/L	0.00017269	3.89%
Pb 220.353†	11.8	-0.0014369 mg/L		0.00082459	-0.0014369 mg/L	0.00082459	57.39%
Sb 206.836†	1.9	-0.0024929 mg/L		0.00153272	-0.0024929 mg/L	0.00153272	61.48%
Se 196.026†	4.5	-0.0020388 mg/L		0.00592705	-0.0020388 mg/L	0.00592705	290.72%
Sn 189.927†	-3.7	-0.0040364 mg/L		0.00168134	-0.0040364 mg/L	0.00168134	41.65%
Ti 334.940†	-140.6	-0.0037110 mg/L		0.00007073	-0.0037110 mg/L	0.00007073	1.91%
Tl 190.801†	-6.1	-0.0076986 mg/L		0.00077992	-0.0076986 mg/L	0.00077992	10.13%
V 290.880†	688.3	-0.0020935 mg/L		0.00039314	-0.0020935 mg/L	0.00039314	18.78%
Zn 206.200†	555.0	0.0066485 mg/L		0.00032130	0.0066485 mg/L	0.00032130	4.83%

Sequence No.: 17
 Sample ID: 75646-004 MS 1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 86
 Date Collected: 11/22/2013 7:03:51 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-004 MS 1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	937476.2	94.1	%	0.51			0.54%
Y 371.029	290884.7	89.7	%	0.49			0.54%
Ag 328.068†	18328.2	0.0949484	mg/L	0.00065371	0.0949484 mg/L	0.00065371	0.69%
Al 308.215†	139637.3	4.88871	mg/L	0.056115	4.88871 mg/L	0.056115	1.15%
As 188.979†	647.8	0.483692	mg/L	0.0029117	0.483692 mg/L	0.0029117	0.60%
Ba 233.527†	72365.1	0.525436	mg/L	0.0050404	0.525436 mg/L	0.0050404	0.96%
Be 313.107†	1331960.9	0.484028	mg/L	0.0000576	0.484028 mg/L	0.0000576	0.01%
Ca 315.887†	6110778.1	61.7646	mg/L	0.00008	61.7646 mg/L	0.00008	0.00%
Cd 228.802†	26032.4	0.489000	mg/L	0.0059452	0.489000 mg/L	0.0059452	1.22%
Co 228.616†	20406.9	0.489574	mg/L	0.0065984	0.489574 mg/L	0.0065984	1.35%
Cr 267.716†	39073.6	0.493413	mg/L	0.0028096	0.493413 mg/L	0.0028096	0.57%
Cu 327.393†	65476.3	0.485726	mg/L	0.0064776	0.485726 mg/L	0.0064776	1.33%
Fe 273.955†	115818.6	5.01432	mg/L	0.069636	5.01432 mg/L	0.069636	1.39%
K 404.721†	4847.1	47.9045	mg/L	0.20865	47.9045 mg/L	0.20865	0.44%
Mg 279.077†	876619.4	54.3859	mg/L	0.04264	54.3859 mg/L	0.04264	0.08%
Mn 257.610†	468011.6	0.636475	mg/L	0.0076271	0.636475 mg/L	0.0076271	1.20%
Mo 202.031†	9358.3	0.481375	mg/L	0.0027043	0.481375 mg/L	0.0027043	0.56%
Na 330.237†	96535.9	84.6158	mg/L	1.02845	84.6158 mg/L	1.02845	1.22%
Ni 231.604†	21676.2	0.487932	mg/L	0.0048633	0.487932 mg/L	0.0048633	1.00%
Pb 220.353†	5515.8	0.480461	mg/L	0.0025630	0.480461 mg/L	0.0025630	0.53%
Sb 206.836†	1072.8	0.495532	mg/L	0.0011514	0.495532 mg/L	0.0011514	0.23%
Se 196.026†	565.0	0.478084	mg/L	0.0032001	0.478084 mg/L	0.0032001	0.67%
Sn 189.927†	1880.7	0.488941	mg/L	0.0001126	0.488941 mg/L	0.0001126	0.02%
Ti 334.940†	352059.7	0.479276	mg/L	0.0047607	0.479276 mg/L	0.0047607	0.99%
Tl 190.801†	710.1	0.496404	mg/L	0.0064720	0.496404 mg/L	0.0064720	1.30%
V 290.880†	69949.9	0.484792	mg/L	0.0056088	0.484792 mg/L	0.0056088	1.16%
Zn 206.200†	23325.9	0.496481	mg/L	0.0064952	0.496481 mg/L	0.0064952	1.31%

Sequence No.: 18
 Sample ID: 75646-034 MS 2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 87
 Date Collected: 11/22/2013 7:07:21 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-034 MS 2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	927201.1	93.1	%	0.67			0.72%
Y 371.029	291410.8	89.9	%	0.33			0.36%
Ag 328.068†	18812.0	0.0974679	mg/L	0.00029701	0.0974679 mg/L	0.00029701	0.30%
Al 308.215†	141772.6	4.96438	mg/L	0.005620	4.96438 mg/L	0.005620	0.11%
As 188.979†	658.8	0.491995	mg/L	0.0044471	0.491995 mg/L	0.0044471	0.90%
Ba 233.527†	73282.0	0.532160	mg/L	0.0025410	0.532160 mg/L	0.0025410	0.48%
Be 313.107†	1345679.6	0.489039	mg/L	0.0038019	0.489039 mg/L	0.0038019	0.78%
Ca 315.887†	6116577.5	61.8235	mg/L	0.52336	61.8235 mg/L	0.52336	0.85%
Cd 228.802†	26406.0	0.496054	mg/L	0.0013204	0.496054 mg/L	0.0013204	0.27%
Co 228.616†	20701.8	0.496735	mg/L	0.0026829	0.496735 mg/L	0.0026829	0.54%
Cr 267.716†	39711.4	0.501556	mg/L	0.0004907	0.501556 mg/L	0.0004907	0.10%
Cu 327.393†	65977.1	0.489485	mg/L	0.0023966	0.489485 mg/L	0.0023966	0.49%
Fe 273.955†	117459.3	5.08620	mg/L	0.036118	5.08620 mg/L	0.036118	0.71%
K 404.721†	4851.5	47.9483	mg/L	1.68795	47.9483 mg/L	1.68795	3.52%
Mg 279.077†	883037.6	54.7878	mg/L	0.50151	54.7878 mg/L	0.50151	0.92%
Mn 257.610†	464081.4	0.631058	mg/L	0.0053006	0.631058 mg/L	0.0053006	0.84%
Mo 202.031†	9572.9	0.492549	mg/L	0.0022003	0.492549 mg/L	0.0022003	0.45%
Na 330.237†	95745.9	83.9247	mg/L	0.20526	83.9247 mg/L	0.20526	0.24%
Ni 231.604†	21954.8	0.494283	mg/L	0.0031737	0.494283 mg/L	0.0031737	0.64%
Pb 220.353†	5578.2	0.485927	mg/L	0.0027764	0.485927 mg/L	0.0027764	0.57%
Sb 206.836†	1107.0	0.511469	mg/L	0.0013862	0.511469 mg/L	0.0013862	0.27%
Se 196.026†	581.2	0.492014	mg/L	0.0028884	0.492014 mg/L	0.0028884	0.59%
Sn 189.927†	1921.8	0.499663	mg/L	0.0034874	0.499663 mg/L	0.0034874	0.70%
Ti 334.940†	359719.1	0.489780	mg/L	0.0016308	0.489780 mg/L	0.0016308	0.33%
Tl 190.801†	714.5	0.499654	mg/L	0.0023053	0.499654 mg/L	0.0023053	0.46%
V 290.880†	71093.4	0.492884	mg/L	0.0010575	0.492884 mg/L	0.0010575	0.21%
Zn 206.200†	23589.9	0.502159	mg/L	0.0029078	0.502159 mg/L	0.0029078	0.58%

Sequence No.: 19
 Sample ID: 75646-002 PS
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 88
 Date Collected: 11/22/2013 7:10:53 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-002 PS

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	930060.8	93.3	%	0.09			0.09%
Y 371.029	288736.3	89.1	%	0.84			0.95%
Ag 328.068†	16868.9	0.0874253	mg/L	0.00066081	0.0874253 mg/L	0.00066081	0.76%
Al 308.215†	158292.0	5.55167	mg/L	0.050983	5.55167 mg/L	0.050983	0.92%
As 188.979†	739.3	0.552395	mg/L	0.0070006	0.552395 mg/L	0.0070006	1.27%
Ba 233.527†	81493.1	0.592381	mg/L	0.0057850	0.592381 mg/L	0.0057850	0.98%
Be 313.107†	151444.1	0.550749	mg/L	0.0015139	0.550749 mg/L	0.0015139	0.27%
Ca 315.887†	6732361.9	68.0952	mg/L	0.09247	68.0952 mg/L	0.09247	0.14%
Cd 228.802†	29634.7	0.557011	mg/L	0.0048457	0.557011 mg/L	0.0048457	0.87%
Co 228.616†	23145.8	0.555892	mg/L	0.0049553	0.555892 mg/L	0.0049553	0.89%
Cr 267.716†	44652.5	0.564111	mg/L	0.0070246	0.564111 mg/L	0.0070246	1.25%
Cu 327.393†	74027.1	0.549802	mg/L	0.0038868	0.549802 mg/L	0.0038868	0.71%
Fe 273.955†	131190.4	5.68776	mg/L	0.043039	5.68776 mg/L	0.043039	0.76%
K 404.721†	5505.7	54.4297	mg/L	1.75027	54.4297 mg/L	1.75027	3.22%
Mg 279.077†	982719.2	61.0277	mg/L	0.09284	61.0277 mg/L	0.09284	0.15%
Mn 257.610†	511875.4	0.696556	mg/L	0.0052084	0.696556 mg/L	0.0052084	0.75%
Mo 202.031†	9121.0	0.468781	mg/L	0.0020129	0.468781 mg/L	0.0020129	0.43%
Na 330.237†	103324.0	90.5534	mg/L	0.69445	90.5534 mg/L	0.69445	0.77%
Ni 231.604†	24639.4	0.555332	mg/L	0.0052509	0.555332 mg/L	0.0052509	0.95%
Pb 220.353†	6295.6	0.548670	mg/L	0.0003953	0.548670 mg/L	0.0003953	0.07%
Sb 206.836†	1042.2	0.481373	mg/L	0.0021004	0.481373 mg/L	0.0021004	0.44%
Se 196.026†	638.7	0.541246	mg/L	0.0104049	0.541246 mg/L	0.0104049	1.92%
Sn 189.927†	1833.4	0.476788	mg/L	0.0039074	0.476788 mg/L	0.0039074	0.82%
Ti 334.940†	339379.6	0.461887	mg/L	0.0030539	0.461887 mg/L	0.0030539	0.66%
Tl 190.801†	805.4	0.562530	mg/L	0.0049138	0.562530 mg/L	0.0049138	0.87%
V 290.880†	79375.1	0.551067	mg/L	0.0041099	0.551067 mg/L	0.0041099	0.75%
Zn 206.200†	26391.4	0.562444	mg/L	0.0070951	0.562444 mg/L	0.0070951	1.26%

Sequence No.: 20

Sample ID: CCV V-173510

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 11/22/2013 7:14:23 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	935816.2	93.9 %		0.14			0.15%
Y 371.029	290916.4	89.8 %		0.29			0.32%
Ag 328.068†	18925.9	0.0980525 mg/L		0.00005146	0.0980525 mg/L	0.00005146	0.05%
QC value within limits for Ag 328.068 Recovery = 98.05%							
Al 308.215†	141246.5	4.94570 mg/L		0.020222	4.94570 mg/L	0.020222	0.41%
QC value within limits for Al 308.215 Recovery = 98.91%							
As 188.979†	642.3	0.479797 mg/L		0.0056321	0.479797 mg/L	0.0056321	1.17%
QC value within limits for As 188.979 Recovery = 95.96%							
Ba 233.527†	68819.4	0.499421 mg/L		0.0000480	0.499421 mg/L	0.0000480	0.01%
QC value within limits for Ba 233.527 Recovery = 99.88%							
Be 313.107†	1351252.9	0.491078 mg/L		0.0010820	0.491078 mg/L	0.0010820	0.22%
QC value within limits for Be 313.107 Recovery = 98.22%							
Ca 315.887†	4963885.2	50.0822 mg/L		0.07201	50.0822 mg/L	0.07201	0.14%
QC value within limits for Ca 315.887 Recovery = 100.16%							
Cd 228.802†	26328.7	0.494645 mg/L		0.0013728	0.494645 mg/L	0.0013728	0.28%
QC value within limits for Cd 228.802 Recovery = 98.93%							
Co 228.616†	20640.0	0.495241 mg/L		0.0012344	0.495241 mg/L	0.0012344	0.25%
QC value within limits for Co 228.616 Recovery = 99.05%							
Cr 267.716†	39746.2	0.501943 mg/L		0.0001630	0.501943 mg/L	0.0001630	0.03%
QC value within limits for Cr 267.716 Recovery = 100.39%							
Cu 327.393†	65711.6	0.487654 mg/L		0.0030137	0.487654 mg/L	0.0030137	0.62%
QC value within limits for Cu 327.393 Recovery = 97.53%							
Fe 273.955†	115671.4	5.00788 mg/L		0.001056	5.00788 mg/L	0.001056	0.02%
QC value within limits for Fe 273.955 Recovery = 100.16%							
K 404.721†	4641.3	45.8652 mg/L		1.37929	45.8652 mg/L	1.37929	3.01%
QC value within limits for K 404.721 Recovery = 91.73%							
Mg 279.077†	821555.1	50.9381 mg/L		0.08001	50.9381 mg/L	0.08001	0.16%
QC value within limits for Mg 279.077 Recovery = 101.88%							
Mn 257.610†	360855.2	0.489223 mg/L		0.0005441	0.489223 mg/L	0.0005441	0.11%
QC value within limits for Mn 257.610 Recovery = 97.84%							
Mo 202.031†	9559.5	0.492262 mg/L		0.0034513	0.492262 mg/L	0.0034513	0.70%
QC value within limits for Mo 202.031 Recovery = 98.45%							
Na 330.237†	53081.7	46.6060 mg/L		0.20689	46.6060 mg/L	0.20689	0.44%
QC value within limits for Na 330.237 Recovery = 93.21%							
Ni 231.604†	22121.1	0.498066 mg/L		0.0019634	0.498066 mg/L	0.0019634	0.39%
QC value within limits for Ni 231.604 Recovery = 99.61%							
Pb 220.353†	5595.1	0.487459 mg/L		0.0057667	0.487459 mg/L	0.0057667	1.18%
QC value within limits for Pb 220.353 Recovery = 97.49%							
Sb 206.836†	1084.0	0.500790 mg/L		0.0058492	0.500790 mg/L	0.0058492	1.17%
QC value within limits for Sb 206.836 Recovery = 100.16%							
Se 196.026†	560.9	0.474980 mg/L		0.0003792	0.474980 mg/L	0.0003792	0.08%
QC value within limits for Se 196.026 Recovery = 95.00%							
Sn 189.927†	1921.1	0.499163 mg/L		0.0071797	0.499163 mg/L	0.0071797	1.44%
QC value within limits for Sn 189.927 Recovery = 99.83%							
Ti 334.940†	358245.3	0.487759 mg/L		0.0017578	0.487759 mg/L	0.0017578	0.36%
QC value within limits for Ti 334.940 Recovery = 97.55%							
Tl 190.801†	725.5	0.507420 mg/L		0.0073106	0.507420 mg/L	0.0073106	1.44%
QC value within limits for Tl 190.801 Recovery = 101.48%							
V 290.880†	70573.5	0.489648 mg/L		0.0002089	0.489648 mg/L	0.0002089	0.04%
QC value within limits for V 290.880 Recovery = 97.93%							
Zn 206.200†	23180.3	0.493343 mg/L		0.0032430	0.493343 mg/L	0.0032430	0.66%
QC value within limits for Zn 206.200 Recovery = 98.67%							

All analyte(s) passed QC.

Autosampler Location: 5
Date Collected: 11/22/2013 7:17:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analyte	Mean Corrected		Calib		Sample		RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	
Sc 361.383	970372.8	97.4	%	0.03			0.03%
Y 371.029	311057.9	96.0	%	0.01			0.01%
Ag 328.068†	3955.9	0.0198692	mg/L	0.00013331	0.0198692	mg/L	0.67%
QC value within limits for Ag		328.068	Recovery =	99.35%			
Al 308.215†	5738.2	0.139247	mg/L	0.0031070	0.139247	mg/L	2.23%
QC value less than the lower limit for Al 308.215			Recovery =	69.62%			
As 188.979†	28.0	0.0182402	mg/L	0.00145326	0.0182402	mg/L	7.97%
QC value within limits for As		188.979	Recovery =	91.20%			
Ba 233.527†	7079.0	0.0466193	mg/L	0.00018140	0.0466193	mg/L	0.39%
QC value within limits for Ba		233.527	Recovery =	93.24%			
Be 313.107†	31802.2	0.0088485	mg/L	0.00007302	0.0088485	mg/L	0.83%
QC value within limits for Be		313.107	Recovery =	73.74%			
Ca 315.887†	497814.6	4.60051	mg/L	0.026828	4.60051	mg/L	0.58%
QC value within limits for Ca		315.887	Recovery =	92.01%			
Cd 228.802†	618.0	0.0092876	mg/L	0.00015250	0.0092876	mg/L	1.64%
QC value within limits for Cd		228.802	Recovery =	77.40%			
Co 228.616†	860.6	0.0153531	mg/L	0.00019976	0.0153531	mg/L	1.30%
QC value within limits for Co		228.616	Recovery =	76.77%			
Cr 267.716†	4054.6	0.0467509	mg/L	0.00035629	0.0467509	mg/L	0.76%
QC value within limits for Cr		267.716	Recovery =	93.50%			
Cu 327.393†	6631.8	0.0449210	mg/L	0.00010684	0.0449210	mg/L	0.24%
QC value within limits for Cu		327.393	Recovery =	89.84%			
Fe 273.955†	7167.2	0.254359	mg/L	0.0007305	0.254359	mg/L	0.29%
QC value within limits for Fe		273.955	Recovery =	84.79%			
K 404.721†	413.9	3.98190	mg/L	0.127206	3.98190	mg/L	3.19%
QC value within limits for K 404.721			Recovery =	79.64%			
Mg 279.077†	83775.7	4.74683	mg/L	0.001268	4.74683	mg/L	0.03%
QC value within limits for Mg		279.077	Recovery =	94.94%			
Mn 257.610†	29934.0	0.0356401	mg/L	0.00000132	0.0356401	mg/L	0.00%
QC value within limits for Mn		257.610	Recovery =	89.10%			
Mo 202.031†	411.9	0.0174659	mg/L	0.00011174	0.0174659	mg/L	0.64%
QC value within limits for Mo		202.031	Recovery =	87.33%			
Na 330.237†	4677.1	4.26599	mg/L	0.050854	4.26599	mg/L	1.19%
QC value within limits for Na		330.237	Recovery =	85.32%			
Ni 231.604†	2301.1	0.0465938	mg/L	0.00012115	0.0465938	mg/L	0.26%
QC value within limits for Ni		231.604	Recovery =	93.19%			
Pb 220.353†	151.0	0.0107560	mg/L	0.00031005	0.0107560	mg/L	2.88%
QC value within limits for Pb		220.353	Recovery =	89.63%			
Sb 206.836†	44.2	0.0171775	mg/L	0.00039693	0.0171775	mg/L	2.31%
QC value within limits for Sb		206.836	Recovery =	85.89%			
Se 196.026†	52.7	0.0395835	mg/L	0.00308354	0.0395835	mg/L	7.79%
QC value within limits for Se		196.026	Recovery =	98.96%			
Sn 189.927†	182.6	0.0443759	mg/L	0.00047594	0.0443759	mg/L	1.07%
QC value within limits for Sn		189.927	Recovery =	88.75%			
Ti 334.940†	34575.4	0.0438965	mg/L	0.00011420	0.043		

Sequence No.: 22
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/22/2013 7:21:17 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	982284.7		98.6 %	0.81			0.83%	
Y	371.029	319706.6		98.6 %	1.06			1.07%	
Ag	328.068†	-6.5	-0.0007433	mg/L	0.00028922	-0.0007433	mg/L	0.00028922	38.91%
	QC value	within limits	for Ag	328.068	Recovery =	Not calculated			
Al	308.215†	-8.3	-0.0645629	mg/L	0.00472073	-0.0645629	mg/L	0.00472073	7.31%
	QC value	within limits	for Al	308.215	Recovery =	Not calculated			
As	188.979†	0.6	-0.0022390	mg/L	0.00064600	-0.0022390	mg/L	0.00064600	28.85%
	QC value	within limits	for As	188.979	Recovery =	Not calculated			
Ba	233.527†	-8.7	-0.0053706	mg/L	0.00001228	-0.0053706	mg/L	0.00001228	0.23%
	QC value	within limits	for Ba	233.527	Recovery =	Not calculated			
Be	313.107†	1.8	-0.0027605	mg/L	0.00001748	-0.0027605	mg/L	0.00001748	0.63%
	QC value	within limits	for Be	313.107	Recovery =	Not calculated			
Ca	315.887†	-548.8	-0.475355	mg/L	0.0012267	-0.475355	mg/L	0.0012267	0.26%
	QC value	within limits	for Ca	315.887	Recovery =	Not calculated			
Cd	228.802†	-8.6	-0.0025217	mg/L	0.00027205	-0.0025217	mg/L	0.00027205	10.79%
	QC value	within limits	for Cd	228.802	Recovery =	Not calculated			
Co	228.616†	-0.5	-0.0054835	mg/L	0.00012996	-0.0054835	mg/L	0.00012996	2.37%
	QC value	within limits	for Co	228.616	Recovery =	Not calculated			
Cr	267.716†	-5.4	-0.0048545	mg/L	0.00007921	-0.0048545	mg/L	0.00007921	1.63%
	QC value	within limits	for Cr	267.716	Recovery =	Not calculated			
Cu	327.393†	-244.5	-0.0066002	mg/L	0.00028110	-0.0066002	mg/L	0.00028110	4.26%
	QC value	within limits	for Cu	327.393	Recovery =	Not calculated			
Fe	273.955†	-7.1	-0.0599412	mg/L	0.00035097	-0.0599412	mg/L	0.00035097	0.59%
	QC value	within limits	for Fe	273.955	Recovery =	Not calculated			
K	404.721†	100.8	0.880406	mg/L	2.2595226	0.880406	mg/L	2.2595226	256.65%
	QC value	within limits	for K	404.721	Recovery =	Not calculated			
Mg	279.077†	-62.8	-0.501887	mg/L	0.0017755	-0.501887	mg/L	0.0017755	0.35%
	QC value	within limits	for Mg	279.077	Recovery =	Not calculated			
Mn	257.610†	49.0	-0.0052756	mg/L	0.00000916	-0.0052756	mg/L	0.00000916	0.17%
	QC value	within limits	for Mn	257.610	Recovery =	Not calculated			
Mo	202.031†	4.0	-0.0035921	mg/L	0.00010870	-0.0035921	mg/L	0.00010870	3.03%
	QC value	within limits	for Mo	202.031	Recovery =	Not calculated			
Na	330.237†	31.8	0.202708	mg/L	0.0014976	0.202708	mg/L	0.0014976	0.74%
	QC value	within limits	for Na	330.237	Recovery =	Not calculated			
Ni	231.604†	-8.2	-0.0059689	mg/L	0.00006824	-0.0059689	mg/L	0.00006824	1.14%
	QC value	within limits	for Ni	231.604	Recovery =	Not calculated			
Pb	220.353†	-0.3	-0.0024365	mg/L	0.00067784	-0.0024365	mg/L	0.00067784	27.82%
	QC value	within limits	for Pb	220.353	Recovery =	Not calculated			
Sb	206.836†	2.0	-0.0024604	mg/L	0.00203606	-0.0024604	mg/L	0.00203606	82.75%
	QC value	within limits	for Sb	206.836	Recovery =	Not calculated			
Se	196.026†	5.7	-0.0006376	mg/L	0.00160008	-0.0006376	mg/L	0.00160008	250.96%
	QC value	within limits	for Se	196.026	Recovery =	Not calculated			
Sn	189.927†	3.7	-0.0024427	mg/L	0.00019478	-0.0024427	mg/L	0.00019478	7.97%
	QC value	within limits	for Sn	189.927	Recovery =	Not calculated			
Ti	334.940†	-49.7	-0.0035863	mg/L	0.00010137	-0.0035863	mg/L	0.00010137	2.83%
	QC value	within limits	for Ti	334.940	Recovery =	Not calculated			
Tl	190.801†	-2.0	-0.0046524	mg/L	0.00066118	-0.0046524	mg/L	0.00066118	14.21%
	QC value	within limits	for Tl	190.801	Recovery =	Not calculated			
V	290.880†	39.1	-0.0061858	mg/L	0.00009033	-0.0061858	mg/L	0.00009033	1.46%
	QC value	within limits	for V	290.880	Recovery =	Not calculated			
Zn	206.200†	-7.9	-0.0054663	mg/L	0.00014429	-0.0054663	mg/L	0.00014429	2.64%
	QC value	within limits	for Zn	206.200	Recovery =	Not calculated			
All analyte(s) passed QC.									

All analyte(s) passed QC.

Sequence No.: 23
 Sample ID: 75646-002 SD
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 89
 Date Collected: 11/22/2013 7:24:40 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-002 SD

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	980340.7	98.4 %		0.84			0.86%
Y 371.029	312422.7	96.4 %		0.62			0.65%
Ag 328.068†	8.6	-0.0006637	mg/L	0.00029862	-0.0006637	mg/L	0.00029862 45.00%
Al 308.215†	182.0	-0.0578107	mg/L	0.00090648	-0.0578107	mg/L	0.00090648 1.57%
As 188.979†	1.8	-0.0014060	mg/L	0.00196843	-0.0014060	mg/L	0.00196843 140.00%
Ba 233.527†	781.8	0.0004282	mg/L	0.00003459	0.0004282	mg/L	0.00003459 8.08%
Be 313.107†	31.7	-0.0027497	mg/L	0.00001807	-0.0027497	mg/L	0.00001807 0.66%
Ca 315.887†	245699.5	2.03292	mg/L	0.025238	2.03292	mg/L	0.025238 1.24%
Cd 228.802†	-4.9	-0.0024626	mg/L	0.00007786	-0.0024626	mg/L	0.00007786 3.16%
Co 228.616†	7.4	-0.0052914	mg/L	0.00003175	-0.0052914	mg/L	0.00003175 0.60%
Cr 267.716†	-3.0	-0.0048117	mg/L	0.00004569	-0.0048117	mg/L	0.00004569 0.95%
Cu 327.393†	-187.4	-0.0062062	mg/L	0.00032274	-0.0062062	mg/L	0.00032274 5.20%
Fe 273.955†	362.7	-0.0437436	mg/L	0.00056900	-0.0437436	mg/L	0.00056900 1.30%
K 404.721†	104.3	0.914333	mg/L	1.0637530	0.914333	mg/L	1.0637530 116.34%
Mg 279.077†	14492.7	0.409484	mg/L	0.0000972	0.409484	mg/L	0.0000972 0.02%
Mn 257.610†	21536.0	0.0242440	mg/L	0.00011564	0.0242440	mg/L	0.00011564 0.48%
Mo 202.031†	12.2	-0.0032500	mg/L	0.00015528	-0.0032500	mg/L	0.00015528 4.78%
Na 330.237†	6921.9	6.22951	mg/L	0.030964	6.22951	mg/L	0.030964 0.50%
Ni 231.604†	9.9	-0.0055574	mg/L	0.00038710	-0.0055574	mg/L	0.00038710 6.97%
Pb 220.353†	8.2	-0.0017004	mg/L	0.00134766	-0.0017004	mg/L	0.00134766 79.26%
Sb 206.836†	4.6	-0.0012361	mg/L	0.00049646	-0.0012361	mg/L	0.00049646 40.16%
Se 196.026†	1.7	-0.0041026	mg/L	0.00267393	-0.0041026	mg/L	0.00267393 65.18%
Sn 189.927†	-0.7	-0.0035119	mg/L	0.00039943	-0.0035119	mg/L	0.00039943 11.37%
Ti 334.940†	-3.2	-0.0035226	mg/L	0.00001221	-0.0035226	mg/L	0.00001221 0.35%
Tl 190.801†	-2.5	-0.0050425	mg/L	0.00149903	-0.0050425	mg/L	0.00149903 29.73%
V 290.880†	187.3	-0.0052417	mg/L	0.00046161	-0.0052417	mg/L	0.00046161 8.81%
Zn 206.200†	159.2	-0.0018702	mg/L	0.00018059	-0.0018702	mg/L	0.00018059 9.66%

Sequence No.: 24
 Sample ID: 75646-006
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 90
 Date Collected: 11/22/2013 7:28:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-006

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	989154.6	99.3	%	0.65				0.66%
Y 371.029	315612.2	97.4	%	0.50				0.51%
Ag 328.068†	-2.1	-0.0004305	mg/L	0.00007544	-0.0004305	mg/L	0.00007544	17.52%
Al 308.215†	465.4	-0.0477672	mg/L	0.00286490	-0.0477672	mg/L	0.00286490	6.00%
As 188.979†	5.3	0.0012857	mg/L	0.00052658	0.0012857	mg/L	0.00052658	40.96%
Ba 233.527†	2668.1	0.0141424	mg/L	0.00003601	0.0141424	mg/L	0.00003601	0.25%
Be 313.107†	-51.6	-0.0027800	mg/L	0.00004572	-0.0027800	mg/L	0.00004572	1.64%
Ca 315.887†	1419986.2	13.9901	mg/L	0.03162	13.9901	mg/L	0.03162	0.23%
Cd 228.802†	17.1	-0.0021299	mg/L	0.00002762	-0.0021299	mg/L	0.00002762	1.30%
Co 228.616†	74.9	-0.0036496	mg/L	0.00022319	-0.0036496	mg/L	0.00022319	6.12%
Cr 267.716†	3.7	-0.0046712	mg/L	0.00024847	-0.0046712	mg/L	0.00024847	5.32%
Cu 327.393†	13.8	-0.0048591	mg/L	0.00128373	-0.0048591	mg/L	0.00128373	26.42%
Fe 273.955†	76147.9	3.27637	mg/L	0.051937	3.27637	mg/L	0.051937	1.59%
K 404.721†	158.2	1.44865	mg/L	1.107498	1.44865	mg/L	1.107498	76.45%
Mg 279.077†	56643.7	3.04666	mg/L	0.057256	3.04666	mg/L	0.057256	1.88%
Mn 257.610†	114553.7	0.152084	mg/L	0.0024908	0.152084	mg/L	0.0024908	1.64%
Mo 202.031†	43.2	-0.0020507	mg/L	0.00006751	-0.0020507	mg/L	0.00006751	3.29%
Na 330.237†	20066.2	17.7270	mg/L	0.28241	17.7270	mg/L	0.28241	1.59%
Ni 231.604†	59.0	-0.0044382	mg/L	0.00026484	-0.0044382	mg/L	0.00026484	5.97%
Pb 220.353†	-16.0	-0.0041667	mg/L	0.00009648	-0.0041667	mg/L	0.00009648	2.32%
Sb 206.836†	-0.4	-0.0032517	mg/L	0.00075510	-0.0032517	mg/L	0.00075510	23.22%
Se 196.026†	9.3	0.0026965	mg/L	0.00143124	0.0026965	mg/L	0.00143124	53.08%
Sn 189.927†	-6.2	-0.0046492	mg/L	0.00058903	-0.0046492	mg/L	0.00058903	12.67%
Ti 334.940†	-90.0	-0.0036417	mg/L	0.00001298	-0.0036417	mg/L	0.00001298	0.36%
Tl 190.801†	-6.8	-0.0080457	mg/L	0.00330902	-0.0080457	mg/L	0.00330902	41.13%
V 290.880†	532.4	-0.0032173	mg/L	0.00050660	-0.0032173	mg/L	0.00050660	15.75%
Zn 206.200†	390.2	0.0029713	mg/L	0.00004725	0.0029713	mg/L	0.00004725	1.59%

Sequence No.: 25
 Sample ID: 75646-008
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 91
 Date Collected: 11/22/2013 7:31:32 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-008

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	989307.1	99.3	%	0.62				0.62%
Y 371.029	313837.2	96.8	%	0.57				0.59%
Ag 328.068†	-78.8	-0.0008120	mg/L	0.00037974	-0.0008120	mg/L	0.00037974	46.76%
Al 308.215†	420.0	-0.0493841	mg/L	0.00345491	-0.0493841	mg/L	0.00345491	7.00%
As 188.979†	3.8	0.0000792	mg/L	0.00025372	0.0000792	mg/L	0.00025372	320.31%
Ba 233.527†	3074.8	0.0171181	mg/L	0.00001966	0.0171181	mg/L	0.00001966	0.11%
Be 313.107†	-89.4	-0.0027938	mg/L	0.00001245	-0.0027938	mg/L	0.00001245	0.45%
Ca 315.887†	1609751.5	15.9228	mg/L	0.11391	15.9228	mg/L	0.11391	0.72%
Cd 228.802†	15.0	-0.0021802	mg/L	0.00022045	-0.0021802	mg/L	0.00022045	10.11%
Co 228.616†	83.9	-0.0034311	mg/L	0.00008513	-0.0034311	mg/L	0.00008513	2.48%
Cr 267.716†	0.2	-0.0047065	mg/L	0.00010013	-0.0047065	mg/L	0.00010013	2.13%
Cu 327.393†	273.0	-0.0029407	mg/L	0.00051918	-0.0029407	mg/L	0.00051918	17.65%
Fe 273.955†	80696.9	3.47566	mg/L	0.014576	3.47566	mg/L	0.014576	0.42%
K 404.721†	225.5	2.11566	mg/L	0.040068	2.11566	mg/L	0.040068	1.89%
Mg 279.077†	64617.6	3.54581	mg/L	0.008536	3.54581	mg/L	0.008536	0.24%
Mn 257.610†	128304.9	0.170979	mg/L	0.0006506	0.170979	mg/L	0.0006506	0.38%
Mo 202.031†	49.2	-0.0018094	mg/L	0.00016666	-0.0018094	mg/L	0.00016666	9.21%
Na 330.237†	23175.0	20.4463	mg/L	0.06496	20.4463	mg/L	0.06496	0.32%
Ni 231.604†	124.2	-0.0029539	mg/L	0.00053653	-0.0029539	mg/L	0.00053653	18.16%
Pb 220.353†	7.5	-0.0021332	mg/L	0.00059595	-0.0021332	mg/L	0.00059595	27.94%
Sb 206.836†	2.4	-0.0019359	mg/L	0.00107792	-0.0019359	mg/L	0.00107792	55.68%
Se 196.026†	11.1	0.0042238	mg/L	0.00062161	0.0042238	mg/L	0.00062161	14.72%
Sn 189.927†	-7.7	-0.0050076	mg/L	0.00028600	-0.0050076	mg/L	0.00028600	5.71%
Ti 334.940†	-131.9	-0.0036991	mg/L	0.00007519	-0.0036991	mg/L	0.00007519	2.03%
Tl 190.801†	-5.0	-0.0068163	mg/L	0.00151714	-0.0068163	mg/L	0.00151714	22.26%
V 290.880†	647.5	-0.0024641	mg/L	0.00020614	-0.0024641	mg/L	0.00020614	8.37%
Zn 206.200†	630.2	0.0081307	mg/L	0.00031639	0.0081307	mg/L	0.00031639	3.89%

Sequence No.: 26
 Sample ID: 75646-010
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 92
 Date Collected: 11/22/2013 7:35:00 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-010

Mean Data: 75010-010								
	Mean Corrected		Calib		Sample			
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc 361.383	991169.8	99.5	%	0.74				0.74%
Y 371.029	315922.8	97.5	%	1.11				1.14%
Ag 328.068†	6.3	-0.0006757	mg/L	0.00000574	-0.0006757	mg/L	0.00000574	0.85%
Al 308.215†	340.5	-0.0522052	mg/L	0.00107306	-0.0522052	mg/L	0.00107306	2.06%
As 188.979†	1.9	-0.0015304	mg/L	0.00070575	-0.0015304	mg/L	0.00070575	46.12%
Ba 233.527†	1922.1	0.0087944	mg/L	0.00008778	0.0087944	mg/L	0.00008778	1.00%
Be 313.107†	34.6	-0.0027486	mg/L	0.00001756	-0.0027486	mg/L	0.00001756	0.64%
Ca 315.887†	1372084.5	13.5068	mg/L	0.05997	13.5068	mg/L	0.05997	0.44%
Cd 228.802†	437.7	0.0058499	mg/L	0.00026733	0.0058499	mg/L	0.00026733	4.57%
Co 228.616†	1.4	-0.0054318	mg/L	0.00014894	-0.0054318	mg/L	0.00014894	2.74%
Cr 267.716†	17.1	-0.0045352	mg/L	0.00004898	-0.0045352	mg/L	0.00004898	1.08%
Cu 327.393†	23.6	-0.0047794	mg/L	0.00056578	-0.0047794	mg/L	0.00056578	11.84%
Fe 273.955†	355.5	-0.0440561	mg/L	0.00030714	-0.0440561	mg/L	0.00030714	0.70%
K 404.721†	432.7	4.16816	mg/L	1.314265	4.16816	mg/L	1.314265	31.53%
Mg 279.077†	37980.4	1.88008	mg/L	0.000856	1.88008	mg/L	0.000856	0.05%
Mn 257.610†	47142.4	0.0594091	mg/L	0.00030851	0.0594091	mg/L	0.00030851	0.52%
Mo 202.031†	41.6	-0.0021213	mg/L	0.00009506	-0.0021213	mg/L	0.00009506	4.48%
Na 330.237†	18512.3	16.3678	mg/L	0.01631	16.3678	mg/L	0.01631	0.10%
Ni 231.604†	22.4	-0.0052699	mg/L	0.00014630	-0.0052699	mg/L	0.00014630	2.78%
Pb 220.353†	-1.6	-0.0025710	mg/L	0.00005493	-0.0025710	mg/L	0.00005493	2.14%
Sb 206.836†	3.9	-0.0015692	mg/L	0.00062782	-0.0015692	mg/L	0.00062782	40.01%
Se 196.026†	11.6	0.0040227	mg/L	0.00090421	0.0040227	mg/L	0.00090421	22.48%
Sn 189.927†	-2.8	-0.0037837	mg/L	0.00106832	-0.0037837	mg/L	0.00106832	28.24%
Ti 334.940†	-29.5	-0.0035587	mg/L	0.00004851	-0.0035587	mg/L	0.00004851	1.36%
Tl 190.801†	-6.1	-0.0075648	mg/L	0.00032974	-0.0075648	mg/L	0.00032974	4.36%
V 290.880†	405.4	-0.0038706	mg/L	0.00015732	-0.0038706	mg/L	0.00015732	4.06%
Zn 206.200†	452.9	0.0044528	mg/L	0.00038410	0.0044528	mg/L	0.00038410	8.63%

Sequence No.: 27
 Sample ID: 75646-012
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 93
 Date Collected: 11/22/2013 7:38:25 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-012

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	979209.3	98.3 %		0.54			0.55%
Y 371.029	311362.7	96.1 %		0.68			0.71%
Ag 328.068†	4.1	-0.0006869 mg/L		0.00011958	-0.0006869 mg/L	0.00011958	17.41%
Al 308.215†	465.3	-0.0477608 mg/L		0.00238707	-0.0477608 mg/L	0.00238707	5.00%
As 188.979†	1.8	-0.0015386 mg/L		0.00026328	-0.0015386 mg/L	0.00026328	17.11%
Ba 233.527†	4426.8	0.0271714 mg/L		0.00019821	0.0271714 mg/L	0.00019821	0.73%
Be 313.107†	-10.7	-0.0027651 mg/L		0.00002082	-0.0027651 mg/L	0.00002082	0.75%
Ca 315.887†	997778.3	9.69422 mg/L		0.033580	9.69422 mg/L	0.033580	0.35%
Cd 228.802†	649.0	0.0098580 mg/L		0.00002130	0.0098580 mg/L	0.00002130	0.22%
Co 228.616†	-9.5	-0.0056974 mg/L		0.00022716	-0.0056974 mg/L	0.00022716	3.99%
Cr 267.716†	28.8	-0.0044130 mg/L		0.00018069	-0.0044130 mg/L	0.00018069	4.09%
Cu 327.393†	109.8	-0.0040806 mg/L		0.00001904	-0.0040806 mg/L	0.00001904	0.47%
Fe 273.955†	398.8	-0.0421605 mg/L		0.00077109	-0.0421605 mg/L	0.00077109	1.83%
K 404.721†	255.0	2.40770 mg/L		0.944109	2.40770 mg/L	0.944109	39.21%
Mg 279.077†	32948.2	1.56469 mg/L		0.023627	1.56469 mg/L	0.023627	1.51%
Mn 257.610†	1751.3	-0.0030105 mg/L		0.00001533	-0.0030105 mg/L	0.00001533	0.51%
Mo 202.031†	31.1	-0.0025334 mg/L		0.00042555	-0.0025334 mg/L	0.00042555	16.80%
Na 330.237†	42797.6	37.6104 mg/L		0.26911	37.6104 mg/L	0.26911	0.72%
Ni 231.604†	25.6	-0.0051988 mg/L		0.00026229	-0.0051988 mg/L	0.00026229	5.05%
Pb 220.353†	3.6	-0.0021139 mg/L		0.00050124	-0.0021139 mg/L	0.00050124	23.71%
Sb 206.836†	0.9	-0.0029697 mg/L		0.00092279	-0.0029697 mg/L	0.00092279	31.07%
Se 196.026†	2.7	-0.0034914 mg/L		0.00029146	-0.0034914 mg/L	0.00029146	8.35%
Sn 189.927†	-1.4	-0.0035081 mg/L		0.00137273	-0.0035081 mg/L	0.00137273	39.13%
Ti 334.940†	-59.1	-0.0035993 mg/L		0.00000652	-0.0035993 mg/L	0.00000652	0.18%
Tl 190.801†	-3.5	-0.0057190 mg/L		0.00299528	-0.0057190 mg/L	0.00299528	52.37%
V 290.880†	406.1	-0.0038423 mg/L		0.00027545	-0.0038423 mg/L	0.00027545	7.17%
Zn 206.200†	293.8	0.0010260 mg/L		0.00005165	0.0010260 mg/L	0.00005165	5.03%

Sequence No.: 28
 Sample ID: 75646-014
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 94
 Date Collected: 11/22/2013 7:41:51 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-014

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	988007.2	99.2	%	0.23			0.24%
Y 371.029	317745.7	98.0	%	0.30			0.31%
Ag 328.068†	-16.3	-0.0007926	mg/L	0.00009758	-0.0007926	mg/L	0.00009758 12.31%
Al 308.215†	374.1	-0.0510000	mg/L	0.00236764	-0.0510000	mg/L	0.00236764 4.64%
As 188.979†	3.4	-0.0003735	mg/L	0.00024854	-0.0003735	mg/L	0.00024854 66.55%
Ba 233.527†	2089.7	0.0100245	mg/L	0.00016242	0.0100245	mg/L	0.00016242 1.62%
Be 313.107†	54.0	-0.0027415	mg/L	0.00000283	-0.0027415	mg/L	0.00000283 0.10%
Ca 315.887†	1043286.5	10.1578	mg/L	0.01857	10.1578	mg/L	0.01857 0.18%
Cd 228.802†	-15.8	-0.0027022	mg/L	0.00012301	-0.0027022	mg/L	0.00012301 4.55%
Co 228.616†	2.8	-0.0053995	mg/L	0.00003386	-0.0053995	mg/L	0.00003386 0.63%
Cr 267.716†	20.5	-0.0045178	mg/L	0.00013635	-0.0045178	mg/L	0.00013635 3.02%
Cu 327.393†	323.8	-0.0024806	mg/L	0.00035883	-0.0024806	mg/L	0.00035883 14.47%
Fe 273.955†	424.3	-0.0410422	mg/L	0.00080116	-0.0410422	mg/L	0.00080116 1.95%
K 404.721†	58.1	0.457468	mg/L	0.3860800	0.457468	mg/L	0.3860800 84.39%
Mg 279.077†	29324.8	1.33785	mg/L	0.012949	1.33785	mg/L	0.012949 0.97%
Mn 257.610†	2161.9	-0.0024373	mg/L	0.00003817	-0.0024373	mg/L	0.00003817 1.57%
Mo 202.031†	31.3	-0.0025402	mg/L	0.00000426	-0.0025402	mg/L	0.00000426 0.17%
Na 330.237†	8212.8	7.35871	mg/L	0.074763	7.35871	mg/L	0.074763 1.02%
Ni 231.604†	1.5	-0.0057456	mg/L	0.00024629	-0.0057456	mg/L	0.00024629 4.29%
Pb 220.353†	-2.9	-0.0026810	mg/L	0.00066122	-0.0026810	mg/L	0.00066122 24.66%
Sb 206.836†	0.0	-0.0033642	mg/L	0.00074606	-0.0033642	mg/L	0.00074606 22.18%
Se 196.026†	6.1	-0.0005697	mg/L	0.00084442	-0.0005697	mg/L	0.00084442 148.22%
Sn 189.927†	-1.9	-0.0036473	mg/L	0.00004812	-0.0036473	mg/L	0.00004812 1.32%
Ti 334.940†	22.4	-0.0034876	mg/L	0.00000519	-0.0034876	mg/L	0.00000519 0.15%
Tl 190.801†	-3.3	-0.0055668	mg/L	0.00148376	-0.0055668	mg/L	0.00148376 26.65%
V 290.880†	341.2	-0.0042750	mg/L	0.00021730	-0.0042750	mg/L	0.00021730 5.08%
Zn 206.200†	206.9	-0.0008434	mg/L	0.00004938	-0.0008434	mg/L	0.00004938 5.85%

Sequence No.: 29
 Sample ID: 75646-016
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 95
 Date Collected: 11/22/2013 7:45:17 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-016

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	985069.4	98.9	%	0.02				0.02%
Y 371.029	311468.3	96.1	%	0.21				0.22%
Ag 328.068†	-56.3	-0.0010017	mg/L	0.00002481	-0.0010017	mg/L	0.00002481	2.48%
Al 308.215†	381.1	-0.0507761	mg/L	0.00017963	-0.0507761	mg/L	0.00017963	0.35%
As 188.979†	0.7	-0.0025377	mg/L	0.00003026	-0.0025377	mg/L	0.00003026	1.19%
Ba 233.527†	3372.0	0.0194331	mg/L	0.00003465	0.0194331	mg/L	0.00003465	0.18%
Be 313.107†	-58.1	-0.0027824	mg/L	0.00000763	-0.0027824	mg/L	0.00000763	0.27%
Ca 315.887†	2103352.6	20.9564	mg/L	0.13939	20.9564	mg/L	0.13939	0.67%
Cd 228.802†	-15.1	-0.0027355	mg/L	0.00019377	-0.0027355	mg/L	0.00019377	7.08%
Co 228.616†	-10.5	-0.0057145	mg/L	0.00006136	-0.0057145	mg/L	0.00006136	1.07%
Cr 267.716†	10.4	-0.0046390	mg/L	0.00004813	-0.0046390	mg/L	0.00004813	1.04%
Cu 327.393†	41.2	-0.0047487	mg/L	0.00032849	-0.0047487	mg/L	0.00032849	6.92%
Fe 273.955†	84.8	-0.0559162	mg/L	0.00023833	-0.0559162	mg/L	0.00023833	0.43%
K 404.721†	317.8	3.03041	mg/L	0.464371	3.03041	mg/L	0.464371	15.32%
Mg 279.077†	57377.7	3.09404	mg/L	0.007079	3.09404	mg/L	0.007079	0.23%
Mn 257.610†	1176.1	-0.0038579	mg/L	0.00000898	-0.0038579	mg/L	0.00000898	0.23%
Mo 202.031†	60.5	-0.0013957	mg/L	0.00052430	-0.0013957	mg/L	0.00052430	37.57%
Na 330.237†	23580.8	20.8012	mg/L	0.06132	20.8012	mg/L	0.06132	0.29%
Ni 231.604†	24.3	-0.0052264	mg/L	0.00014579	-0.0052264	mg/L	0.00014579	2.79%
Pb 220.353†	-10.5	-0.0033622	mg/L	0.00062888	-0.0033622	mg/L	0.00062888	18.70%
Sb 206.836†	5.7	-0.0007371	mg/L	0.00051291	-0.0007371	mg/L	0.00051291	69.58%
Se 196.026†	16.1	0.0077093	mg/L	0.00258931	0.0077093	mg/L	0.00258931	33.59%
Sn 189.927†	-11.3	-0.0058266	mg/L	0.00039626	-0.0058266	mg/L	0.00039626	6.80%
Ti 334.940†	-196.4	-0.0037875	mg/L	0.00007329	-0.0037875	mg/L	0.00007329	1.94%
Tl 190.801†	-1.7	-0.0043899	mg/L	0.00102137	-0.0043899	mg/L	0.00102137	23.27%
V 290.880†	589.5	-0.0027365	mg/L	0.00076180	-0.0027365	mg/L	0.00076180	27.84%
Zn 206.200†	230.1	-0.0003439	mg/L	0.00013695	-0.0003439	mg/L	0.00013695	39.83%

Sequence No.: 30
 Sample ID: 75646-018
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 96
 Date Collected: 11/22/2013 7:48:44 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-018

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1010969.4	101	%	0.6			0.59%
Y 371.029	325996.0	101	%	0.7			0.66%
Ag 328.068†	-62.3	-0.0010331	mg/L	0.00029001	-0.0010331	mg/L	0.00029001 28.07%
Al 308.215†	-99.7	-0.0678070	mg/L	0.00548751	-0.0678070	mg/L	0.00548751 8.09%
As 188.979†	3.1	-0.0003624	mg/L	0.00131503	-0.0003624	mg/L	0.00131503 362.88%
Ba 233.527†	22.6	-0.0051410	mg/L	0.00011024	-0.0051410	mg/L	0.00011024 2.14%
Be 313.107†	58.4	-0.0027399	mg/L	0.00002511	-0.0027399	mg/L	0.00002511 0.92%
Ca 315.887†	3224.9	-0.436915	mg/L	0.0024109	-0.436915	mg/L	0.0024109 0.55%
Cd 228.802†	-19.5	-0.0027270	mg/L	0.00005781	-0.0027270	mg/L	0.00005781 2.12%
Co 228.616†	-9.0	-0.0056912	mg/L	0.00021388	-0.0056912	mg/L	0.00021388 3.76%
Cr 267.716†	13.4	-0.0046173	mg/L	0.00018065	-0.0046173	mg/L	0.00018065 3.91%
Cu 327.393†	-94.3	-0.0054733	mg/L	0.00077539	-0.0054733	mg/L	0.00077539 14.17%
Fe 273.955†	67.8	-0.0566603	mg/L	0.00003017	-0.0566603	mg/L	0.00003017 0.05%
K 404.721†	238.3	2.24254	mg/L	0.420918	2.24254	mg/L	0.420918 18.77%
Mg 279.077†	43.5	-0.495237	mg/L	0.0024253	-0.495237	mg/L	0.0024253 0.49%
Mn 257.610†	10.9	-0.0053284	mg/L	0.00000413	-0.0053284	mg/L	0.00000413 0.08%
Mo 202.031†	0.6	-0.0037658	mg/L	0.00022462	-0.0037658	mg/L	0.00022462 5.96%
Na 330.237†	60.1	0.227426	mg/L	0.0247191	0.227426	mg/L	0.0247191 10.87%
Ni 231.604†	5.9	-0.0056495	mg/L	0.00004998	-0.0056495	mg/L	0.00004998 0.88%
Pb 220.353†	-5.9	-0.0029248	mg/L	0.00063376	-0.0029248	mg/L	0.00063376 21.67%
Sb 206.836†	2.2	-0.0023709	mg/L	0.00091107	-0.0023709	mg/L	0.00091107 38.43%
Se 196.026†	3.7	-0.0023325	mg/L	0.00400533	-0.0023325	mg/L	0.00400533 171.71%
Sn 189.927†	2.8	-0.0026631	mg/L	0.00092017	-0.0026631	mg/L	0.00092017 34.55%
Ti 334.940†	36.5	-0.0034682	mg/L	0.00002576	-0.0034682	mg/L	0.00002576 0.74%
Tl 190.801†	-0.2	-0.0034166	mg/L	0.00140640	-0.0034166	mg/L	0.00140640 41.16%
V 290.880†	-42.7	-0.0067694	mg/L	0.00035772	-0.0067694	mg/L	0.00035772 5.28%
Zn 206.200†	138.3	-0.0023203	mg/L	0.00004310	-0.0023203	mg/L	0.00004310 1.86%

Sequence No.: 31
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/22/2013 7:52:10 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-173614

Mean Corrected		Calib		Sample				
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc 361.383	830069.4	83.3	%	0.29				0.35%
Y 371.029	259114.9	79.9	%	0.13				0.16%
Ag 328.068†	-3217.7	-0.0012205	mg/L	0.00018382	-0.0012205	mg/L	0.00018382	15.06%
Al 308.215†	14093795.1	500.658	mg/L	2.8363	500.658	mg/L	2.8363	0.57%
QC value within limits for Al 308.215 Recovery = 100.13%								
As 188.979†	41.7	-0.0020872	mg/L	0.00136730	-0.0020872	mg/L	0.00136730	65.51%
Ba 233.527†	1736.7	0.0003617	mg/L	0.00007734	0.0003617	mg/L	0.00007734	21.38%
Be 313.107†	-1832.3	-0.0034314	mg/L	0.00003444	-0.0034314	mg/L	0.00003444	1.00%
Ca 315.887†	46874065.0	476.678	mg/L	4.4295	476.678	mg/L	4.4295	0.93%
QC value within limits for Ca 315.887 Recovery = 95.34%								
Cd 228.802†	227.6	-0.0038931	mg/L	0.00022545	-0.0038931	mg/L	0.00022545	5.79%
Co 228.616†	-60.1	-0.0068152	mg/L	0.00030630	-0.0068152	mg/L	0.00030630	4.49%
Cr 267.716†	-225.3	-0.0074858	mg/L	0.00027481	-0.0074858	mg/L	0.00027481	3.67%
Cu 327.393†	629.7	-0.0126219	mg/L	0.00068442	-0.0126219	mg/L	0.00068442	5.42%
Fe 273.955†	4258164.3	186.488	mg/L	0.2244	186.488	mg/L	0.2244	0.12%
QC value within limits for Fe 273.955 Recovery = 93.24%								
K 404.721†	-1931.8	-19.2577	mg/L	0.89285	-19.2577	mg/L	0.89285	4.64%
Mg 279.077†	8050979.6	503.380	mg/L	0.3268	503.380	mg/L	0.3268	0.06%
QC value within limits for Mg 279.077 Recovery = 100.68%								
Mn 257.610†	1419.9	-0.0220766	mg/L	0.00000687	-0.0220766	mg/L	0.00000687	0.03%
Mo 202.031†	586.8	0.0010747	mg/L	0.00057315	0.0010747	mg/L	0.00057315	53.33%
Na 330.237†	195.6	0.345932	mg/L	0.0231834	0.345932	mg/L	0.0231834	6.70%
Ni 231.604†	42.3	-0.0047853	mg/L	0.00032690	-0.0047853	mg/L	0.00032690	6.83%
Pb 220.353†	-477.4	-0.0027045	mg/L	0.00033675	-0.0027045	mg/L	0.00033675	12.45%
Sb 206.836†	-57.1	-0.0067863	mg/L	0.00151335	-0.0067863	mg/L	0.00151335	22.30%
Se 196.026†	-15.4	-0.0133385	mg/L	0.01634448	-0.0133385	mg/L	0.01634448	122.54%
Sn 189.927†	-3.2	-0.0033080	mg/L	0.00283404	-0.0033080	mg/L	0.00283404	85.67%
Ti 334.940†	621.9	-0.0026654	mg/L	0.00007181	-0.0026654	mg/L	0.00007181	2.69%
Tl 190.801†	22.3	-0.0103557	mg/L	0.00191278	-0.0103557	mg/L	0.00191278	18.47%
V 290.880†	13069.0	0.0133650	mg/L	0.00059865	0.0133650	mg/L	0.00059865	4.48%
Zn 206.200†	625.6	-0.0076702	mg/L	0.00025733	-0.0076702	mg/L	0.00025733	3.35%
All analyte(s) passed QC.								

All analyte(s) passed QC.

Sequence No.: 32

Sample ID: ICSAB V-173231

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 11/22/2013 7:56:51 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	832094.7	83.5 %		0.52			0.62%
Y 371.029	261735.4	80.7 %		0.20			0.25%
Ag 328.068†	210077.5	1.10677 mg/L		0.001834	1.10677 mg/L	0.001834	0.17%
QC value within limits for Ag 328.068 Recovery = 110.68%							
Al 308.215†	13920052.2	494.485 mg/L		4.2939	494.485 mg/L	4.2939	0.87%
QC value within limits for Al 308.215 Recovery = 98.90%							
As 188.979†	1428.8	1.04213 mg/L		0.001534	1.04213 mg/L	0.001534	0.15%
QC value within limits for As 188.979 Recovery = 104.21%							
Ba 233.527†	73276.5	0.525285 mg/L		0.0017808	0.525285 mg/L	0.0017808	0.34%
QC value within limits for Ba 233.527 Recovery = 105.06%							
Be 313.107†	1421595.2	0.516971 mg/L		0.0008411	0.516971 mg/L	0.0008411	0.16%
QC value within limits for Be 313.107 Recovery = 103.39%							
Ca 315.887†	46390495.3	471.753 mg/L		5.1002	471.753 mg/L	5.1002	1.08%
QC value within limits for Ca 315.887 Recovery = 94.35%							
Cd 228.802†	56425.2	1.05772 mg/L		0.002270	1.05772 mg/L	0.002270	0.21%
QC value within limits for Cd 228.802 Recovery = 105.77%							
Co 228.616†	20311.0	0.486515 mg/L		0.0010290	0.486515 mg/L	0.0010290	0.21%
QC value within limits for Co 228.616 Recovery = 97.30%							
Cr 267.716†	39850.3	0.500849 mg/L		0.0004288	0.500849 mg/L	0.0004288	0.09%
QC value within limits for Cr 267.716 Recovery = 100.17%							
Cu 327.393†	72953.9	0.530275 mg/L		0.0005298	0.530275 mg/L	0.0005298	0.10%
QC value within limits for Cu 327.393 Recovery = 106.06%							
Fe 273.955†	4231741.9	185.331 mg/L		0.0220	185.331 mg/L	0.0220	0.01%
QC value within limits for Fe 273.955 Recovery = 92.67%							
K 404.721†	-2079.8	-20.7241 mg/L		1.40516	-20.7241 mg/L	1.40516	6.78%
Mg 279.077†	7996474.5	499.971 mg/L		0.2744	499.971 mg/L	0.2744	0.05%
QC value within limits for Mg 279.077 Recovery = 99.99%							
Mn 257.610†	368111.5	0.482399 mg/L		0.0008694	0.482399 mg/L	0.0008694	0.18%
QC value within limits for Mn 257.610 Recovery = 96.48%							
Mo 202.031†	569.2	0.0004392 mg/L		0.00008821	0.0004392 mg/L	0.00008821	20.08%
Na 330.237†	1196.2	1.22115 mg/L		0.002731	1.22115 mg/L	0.002731	0.22%
Ni 231.604†	42102.9	0.952124 mg/L		0.0023467	0.952124 mg/L	0.0023467	0.25%
QC value within limits for Ni 231.604 Recovery = 95.21%							
Pb 220.353†	10569.1	0.964032 mg/L		0.0009378	0.964032 mg/L	0.0009378	0.10%
QC value within limits for Pb 220.353 Recovery = 96.40%							
Sb 206.836†	2222.4	1.05190 mg/L		0.004463	1.05190 mg/L	0.004463	0.42%
QC value within limits for Sb 206.836 Recovery = 105.19%							
Se 196.026†	1170.0	1.00316 mg/L		0.010634	1.00316 mg/L	0.010634	1.06%
QC value within limits for Se 196.026 Recovery = 100.32%							
Sn 189.927†	-11.1	-0.0053087 mg/L		0.00095097	-0.0053087 mg/L	0.00095097	17.91%
Ti 334.940†	773.6	-0.0024574 mg/L		0.00006963	-0.0024574 mg/L	0.00006963	2.83%
Tl 190.801†	1438.3	0.976498 mg/L		0.0041487	0.976498 mg/L	0.0041487	0.42%
QC value within limits for Tl 190.801 Recovery = 97.65%							
V 290.880†	81265.4	0.499933 mg/L		0.0011889	0.499933 mg/L	0.0011889	0.24%
QC value within limits for V 290.880 Recovery = 99.99%							
Zn 206.200†	45251.1	0.953239 mg/L		0.0009050	0.953239 mg/L	0.0009050	0.09%
QC value within limits for Zn 206.200 Recovery = 95.32%							

All analyte(s) passed QC.

Sequence No.: 33
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/22/2013 8:01:48 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-173510

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	925023.6	92.8 %		0.55			0.59%
Y 371.029	291171.7	89.8 %		0.03			0.04%
Ag 328.068†	19173.5	0.0993448 mg/L	0.00096768		0.0993448 mg/L	0.00096768	0.97%
QC value within limits for Ag		328.068	Recovery = 99.34%				
Al 308.215†	143525.2	5.02657 mg/L	0.007433		5.02657 mg/L	0.007433	0.15%
QC value within limits for Al		308.215	Recovery = 100.53%				
As 188.979†	650.6	0.486037 mg/L	0.0094071		0.486037 mg/L	0.0094071	1.94%
QC value within limits for As		188.979	Recovery = 97.21%				
Ba 233.527†	69577.8	0.504983 mg/L	0.0014262		0.504983 mg/L	0.0014262	0.28%
QC value within limits for Ba		233.527	Recovery = 101.00%				
Be 313.107†	1345325.3	0.488909 mg/L	0.0015754		0.488909 mg/L	0.0015754	0.32%
QC value within limits for Be		313.107	Recovery = 97.78%				
Ca 315.887†	4946989.2	49.9100 mg/L	0.13157		49.9100 mg/L	0.13157	0.26%
QC value within limits for Ca		315.887	Recovery = 99.82%				
Cd 228.802†	26578.6	0.499364 mg/L	0.0018608		0.499364 mg/L	0.0018608	0.37%
QC value within limits for Cd		228.802	Recovery = 99.87%				
Co 228.616†	20848.7	0.500304 mg/L	0.0027255		0.500304 mg/L	0.0027255	0.54%
QC value within limits for Co		228.616	Recovery = 100.06%				
Cr 267.716†	40224.8	0.508041 mg/L	0.0049428		0.508041 mg/L	0.0049428	0.97%
QC value within limits for Cr		267.716	Recovery = 101.61%				
Cu 327.393†	66373.9	0.492626 mg/L	0.0013888		0.492626 mg/L	0.0013888	0.28%
QC value within limits for Cu		327.393	Recovery = 98.53%				
Fe 273.955†	117159.8	5.07308 mg/L	0.023465		5.07308 mg/L	0.023465	0.46%
QC value within limits for Fe		273.955	Recovery = 101.46%				
K 404.721†	4677.3	46.2225 mg/L	0.81278		46.2225 mg/L	0.81278	1.76%
QC value within limits for K		404.721	Recovery = 92.45%				
Mg 279.077†	817277.7	50.6703 mg/L	0.17016		50.6703 mg/L	0.17016	0.34%
QC value within limits for Mg		279.077	Recovery = 101.34%				
Mn 257.610†	364764.0	0.494611 mg/L	0.0017421		0.494611 mg/L	0.0017421	0.35%
QC value within limits for Mn		257.610	Recovery = 98.92%				
Mo 202.031†	9667.2	0.497875 mg/L	0.0029202		0.497875 mg/L	0.0029202	0.59%
QC value within limits for Mo		202.031	Recovery = 99.57%				
Na 330.237†	53848.8	47.2769 mg/L	0.01367		47.2769 mg/L	0.01367	0.03%
QC value within limits for Na		330.237	Recovery = 94.55%				
Ni 231.604†	22386.3	0.504107 mg/L	0.0025536		0.504107 mg/L	0.0025536	0.51%
QC value within limits for Ni		231.604	Recovery = 100.82%				
Pb 220.353†	5685.9	0.495426 mg/L	0.0049869		0.495426 mg/L	0.0049869	1.01%
QC value within limits for Pb		220.353	Recovery = 99.09%				
Sb 206.836†	1093.6	0.505257 mg/L	0.0013105		0.505257 mg/L	0.0013105	0.26%
QC value within limits for Sb		206.836	Recovery = 101.05%				
Se 196.026†	573.1	0.485436 mg/L	0.0032315		0.485436 mg/L	0.0032315	0.67%
QC value within limits for Se		196.026	Recovery = 97.09%				
Sn 189.927†	1944.0	0.505142 mg/L	0.0038267		0.505142 mg/L	0.0038267	0.76%
QC value within limits for Sn		189.927	Recovery = 101.03%				
Ti 334.940†	362119.1	0.493071 mg/L	0.0005824		0.493071 mg/L	0.0005824	0.12%
QC value within limits for Ti		334.940	Recovery = 98.61%				
Tl 190.801†	737.1	0.515560 mg/L	0.0074246		0.515560 mg/L	0.0074246	1.44%
QC value within limits for Tl		190.801	Recovery = 103.11%				
V 290.880†	71355.4	0.495255 mg/L	0.0034701		0.495255 mg/L	0.0034701	0.70%
QC value within limits for V		290.880	Recovery = 99.05%				
Zn 206.200†	23288.0	0.495657 mg/L	0.0021988		0.495657 mg/L	0.0021988	0.44%
QC value within limits for Zn		206.200	Recovery = 99.13%				

All analyte(s) passed QC.

Autosampler Location: 5
Date Collected: 11/22/2013 8:05:15 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analyte	Mean Corrected		Calib		Sample		RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	
Sc 361.383	977171.0	98.1	%	0.57			0.58%
Y 371.029	314047.4	96.9	%	0.54			0.56%
Ag 328.068†	3825.5	0.0191910	mg/L	0.00045720	0.0191910	mg/L	2.38%
QC value within limits for Ag		328.068	Recovery =	95.96%			
Al 308.215†	5693.9	0.137680	mg/L	0.0038530	0.137680	mg/L	2.80%
QC value less than the lower limit for Al 308.215			Recovery =	68.84%			
As 188.979†	28.4	0.0185729	mg/L	0.00035071	0.0185729	mg/L	1.89%
QC value within limits for As		188.979	Recovery =	92.86%			
Ba 233.527†	6988.0	0.0459515	mg/L	0.00048490	0.0459515	mg/L	1.06%
QC value within limits for Ba		233.527	Recovery =	91.90%			
Be 313.107†	31297.3	0.0086642	mg/L	0.00009819	0.0086642	mg/L	1.13%
QC value within limits for Be		313.107	Recovery =	72.20%			
Ca 315.887†	495035.6	4.57221	mg/L	0.008156	4.57221	mg/L	0.18%
QC value within limits for Ca		315.887	Recovery =	91.44%			
Cd 228.802†	607.8	0.0090950	mg/L	0.00007371	0.0090950	mg/L	0.81%
QC value within limits for Cd		228.802	Recovery =	75.79%			
Co 228.616†	840.5	0.0148663	mg/L	0.00014055	0.0148663	mg/L	0.95%
QC value within limits for Co		228.616	Recovery =	74.33%			
Cr 267.716†	3982.8	0.0458382	mg/L	0.00008826	0.0458382	mg/L	0.19%
QC value within limits for Cr		267.716	Recovery =	91.68%			
Cu 327.393†	6679.2	0.0452776	mg/L	0.00084988	0.0452776	mg/L	1.88%
QC value within limits for Cu		327.393	Recovery =	90.56%			
Fe 273.955†	7090.3	0.250990	mg/L	0.0043309	0.250990	mg/L	1.73%
QC value within limits for Fe		273.955	Recovery =	83.66%			
K 404.721†	518.2	5.01586	mg/L	0.416629	5.01586	mg/L	8.31%
QC value within limits for K 404.721			Recovery =	100.32%			
Mg 279.077†	82020.7	4.63696	mg/L	0.039627	4.63696	mg/L	0.85%
QC value within limits for Mg		279.077	Recovery =	92.74%			
Mn 257.610†	29356.7	0.0348501	mg/L	0.00042161	0.0348501	mg/L	1.21%
QC value within limits for Mn		257.610	Recovery =	87.13%			
Mo 202.031†	403.8	0.0170474	mg/L	0.00048945	0.0170474	mg/L	2.87%
QC value within limits for Mo		202.031	Recovery =	85.24%			
Na 330.237†	4523.3	4.13141	mg/L	0.031194	4.13141	mg/L	0.76%
QC value within limits for Na		330.237	Recovery =	82.63%			
Ni 231.604†	2275.7	0.0460149	mg/L	0.00013195	0.0460149	mg/L	0.29%
QC value within limits for Ni		231.604	Recovery =	92.03%			
Pb 220.353†	137.0	0.0095278	mg/L	0.00080765	0.0095278	mg/L	8.48%
QC value within limits for Pb		220.353	Recovery =	79.40%			
Sb 206.836†	41.0	0.0156670	mg/L	0.00076666	0.0156670	mg/L	4.89%
QC value within limits for Sb		206.836	Recovery =	78.33%			
Se 196.026†	50.4	0.0375844	mg/L	0.00039013	0.0375844	mg/L	1.04%
QC value within limits for Se		196.026	Recovery =	93.96%			
Sn 189.927†	174.0	0.0421325	mg/L	0.00104381	0.0421325	mg/L	2.48%
QC value within limits for Sn		189.927	Recovery =	84.26%			
Ti 334.940†	34038.9	0.0431607	mg/L	0.00039184	0.04		

Sequence No.: 35

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 11/22/2013 8:08:42 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	988591.7	99.2 %		0.96			0.97%
Y 371.029	322198.4	99.4 %		1.01			1.02%
Ag 328.068†	-59.7	-0.0010194 mg/L		0.00000202	-0.0010194 mg/L	0.00000202	0.20%
QC value within limits for Ag 328.068			Recovery = Not calculated				
Al 308.215†	-22.1	-0.0650520 mg/L		0.00312005	-0.0650520 mg/L	0.00312005	4.80%
QC value within limits for Al 308.215			Recovery = Not calculated				
As 188.979†	1.4	-0.0016709 mg/L		0.00125031	-0.0016709 mg/L	0.00125031	74.83%
QC value within limits for As 188.979			Recovery = Not calculated				
Ba 233.527†	-3.8	-0.0053349 mg/L		0.00002901	-0.0053349 mg/L	0.00002901	0.54%
QC value within limits for Ba 233.527			Recovery = Not calculated				
Be 313.107†	77.6	-0.0027329 mg/L		0.00003554	-0.0027329 mg/L	0.00003554	1.30%
QC value within limits for Be 313.107			Recovery = Not calculated				
Ca 315.887†	57.3	-0.469181 mg/L		0.0003491	-0.469181 mg/L	0.0003491	0.07%
QC value within limits for Ca 315.887			Recovery = Not calculated				
Cd 228.802†	-0.6	-0.0023699 mg/L		0.00000942	-0.0023699 mg/L	0.00000942	0.40%
QC value within limits for Cd 228.802			Recovery = Not calculated				
Co 228.616†	6.9	-0.0053068 mg/L		0.00004971	-0.0053068 mg/L	0.00004971	0.94%
QC value within limits for Co 228.616			Recovery = Not calculated				
Cr 267.716†	-16.5	-0.0049956 mg/L		0.00016316	-0.0049956 mg/L	0.00016316	3.27%
QC value within limits for Cr 267.716			Recovery = Not calculated				
Cu 327.393†	-121.0	-0.0056739 mg/L		0.00082762	-0.0056739 mg/L	0.00082762	14.59%
QC value within limits for Cu 327.393			Recovery = Not calculated				
Fe 273.955†	18.0	-0.0588427 mg/L		0.00092204	-0.0588427 mg/L	0.00092204	1.57%
QC value within limits for Fe 273.955			Recovery = Not calculated				
K 404.721†	217.4	2.03563 mg/L		1.041820	2.03563 mg/L	1.041820	51.18%
QC value within limits for K 404.721			Recovery = Not calculated				
Mg 279.077†	73.2	-0.493374 mg/L		0.0005414	-0.493374 mg/L	0.0005414	0.11%
QC value within limits for Mg 279.077			Recovery = Not calculated				
Mn 257.610†	39.1	-0.0052896 mg/L		0.00001464	-0.0052896 mg/L	0.00001464	0.28%
QC value within limits for Mn 257.610			Recovery = Not calculated				
Mo 202.031†	0.6	-0.0037662 mg/L		0.00014269	-0.0037662 mg/L	0.00014269	3.79%
QC value within limits for Mo 202.031			Recovery = Not calculated				
Na 330.237†	-24.7	0.153281 mg/L		0.0057976	0.153281 mg/L	0.0057976	3.78%
QC value within limits for Na 330.237			Recovery = Not calculated				
Ni 231.604†	-7.6	-0.0059545 mg/L		0.00058681	-0.0059545 mg/L	0.00058681	9.85%
QC value within limits for Ni 231.604			Recovery = Not calculated				
Pb 220.353†	0.2	-0.0023894 mg/L		0.00076901	-0.0023894 mg/L	0.00076901	32.18%
QC value within limits for Pb 220.353			Recovery = Not calculated				
Sb 206.836†	-0.4	-0.0035824 mg/L		0.00025218	-0.0035824 mg/L	0.00025218	7.04%
QC value within limits for Sb 206.836			Recovery = Not calculated				
Se 196.026†	4.9	-0.0012863 mg/L		0.00200171	-0.0012863 mg/L	0.00200171	155.61%
QC value within limits for Se 196.026			Recovery = Not calculated				
Sn 189.927†	3.4	-0.0025232 mg/L		0.00117395	-0.0025232 mg/L	0.00117395	46.53%
QC value within limits for Sn 189.927			Recovery = Not calculated				
Ti 334.940†	37.7	-0.0034665 mg/L		0.00004135	-0.0034665 mg/L	0.00004135	1.19%
QC value within limits for Ti 334.940			Recovery = Not calculated				
Tl 190.801†	-2.7	-0.0051934 mg/L		0.00149462	-0.0051934 mg/L	0.00149462	28.78%
QC value within limits for Tl 190.801			Recovery = Not calculated				
V 290.880†	-12.9	-0.0065571 mg/L		0.00026210	-0.0065571 mg/L	0.00026210	4.00%
QC value within limits for V 290.880			Recovery = Not calculated				
Zn 206.200†	0.3	-0.0052902 mg/L		0.00017271	-0.0052902 mg/L	0.00017271	3.26%
QC value within limits for Zn 206.200			Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 36
 Sample ID: 75646-020
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 97
 Date Collected: 11/22/2013 8:12:04 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-020

Mean Corrected		Calib		Sample				
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc 361.383	981724.0	98.5	%	0.21				0.21%
Y 371.029	310782.7	95.9	%	0.10				0.11%
Ag 328.068†	-43.1	-0.0007477	mg/L	0.00006914	-0.0007477	mg/L	0.00006914	9.25%
Al 308.215†	591.2	-0.0433251	mg/L	0.00274256	-0.0433251	mg/L	0.00274256	6.33%
As 188.979†	1.1	-0.0022499	mg/L	0.00180605	-0.0022499	mg/L	0.00180605	80.27%
Ba 233.527†	4499.4	0.0276235	mg/L	0.00013474	0.0276235	mg/L	0.00013474	0.49%
Be 313.107†	-75.4	-0.0027887	mg/L	0.00002038	-0.0027887	mg/L	0.00002038	0.73%
Ca 315.887†	2946422.9	29.5397	mg/L	0.06761	29.5397	mg/L	0.06761	0.23%
Cd 228.802†	-6.6	-0.0026302	mg/L	0.00005404	-0.0026302	mg/L	0.00005404	2.05%
Co 228.616†	-2.8	-0.0055254	mg/L	0.00009609	-0.0055254	mg/L	0.00009609	1.74%
Cr 267.716†	84.9	-0.0035503	mg/L	0.00024838	-0.0035503	mg/L	0.00024838	7.00%
Cu 327.393†	191.6	-0.0037374	mg/L	0.00090096	-0.0037374	mg/L	0.00090096	24.11%
Fe 273.955†	48872.0	2.08143	mg/L	0.012683	2.08143	mg/L	0.012683	0.61%
K 404.721†	295.5	2.80870	mg/L	0.180692	2.80870	mg/L	0.180692	6.43%
Mg 279.077†	73130.7	4.08095	mg/L	0.026819	4.08095	mg/L	0.026819	0.66%
Mn 257.610†	280296.3	0.380009	mg/L	0.0012910	0.380009	mg/L	0.0012910	0.34%
Mo 202.031†	73.2	-0.0010320	mg/L	0.00011485	-0.0010320	mg/L	0.00011485	11.13%
Na 330.237†	38915.2	34.2143	mg/L	0.18482	34.2143	mg/L	0.18482	0.54%
Ni 231.604†	21.3	-0.0052944	mg/L	0.00010904	-0.0052944	mg/L	0.00010904	2.06%
Pb 220.353†	5.3	-0.0021930	mg/L	0.00045599	-0.0021930	mg/L	0.00045599	20.79%
Sb 206.836†	2.0	-0.0022505	mg/L	0.00043106	-0.0022505	mg/L	0.00043106	19.15%
Se 196.026†	8.4	0.0011487	mg/L	0.00607935	0.0011487	mg/L	0.00607935	529.25%
Sn 189.927†	-13.4	-0.0061669	mg/L	0.00157090	-0.0061669	mg/L	0.00157090	25.47%
Ti 334.940†	-206.8	-0.0038019	mg/L	0.00002595	-0.0038019	mg/L	0.00002595	0.68%
Tl 190.801†	-3.6	-0.0060603	mg/L	0.00098815	-0.0060603	mg/L	0.00098815	16.31%
V 290.880†	685.6	-0.0021512	mg/L	0.00020209	-0.0021512	mg/L	0.00020209	9.39%
Zn 206.200†	533.0	0.0060938	mg/L	0.00030538	0.0060938	mg/L	0.00030538	5.01%

Sequence No.: 37
 Sample ID: 75646-022
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 98
 Date Collected: 11/22/2013 8:15:33 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-022

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	986251.9	99.0 %		0.19			0.19%
Y 371.029	312403.7	96.4 %		0.16			0.17%
Ag 328.068†	-6.2	-0.0001812 mg/L		0.00022829	-0.0001812 mg/L	0.00022829	125.96%
Al 308.215†	798.7	-0.0359506 mg/L		0.00436416	-0.0359506 mg/L	0.00436416	12.14%
As 188.979†	1.4	-0.0014735 mg/L		0.00118107	-0.0014735 mg/L	0.00118107	80.15%
Ba 233.527†	6394.9	0.0413673 mg/L		0.00025676	0.0413673 mg/L	0.00025676	0.62%
Be 313.107†	-48.4	-0.0027789 mg/L		0.00001298	-0.0027789 mg/L	0.00001298	0.47%
Ca 315.887†	1347884.7	13.2436 mg/L		0.08272	13.2436 mg/L	0.08272	0.62%
Cd 228.802†	6025.0	0.111331 mg/L		0.0007306	0.111331 mg/L	0.0007306	0.66%
Co 228.616†	739.1	0.0124393 mg/L		0.00022185	0.0124393 mg/L	0.00022185	1.78%
Cr 267.716†	0.8	-0.0041264 mg/L		0.00000992	-0.0041264 mg/L	0.00000992	0.24%
Cu 327.393†	114.2	-0.0040955 mg/L		0.00108426	-0.0040955 mg/L	0.00108426	26.47%
Fe 273.955†	147302.4	6.39362 mg/L		0.045073	6.39362 mg/L	0.045073	0.70%
K 404.721†	341.2	3.26181 mg/L		2.200310	3.26181 mg/L	2.200310	67.46%
Mg 279.077†	32878.0	1.56577 mg/L		0.016489	1.56577 mg/L	0.016489	1.05%
Mn 257.610†	1254023.4	1.71937 mg/L		0.011366	1.71937 mg/L	0.011366	0.66%
Mo 202.031†	71.5	-0.0005546 mg/L		0.00003897	-0.0005546 mg/L	0.00003897	7.03%
Na 330.237†	29105.1	25.6334 mg/L		0.31732	25.6334 mg/L	0.31732	1.24%
Ni 231.604†	19.5	-0.0053349 mg/L		0.00009955	-0.0053349 mg/L	0.00009955	1.87%
Pb 220.353†	25.4	-0.0008166 mg/L		0.00116351	-0.0008166 mg/L	0.00116351	142.48%
Sb 206.836†	-0.0	-0.0027503 mg/L		0.00229086	-0.0027503 mg/L	0.00229086	83.30%
Se 196.026†	7.8	0.0013142 mg/L		0.00246795	0.0013142 mg/L	0.00246795	187.79%
Sn 189.927†	-8.6	-0.0053212 mg/L		0.00095392	-0.0053212 mg/L	0.00095392	17.93%
Ti 334.940†	-77.0	-0.0036238 mg/L		0.00002114	-0.0036238 mg/L	0.00002114	0.58%
Tl 190.801†	-2.2	-0.0065436 mg/L		0.00486649	-0.0065436 mg/L	0.00486649	74.37%
V 290.880†	370.1	-0.0038437 mg/L		0.00045757	-0.0038437 mg/L	0.00045757	11.90%
Zn 206.200†	248.9	-0.0001932 mg/L		0.00013574	-0.0001932 mg/L	0.00013574	70.27%

Sequence No.: 38
 Sample ID: 75646-024
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 99
 Date Collected: 11/22/2013 8:19:00 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-024

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	992308.4	99.6	%	0.25				0.25%
Y 371.029	316673.1	97.7	%	0.42				0.43%
Ag 328.068†	41.8	-0.0004670	mg/L	0.00011734	-0.0004670	mg/L	0.00011734	25.13%
Al 308.215†	1090.5	-0.0255629	mg/L	0.00064772	-0.0255629	mg/L	0.00064772	2.53%
As 188.979†	1.8	-0.0015617	mg/L	0.00136596	-0.0015617	mg/L	0.00136596	87.47%
Ba 233.527†	2463.2	0.0127542	mg/L	0.00001811	0.0127542	mg/L	0.00001811	0.14%
Be 313.107†	6.0	-0.0027593	mg/L	0.00000711	-0.0027593	mg/L	0.00000711	0.26%
Ca 315.887†	1266666.7	12.4326	mg/L	0.00419	12.4326	mg/L	0.00419	0.03%
Cd 228.802†	104.8	-0.0004364	mg/L	0.00024809	-0.0004364	mg/L	0.00024809	56.85%
Co 228.616†	27.7	-0.0047932	mg/L	0.00009799	-0.0047932	mg/L	0.00009799	2.04%
Cr 267.716†	725.0	0.0044418	mg/L	0.00018096	0.0044418	mg/L	0.00018096	4.07%
Cu 327.393†	960.7	0.0022676	mg/L	0.00079243	0.0022676	mg/L	0.00079243	34.95%
Fe 273.955†	6705.0	0.234112	mg/L	0.0005407	0.234112	mg/L	0.0005407	0.23%
K 404.721†	462.1	4.46010	mg/L	0.512943	4.46010	mg/L	0.512943	11.50%
Mg 279.077†	43928.8	2.25226	mg/L	0.015731	2.25226	mg/L	0.015731	0.70%
Mn 257.610†	45536.5	0.0571867	mg/L	0.00025898	0.0571867	mg/L	0.00025898	0.45%
Mo 202.031†	48.6	-0.0017175	mg/L	0.00015821	-0.0017175	mg/L	0.00015821	9.21%
Na 330.237†	11919.1	10.6006	mg/L	0.07499	10.6006	mg/L	0.07499	0.71%
Ni 231.604†	81.3	-0.0039293	mg/L	0.00011484	-0.0039293	mg/L	0.00011484	2.92%
Pb 220.353†	7.5	-0.0018074	mg/L	0.00211074	-0.0018074	mg/L	0.00211074	116.79%
Sb 206.836†	3.4	-0.0017829	mg/L	0.00064053	-0.0017829	mg/L	0.00064053	35.93%
Se 196.026†	11.4	0.0039841	mg/L	0.00310582	0.0039841	mg/L	0.00310582	77.95%
Sn 189.927†	-4.8	-0.0043312	mg/L	0.00051758	-0.0043312	mg/L	0.00051758	11.95%
Ti 334.940†	421.7	-0.0029400	mg/L	0.00002197	-0.0029400	mg/L	0.00002197	0.75%
Tl 190.801†	-7.9	-0.0088414	mg/L	0.00083527	-0.0088414	mg/L	0.00083527	9.45%
V 290.880†	956.2	-0.0000060	mg/L	0.00006340	-0.0000060	mg/L	0.00006340	>999.9%
Zn 206.200†	1650.6	0.0302277	mg/L	0.00031396	0.0302277	mg/L	0.00031396	1.04%

Sequence No.: 39
 Sample ID: 75646-026
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 100
 Date Collected: 11/22/2013 8:22:26 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-026

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	981089.3	98.5 %		0.21			0.22%
Y 371.029	313710.1	96.8 %		0.21			0.22%
Ag 328.068†	4.1	-0.0006809 mg/L		0.00015327	-0.0006809 mg/L	0.00015327	22.51%
Al 308.215†	331.0	-0.0525358 mg/L		0.00129379	-0.0525358 mg/L	0.00129379	2.46%
As 188.979†	1.7	-0.0016347 mg/L		0.00045883	-0.0016347 mg/L	0.00045883	28.07%
Ba 233.527†	2285.4	0.0114576 mg/L		0.00003617	0.0114576 mg/L	0.00003617	0.32%
Be 313.107†	-11.9	-0.0027656 mg/L		0.00003130	-0.0027656 mg/L	0.00003130	1.13%
Ca 315.887†	1175165.6	11.5009 mg/L		0.01806	11.5009 mg/L	0.01806	0.16%
Cd 228.802†	1735.0	0.0303636 mg/L		0.00005582	0.0303636 mg/L	0.00005582	0.18%
Co 228.616†	25.8	-0.0048408 mg/L		0.00001835	-0.0048408 mg/L	0.00001835	0.38%
Cr 267.716†	888.9	0.0065074 mg/L		0.00035389	0.0065074 mg/L	0.00035389	5.44%
Cu 327.393†	488.5	-0.0012631 mg/L		0.00033137	-0.0012631 mg/L	0.00033137	26.24%
Fe 273.955†	1921.0	0.0245246 mg/L		0.00092265	0.0245246 mg/L	0.00092265	3.76%
K 404.721†	240.9	2.26846 mg/L		0.669372	2.26846 mg/L	0.669372	29.51%
Mg 279.077†	31020.7	1.44418 mg/L		0.003738	1.44418 mg/L	0.003738	0.26%
Mn 257.610†	26846.2	0.0315097 mg/L		0.00008446	0.0315097 mg/L	0.00008446	0.27%
Mo 202.031†	36.2	-0.0023307 mg/L		0.00007263	-0.0023307 mg/L	0.00007263	3.12%
Na 330.237†	10673.1	9.51069 mg/L		0.019714	9.51069 mg/L	0.019714	0.21%
Ni 231.604†	76.6	-0.0040373 mg/L		0.00005684	-0.0040373 mg/L	0.00005684	1.41%
Pb 220.353†	13.2	-0.0012794 mg/L		0.00018828	-0.0012794 mg/L	0.00018828	14.72%
Sb 206.836†	-1.2	-0.0039414 mg/L		0.00182488	-0.0039414 mg/L	0.00182488	46.30%
Se 196.026†	7.9	0.0009098 mg/L		0.00495386	0.0009098 mg/L	0.00495386	544.51%
Sn 189.927†	-4.0	-0.0041622 mg/L		0.00020155	-0.0041622 mg/L	0.00020155	4.84%
Ti 334.940†	-27.4	-0.0035558 mg/L		0.00005727	-0.0035558 mg/L	0.00005727	1.61%
Tl 190.801†	-4.8	-0.0066502 mg/L		0.00070309	-0.0066502 mg/L	0.00070309	10.57%
V 290.880†	366.2	-0.0041035 mg/L		0.00012999	-0.0041035 mg/L	0.00012999	3.17%
Zn 206.200†	536.1	0.0062419 mg/L		0.00005457	0.0062419 mg/L	0.00005457	0.87%

Sequence No.: 40
 Sample ID: 75646-028
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 101
 Date Collected: 11/22/2013 8:25:52 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-028

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	980040.7	98.4 %		0.17			0.18%
Y 371.029	309495.2	95.5 %		0.48			0.50%
Ag 328.068†	-59.7	-0.0009575 mg/L	0.00003467	-0.0009575 mg/L	0.00003467	3.62%	
Al 308.215†	2442.9	0.0224599 mg/L	0.00308296	0.0224599 mg/L	0.00308296	13.73%	
As 188.979†	2.4	-0.0011971 mg/L	0.00099564	-0.0011971 mg/L	0.00099564	83.17%	
Ba 233.527†	2165.0	0.0105501 mg/L	0.00002179	0.0105501 mg/L	0.00002179	0.21%	
Be 313.107†	-24.1	-0.0027702 mg/L	0.00000821	-0.0027702 mg/L	0.00000821	0.30%	
Ca 315.887†	2040430.3	20.3092 mg/L	0.05990	20.3092 mg/L	0.05990	0.29%	
Cd 228.802†	660.7	0.0100266 mg/L	0.00005983	0.0100266 mg/L	0.00005983	0.60%	
Co 228.616†	3.9	-0.0053638 mg/L	0.00003695	-0.0053638 mg/L	0.00003695	0.69%	
Cr 267.716†	20.7	-0.0041343 mg/L	0.00023800	-0.0041343 mg/L	0.00023800	5.76%	
Cu 327.393†	295.4	-0.0028329 mg/L	0.00022816	-0.0028329 mg/L	0.00022816	8.05%	
Fe 273.955†	16296.6	0.654315 mg/L	0.0024450	0.654315 mg/L	0.0024450	0.37%	
K 404.721†	590.4	5.73046 mg/L	2.465194	5.73046 mg/L	2.465194	43.02%	
Mg 279.077†	55865.2	3.00470 mg/L	0.008507	3.00470 mg/L	0.008507	0.28%	
Mn 257.610†	734495.6	1.00476 mg/L	0.002570	1.00476 mg/L	0.002570	0.26%	
Mo 202.031†	76.4	-0.0005440 mg/L	0.00035603	-0.0005440 mg/L	0.00035603	65.45%	
Na 330.237†	27259.0	24.0185 mg/L	0.18008	24.0185 mg/L	0.18008	0.75%	
Ni 231.604†	97.5	-0.0035591 mg/L	0.00001724	-0.0035591 mg/L	0.00001724	0.48%	
Pb 220.353†	3.5	-0.0021912 mg/L	0.00137826	-0.0021912 mg/L	0.00137826	62.90%	
Sb 206.836†	0.6	-0.0030268 mg/L	0.00012943	-0.0030268 mg/L	0.00012943	4.28%	
Se 196.026†	8.8	0.0011352 mg/L	0.00134335	0.0011352 mg/L	0.00134335	118.33%	
Sn 189.927†	-9.8	-0.0054576 mg/L	0.00049625	-0.0054576 mg/L	0.00049625	9.09%	
Ti 334.940†	369.0	-0.0030122 mg/L	0.00007229	-0.0030122 mg/L	0.00007229	2.40%	
Tl 190.801†	-4.5	-0.0074530 mg/L	0.00087877	-0.0074530 mg/L	0.00087877	11.79%	
V 290.880†	994.9	0.0004277 mg/L	0.00008408	0.0004277 mg/L	0.00008408	19.66%	
Zn 206.200†	885.6	0.0137399 mg/L	0.00002514	0.0137399 mg/L	0.00002514	0.18%	

Sequence No.: 41
 Sample ID: 75646-030
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 102
 Date Collected: 11/22/2013 8:29:20 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-030

Mean Data: 75010-050							
Analyte	Mean Corrected		Calib	Std.Dev.	Sample		RSD
	Intensity	Conc. Units	Conc. Units		Std.Dev.		
Sc 361.383	981338.5	98.5 %		0.57			0.58%
Y 371.029	311394.2	96.1 %		0.64			0.67%
Ag 328.068†	-10.6	-0.0007646 mg/L	0.00023898	-0.0007646 mg/L	0.00023898	31.26%	
Al 308.215†	358.0	-0.0516086 mg/L	0.00047504	-0.0516086 mg/L	0.00047504	0.92%	
As 188.979†	3.2	-0.0007371 mg/L	0.00060249	-0.0007371 mg/L	0.00060249	81.73%	
Ba 233.527†	4613.2	0.0285395 mg/L	0.00025713	0.0285395 mg/L	0.00025713	0.90%	
Be 313.107†	-18.5	-0.0027679 mg/L	0.00002709	-0.0027679 mg/L	0.00002709	0.98%	
Ca 315.887†	2659869.3	26.6223 mg/L	0.11712	26.6223 mg/L	0.11712	0.44%	
Cd 228.802†	-13.0	-0.0027193 mg/L	0.00003270	-0.0027193 mg/L	0.00003270	1.20%	
Co 228.616†	19.5	-0.0049866 mg/L	0.00023645	-0.0049866 mg/L	0.00023645	4.74%	
Cr 267.716†	-4.3	-0.0045995 mg/L	0.00000904	-0.0045995 mg/L	0.00000904	0.20%	
Cu 327.393†	74.7	-0.0045747 mg/L	0.00029207	-0.0045747 mg/L	0.00029207	6.38%	
Fe 273.955†	67.0	-0.0566954 mg/L	0.00040641	-0.0566954 mg/L	0.00040641	0.72%	
K 404.721†	417.1	4.01358 mg/L	2.228828	4.01358 mg/L	2.228828	55.53%	
Mg 279.077†	76482.3	4.29355 mg/L	0.021421	4.29355 mg/L	0.021421	0.50%	
Mn 257.610†	443251.2	0.604130 mg/L	0.0025676	0.604130 mg/L	0.0025676	0.43%	
Mo 202.031†	71.8	-0.0010048 mg/L	0.00000822	-0.0010048 mg/L	0.00000822	0.82%	
Na 330.237†	12112.4	10.7697 mg/L	0.02157	10.7697 mg/L	0.02157	0.20%	
Ni 231.604†	29.6	-0.0051045 mg/L	0.00022923	-0.0051045 mg/L	0.00022923	4.49%	
Pb 220.353†	-0.9	-0.0025332 mg/L	0.00037466	-0.0025332 mg/L	0.00037466	14.79%	
Sb 206.836†	1.3	-0.0028087 mg/L	0.00026564	-0.0028087 mg/L	0.00026564	9.46%	
Se 196.026†	9.8	0.0018650 mg/L	0.00013516	0.0018650 mg/L	0.00013516	7.25%	
Sn 189.927†	-14.1	-0.0064122 mg/L	0.00102226	-0.0064122 mg/L	0.00102226	15.94%	
Ti 334.940†	-273.7	-0.0038936 mg/L	0.00004511	-0.0038936 mg/L	0.00004511	1.16%	
Tl 190.801†	-3.5	-0.0062905 mg/L	0.00295503	-0.0062905 mg/L	0.00295503	46.98%	
V 290.880†	692.0	-0.0019890 mg/L	0.00042238	-0.0019890 mg/L	0.00042238	21.24%	
Zn 206.200†	293.7	0.0010245 mg/L	0.00006564	0.0010245 mg/L	0.00006564	6.41%	

Sequence No.: 42
 Sample ID: 75646-032
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 103
 Date Collected: 11/22/2013 8:32:48 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-032

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	983460.9	98.7 %		0.32			0.32%
Y 371.029	315522.0	97.3 %		0.53			0.55%
Ag 328.068†	-41.5	-0.0009242 mg/L		0.00007232	-0.0009242 mg/L	0.00007232	7.82%
Al 308.215†	359.4	-0.0515299 mg/L		0.00147046	-0.0515299 mg/L	0.00147046	2.85%
As 188.979†	2.6	-0.0010219 mg/L		0.00055418	-0.0010219 mg/L	0.00055418	54.23%
Ba 233.527†	1769.5	0.0076752 mg/L		0.00019163	0.0076752 mg/L	0.00019163	2.50%
Be 313.107†	-15.0	-0.0027667 mg/L		0.00000069	-0.0027667 mg/L	0.00000069	0.03%
Ca 315.887†	1266454.2	12.4311 mg/L		0.00963	12.4311 mg/L	0.00963	0.08%
Cd 228.802†	139.2	0.0002163 mg/L		0.00021943	0.0002163 mg/L	0.00021943	101.42%
Co 228.616†	4.8	-0.0053501 mg/L		0.00008207	-0.0053501 mg/L	0.00008207	1.53%
Cr 267.716†	319.0	-0.0007325 mg/L		0.00000006	-0.0007325 mg/L	0.00000006	0.01%
Cu 327.393†	13.6	-0.0048398 mg/L		0.00033377	-0.0048398 mg/L	0.00033377	6.90%
Fe 273.955†	287.3	-0.0470461 mg/L		0.00044775	-0.0470461 mg/L	0.00044775	0.95%
K 404.721†	201.8	1.88032 mg/L		1.652496	1.88032 mg/L	1.652496	87.88%
Mg 279.077†	45391.1	2.34363 mg/L		0.005402	2.34363 mg/L	0.005402	0.23%
Mn 257.610†	472.9	-0.0047977 mg/L		0.00002121	-0.0047977 mg/L	0.00002121	0.44%
Mo 202.031†	37.9	-0.0022748 mg/L		0.00031550	-0.0022748 mg/L	0.00031550	13.87%
Na 330.237†	10371.0	9.24644 mg/L		0.099958	9.24644 mg/L	0.099958	1.08%
Ni 231.604†	36.1	-0.0049591 mg/L		0.00013843	-0.0049591 mg/L	0.00013843	2.79%
Pb 220.353†	13.9	-0.0012262 mg/L		0.00038444	-0.0012262 mg/L	0.00038444	31.35%
Sb 206.836†	-0.9	-0.0038053 mg/L		0.00078876	-0.0038053 mg/L	0.00078876	20.73%
Se 196.026†	2.8	-0.0034884 mg/L		0.00134580	-0.0034884 mg/L	0.00134580	38.58%
Sn 189.927†	-4.8	-0.0043269 mg/L		0.00050522	-0.0043269 mg/L	0.00050522	11.68%
Ti 334.940†	-57.3	-0.0035968 mg/L		0.00004107	-0.0035968 mg/L	0.00004107	1.14%
Tl 190.801†	-4.8	-0.0066052 mg/L		0.00173484	-0.0066052 mg/L	0.00173484	26.26%
V 290.880†	475.5	-0.0034509 mg/L		0.00021334	-0.0034509 mg/L	0.00021334	6.18%
Zn 206.200†	635.8	0.0083908 mg/L		0.00012941	0.0083908 mg/L	0.00012941	1.54%

Sequence No.: 43

Sample ID: ICSA V-173614

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 11/22/2013 8:36:14 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
Sc 361.383	826428.8	82.9 %	0.27			0.33%
Y 371.029	258898.5	79.9 %	0.01			0.01%
Ag 328.068†	-3286.1	-0.0017605 mg/L	0.00006992	-0.0017605 mg/L	0.00006992	3.97%
Al 308.215†	13901232.7	493.816 mg/L	0.5672	493.816 mg/L	0.5672	0.11%
QC value within limits for Al 308.215 Recovery = 98.76%						
As 188.979†	39.9	-0.0029423 mg/L	0.00112545	-0.0029423 mg/L	0.00112545	38.25%
Ba 233.527†	1705.5	0.0002139 mg/L	0.00000361	0.0002139 mg/L	0.00000361	1.69%
Be 313.107†	-1836.0	-0.0034328 mg/L	0.00000210	-0.0034328 mg/L	0.00000210	0.06%
Ca 315.887†	46198329.4	469.799 mg/L	1.4122	469.799 mg/L	1.4122	0.30%
QC value within limits for Ca 315.887 Recovery = 93.96%						
Cd 228.802†	198.1	-0.0043722 mg/L	0.00012033	-0.0043722 mg/L	0.00012033	2.75%
Co 228.616†	-44.7	-0.0064473 mg/L	0.00000038	-0.0064473 mg/L	0.00000038	0.01%
Cr 267.716†	-237.9	-0.0076525 mg/L	0.00004288	-0.0076525 mg/L	0.00004288	0.56%
Cu 327.393†	668.3	-0.0121559 mg/L	0.00045255	-0.0121559 mg/L	0.00045255	3.72%
Fe 273.955†	4209661.1	184.364 mg/L	0.6695	184.364 mg/L	0.6695	0.36%
QC value within limits for Fe 273.955 Recovery = 92.18%						
K 404.721†	-2010.7	-20.0400 mg/L	1.49466	-20.0400 mg/L	1.49466	7.46%
Mg 279.077†	7944695.9	496.727 mg/L	1.7814	496.727 mg/L	1.7814	0.36%
QC value within limits for Mg 279.077 Recovery = 99.35%						
Mn 257.610†	1463.2	-0.0217707 mg/L	0.00014744	-0.0217707 mg/L	0.00014744	0.68%
Mo 202.031†	561.8	0.0001354 mg/L	0.00037797	0.0001354 mg/L	0.00037797	279.24%
Na 330.237†	211.5	0.359835 mg/L	0.00000759	0.359835 mg/L	0.00000759	0.02%
Ni 231.604†	59.1	-0.0044035 mg/L	0.00029268	-0.0044035 mg/L	0.00029268	6.65%
Pb 220.353†	-501.4	-0.0054227 mg/L	0.00046585	-0.0054227 mg/L	0.00046585	8.59%
Sb 206.836†	-58.8	-0.0078802 mg/L	0.00013341	-0.0078802 mg/L	0.00013341	1.69%
Se 196.026†	-15.5	-0.0134045 mg/L	0.00123327	-0.0134045 mg/L	0.00123327	9.20%
Sn 189.927†	-7.5	-0.0044480 mg/L	0.00049233	-0.0044480 mg/L	0.00049233	11.07%
Ti 334.940†	627.8	-0.0026573 mg/L	0.00006446	-0.0026573 mg/L	0.00006446	2.43%
Tl 190.801†	16.0	-0.0144897 mg/L	0.00499765	-0.0144897 mg/L	0.00499765	34.49%
V 290.880†	12777.9	0.0122458 mg/L	0.00150217	0.0122458 mg/L	0.00150217	12.27%
Zn 206.200†	638.1	-0.0072018 mg/L	0.00050598	-0.0072018 mg/L	0.00050598	7.03%

All analyte(s) passed QC.

Sequence No.: 44
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/22/2013 8:41:07 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	834856.2	83.8 %		0.11			0.13%
Y 371.029	261455.9	80.7 %		0.44			0.55%
Ag 328.068†	208875.2	1.10049 mg/L		0.009561	1.10049 mg/L	0.009561	0.87%
QC value within limits for Ag	328.068	Recovery =	110.05%				
Al 308.215†	14010319.9	497.692 mg/L		0.4345	497.692 mg/L	0.4345	0.09%
QC value within limits for Al	308.215	Recovery =	99.54%				
As 188.979†	1401.9	1.02169 mg/L		0.000235	1.02169 mg/L	0.000235	0.02%
QC value within limits for As	188.979	Recovery =	102.17%				
Ba 233.527†	73096.0	0.523975 mg/L		0.0049429	0.523975 mg/L	0.0049429	0.94%
QC value within limits for Ba	233.527	Recovery =	104.80%				
Be 313.107†	1416867.1	0.515243 mg/L		0.0011168	0.515243 mg/L	0.0011168	0.22%
QC value within limits for Be	313.107	Recovery =	103.05%				
Ca 315.887†	46530135.7	473.175 mg/L		0.0122	473.175 mg/L	0.0122	0.00%
QC value within limits for Ca	315.887	Recovery =	94.63%				
Cd 228.802†	56129.4	1.05212 mg/L		0.007947	1.05212 mg/L	0.007947	0.76%
QC value within limits for Cd	228.802	Recovery =	105.21%				
Co 228.616†	20006.9	0.479148 mg/L		0.0013550	0.479148 mg/L	0.0013550	0.28%
QC value within limits for Co	228.616	Recovery =	95.83%				
Cr 267.716†	39464.5	0.495953 mg/L		0.0048896	0.495953 mg/L	0.0048896	0.99%
QC value within limits for Cr	267.716	Recovery =	99.19%				
Cu 327.393†	72831.1	0.529295 mg/L		0.0034395	0.529295 mg/L	0.0034395	0.65%
QC value within limits for Cu	327.393	Recovery =	105.86%				
Fe 273.955†	4223342.2	184.963 mg/L		0.5104	184.963 mg/L	0.5104	0.28%
QC value within limits for Fe	273.955	Recovery =	92.48%				
K 404.721†	-1921.5	-19.1562 mg/L		1.42141	-19.1562 mg/L	1.42141	7.42%
Mg 279.077†	7966436.7	498.091 mg/L		2.0339	498.091 mg/L	2.0339	0.41%
QC value within limits for Mg	279.077	Recovery =	99.62%				
Mn 257.610†	366323.7	0.480010 mg/L		0.0044324	0.480010 mg/L	0.0044324	0.92%
QC value within limits for Mn	257.610	Recovery =	96.00%				
Mo 202.031†	559.3	-0.0001795 mg/L		0.00014979	-0.0001795 mg/L	0.00014979	83.46%
Na 330.237†	1199.4	1.22401 mg/L		0.030449	1.22401 mg/L	0.030449	2.49%
Ni 231.604†	41827.8	0.945863 mg/L		0.0105545	0.945863 mg/L	0.0105545	1.12%
QC value within limits for Ni	231.604	Recovery =	94.59%				
Pb 220.353†	10416.7	0.951173 mg/L		0.0028166	0.951173 mg/L	0.0028166	0.30%
QC value within limits for Pb	220.353	Recovery =	95.12%				
Sb 206.836†	2196.3	1.03980 mg/L		0.005431	1.03980 mg/L	0.005431	0.52%
QC value within limits for Sb	206.836	Recovery =	103.98%				
Se 196.026†	1158.0	0.992661 mg/L		0.0103536	0.992661 mg/L	0.0103536	1.04%
QC value within limits for Se	196.026	Recovery =	99.27%				
Sn 189.927†	-9.9	-0.0050828 mg/L		0.00163665	-0.0050828 mg/L	0.00163665	32.20%
Ti 334.940†	718.5	-0.0025329 mg/L		0.00001211	-0.0025329 mg/L	0.00001211	0.48%
Tl 190.801†	1405.6	0.953547 mg/L		0.0015286	0.953547 mg/L	0.0015286	0.16%
QC value within limits for Tl	190.801	Recovery =	95.35%				
V 290.880†	80596.6	0.495427 mg/L		0.0058478	0.495427 mg/L	0.0058478	1.18%
QC value within limits for V	290.880	Recovery =	99.09%				
Zn 206.200†	44412.8	0.935152 mg/L		0.0033396	0.935152 mg/L	0.0033396	0.36%
QC value within limits for Zn	206.200	Recovery =	93.52%				

All analyte(s) passed QC.

Sequence No.: 45
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/22/2013 8:45:51 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	928369.7	93.2 %	0.18			0.19%
Y 371.029	291209.2	89.8 %	0.31			0.34%
Ag 328.068†	19086.9	0.0988913 mg/L	0.00028289	0.0988913 mg/L	0.00028289	0.29%
QC value within limits for Ag		328.068 Recovery = 98.89%				
Al 308.215†	142847.3	5.00261 mg/L	0.002874	5.00261 mg/L	0.002874	0.06%
QC value within limits for Al		308.215 Recovery = 100.05%				
As 188.979†	635.5	0.474634 mg/L	0.0011187	0.474634 mg/L	0.0011187	0.24%
QC value within limits for As		188.979 Recovery = 94.93%				
Ba 233.527†	69356.2	0.503358 mg/L	0.0003541	0.503358 mg/L	0.0003541	0.07%
QC value within limits for Ba		233.527 Recovery = 100.67%				
Be 313.107†	1339108.0	0.486636 mg/L	0.0006351	0.486636 mg/L	0.0006351	0.13%
QC value within limits for Be		313.107 Recovery = 97.33%				
Ca 315.887†	4919835.4	49.6335 mg/L	0.07811	49.6335 mg/L	0.07811	0.16%
QC value within limits for Ca		315.887 Recovery = 99.27%				
Cd 228.802†	26411.9	0.496218 mg/L	0.0000010	0.496218 mg/L	0.0000010	0.00%
QC value within limits for Cd		228.802 Recovery = 99.24%				
Co 228.616†	20708.3	0.496876 mg/L	0.0015598	0.496876 mg/L	0.0015598	0.31%
QC value within limits for Co		228.616 Recovery = 99.38%				
Cr 267.716†	39989.1	0.505013 mg/L	0.0037094	0.505013 mg/L	0.0037094	0.73%
QC value within limits for Cr		267.716 Recovery = 101.00%				
Cu 327.393†	66148.0	0.490931 mg/L	0.0024528	0.490931 mg/L	0.0024528	0.50%
QC value within limits for Cu		327.393 Recovery = 98.19%				
Fe 273.955†	116272.4	5.03421 mg/L	0.008669	5.03421 mg/L	0.008669	0.17%
QC value within limits for Fe		273.955 Recovery = 100.68%				
K 404.721†	4858.6	48.0181 mg/L	0.27173	48.0181 mg/L	0.27173	0.57%
QC value within limits for K		404.721 Recovery = 96.04%				
Mg 279.077†	810919.6	50.2722 mg/L	0.11711	50.2722 mg/L	0.11711	0.23%
QC value within limits for Mg		279.077 Recovery = 100.54%				
Mn 257.610†	363001.6	0.492199 mg/L	0.0013161	0.492199 mg/L	0.0013161	0.27%
QC value within limits for Mn		257.610 Recovery = 98.44%				
Mo 202.031†	9520.7	0.490250 mg/L	0.0019076	0.490250 mg/L	0.0019076	0.39%
QC value within limits for Mo		202.031 Recovery = 98.05%				
Na 330.237†	53564.9	47.0286 mg/L	0.01636	47.0286 mg/L	0.01636	0.03%
QC value within limits for Na		330.237 Recovery = 94.06%				
Ni 231.604†	22238.7	0.500739 mg/L	0.0030130	0.500739 mg/L	0.0030130	0.60%
QC value within limits for Ni		231.604 Recovery = 100.15%				
Pb 220.353†	5590.2	0.487042 mg/L	0.0035666	0.487042 mg/L	0.0035666	0.73%
QC value within limits for Pb		220.353 Recovery = 97.41%				
Sb 206.836†	1077.1	0.497579 mg/L	0.0046607	0.497579 mg/L	0.0046607	0.94%
QC value within limits for Sb		206.836 Recovery = 99.52%				
Se 196.026†	562.5	0.476376 mg/L	0.0073431	0.476376 mg/L	0.0073431	1.54%
QC value within limits for Se		196.026 Recovery = 95.28%				
Sn 189.927†	1914.7	0.497479 mg/L	0.0019984	0.497479 mg/L	0.0019984	0.40%
QC value within limits for Sn		189.927 Recovery = 99.50%				
Ti 334.940†	361561.7	0.492307 mg/L	0.0006271	0.492307 mg/L	0.0006271	0.13%
QC value within limits for Ti		334.940 Recovery = 98.46%				
Tl 190.801†	723.2	0.505829 mg/L	0.0029891	0.505829 mg/L	0.0029891	0.59%
QC value within limits for Tl		190.801 Recovery = 101.17%				
V 290.880†	71087.2	0.493396 mg/L	0.0019482	0.493396 mg/L	0.0019482	0.39%
QC value within limits for V		290.880 Recovery = 98.68%				
Zn 206.200†	23139.6	0.492466 mg/L	0.0000120	0.492466 mg/L	0.0000120	0.00%
QC value within limits for Zn		206.200 Recovery = 98.49%				

All analyte(s) passed QC.

Sequence No.: 46

Sample ID: LLCCV V-177224 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/22/2013 8:49:18 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-177224 [aq]

Analyte	Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	967067.8	97.1 %		0.20			0.20%
Y 371.029	311958.4	96.2 %		0.19			0.20%
Ag 328.068†	3887.6	0.0195142 mg/L		0.00009040	0.0195142 mg/L	0.00009040	0.46%
QC value within limits for Ag		328.068	Recovery = 97.57%				
Al 308.215†	5901.3	0.145050 mg/L		0.0049921	0.145050 mg/L	0.0049921	3.44%
QC value within limits for Al		308.215	Recovery = 72.53%				
As 188.979†	25.3	0.0162349 mg/L		0.00084901	0.0162349 mg/L	0.00084901	5.23%
QC value within limits for As		188.979	Recovery = 81.17%				
Ba 233.527†	7052.3	0.0464227 mg/L		0.00035684	0.0464227 mg/L	0.00035684	0.77%
QC value within limits for Ba		233.527	Recovery = 92.85%				
Be 313.107†	31731.7	0.0088228 mg/L		0.00005688	0.0088228 mg/L	0.00005688	0.64%
QC value within limits for Be		313.107	Recovery = 73.52%				
Ca 315.887†	495622.5	4.57818 mg/L		0.004598	4.57818 mg/L	0.004598	0.10%
QC value within limits for Ca		315.887	Recovery = 91.56%				
Cd 228.802†	623.9	0.0093979 mg/L		0.00024426	0.0093979 mg/L	0.00024426	2.60%
QC value within limits for Cd		228.802	Recovery = 78.32%				
Co 228.616†	838.6	0.0148167 mg/L		0.00015386	0.0148167 mg/L	0.00015386	1.04%
QC value within limits for Co		228.616	Recovery = 74.08%				
Cr 267.716†	4052.6	0.0467219 mg/L		0.00007547	0.0467219 mg/L	0.00007547	0.16%
QC value within limits for Cr		267.716	Recovery = 93.44%				
Cu 327.393†	6488.4	0.0438456 mg/L		0.00134172	0.0438456 mg/L	0.00134172	3.06%
QC value within limits for Cu		327.393	Recovery = 87.69%				
Fe 273.955†	7183.3	0.255064 mg/L		0.0011845	0.255064 mg/L	0.0011845	0.46%
QC value within limits for Fe		273.955	Recovery = 85.02%				
K 404.721†	644.5	6.26708 mg/L		0.405084	6.26708 mg/L	0.405084	6.46%
QC value within limits for K		404.721	Recovery = 125.34%				
Mg 279.077†	83015.6	4.69924 mg/L		0.034735	4.69924 mg/L	0.034735	0.74%
QC value within limits for Mg		279.077	Recovery = 93.98%				
Mn 257.610†	29735.7	0.0353690 mg/L		0.00012550	0.0353690 mg/L	0.00012550	0.35%
QC value within limits for Mn		257.610	Recovery = 88.42%				
Mo 202.031†	402.1	0.0169561 mg/L		0.00035312	0.0169561 mg/L	0.00035312	2.08%
QC value within limits for Mo		202.031	Recovery = 84.78%				
Na 330.237†	4602.8	4.20096 mg/L		0.034986	4.20096 mg/L	0.034986	0.83%
QC value within limits for Na		330.237	Recovery = 84.02%				
Ni 231.604†	2286.9	0.0462708 mg/L		0.00037335	0.0462708 mg/L	0.00037335	0.81%
QC value within limits for Ni		231.604	Recovery = 92.54%				
Pb 220.353†	133.6	0.0092296 mg/L		0.00037305	0.0092296 mg/L	0.00037305	4.04%
QC value within limits for Pb		220.353	Recovery = 76.91%				
Sb 206.836†	42.3	0.0162978 mg/L		0.00045212	0.0162978 mg/L	0.00045212	2.77%
QC value within limits for Sb		206.836	Recovery = 81.49%				
Se 196.026†	50.0	0.0372455 mg/L		0.00799594	0.0372455 mg/L	0.00799594	21.47%
QC value within limits for Se		196.026	Recovery = 93.11%				
Sn 189.927†	173.0	0.0418728 mg/L		0.00157869	0.0418728 mg/L	0.00157869	3.77%
QC value within limits for Sn		189.927	Recovery = 83.75%				
Ti 334.940†	34524.4	0.0438266 mg/L		0.00008706	0.0438266 mg/L	0.00008706	0.20%
QC value within limits for Ti		334.940	Recovery = 87.65%				
Tl 190.801†	28.1	0.0166474 mg/L		0.00021191	0.0166474 mg/L	0.00021191	1.27%
QC value within limits for Tl		190.801	Recovery = 83.24%				
V 290.880†	7466.8	0.0460578 mg/L		0.00003285	0.0460578 mg/L	0.00003285	0.07%
QC value within limits for V		290.880	Recovery = 92.12%				
Zn 206.200†	2302.0	0.0442415 mg/L		0.00000912	0.0442415 mg/L	0.00000912	0.02%
QC value within limits for Zn		206.200	Recovery = 88.48%				

All analyte(s) passed QC.

Sequence No.: 47

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 11/22/2013 8:52:45 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	980511.3	98.4 %		1.05			1.06%
Y 371.029	319304.5	98.5 %		1.04			1.06%
Ag 328.068†	-19.1	-0.0008087 mg/L	0.00003211	-0.0008087 mg/L	0.00003211		3.97%
QC value within limits for Ag 328.068		Recovery = Not calculated					
Al 308.215†	14.2	-0.0637626 mg/L	0.00468265	-0.0637626 mg/L	0.00468265		7.34%
QC value within limits for Al 308.215		Recovery = Not calculated					
As 188.979†	1.5	-0.0016227 mg/L	0.00222920	-0.0016227 mg/L	0.00222920		137.38%
QC value within limits for As 188.979		Recovery = Not calculated					
Ba 233.527†	-3.9	-0.0053359 mg/L	0.00017113	-0.0053359 mg/L	0.00017113		3.21%
QC value within limits for Ba 233.527		Recovery = Not calculated					
Be 313.107†	68.0	-0.0027364 mg/L	0.00000159	-0.0027364 mg/L	0.00000159		0.06%
QC value within limits for Be 313.107		Recovery = Not calculated					
Ca 315.887†	-356.0	-0.473390 mg/L	0.0014057	-0.473390 mg/L	0.0014057		0.30%
QC value within limits for Ca 315.887		Recovery = Not calculated					
Cd 228.802†	-6.9	-0.0024904 mg/L	0.00012596	-0.0024904 mg/L	0.00012596		5.06%
QC value within limits for Cd 228.802		Recovery = Not calculated					
Co 228.616†	3.7	-0.0053823 mg/L	0.00005016	-0.0053823 mg/L	0.00005016		0.93%
QC value within limits for Co 228.616		Recovery = Not calculated					
Cr 267.716†	-17.3	-0.0050061 mg/L	0.00022842	-0.0050061 mg/L	0.00022842		4.56%
QC value within limits for Cr 267.716		Recovery = Not calculated					
Cu 327.393†	-287.9	-0.0069259 mg/L	0.00207833	-0.0069259 mg/L	0.00207833		30.01%
QC value within limits for Cu 327.393		Recovery = Not calculated					
Fe 273.955†	1.9	-0.0595485 mg/L	0.00059882	-0.0595485 mg/L	0.00059882		1.01%
QC value within limits for Fe 273.955		Recovery = Not calculated					
K 404.721†	185.7	1.72107 mg/L	0.892306	1.72107 mg/L	0.892306		51.85%
QC value within limits for K 404.721		Recovery = Not calculated					
Mg 279.077†	59.4	-0.494236 mg/L	0.0019332	-0.494236 mg/L	0.0019332		0.39%
QC value within limits for Mg 279.077		Recovery = Not calculated					
Mn 257.610†	21.3	-0.0053141 mg/L	0.00003721	-0.0053141 mg/L	0.00003721		0.70%
QC value within limits for Mn 257.610		Recovery = Not calculated					
Mo 202.031†	1.2	-0.0037355 mg/L	0.00021544	-0.0037355 mg/L	0.00021544		5.77%
QC value within limits for Mo 202.031		Recovery = Not calculated					
Na 330.237†	6.3	0.180375 mg/L	0.0115968	0.180375 mg/L	0.0115968		6.43%
QC value within limits for Na 330.237		Recovery = Not calculated					
Ni 231.604†	3.0	-0.0057153 mg/L	0.00000514	-0.0057153 mg/L	0.00000514		0.09%
QC value within limits for Ni 231.604		Recovery = Not calculated					
Pb 220.353†	-5.2	-0.0028640 mg/L	0.00132256	-0.0028640 mg/L	0.00132256		46.18%
QC value within limits for Pb 220.353		Recovery = Not calculated					
Sb 206.836†	-1.5	-0.0040704 mg/L	0.00036307	-0.0040704 mg/L	0.00036307		8.92%
QC value within limits for Sb 206.836		Recovery = Not calculated					
Se 196.026†	5.2	-0.0010741 mg/L	0.00483564	-0.0010741 mg/L	0.00483564		450.22%
QC value within limits for Se 196.026		Recovery = Not calculated					
Sn 189.927†	0.2	-0.0033411 mg/L	0.00005972	-0.0033411 mg/L	0.00005972		1.79%
QC value within limits for Sn 189.927		Recovery = Not calculated					
Ti 334.940†	19.3	-0.0034917 mg/L	0.00003785	-0.0034917 mg/L	0.00003785		1.08%
QC value within limits for Ti 334.940		Recovery = Not calculated					
Tl 190.801†	-1.9	-0.0046276 mg/L	0.00060558	-0.0046276 mg/L	0.00060558		13.09%
QC value within limits for Tl 190.801		Recovery = Not calculated					
V 290.880†	52.9	-0.0060882 mg/L	0.00038823	-0.0060882 mg/L	0.00038823		6.38%
QC value within limits for V 290.880		Recovery = Not calculated					
Zn 206.200†	-7.8	-0.0054639 mg/L	0.00002449	-0.0054639 mg/L	0.00002449		0.45%
QC value within limits for Zn 206.200		Recovery = Not calculated					

All analyte(s) passed QC.

File SW15727E2

Batch 15727 SW846 3110835 0543

Method: PE2 4300DV AXIAL

Page 1

Date: 11/25/2013 10:44:53 AM

Analyst LBL 11/25/13

=====
Analysis Begun

Start Time: 11/25/2013 10:42:35 AM Plasma On Time: 11/25/2013 9:57:41 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\11.23.13.sif
Batch ID: PEICP 2
Results Data Set: SW15727E2
Results Library: C:\pe\administrator\Results\Results.mdb

=====
Method Loaded

Method Name: PE2 4300DV AXIAL Method Last Saved: 11/22/2013 5:26:16 PM
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: 11/25/2013 10:42:35 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	Calib Conc. Units
Sc 361.383	904411.1	735.40	0.08%	100 %
Y 371.029	295888.2	89.91	0.03%	100 %
Ag 328.068†	2928.7	65.58	2.24%	[0.00] mg/L
Al 308.215†	13327.6	21.63	0.16%	[0.00] mg/L
As 188.979†	32.2	1.32	4.09%	[0.00] mg/L
Ba 233.527†	-806.7	10.09	1.25%	[0.00] mg/L
Be 313.107†	-2623.3	52.84	2.01%	[0.00] mg/L
Ca 315.887†	-8128.6	117.15	1.44%	[0.00] mg/L
Cd 228.802†	755.4	5.30	0.70%	[0.00] mg/L
Co 228.616†	135.6	9.91	7.31%	[0.00] mg/L
Cr 267.716†	-871.8	8.07	0.93%	[0.00] mg/L
Cu 327.393†	-5275.0	61.15	1.16%	[0.00] mg/L
Fe 273.955†	921.3	8.12	0.88%	[0.00] mg/L
K 404.721†	-12114.4	357.94	2.95%	[0.00] mg/L
Mg 279.077†	-4104.0	55.41	1.35%	[0.00] mg/L
Mn 257.610†	1188.4	15.13	1.27%	[0.00] mg/L
Mo 202.031†	227.2	9.58	4.22%	[0.00] mg/L
Na 330.237†	302.7	6.78	2.24%	[0.00] mg/L
Ni 231.604†	256.2	27.74	10.83%	[0.00] mg/L
Pb 220.353†	440.0	9.90	2.25%	[0.00] mg/L
Sb 206.836†	-19.7	1.65	8.39%	[0.00] mg/L
Se 196.026†	31.1	1.41	4.52%	[0.00] mg/L
Sn 189.927†	37.6	1.91	5.08%	[0.00] mg/L
Ti 334.940†	-351.3	15.91	4.53%	[0.00] mg/L
Tl 190.801†	-3.8	1.05	27.33%	[0.00] mg/L
V 290.880†	4984.9	100.88	2.02%	[0.00] mg/L
Zn 206.200†	170.8	11.63	6.81%	[0.00] mg/L

15727
27442

Al reported

Sequence No.: 2

Sample ID: Calib 1 V-173067

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 11/25/2013 10:45:49 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	903963.5	1661.02	0.18%	100.0 %
Y 371.029	296212.1	723.76	0.24%	100 %
As 188.979†	5.5	1.34	24.26%	[0.005] mg/L
Be 313.107†	9537.3	92.06	0.97%	[0.003] mg/L
Cd 228.802†	197.7	5.75	2.91%	[0.003] mg/L
Pb 220.353†	71.0	17.57	24.75%	[0.004] mg/L
Tl 190.801†	13.0	0.57	4.39%	[0.005] mg/L

Sequence No.: 3

Sample ID: Calib 2 V-173273

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 11/25/2013 10:49:03 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	888832.9	6492.61	0.73%	98.3 %
Y 371.029	289132.5	2258.10	0.78%	97.7 %
Ag 328.068†	372.1	69.99	18.81%	[0.002] mg/L
Al 308.215†	3114.9	57.37	1.84%	[0.10] mg/L
As 188.979†	13.9	2.77	19.92%	[0.010] mg/L
Ba 233.527†	1427.5	14.13	0.99%	[0.010] mg/L
Be 313.107†	29143.9	83.99	0.29%	[0.010] mg/L
Ca 315.887†	113659.8	1409.75	1.24%	[1.0] mg/L
Cd 228.802†	605.4	2.00	0.33%	[0.010] mg/L
Co 228.616†	467.9	5.16	1.10%	[0.010] mg/L
Cr 267.716†	804.7	29.00	3.60%	[0.010] mg/L
Cu 327.393†	1529.2	137.47	8.99%	[0.010] mg/L
Fe 273.955†	2576.8	43.56	1.69%	[0.10] mg/L
K 404.721†	-72.0	277.12	385.11%	[1.0] mg/L
No calibration curve because standard intensity and concentration values are not in the same order.				
Mg 279.077†	19989.8	169.14	0.85%	[1.0] mg/L
Mn 257.610†	8578.8	41.70	0.49%	[0.010] mg/L
Mo 202.031†	199.8	4.86	2.43%	[0.010] mg/L
Na 330.237†	914.8	65.36	7.14%	[1.0] mg/L
Ni 231.604†	561.4	11.77	2.10%	[0.010] mg/L
Pb 220.353†	151.9	16.55	10.90%	[0.010] mg/L
Sb 206.836†	26.3	1.89	7.19%	[0.010] mg/L
Se 196.026†	24.1	2.34	9.71%	[0.010] mg/L
Sn 189.927†	45.3	4.01	8.86%	[0.010] mg/L
Ti 334.940†	6863.2	31.35	0.46%	[0.010] mg/L
Tl 190.801†	17.3	0.75	4.30%	[0.010] mg/L
V 290.880†	1580.5	85.44	5.41%	[0.010] mg/L
Zn 206.200†	883.5	22.67	2.57%	[0.010] mg/L

Sequence No.: 4

Sample ID: Calib 3 V-173274

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 11/25/2013 10:52:20 AM

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	868888.0	985.98	0.11%	96.1 %
Y 371.029	275665.6	1419.68	0.52%	93.2 %
Ag 328.068†	19778.8	201.58	1.02%	[0.10] mg/L
Al 308.215†	139284.6	284.47	0.20%	[5.0] mg/L
As 188.979†	820.9	0.58	0.07%	[0.50] mg/L
Ba 233.527†	73507.1	128.26	0.17%	[0.50] mg/L
Be 313.107†	1566829.6	6132.30	0.39%	[0.50] mg/L
Ca 315.887†	5655874.7	13946.10	0.25%	[50] mg/L
Cd 228.802†	31708.6	180.45	0.57%	[0.50] mg/L
Co 228.616†	24131.1	128.34	0.53%	[0.50] mg/L
Cr 267.716†	41884.3	395.20	0.94%	[0.50] mg/L
Cu 327.393†	69967.1	166.30	0.24%	[0.50] mg/L
Fe 273.955†	127524.6	385.43	0.30%	[5.0] mg/L
K 404.721†	3791.1	770.64	20.33%	[50] mg/L
No calibration curve because standard intensity and concentration values are not in the same order.				
Mg 279.077†	1026722.0	3551.23	0.35%	[50] mg/L
Mn 257.610†	396669.2	858.76	0.22%	[0.50] mg/L
Mo 202.031†	10430.3	71.08	0.68%	[0.50] mg/L
Na 330.237†	57131.5	111.32	0.19%	[50] mg/L
Ni 231.604†	26928.5	220.72	0.82%	[0.50] mg/L
Pb 220.353†	7426.5	56.50	0.76%	[0.50] mg/L
Sb 206.836†	1241.4	13.88	1.12%	[0.50] mg/L
Se 196.026†	901.7	11.26	1.25%	[0.50] mg/L
Sn 189.927†	2197.8	17.31	0.79%	[0.50] mg/L
Ti 334.940†	359069.4	532.66	0.15%	[0.50] mg/L
Tl 190.801†	907.3	10.90	1.20%	[0.50] mg/L
V 290.880†	72810.6	156.86	0.22%	[0.50] mg/L
Zn 206.200†	33899.9	179.27	0.53%	[0.50] mg/L

Sequence No.: 5

Sample ID: Calib 4 V-174144

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 11/25/2013 10:55:50 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib 4 V-174144

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	847352.8	8202.60	0.97%	93.7 %
Y 371.029	271071.8	2328.70	0.86%	91.6 %
Ag 328.068†	38067.6	476.25	1.25%	[0.20] mg/L
Al 308.215†	268225.5	649.44	0.24%	[10] mg/L
As 188.979†	1597.1	6.83	0.43%	[1.0] mg/L
Ba 233.527†	140364.6	456.00	0.32%	[1.0] mg/L
Be 313.107†	2981107.6	36193.24	1.21%	[1.0] mg/L
Ca 315.887†	10699777.4	115999.13	1.08%	[100] mg/L
Cd 228.802†	59980.2	201.18	0.34%	[1.0] mg/L
Co 228.616†	45665.7	136.35	0.30%	[1.0] mg/L
Cr 267.716†	79846.4	740.03	0.93%	[1.0] mg/L
Cu 327.393†	134039.6	366.62	0.27%	[1.0] mg/L
Fe 273.955†	242622.7	536.44	0.22%	[10] mg/L
K 404.721†	9254.6	645.35	6.97%	[100] mg/L
No calibration curve because standard intensity and concentration values are not in the same order.				
Mg 279.077†	1938380.1	309.89	0.02%	[100] mg/L
Mn 257.610†	757026.3	985.94	0.13%	[1.0] mg/L
Mo 202.031†	19941.9	218.93	1.10%	[1.0] mg/L
Na 330.237†	116635.1	255.78	0.22%	[100] mg/L
Ni 231.604†	50881.6	290.48	0.57%	[1.0] mg/L
Pb 220.353†	14085.4	168.71	1.20%	[1.0] mg/L
Sb 206.836†	2404.6	19.71	0.82%	[1.0] mg/L
Se 196.026†	1703.4	39.11	2.30%	[1.0] mg/L
Sn 189.927†	4247.1	36.54	0.86%	[1.0] mg/L
Ti 334.940†	691648.7	1735.29	0.25%	[1.0] mg/L
Tl 190.801†	1716.9	21.32	1.24%	[1.0] mg/L
V 290.880†	137789.1	429.97	0.31%	[1.0] mg/L
Zn 206.200†	64020.4	130.69	0.20%	[1.0] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin, Calc Int	131.7	191000	0.00000	0.999795	
Al 308.215	3	Lin, Calc Int	1137.7	26890	0.00000	0.999809	
As 188.979	4	Lin, Calc Int	1.4	1604	0.00000	0.999901	
Ba 233.527	3	Lin, Calc Int	615.9	141000	0.00000	0.999703	
Be 313.107	4	Lin, Calc Int	9483.1	3000000	0.00000	0.999694	
Ca 315.887	3	Lin, Calc Int	58714.6	107500	0.00000	0.999571	
Cd 228.802	4	Lin, Calc Int	221.5	60400	0.00000	0.999618	
Co 228.616	3	Lin, Calc Int	241.4	45890	0.00000	0.999574	
Cr 267.716	3	Lin, Calc Int	359.7	80200	0.00000	0.999681	
Cu 327.393	3	Lin, Calc Int	622.1	134500	0.00000	0.999751	
Fe 273.955	3	Lin, Calc Int	1199.2	24370	0.00000	0.999656	
Mg 279.077	3	Lin, Calc Int	10746.1	19480	0.00000	0.999536	
Mn 257.610	3	Lin, Calc Int	3762.3	759800	0.00000	0.999702	
Mo 202.031	3	Lin, Calc Int	83.8	20020	0.00000	0.999719	
Na 330.237	3	Lin, Calc Int	-330.1	1166	0.00000	0.999949	
Ni 231.604	3	Lin, Calc Int	294.7	51120	0.00000	0.999555	
Pb 220.353	4	Lin, Calc Int	55.9	14170	0.00000	0.999660	
Sb 206.836	3	Lin, Calc Int	8.2	2410	0.00000	0.999863	
Se 196.026	3	Lin, Calc Int	12.3	1709	0.00000	0.999567	
Sn 189.927	3	Lin, Calc Int	14.8	4259	0.00000	0.999840	
Ti 334.940	3	Lin, Calc Int	2386.5	694100	0.00000	0.999805	
Tl 190.801	4	Lin, Calc Int	7.5	1727	0.00000	0.999630	
V 290.880	3	Lin, Calc Int	804.7	138400	0.00000	0.999582	
Zn 206.200	3	Lin, Calc Int	454.4	64230	0.00000	0.999561	

Sequence No.: 6

Sample ID: ICS3 V-173274

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 11/25/2013 11:00:14 AM

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	876829.0	97.0 %		0.18			0.19%
Y 371.029	274826.1	92.9 %		0.51			0.55%
Ag 328.068†	19431.9	0.101472 mg/L		0.0006165	0.101472 mg/L	0.0006165	0.61%
QC value within limits for Ag 328.068 Recovery = 101.47%							
Al 308.215†	137334.5	5.05614 mg/L		0.009542	5.05614 mg/L	0.009542	0.19%
QC value within limits for Al 308.215 Recovery = 101.12%							
As 188.979†	810.5	0.503487 mg/L		0.0033711	0.503487 mg/L	0.0033711	0.67%
QC value within limits for As 188.979 Recovery = 100.70%							
Ba 233.527†	72446.2	0.509420 mg/L		0.0005915	0.509420 mg/L	0.0005915	0.12%
QC value within limits for Ba 233.527 Recovery = 101.88%							
Be 313.107†	1546684.2	0.512195 mg/L		0.0006788	0.512195 mg/L	0.0006788	0.13%
QC value within limits for Be 313.107 Recovery = 102.44%							
Ca 315.887†	5595289.9	51.4832 mg/L		0.08394	51.4832 mg/L	0.08394	0.16%
QC value within limits for Ca 315.887 Recovery = 102.97%							
Cd 228.802†	31084.9	0.510644 mg/L		0.0023642	0.510644 mg/L	0.0023642	0.46%
QC value within limits for Cd 228.802 Recovery = 102.13%							
Co 228.616†	23705.2	0.512139 mg/L		0.0018932	0.512139 mg/L	0.0018932	0.37%
QC value within limits for Co 228.616 Recovery = 102.43%							
Cr 267.716†	41247.9	0.512657 mg/L		0.0026096	0.512657 mg/L	0.0026096	0.51%
QC value within limits for Cr 267.716 Recovery = 102.53%							
Cu 327.393†	69069.6	0.508295 mg/L		0.0018169	0.508295 mg/L	0.0018169	0.36%
QC value within limits for Cu 327.393 Recovery = 101.66%							
Fe 273.955†	124875.5	5.07577 mg/L		0.015935	5.07577 mg/L	0.015935	0.31%
QC value within limits for Fe 273.955 Recovery = 101.52%							
K 404.721†	4317.9					87.62	2.03%
Unable to evaluate QC.							
Mg 279.077†	1014303.5	51.5115 mg/L		0.12035	51.5115 mg/L	0.12035	0.23%
QC value within limits for Mg 279.077 Recovery = 103.02%							
Mn 257.610†	389948.7	0.506550 mg/L		0.0003869	0.506550 mg/L	0.0003869	0.08%
QC value within limits for Mn 257.610 Recovery = 101.31%							
Mo 202.031†	10249.7	0.505632 mg/L		0.0019773	0.505632 mg/L	0.0019773	0.39%
QC value within limits for Mo 202.031 Recovery = 101.13%							
Na 330.237†	56502.8	48.7596 mg/L		0.00781	48.7596 mg/L	0.00781	0.02%
QC value within limits for Na 330.237 Recovery = 97.52%							
Ni 231.604†	26378.7	0.510830 mg/L		0.0007040	0.510830 mg/L	0.0007040	0.14%
QC value within limits for Ni 231.604 Recovery = 102.17%							
Pb 220.353†	7296.8	0.510850 mg/L		0.0039503	0.510850 mg/L	0.0039503	0.77%
QC value within limits for Pb 220.353 Recovery = 102.17%							
Sb 206.836†	1228.7	0.506979 mg/L		0.0022171	0.506979 mg/L	0.0022171	0.44%
QC value within limits for Sb 206.836 Recovery = 101.40%							
Se 196.026†	865.0	0.498513 mg/L		0.0011581	0.498513 mg/L	0.0011581	0.23%
QC value within limits for Se 196.026 Recovery = 99.70%							
Sn 189.927†	2160.7	0.505658 mg/L		0.0007824	0.505658 mg/L	0.0007824	0.15%
QC value within limits for Sn 189.927 Recovery = 101.13%							
Ti 334.940†	353769.2	0.506269 mg/L		0.0004204	0.506269 mg/L	0.0004204	0.08%
QC value within limits for Ti 334.940 Recovery = 101.25%							
Tl 190.801†	884.9	0.513013 mg/L		0.0049177	0.513013 mg/L	0.0049177	0.96%
QC value within limits for Tl 190.801 Recovery = 102.60%							
V 290.880†	71672.1	0.505342 mg/L		0.0003113	0.505342 mg/L	0.0003113	0.06%
QC value within limits for V 290.880 Recovery = 101.07%							
Zn 206.200†	33100.7	0.507857 mg/L		0.0040359	0.507857 mg/L	0.0040359	0.79%
QC value within limits for Zn 206.200 Recovery = 101.57%							

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: 11/25/2013 11:03:44 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICV V-173510

	Mean Corrected		Calib		Sample			
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc 361.383	864496.5	95.6	%	0.08				0.08%
Y 371.029	277822.4	93.9	%	0.12				0.13%
Ag 328.068†	18976.0	0.0990822	mg/L	0.00020478	0.0990822	mg/L	0.00020478	0.21%
QC value within limits for Ag	328.068	Recovery =	99.08%					
Al 308.215†	135819.3	4.99998	mg/L	0.010945	4.99998	mg/L	0.010945	0.22%
QC value within limits for Al	308.215	Recovery =	100.00%					
As 188.979†	775.8	0.481909	mg/L	0.0020732	0.481909	mg/L	0.0020732	0.43%
QC value within limits for As	188.979	Recovery =	96.38%					
Ba 233.527†	71689.6	0.504054	mg/L	0.0001698	0.504054	mg/L	0.0001698	0.03%
QC value within limits for Ba	233.527	Recovery =	100.81%					
Be 313.107†	1467588.0	0.485835	mg/L	0.0010543	0.485835	mg/L	0.0010543	0.22%
QC value within limits for Be	313.107	Recovery =	97.17%					
Ca 315.887†	5385308.4	49.5304	mg/L	0.05401	49.5304	mg/L	0.05401	0.11%
QC value within limits for Ca	315.887	Recovery =	99.06%					
Cd 228.802†	30567.1	0.502081	mg/L	0.0027132	0.502081	mg/L	0.0027132	0.54%
QC value within limits for Cd	228.802	Recovery =	100.42%					
Co 228.616†	23070.8	0.498296	mg/L	0.0027527	0.498296	mg/L	0.0027527	0.55%
QC value within limits for Co	228.616	Recovery =	99.66%					
Cr 267.716†	40873.6	0.507928	mg/L	0.0005645	0.507928	mg/L	0.0005645	0.11%
QC value within limits for Cr	267.716	Recovery =	101.59%					
Cu 327.393†	66859.0	0.491882	mg/L	0.0017452	0.491882	mg/L	0.0017452	0.35%
QC value within limits for Cu	327.393	Recovery =	98.38%					
Fe 273.955†	123907.5	5.03604	mg/L	0.012294	5.03604	mg/L	0.012294	0.24%
QC value within limits for Fe	273.955	Recovery =	100.72%					
K 404.721†	4339.1						147.80	3.41%
Unable to evaluate QC.								
Mg 279.077†	991788.4	50.3558	mg/L	0.02824	50.3558	mg/L	0.02824	0.06%
QC value within limits for Mg	279.077	Recovery =	100.71%					
Mn 257.610†	380026.1	0.493530	mg/L	0.0007255	0.493530	mg/L	0.0007255	0.15%
QC value within limits for Mn	257.610	Recovery =	98.71%					
Mo 202.031†	10028.0	0.494634	mg/L	0.0027176	0.494634	mg/L	0.0027176	0.55%
QC value within limits for Mo	202.031	Recovery =	98.93%					
Na 330.237†	55154.7	47.6029	mg/L	0.07362	47.6029	mg/L	0.07362	0.15%
QC value within limits for Na	330.237	Recovery =	95.21%					
Ni 231.604†	25783.5	0.499174	mg/L	0.0039510	0.499174	mg/L	0.0039510	0.79%
QC value within limits for Ni	231.604	Recovery =	99.83%					
Pb 220.353†	7048.0	0.493296	mg/L	0.0016555	0.493296	mg/L	0.0016555	0.34%
QC value within limits for Pb	220.353	Recovery =	98.66%					
Sb 206.836†	1218.2	0.502630	mg/L	0.0037942	0.502630	mg/L	0.0037942	0.75%
QC value within limits for Sb	206.836	Recovery =	100.53%					
Se 196.026†	837.1	0.482225	mg/L	0.0015151	0.482225	mg/L	0.0015151	0.31%
QC value within limits for Se	196.026	Recovery =	96.45%					
Sn 189.927†	2146.7	0.502315	mg/L	0.0049912	0.502315	mg/L	0.0049912	0.99%
QC value within limits for Sn	189.927	Recovery =	100.46%					
Ti 334.940†	346478.7	0.495765	mg/L	0.0013987	0.495765	mg/L	0.0013987	0.28%
QC value within limits for Ti	334.940	Recovery =	99.15%					
Tl 190.801†	868.5	0.503393	mg/L	0.0066539	0.503393	mg/L	0.0066539	1.32%
QC value within limits for Tl	190.801	Recovery =	100.68%					
V 290.880†	70083.8	0.494013	mg/L	0.0002231	0.494013	mg/L	0.0002231	0.05%
QC value within limits for V	290.880	Recovery =	98.80%					
Zn 206.200†	32072.0	0.491846	mg/L	0.0040116	0.491846	mg/L	0.0040116	0.82%
QC value within limits for Zn	206.200	Recovery =	98.37%					

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 8

Sample ID: LLICV V-177224 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/25/2013 11:07:12 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV V-177224 [aq]

		Mean Corrected		Calib		Sample			
Analyte		Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc 361.383		895428.9	99.0	%	0.06				0.06%
Y 371.029		289104.2	97.7	%	0.02				0.02%
Ag 328.068†		3844.5	0.0194575	mg/L	0.00070284	0.0194575	mg/L	0.00070284	3.61%
	QC value within limits for Ag		328.068	Recovery = 97.29%					
Al 308.215†		5320.9	0.155279	mg/L	0.0026796	0.155279	mg/L	0.0026796	1.73%
	QC value within limits for Al		308.215	Recovery = 77.64%					
As 188.979†		30.6	0.0181487	mg/L	0.00061651	0.0181487	mg/L	0.00061651	3.40%
	QC value within limits for As		188.979	Recovery = 90.74%					
Ba 233.527†		7182.7	0.0465794	mg/L	0.00026870	0.0465794	mg/L	0.00026870	0.58%
	QC value within limits for Ba		233.527	Recovery = 93.16%					
Be 313.107†		35233.0	0.0085671	mg/L	0.00006269	0.0085671	mg/L	0.00006269	0.73%
	QC value within limits for Be		313.107	Recovery = 71.39%					
Ca 315.887†		544046.6	4.51352	mg/L	0.016056	4.51352	mg/L	0.016056	0.36%
	QC value within limits for Ca		315.887	Recovery = 90.27%					
Cd 228.802†		743.5	0.0086189	mg/L	0.00017111	0.0086189	mg/L	0.00017111	1.99%
	QC value within limits for Cd		228.802	Recovery = 71.82%					
Co 228.616†		946.8	0.0153427	mg/L	0.00000981	0.0153427	mg/L	0.00000981	0.06%
	QC value within limits for Co		228.616	Recovery = 76.71%					
Cr 267.716†		4076.6	0.0464460	mg/L	0.00030876	0.0464460	mg/L	0.00030876	0.66%
	QC value within limits for Cr		267.716	Recovery = 92.89%					
Cu 327.393†		6410.4	0.0429714	mg/L	0.00054092	0.0429714	mg/L	0.00054092	1.26%
	QC value within limits for Cu		327.393	Recovery = 85.94%					
Fe 273.955†		7424.6	0.255495	mg/L	0.0034430	0.255495	mg/L	0.0034430	1.35%
	QC value within limits for Fe		273.955	Recovery = 85.16%					
K 404.721†		659.0						66.54	10.10%
	Unable to evaluate QC.								
Mg 279.077†		100471.9	4.60528	mg/L	0.019582	4.60528	mg/L	0.019582	0.43%
	QC value within limits for Mg		279.077	Recovery = 92.11%					
Mn 257.610†		30297.7	0.0347606	mg/L	0.00015926	0.0347606	mg/L	0.00015926	0.46%
	QC value within limits for Mn		257.610	Recovery = 86.90%					
Mo 202.031†		416.4	0.0164384	mg/L	0.00016362	0.0164384	mg/L	0.00016362	1.00%
	QC value within limits for Mo		202.031	Recovery = 82.19%					
Na 330.237†		4744.3	4.35351	mg/L	0.061346	4.35351	mg/L	0.061346	1.41%
	QC value within limits for Na		330.237	Recovery = 87.07%					
Ni 231.604†		2621.1	0.0455270	mg/L	0.00002584	0.0455270	mg/L	0.00002584	0.06%
	QC value within limits for Ni		231.604	Recovery = 91.05%					
Pb 220.353†		205.0	0.0104669	mg/L	0.00070075	0.0104669	mg/L	0.00070075	6.69%
	QC value within limits for Pb		220.353	Recovery = 87.22%					
Sb 206.836†		47.6	0.0163697	mg/L	0.00182132	0.0163697	mg/L	0.00182132	11.13%
	QC value within limits for Sb		206.836	Recovery = 81.85%					
Se 196.026†		78.9	0.0388931	mg/L	0.00068282	0.0388931	mg/L	0.00068282	1.76%
	QC value within limits for Se		196.026	Recovery = 97.23%					
Sn 189.927†		192.7	0.0419412	mg/L	0.00102132	0.0419412	mg/L	0.00102132	2.44%
	QC value within limits for Sn		189.927	Recovery = 83.88%					
Ti 334.940†		32819.9	0.0438483	mg/L	0.00004235	0.0438483	mg/L	0.00004235	0.10%
	QC value within limits for Ti		334.940	Recovery = 87.70%					
Tl 190.801†		36.0	0.0168263	mg/L	0.00027438	0.0168263	mg/L	0.00027438	1.63%
	QC value within limits for Tl		190.801	Recovery = 84.13%					
V 290.880†		7224.1	0.0457842	mg/L	0.00015133	0.0457842	mg/L	0.00015133	0.33%
	QC value within limits for V		290.880	Recovery = 91.57%					
Zn 206.200†		3221.3	0.0430620	mg/L	0.00017442	0.0430620	mg/L	0.00017442	0.41%
	QC value within limits for Zn		206.200	Recovery = 86.12%					

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: 11/25/2013 11:10:31 AM

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	Sample	Std.Dev.	RSD
Sc 361.383	893832.3	98.8 %		0.73				0.73%
Y 371.029	292418.2	98.8 %		0.68				0.69%
Ag 328.068†	7.1 -0.0006564	mg/L	0.00038517	-0.0006564	mg/L	0.00038517		58.68%
QC value within limits for Ag 328.068	Recovery = Not calculated							
Al 308.215†	298.6 -0.0311396	mg/L	0.00055596	-0.0311396	mg/L	0.00055596		1.79%
QC value within limits for Al 308.215	Recovery = Not calculated							
As 188.979†	-0.1 -0.0008973	mg/L	0.00015594	-0.0008973	mg/L	0.00015594		17.38%
QC value within limits for As 188.979	Recovery = Not calculated							
Ba 233.527†	-13.0 -0.0044600	mg/L	0.00003795	-0.0044600	mg/L	0.00003795		0.85%
QC value within limits for Ba 233.527	Recovery = Not calculated							
Be 313.107†	-103.9 -0.0031942	mg/L	0.00000700	-0.0031942	mg/L	0.00000700		0.22%
QC value within limits for Be 313.107	Recovery = Not calculated							
Ca 315.887†	-960.8 -0.554934	mg/L	0.0062034	-0.554934	mg/L	0.0062034		1.12%
QC value within limits for Ca 315.887	Recovery = Not calculated							
Cd 228.802†	17.9 -0.0033674	mg/L	0.00014957	-0.0033674	mg/L	0.00014957		4.44%
QC value within limits for Cd 228.802	Recovery = Not calculated							
Co 228.616†	4.4 -0.0051713	mg/L	0.00024351	-0.0051713	mg/L	0.00024351		4.71%
QC value within limits for Co 228.616	Recovery = Not calculated							
Cr 267.716†	5.3 -0.0044413	mg/L	0.00021405	-0.0044413	mg/L	0.00021405		4.82%
QC value within limits for Cr 267.716	Recovery = Not calculated							
Cu 327.393†	-404.3 -0.0076258	mg/L	0.00080355	-0.0076258	mg/L	0.00080355		10.54%
QC value within limits for Cu 327.393	Recovery = Not calculated							
Fe 273.955†	45.7 -0.0473379	mg/L	0.00092452	-0.0473379	mg/L	0.00092452		1.95%
QC value within limits for Fe 273.955	Recovery = Not calculated							
K 404.721†	137.3					419.20	305.38%	
Unable to evaluate QC.								
Mg 279.077†	27.0 -0.550185	mg/L	0.0006041	-0.550185	mg/L	0.0006041		0.11%
QC value within limits for Mg 279.077	Recovery = Not calculated							
Mn 257.610†	-4.6 -0.0049389	mg/L	0.00001185	-0.0049389	mg/L	0.00001185		0.24%
QC value within limits for Mn 257.610	Recovery = Not calculated							
Mo 202.031†	5.6 -0.0038846	mg/L	0.00037989	-0.0038846	mg/L	0.00037989		9.78%
QC value within limits for Mo 202.031	Recovery = Not calculated							
Na 330.237†	39.1 0.316691	mg/L	0.0793523	0.316691	mg/L	0.0793523		25.06%
QC value within limits for Na 330.237	Recovery = Not calculated							
Ni 231.604†	12.0 -0.0055340	mg/L	0.00046829	-0.0055340	mg/L	0.00046829		8.46%
QC value within limits for Ni 231.604	Recovery = Not calculated							
Pb 220.353†	16.1 -0.0028039	mg/L	0.00052270	-0.0028039	mg/L	0.00052270		18.64%
QC value within limits for Pb 220.353	Recovery = Not calculated							
Sb 206.836†	5.6 -0.0010566	mg/L	0.00131332	-0.0010566	mg/L	0.00131332		124.29%
QC value within limits for Sb 206.836	Recovery = Not calculated							
Se 196.026†	8.9 -0.0019799	mg/L	0.00339337	-0.0019799	mg/L	0.00339337		171.39%
QC value within limits for Se 196.026	Recovery = Not calculated							
Sn 189.927†	3.5 -0.0026623	mg/L	0.00011246	-0.0026623	mg/L	0.00011246		4.22%
QC value within limits for Sn 189.927	Recovery = Not calculated							
Ti 334.940†	-83.9 -0.0035593	mg/L	0.00001957	-0.0035593	mg/L	0.00001957		0.55%
QC value within limits for Ti 334.940	Recovery = Not calculated							
Tl 190.801†	4.4 -0.0018544	mg/L	0.00129534	-0.0018544	mg/L	0.00129534		69.85%
QC value within limits for Tl 190.801	Recovery = Not calculated							
V 290.880†	152.4 -0.0046412	mg/L	0.00005749	-0.0046412	mg/L	0.00005749		1.24%
QC value within limits for V 290.880	Recovery = Not calculated							
Zn 206.200†	12.9 -0.0068705	mg/L	0.00003118	-0.0068705	mg/L	0.00003118		0.45%
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: 11/25/2013 11:13:45 AM
 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	807613.4	89.3 %		0.84			0.94%
Y 371.029	255532.3	86.4 %		0.17			0.20%
Ag 328.068†	-3321.6	-0.0014041 mg/L	0.00056780	-0.0014041 mg/L	0.00056780	40.44%	
Al 308.215†	13168349.8	489.627 mg/L	6.0564	489.627 mg/L	6.0564	1.24%	
QC value within limits for Al 308.215 Recovery = 97.93%							
As 188.979†	32.9	-0.0098946 mg/L	0.00038630	-0.0098946 mg/L	0.00038630	3.90%	
Ba 233.527†	1919.8	0.0019734 mg/L	0.00025680	0.0019734 mg/L	0.00025680	13.01%	
Be 313.107†	-2710.4	-0.0040639 mg/L	0.00000615	-0.0040639 mg/L	0.00000615	0.15%	
Ca 315.887†	50884650.6	472.396 mg/L	5.0485	472.396 mg/L	5.0485	1.07%	
QC value within limits for Ca 315.887 Recovery = 94.48%							
Cd 228.802†	231.9	-0.0056469 mg/L	0.00040849	-0.0056469 mg/L	0.00040849	7.23%	
Co 228.616†	-37.2	-0.0059712 mg/L	0.00028445	-0.0059712 mg/L	0.00028445	4.76%	
Cr 267.716†	-390.4	-0.0092216 mg/L	0.00052713	-0.0092216 mg/L	0.00052713	5.72%	
Cu 327.393†	605.2	-0.0125101 mg/L	0.00063480	-0.0125101 mg/L	0.00063480	5.07%	
Fe 273.955†	4677850.4	191.933 mg/L	0.3259	191.933 mg/L	0.3259	0.17%	
QC value within limits for Fe 273.955 Recovery = 95.97%							
K 404.721†	-1805.2				338.93	18.78%	
Mg 279.077†	9845091.5	504.602 mg/L	5.5998	504.602 mg/L	5.5998	1.11%	
QC value within limits for Mg 279.077 Recovery = 100.92%							
Mn 257.610†	1307.7	-0.0219456 mg/L	0.00019099	-0.0219456 mg/L	0.00019099	0.87%	
Mo 202.031†	602.1	0.0005506 mg/L	0.00067439	0.0005506 mg/L	0.00067439	122.48%	
Na 330.237†	200.0	0.454728 mg/L	0.0615821	0.454728 mg/L	0.0615821	13.54%	
Ni 231.604†	44.0	-0.0048725 mg/L	0.00017893	-0.0048725 mg/L	0.00017893	3.67%	
Pb 220.353†	-770.3	-0.0187956 mg/L	0.00047079	-0.0187956 mg/L	0.00047079	2.50%	
Sb 206.836†	-60.5	-0.0050167 mg/L	0.00008000	-0.0050167 mg/L	0.00008000	1.59%	
Se 196.026†	-3.7	-0.0022113 mg/L	0.00699688	-0.0022113 mg/L	0.00699688	316.42%	
Sn 189.927†	5.8	-0.0009419 mg/L	0.00034898	-0.0009419 mg/L	0.00034898	37.05%	
Ti 334.940†	1495.4	-0.0012839 mg/L	0.00012051	-0.0012839 mg/L	0.00012051	9.39%	
Tl 190.801†	23.7	-0.0126417 mg/L	0.00024566	-0.0126417 mg/L	0.00024566	1.94%	
V 290.880†	13056.3	0.0149410 mg/L	0.00127100	0.0149410 mg/L	0.00127100	8.51%	
Zn 206.200†	810.9	-0.0103119 mg/L	0.00017613	-0.0103119 mg/L	0.00017613	1.71%	

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/25/2013 11:18:46 AM
 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	798106.2	88.2 %	0.07			0.08%
Y 371.029	254206.0	85.9 %	0.24			0.28%
Ag 328.068†	214870.3	1.14104 mg/L	0.001955	1.14104 mg/L	0.001955	0.17%
QC value within limits for Ag 328.068 Recovery = 114.10%						
Al 308.215†	13396718.9	498.119 mg/L	0.4805	498.119 mg/L	0.4805	0.10%
QC value within limits for Al 308.215 Recovery = 99.62%						
As 188.979†	1768.7	1.07154 mg/L	0.002660	1.07154 mg/L	0.002660	0.25%
QC value within limits for As 188.979 Recovery = 107.15%						
Ba 233.527†	77321.8	0.536807 mg/L	0.0020601	0.536807 mg/L	0.0020601	0.38%
QC value within limits for Ba 233.527 Recovery = 107.36%						
Be 313.107†	1596702.7	0.529050 mg/L	0.0002191	0.529050 mg/L	0.0002191	0.04%
QC value within limits for Be 313.107 Recovery = 105.81%						
Ca 315.887†	51850221.5	481.368 mg/L	1.6306	481.368 mg/L	1.6306	0.34%
QC value within limits for Ca 315.887 Recovery = 96.27%						
Cd 228.802†	66400.2	1.08976 mg/L	0.001648	1.08976 mg/L	0.001648	0.15%
QC value within limits for Cd 228.802 Recovery = 108.98%						
Co 228.616†	24042.4	0.518717 mg/L	0.0000260	0.518717 mg/L	0.0000260	0.01%
QC value within limits for Co 228.616 Recovery = 103.74%						
Cr 267.716†	42537.3	0.526260 mg/L	0.0017816	0.526260 mg/L	0.0017816	0.34%
QC value within limits for Cr 267.716 Recovery = 105.25%						
Cu 327.393†	75883.0	0.547082 mg/L	0.0011471	0.547082 mg/L	0.0011471	0.21%
QC value within limits for Cu 327.393 Recovery = 109.42%						
Fe 273.955†	4754889.5	195.095 mg/L	0.8778	195.095 mg/L	0.8778	0.45%
QC value within limits for Fe 273.955 Recovery = 97.55%						
K 404.721†	-1850.5				9.29	0.50%
Mg 279.077†	10033808.7	514.288 mg/L	2.1654	514.288 mg/L	2.1654	0.42%
QC value within limits for Mg 279.077 Recovery = 102.86%						
Mn 257.610†	403508.6	0.507080 mg/L	0.0010838	0.507080 mg/L	0.0010838	0.21%
QC value within limits for Mn 257.610 Recovery = 101.42%						
Mo 202.031†	621.7	0.0010644 mg/L	0.00128489	0.0010644 mg/L	0.00128489	120.72%
Na 330.237†	1876.2	1.89285 mg/L	0.040170	1.89285 mg/L	0.040170	2.12%
Ni 231.604†	52503.5	1.02131 mg/L	0.000160	1.02131 mg/L	0.000160	0.02%
QC value within limits for Ni 231.604 Recovery = 102.13%						
Pb 220.353†	13567.0	0.993605 mg/L	0.0024147	0.993605 mg/L	0.0024147	0.24%
QC value within limits for Pb 220.353 Recovery = 99.36%						
Sb 206.836†	2525.4	1.06815 mg/L	0.006864	1.06815 mg/L	0.006864	0.64%
QC value within limits for Sb 206.836 Recovery = 106.82%						
Se 196.026†	1714.4	1.00309 mg/L	0.005771	1.00309 mg/L	0.005771	0.58%
QC value within limits for Se 196.026 Recovery = 100.31%						
Sn 189.927†	-1.6	-0.0026212 mg/L	0.00083691	-0.0026212 mg/L	0.00083691	31.93%
Ti 334.940†	1604.6	-0.0011266 mg/L	0.00011859	-0.0011266 mg/L	0.00011859	10.53%
Tl 190.801†	1793.0	1.01064 mg/L	0.001803	1.01064 mg/L	0.001803	0.18%
QC value within limits for Tl 190.801 Recovery = 101.06%						
V 290.880†	83526.5	0.522933 mg/L	0.0023301	0.522933 mg/L	0.0023301	0.45%
QC value within limits for V 290.880 Recovery = 104.59%						
Zn 206.200†	65745.4	1.00040 mg/L	0.003015	1.00040 mg/L	0.003015	0.30%
QC value within limits for Zn 206.200 Recovery = 100.04%						

All analyte(s) passed QC.

Sequence No.: 12
 Sample ID: MB 27442 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 81
 Date Collected: 11/25/2013 11:23:50 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 27442 (1)

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	912262.3	101 %	0.1			0.09%
Y 371.029	296614.7	100 %	0.1			0.14%
Ag 328.068†	51.3	-0.0004246 mg/L	0.00034011	-0.0004246 mg/L	0.00034011	80.10%
Al 308.215†	422.6	-0.0265160 mg/L	0.00002167	-0.0265160 mg/L	0.00002167	0.08%
As 188.979†	-2.2	-0.0021913 mg/L	0.00215835	-0.0021913 mg/L	0.00215835	98.50%
Ba 233.527†	2.1	-0.0043533 mg/L	0.00002256	-0.0043533 mg/L	0.00002256	0.52%
Be 313.107†	-99.1	-0.0031926 mg/L	0.00001390	-0.0031926 mg/L	0.00001390	0.44%
Ca 315.887†	898.9	-0.537638 mg/L	0.0110733	-0.537638 mg/L	0.0110733	2.06%
Cd 228.802†	4.5	-0.0035883 mg/L	0.00003594	-0.0035883 mg/L	0.00003594	1.00%
Co 228.616†	15.0	-0.0049425 mg/L	0.00014649	-0.0049425 mg/L	0.00014649	2.96%
Cr 267.716†	15.5	-0.0043174 mg/L	0.00029441	-0.0043174 mg/L	0.00029441	6.82%
Cu 327.393†	-291.0	-0.0067835 mg/L	0.00152087	-0.0067835 mg/L	0.00152087	22.42%
Fe 273.955†	135.0	-0.0436727 mg/L	0.00073862	-0.0436727 mg/L	0.00073862	1.69%
K 404.721†	103.8				184.27	177.50%
Mg 279.077†	197.1	-0.541462 mg/L	0.0012835	-0.541462 mg/L	0.0012835	0.24%
Mn 257.610†	-23.1	-0.0049638 mg/L	0.00002109	-0.0049638 mg/L	0.00002109	0.42%
Mo 202.031†	-7.4	-0.0045363 mg/L	0.00006597	-0.0045363 mg/L	0.00006597	1.45%
Na 330.237†	17.3	0.298033 mg/L	0.0994237	0.298033 mg/L	0.0994237	33.36%
Ni 231.604†	9.4	-0.0055854 mg/L	0.00006065	-0.0055854 mg/L	0.00006065	1.09%
Pb 220.353†	23.7	-0.0022627 mg/L	0.00047053	-0.0022627 mg/L	0.00047053	20.80%
Sb 206.836†	2.4	-0.0023935 mg/L	0.00167479	-0.0023935 mg/L	0.00167479	69.97%
Se 196.026†	9.9	-0.0013903 mg/L	0.00278069	-0.0013903 mg/L	0.00278069	200.00%
Sn 189.927†	2.6	-0.0028696 mg/L	0.00139054	-0.0028696 mg/L	0.00139054	48.46%
Ti 334.940†	-104.6	-0.0035892 mg/L	0.00002243	-0.0035892 mg/L	0.00002243	0.62%
Tl 190.801†	3.4	-0.0024113 mg/L	0.00127740	-0.0024113 mg/L	0.00127740	52.98%
V 290.880†	35.4	-0.0054880 mg/L	0.00017384	-0.0054880 mg/L	0.00017384	3.17%
Zn 206.200†	141.6	-0.0048660 mg/L	0.00022453	-0.0048660 mg/L	0.00022453	4.61%

Sequence No.: 13
 Sample ID: LCSW 27442
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 82
 Date Collected: 11/25/2013 11:27:08 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW 27442

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	882241.3	97.5 %	0.22			0.23%
Y 371.029	277852.0	93.9 %	0.82			0.87%
Ag 328.068†	18863.5	0.0985026 mg/L	0.00121884	0.0985026 mg/L	0.00121884	1.24%
Al 308.215†	137605.2	5.06621 mg/L	0.050226	5.06621 mg/L	0.050226	0.99%
As 188.979†	806.4	0.500944 mg/L	0.0011073	0.500944 mg/L	0.0011073	0.22%
Ba 233.527†	72834.6	0.512174 mg/L	0.0039303	0.512174 mg/L	0.0039303	0.77%
Be 313.107†	1519802.8	0.503237 mg/L	0.0015565	0.503237 mg/L	0.0015565	0.31%
Ca 315.887†	5587526.7	51.4110 mg/L	0.11307	51.4110 mg/L	0.11307	0.22%
Cd 228.802†	30786.8	0.505707 mg/L	0.0028074	0.505707 mg/L	0.0028074	0.56%
Co 228.616†	23837.7	0.515040 mg/L	0.0000357	0.515040 mg/L	0.0000357	0.01%
Cr 267.716†	41608.0	0.517146 mg/L	0.0016384	0.517146 mg/L	0.0016384	0.32%
Cu 327.393†	67804.4	0.498890 mg/L	0.0029786	0.498890 mg/L	0.0029786	0.60%
Fe 273.955†	126489.4	5.14200 mg/L	0.026170	5.14200 mg/L	0.026170	0.51%
K 404.721†	4428.5				249.56	5.64%
Mg 279.077†	1032613.1	52.4512 mg/L	0.13210	52.4512 mg/L	0.13210	0.25%
Mn 257.610†	386308.5	0.501724 mg/L	0.0032654	0.501724 mg/L	0.0032654	0.65%
Mo 202.031†	10249.9	0.505646 mg/L	0.0002381	0.505646 mg/L	0.0002381	0.05%
Na 330.237†	55785.9	48.1445 mg/L	0.52299	48.1445 mg/L	0.52299	1.09%
Ni 231.604†	26373.5	0.510727 mg/L	0.0026153	0.510727 mg/L	0.0026153	0.51%
Pb 220.353†	7263.7	0.508495 mg/L	0.0022291	0.508495 mg/L	0.0022291	0.44%
Sb 206.836†	1248.3	0.515109 mg/L	0.0007582	0.515109 mg/L	0.0007582	0.15%
Se 196.026†	845.5	0.487082 mg/L	0.0039778	0.487082 mg/L	0.0039778	0.82%
Sn 189.927†	2219.7	0.519526 mg/L	0.0057536	0.519526 mg/L	0.0057536	1.11%
Ti 334.940†	349500.7	0.500119 mg/L	0.0038622	0.500119 mg/L	0.0038622	0.77%
Tl 190.801†	887.6	0.514517 mg/L	0.0022012	0.514517 mg/L	0.0022012	0.43%
V 290.880†	71197.0	0.501782 mg/L	0.0059875	0.501782 mg/L	0.0059875	1.19%
Zn 206.200†	33061.2	0.507240 mg/L	0.0011827	0.507240 mg/L	0.0011827	0.23%

Sequence No.: 14
 Sample ID: LCSW MR 27442
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 83
 Date Collected: 11/25/2013 11:30:38 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LCSW MR 27442

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	885437.5	97.9	%	0.12			0.12%
Y 371.029	281525.9	95.1	%	0.12			0.12%
Ag 328.068†	18553.3	0.0968725	mg/L	0.00056319	0.0968725 mg/L	0.00056319	0.58%
Al 308.215†	135169.1	4.97590	mg/L	0.009576	4.97590 mg/L	0.009576	0.19%
As 188.979†	774.4	0.480995	mg/L	0.0058218	0.480995 mg/L	0.0058218	1.21%
Ba 233.527†	71575.5	0.503244	mg/L	0.0016571	0.503244 mg/L	0.0016571	0.33%
Be 313.107†	1474947.1	0.488289	mg/L	0.0005445	0.488289 mg/L	0.0005445	0.11%
Ca 315.887†	5431083.7	49.9561	mg/L	0.08784	49.9561 mg/L	0.08784	0.18%
Cd 228.802†	30358.9	0.498633	mg/L	0.0000206	0.498633 mg/L	0.0000206	0.00%
Co 228.616†	23012.4	0.497011	mg/L	0.0024301	0.497011 mg/L	0.0024301	0.49%
Cr 267.716†	40905.0	0.508290	mg/L	0.0026770	0.508290 mg/L	0.0026770	0.53%
Cu 327.393†	66683.9	0.490574	mg/L	0.0014968	0.490574 mg/L	0.0014968	0.31%
Fe 273.955†	124730.7	5.06982	mg/L	0.012278	5.06982 mg/L	0.012278	0.24%
K 404.721†	4351.1					168.05	3.86%
Mg 279.077†	1002823.5	50.9221	mg/L	0.17233	50.9221 mg/L	0.17233	0.34%
Mn 257.610†	380471.8	0.494093	mg/L	0.0005919	0.494093 mg/L	0.0005919	0.12%
Mo 202.031†	9913.4	0.488899	mg/L	0.0011947	0.488899 mg/L	0.0011947	0.24%
Na 330.237†	54861.9	47.3517	mg/L	0.21503	47.3517 mg/L	0.21503	0.45%
Ni 231.604†	25630.4	0.496172	mg/L	0.0020940	0.496172 mg/L	0.0020940	0.42%
Pb 220.353†	7047.8	0.493257	mg/L	0.0001443	0.493257 mg/L	0.0001443	0.03%
Sb 206.836†	1209.6	0.499028	mg/L	0.0009996	0.499028 mg/L	0.0009996	0.20%
Se 196.026†	829.3	0.477634	mg/L	0.0006497	0.477634 mg/L	0.0006497	0.14%
Sn 189.927†	2125.4	0.497318	mg/L	0.0044017	0.497318 mg/L	0.0044017	0.89%
Ti 334.940†	343323.5	0.491219	mg/L	0.0003153	0.491219 mg/L	0.0003153	0.06%
Tl 190.801†	865.1	0.501389	mg/L	0.0020610	0.501389 mg/L	0.0020610	0.41%
V 290.880†	69892.5	0.492555	mg/L	0.0022215	0.492555 mg/L	0.0022215	0.45%
Zn 206.200†	32093.6	0.492184	mg/L	0.0017396	0.492184 mg/L	0.0017396	0.35%

Sequence No.: 15

Sample ID: 75646-002

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 84

Date Collected: 11/25/2013 11:34:10 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

*missed cup
not used*

Mean Data: 75646-002

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1635183.9	181	%	4.0			2.24%
Y 371.029	544231.0	184	%	4.0			2.16%
Ag 328.068†	-1892.6	-0.0106029	mg/L	0.00009440	-0.0106029	mg/L	0.00009440 0.89%
Al 308.215†	-9224.4	-0.385133	mg/L	0.0064079	-0.385133	mg/L	0.0064079 1.66%
As 188.979†	-26.6	-0.0174114	mg/L	0.00012721	-0.0174114	mg/L	0.00012721 0.73%
Ba 233.527†	513.6	-0.0007229	mg/L	0.00005726	-0.0007229	mg/L	0.00005726 7.92%
Be 313.107†	2147.5	-0.0024439	mg/L	0.00001090	-0.0024439	mg/L	0.00001090 0.45%
Ca 315.887†	6391.0	-0.486391	mg/L	0.0021759	-0.486391	mg/L	0.0021759 0.45%
Cd 228.802†	-405.8	-0.0103804	mg/L	0.00016609	-0.0103804	mg/L	0.00016609 1.60%
Co 228.616†	-92.5	-0.0073121	mg/L	0.00001480	-0.0073121	mg/L	0.00001480 0.20%
Cr 267.716†	608.9	0.0030471	mg/L	0.00005678	0.0030471	mg/L	0.00005678 1.86%
Cu 327.393†	665.8	0.0003319	mg/L	0.00145846	0.0003319	mg/L	0.00145846 439.41%
Fe 273.955†	-613.7	-0.0743998	mg/L	0.00058001	-0.0743998	mg/L	0.00058001 0.78%
K 404.721†	7841.6					47.20	0.60%
Mg 279.077†	2817.1	-0.407055	mg/L	0.0026980	-0.407055	mg/L	0.0026980 0.66%
Mn 257.610†	-580.0	-0.0057037	mg/L	0.00004207	-0.0057037	mg/L	0.00004207 0.74%
Mo 202.031†	-141.0	-0.0112022	mg/L	0.00009858	-0.0112022	mg/L	0.00009858 0.88%
Na 330.237†	318.3	0.556269	mg/L	0.0358407	0.556269	mg/L	0.0358407 6.44%
Ni 231.604†	-58.8	-0.0069271	mg/L	0.00018793	-0.0069271	mg/L	0.00018793 2.71%
Pb 220.353†	-272.5	-0.0232224	mg/L	0.00019797	-0.0232224	mg/L	0.00019797 0.85%
Sb 206.836†	13.9	0.0023523	mg/L	0.00065696	0.0023523	mg/L	0.00065696 27.93%
Se 196.026†	-16.2	-0.0167038	mg/L	0.00010197	-0.0167038	mg/L	0.00010197 0.61%
Sn 189.927†	-29.0	-0.0102828	mg/L	0.00033689	-0.0102828	mg/L	0.00033689 3.28%
Ti 334.940†	94.8	-0.0033019	mg/L	0.00002825	-0.0033019	mg/L	0.00002825 0.86%
Tl 190.801†	-4.4	-0.0069575	mg/L	0.00025896	-0.0069575	mg/L	0.00025896 3.72%
V 290.880†	-3530.1	-0.0312708	mg/L	0.00071315	-0.0312708	mg/L	0.00071315 2.28%
Zn 206.200†	-134.2	-0.0091504	mg/L	0.00007530	-0.0091504	mg/L	0.00007530 0.82%

Sequence No.: 16
 Sample ID: 75646-002 MR
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 85
 Date Collected: 11/25/2013 11:37:38 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-002 MR

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	908879.2	100 %	0.1			0.14%
Y 371.029	290905.9	98.3 %	0.06			0.07%
Ag 328.068†	57.4	-0.0003895 mg/L	0.00013160	-0.0003895 mg/L	0.00013160	33.79%
Al 308.215†	475.5	-0.0245776 mg/L	0.00453802	-0.0245776 mg/L	0.00453802	18.46%
As 188.979†	-2.1	-0.0023838 mg/L	0.00292862	-0.0023838 mg/L	0.00292862	122.86%
Ba 233.527†	3835.3	0.0228405 mg/L	0.00002825	0.0228405 mg/L	0.00002825	0.12%
Be 313.107†	182.0	-0.0030989 mg/L	0.00004005	-0.0030989 mg/L	0.00004005	1.29%
Ca 315.887†	1308204.7	11.6211 mg/L	0.02708	11.6211 mg/L	0.02708	0.23%
Cd 228.802†	30.1	-0.0032165 mg/L	0.00010278	-0.0032165 mg/L	0.00010278	3.20%
Co 228.616†	35.7	-0.0044839 mg/L	0.00001124	-0.0044839 mg/L	0.00001124	0.25%
Cr 267.716†	-5.1	-0.0045143 mg/L	0.00011595	-0.0045143 mg/L	0.00011595	2.57%
Cu 327.393†	-37.4	-0.0050635 mg/L	0.00163589	-0.0050635 mg/L	0.00163589	32.31%
Fe 273.955†	1059.5	-0.0057334 mg/L	0.00004001	-0.0057334 mg/L	0.00004001	0.70%
K 404.721†	347.2				261.68	75.37%
Mg 279.077†	83759.5	3.74807 mg/L	0.000397	3.74807 mg/L	0.000397	0.01%
Mn 257.610†	105857.9	0.134240 mg/L	0.0003123	0.134240 mg/L	0.0003123	0.23%
Mo 202.031†	28.7	-0.0031541 mg/L	0.00028597	-0.0031541 mg/L	0.00028597	9.07%
Na 330.237†	37187.8	32.1883 mg/L	0.04869	32.1883 mg/L	0.04869	0.15%
Ni 231.604†	41.6	-0.0049539 mg/L	0.00014817	-0.0049539 mg/L	0.00014817	2.99%
Pb 220.353†	21.8	-0.0024562 mg/L	0.00046195	-0.0024562 mg/L	0.00046195	18.81%
Sb 206.836†	6.7	-0.0006201 mg/L	0.00066198	-0.0006201 mg/L	0.00066198	106.76%
Se 196.026†	9.4	-0.0020751 mg/L	0.00103189	-0.0020751 mg/L	0.00103189	49.73%
Sn 189.927†	1.0	-0.0029326 mg/L	0.00069615	-0.0029326 mg/L	0.00069615	23.74%
Ti 334.940†	-213.1	-0.0037453 mg/L	0.00007213	-0.0037453 mg/L	0.00007213	1.93%
Tl 190.801†	-1.0	-0.0051212 mg/L	0.00028904	-0.0051212 mg/L	0.00028904	5.64%
V 290.880†	604.6	-0.0019009 mg/L	0.00047173	-0.0019009 mg/L	0.00047173	24.82%
Zn 206.200†	752.8	0.0046482 mg/L	0.00008365	0.0046482 mg/L	0.00008365	1.80%

Sequence No.: 17
 Sample ID: 75646-004 MS 1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 86
 Date Collected: 11/25/2013 11:40:56 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-004 MS 1

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	870311.6	96.2 %	0.09			0.10%
Y 371.029	277444.3	93.8 %	0.73			0.78%
Ag 328.068†	18685.3	0.0975706 mg/L	0.00031090	0.0975706 mg/L	0.00031090	0.32%
Al 308.215†	136949.8	5.04193 mg/L	0.019706	5.04193 mg/L	0.019706	0.39%
As 188.979†	804.0	0.499235 mg/L	0.0009058	0.499235 mg/L	0.0009058	0.18%
Ba 233.527†	76419.2	0.537605 mg/L	0.0015933	0.537605 mg/L	0.0015933	0.30%
Be 313.107†	1485906.3	0.491940 mg/L	0.0002105	0.491940 mg/L	0.0002105	0.04%
Ca 315.887†	6796171.5	62.6521 mg/L	0.00830	62.6521 mg/L	0.00830	0.01%
Cd 228.802†	30895.1	0.507455 mg/L	0.0025822	0.507455 mg/L	0.0025822	0.51%
Co 228.616†	23454.0	0.506665 mg/L	0.0005691	0.506665 mg/L	0.0005691	0.11%
Cr 267.716†	41060.1	0.510337 mg/L	0.0008781	0.510337 mg/L	0.0008781	0.17%
Cu 327.393†	67592.1	0.497156 mg/L	0.0014024	0.497156 mg/L	0.0014024	0.28%
Fe 273.955†	126709.7	5.15104 mg/L	0.013255	5.15104 mg/L	0.013255	0.26%
K 404.721†	4601.9				22.72	0.49%
Mg 279.077†	1086910.8	55.2387 mg/L	0.08423	55.2387 mg/L	0.08423	0.15%
Mn 257.610†	498074.7	0.648728 mg/L	0.0006072	0.648728 mg/L	0.0006072	0.09%
Mo 202.031†	10134.2	0.499476 mg/L	0.0005659	0.499476 mg/L	0.0005659	0.11%
Na 330.237†	101916.5	87.7221 mg/L	0.25678	87.7221 mg/L	0.25678	0.29%
Ni 231.604†	26082.4	0.505027 mg/L	0.0014079	0.505027 mg/L	0.0014079	0.28%
Pb 220.353†	7158.6	0.501037 mg/L	0.0023357	0.501037 mg/L	0.0023357	0.47%
Sb 206.836†	1231.0	0.507919 mg/L	0.0030462	0.507919 mg/L	0.0030462	0.60%
Se 196.026†	828.0	0.476470 mg/L	0.0096075	0.476470 mg/L	0.0096075	2.02%
Sn 189.927†	2185.2	0.511698 mg/L	0.0032211	0.511698 mg/L	0.0032211	0.63%
Ti 334.940†	346418.4	0.495678 mg/L	0.0021009	0.495678 mg/L	0.0021009	0.42%
Tl 190.801†	871.5	0.505019 mg/L	0.0027269	0.505019 mg/L	0.0027269	0.54%
V 290.880†	71059.3	0.500461 mg/L	0.0002901	0.500461 mg/L	0.0002901	0.06%
Zn 206.200†	33257.9	0.510304 mg/L	0.0032890	0.510304 mg/L	0.0032890	0.64%

Sequence No.: 18
 Sample ID: 75646-034 MS 2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 87
 Date Collected: 11/25/2013 11:44:27 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-034 MS 2

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	869621.5	96.2	%	0.71			0.74%
Y 371.029	277297.5	93.7	%	0.44			0.47%
Ag 328.068†	18678.5	0.0975295	mg/L	0.00034010	0.0975295 mg/L	0.00034010	0.35%
Al 308.215†	135599.2	4.99167	mg/L	0.028586	4.99167 mg/L	0.028586	0.57%
As 188.979†	803.7	0.499064	mg/L	0.0010439	0.499064 mg/L	0.0010439	0.21%
Ba 233.527†	75399.0	0.530369	mg/L	0.0025477	0.530369 mg/L	0.0025477	0.48%
Be 313.107†	1488222.4	0.492712	mg/L	0.0009557	0.492712 mg/L	0.0009557	0.19%
Ca 315.887†	6736446.8	62.0967	mg/L	0.00648	62.0967 mg/L	0.00648	0.01%
Cd 228.802†	30778.4	0.505526	mg/L	0.0018159	0.505526 mg/L	0.0018159	0.36%
Co 228.616†	23358.5	0.504594	mg/L	0.0008056	0.504594 mg/L	0.0008056	0.16%
Cr 267.716†	40926.6	0.508682	mg/L	0.0004266	0.508682 mg/L	0.0004266	0.08%
Cu 327.393†	67061.0	0.493216	mg/L	0.0010429	0.493216 mg/L	0.0010429	0.21%
Fe 273.955†	125269.1	5.09192	mg/L	0.034098	5.09192 mg/L	0.034098	0.67%
K 404.721†	4268.9					153.44	3.59%
Mg 279.077†	1081615.2	54.9669	mg/L	0.06849	54.9669 mg/L	0.06849	0.12%
Mn 257.610†	487084.1	0.634273	mg/L	0.0027003	0.634273 mg/L	0.0027003	0.43%
Mo 202.031†	10187.3	0.502152	mg/L	0.0032998	0.502152 mg/L	0.0032998	0.66%
Na 330.237†	98267.5	84.5914	mg/L	0.43147	84.5914 mg/L	0.43147	0.51%
Ni 231.604†	25877.7	0.501024	mg/L	0.0005330	0.501024 mg/L	0.0005330	0.11%
Pb 220.353†	7135.6	0.499415	mg/L	0.0011390	0.499415 mg/L	0.0011390	0.23%
Sb 206.836†	1241.1	0.512102	mg/L	0.0015243	0.512102 mg/L	0.0015243	0.30%
Se 196.026†	827.1	0.475982	mg/L	0.0063307	0.475982 mg/L	0.0063307	1.33%
Sn 189.927†	2194.3	0.513824	mg/L	0.0000449	0.513824 mg/L	0.0000449	0.01%
Ti 334.940†	346603.2	0.495944	mg/L	0.0016813	0.495944 mg/L	0.0016813	0.34%
Tl 190.801†	871.2	0.504838	mg/L	0.0017113	0.504838 mg/L	0.0017113	0.34%
V 290.880†	70269.5	0.494787	mg/L	0.0031290	0.494787 mg/L	0.0031290	0.63%
Zn 206.200†	32970.4	0.505830	mg/L	0.0006758	0.505830 mg/L	0.0006758	0.13%

Sequence No.: 19
 Sample ID: 75646-002 PS
 Analyst:
 Initial Sample Wt:
 Dilution:

ran empty
 not used
 88 11/25

Autosampler Location: 88
 Date Collected: 11/25/2013 11:47:57 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-002 PS

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	1215580.7	134 %		54.2			40.33%
Y 371.029	394079.2	133 %		56.5			42.44%
Ag 328.068†	7957.7	0.0412264 mg/L		0.07351073	0.0412264 mg/L	0.07351073	178.31%
Al 308.215†	76065.5	2.78341 mg/L		4.464154	2.78341 mg/L	4.464154	160.38%
As 188.979†	309.3	0.191358 mg/L		0.2934702	0.191358 mg/L	0.2934702	153.36%
Ba 233.527†	44834.5	0.313603 mg/L		0.4428616	0.313603 mg/L	0.4428616	141.22%
Be 313.107†	890306.0	0.293505 mg/L		0.4125726	0.293505 mg/L	0.4125726	140.57%
Ca 315.887†	3954892.2	36.2317 mg/L		51.19045	36.2317 mg/L	51.19045	141.29%
Cd 228.802†	17847.8	0.291617 mg/L		0.4256083	0.291617 mg/L	0.4256083	145.95%
Co 228.616†	9504.9	0.201982 mg/L		0.2952048	0.201982 mg/L	0.2952048	146.15%
Cr 267.716†	24786.4	0.305598 mg/L		0.4259741	0.305598 mg/L	0.4259741	139.39%
Cu 327.393†	40154.4	0.293439 mg/L		0.4139373	0.293439 mg/L	0.4139373	141.06%
Fe 273.955†	73928.9	2.98488 mg/L		4.313382	2.98488 mg/L	4.313382	144.51%
K 404.721†	6646.0					1786.65	26.88%
Mg 279.077†	642751.7	32.4389 mg/L		45.83209	32.4389 mg/L	45.83209	141.29%
Mn 257.610†	282135.8	0.365249 mg/L		0.5228813	0.365249 mg/L	0.5228813	143.16%
Mo 202.031†	3490.7	0.168748 mg/L		0.2536180	0.168748 mg/L	0.2536180	150.29%
Na 330.237†	56874.3	49.0783 mg/L		68.40762	49.0783 mg/L	68.40762	139.38%
Ni 231.604†	15401.9	0.295715 mg/L		0.4261852	0.295715 mg/L	0.4261852	144.12%
Pb 220.353†	2750.8	0.189937 mg/L		0.3002113	0.189937 mg/L	0.3002113	158.06%
Sb 206.836†	440.4	0.179568 mg/L		0.2492336	0.179568 mg/L	0.2492336	138.80%
Se 196.026†	329.7	0.185198 mg/L		0.2855472	0.185198 mg/L	0.2855472	154.19%
Sn 189.927†	741.2	0.171763 mg/L		0.2570283	0.171763 mg/L	0.2570283	149.64%
Ti 334.940†	173805.2	0.246979 mg/L		0.3526308	0.246979 mg/L	0.3526308	142.78%
Tl 190.801†	358.3	0.205035 mg/L		0.2980109	0.205035 mg/L	0.2980109	145.35%
V 290.880†	39805.6	0.277574 mg/L		0.4350837	0.277574 mg/L	0.4350837	156.75%
Zn 206.200†	13266.8	0.199270 mg/L		0.2943595	0.199270 mg/L	0.2943595	147.72%

Sequence No.: 20
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/25/2013 11:51:29 AM
 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	864489.0	95.6 %	0.97			1.02%
Y 371.029	277086.2	93.6 %	0.07			0.07%
Ag 328.068†	19108.3	0.0997784 mg/L	0.00116641	0.0997784 mg/L	0.00116641	1.17%
QC value within limits for Ag 328.068 Recovery = 99.78%						
Al 308.215†	136031.4	5.00784 mg/L	0.079097	5.00784 mg/L	0.079097	1.58%
QC value within limits for Al 308.215 Recovery = 100.16%						
As 188.979†	791.8	0.491869 mg/L	0.0080879	0.491869 mg/L	0.0080879	1.64%
QC value within limits for As 188.979 Recovery = 98.37%						
Ba 233.527†	71736.9	0.504388 mg/L	0.0072172	0.504388 mg/L	0.0072172	1.43%
QC value within limits for Ba 233.527 Recovery = 100.88%						
Be 313.107†	1466715.3	0.485544 mg/L	0.0032422	0.485544 mg/L	0.0032422	0.67%
QC value within limits for Be 313.107 Recovery = 97.11%						
Ca 315.887†	5393116.9	49.6029 mg/L	0.29199	49.6029 mg/L	0.29199	0.59%
QC value within limits for Ca 315.887 Recovery = 99.21%						
Cd 228.802†	30648.3	0.503424 mg/L	0.0073164	0.503424 mg/L	0.0073164	1.45%
QC value within limits for Cd 228.802 Recovery = 100.68%						
Co 228.616†	23255.3	0.502325 mg/L	0.0076941	0.502325 mg/L	0.0076941	1.53%
QC value within limits for Co 228.616 Recovery = 100.46%						
Cr 267.716†	41192.8	0.511919 mg/L	0.0025147	0.511919 mg/L	0.0025147	0.49%
QC value within limits for Cr 267.716 Recovery = 102.38%						
Cu 327.393†	66763.2	0.491170 mg/L	0.0077520	0.491170 mg/L	0.0077520	1.58%
QC value within limits for Cu 327.393 Recovery = 98.23%						
Fe 273.955†	124961.0	5.07927 mg/L	0.058995	5.07927 mg/L	0.058995	1.16%
QC value within limits for Fe 273.955 Recovery = 101.59%						
K 404.721†	4156.6				76.37	1.84%
Unable to evaluate QC.						
Mg 279.077†	994970.6	50.5191 mg/L	0.31756	50.5191 mg/L	0.31756	0.63%
QC value within limits for Mg 279.077 Recovery = 101.04%						
Mn 257.610†	381167.7	0.495027 mg/L	0.0060081	0.495027 mg/L	0.0060081	1.21%
QC value within limits for Mn 257.610 Recovery = 99.01%						
Mo 202.031†	10069.2	0.496689 mg/L	0.0068244	0.496689 mg/L	0.0068244	1.37%
QC value within limits for Mo 202.031 Recovery = 99.34%						
Na 330.237†	55378.3	47.7948 mg/L	0.70344	47.7948 mg/L	0.70344	1.47%
QC value within limits for Na 330.237 Recovery = 95.59%						
Ni 231.604†	26121.3	0.505784 mg/L	0.0027491	0.505784 mg/L	0.0027491	0.54%
QC value within limits for Ni 231.604 Recovery = 101.16%						
Pb 220.353†	7145.5	0.500168 mg/L	0.0066980	0.500168 mg/L	0.0066980	1.34%
QC value within limits for Pb 220.353 Recovery = 100.03%						
Sb 206.836†	1225.8	0.505771 mg/L	0.0051126	0.505771 mg/L	0.0051126	1.01%
QC value within limits for Sb 206.836 Recovery = 101.15%						
Se 196.026†	831.4	0.478866 mg/L	0.0090964	0.478866 mg/L	0.0090964	1.90%
QC value within limits for Se 196.026 Recovery = 95.77%						
Sn 189.927†	2167.5	0.507192 mg/L	0.0071562	0.507192 mg/L	0.0071562	1.41%
QC value within limits for Sn 189.927 Recovery = 101.44%						
Ti 334.940†	346224.6	0.495399 mg/L	0.0071651	0.495399 mg/L	0.0071651	1.45%
QC value within limits for Ti 334.940 Recovery = 99.08%						
Tl 190.801†	876.9	0.508276 mg/L	0.0052246	0.508276 mg/L	0.0052246	1.03%
QC value within limits for Tl 190.801 Recovery = 101.66%						
V 290.880†	70296.9	0.495530 mg/L	0.0057680	0.495530 mg/L	0.0057680	1.16%
QC value within limits for V 290.880 Recovery = 99.11%						
Zn 206.200†	32337.3	0.495974 mg/L	0.0074468	0.495974 mg/L	0.0074468	1.50%
QC value within limits for Zn 206.200 Recovery = 99.19%						

All analyte(s) passed QC. One or more analytes were not evaluated.

Autosampler Location: 5
Date Collected: 11/25/2013 11:54:57 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analyte	Mean Corrected		Calib		Sample		RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	
Sc 361.383	903268.6	99.9	%	1.46			1.46%
Y 371.029	291892.2	98.6	%	1.17			1.18%
Ag 328.068†	3805.1	0.0192513	mg/L	0.00004233	0.0192513	mg/L	0.00004233
QC value within limits for Ag	328.068	Recovery	=	96.26%			
Al 308.215†	5344.6	0.156158	mg/L	0.0101778	0.156158	mg/L	0.0101778
QC value within limits for Al	308.215	Recovery	=	78.08%			
As 188.979†	31.9	0.0189539	mg/L	0.00009654	0.0189539	mg/L	0.00009654
QC value within limits for As	188.979	Recovery	=	94.77%			
Ba 233.527†	7090.7	0.0459268	mg/L	0.00051299	0.0459268	mg/L	0.00051299
QC value within limits for Ba	233.527	Recovery	=	91.85%			
Be 313.107†	34929.5	0.0084662	mg/L	0.00000233	0.0084662	mg/L	0.00000233
QC value within limits for Be	313.107	Recovery	=	70.55%			
Ca 315.887†	538609.0	4.46295	mg/L	0.014677	4.46295	mg/L	0.014677
QC value within limits for Ca	315.887	Recovery	=	89.26%			
Cd 228.802†	715.2	0.0081500	mg/L	0.00000287	0.0081500	mg/L	0.00000287
QC value less than the lower limit for Cd	228.802	Recovery	=	67.92%			
Co 228.616†	940.2	0.0152016	mg/L	0.00028028	0.0152016	mg/L	0.00028028
QC value within limits for Co	228.616	Recovery	=	76.01%			
Cr 267.716†	4042.5	0.0460201	mg/L	0.00020070	0.0460201	mg/L	0.00020070
QC value within limits for Cr	267.716	Recovery	=	92.04%			
Cu 327.393†	6334.7	0.0424098	mg/L	0.00003065	0.0424098	mg/L	0.00003065
QC value within limits for Cu	327.393	Recovery	=	84.82%			
Fe 273.955†	7421.5	0.255367	mg/L	0.0021870	0.255367	mg/L	0.0021870
QC value within limits for Fe	273.955	Recovery	=	85.12%			
K 404.721†	625.2						325.00
Unable to evaluate QC.							51.98%
Mg 279.077†	99687.3	4.56501	mg/L	0.016870	4.56501	mg/L	0.016870
QC value within limits for Mg	279.077	Recovery	=	91.30%			
Mn 257.610†	29985.8	0.0343516	mg/L	0.00025169	0.0343516	mg/L	0.00025169
QC value within limits for Mn	257.610	Recovery	=	85.88%			
Mo 202.031†	417.4	0.0164872	mg/L	0.00006802	0.0164872	mg/L	0.00006802
QC value within limits for Mo	202.031	Recovery	=	82.44%			
Na 330.237†	4708.6	4.32290	mg/L	0.088785	4.32290	mg/L	0.088785
QC value within limits for Na	330.237	Recovery	=	86.46%			
Ni 231.604†	2576.0	0.0446446	mg/L	0.00046093	0.0446446	mg/L	0.00046093
QC value within limits for Ni	231.604	Recovery	=	89.29%			
Pb 220.353†	197.1	0.0099130	mg/L	0.00118047	0.0099130	mg/L	0.00118047
QC value within limits for Pb	220.353	Recovery	=	82.61%			
Sb 206.836†	49.7	0.0172408	mg/L	0.00168243	0.0172408	mg/L	0.00168243
QC value within limits for Sb	206.836	Recovery	=	86.20%			
Se 196.026†	74.7	0.0364299	mg/L	0.00633118	0.0364299	mg/L	0.00633118
QC value within limits for Se	196.026	Recovery	=	91.07%			
Sn 189.927†	196.3	0.0427760	mg/L	0.00093803	0.0427760	mg/L	0.00093803
QC value within limits for Sn	189.927	Recovery	=	85.55%			
Ti 33							

Sequence No.: 22
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/25/2013 11:58:16 AM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	896263.3	99.1 %	0.62			0.63%
Y 371.029	292206.4	98.8 %	0.83			0.84%
Ag 328.068†	-71.9 -0.0010697 mg/L		0.00002442	-0.0010697 mg/L	0.00002442	2.28%
QC value within limits for Ag 328.068	Recovery = Not calculated					
Al 308.215†	366.9 -0.0285892 mg/L		0.00158683	-0.0285892 mg/L	0.00158683	5.55%
QC value within limits for Al 308.215	Recovery = Not calculated					
As 188.979†	-4.3 -0.0034913 mg/L		0.00004297	-0.0034913 mg/L	0.00004297	1.23%
QC value within limits for As 188.979	Recovery = Not calculated					
Ba 233.527†	-11.0 -0.0044459 mg/L		0.00007655	-0.0044459 mg/L	0.00007655	1.72%
QC value within limits for Ba 233.527	Recovery = Not calculated					
Be 313.107†	-29.4 -0.0031694 mg/L		0.00000986	-0.0031694 mg/L	0.00000986	0.31%
QC value within limits for Be 313.107	Recovery = Not calculated					
Ca 315.887†	-1337.7 -0.558438 mg/L		0.0007368	-0.558438 mg/L	0.0007368	0.13%
QC value within limits for Ca 315.887	Recovery = Not calculated					
Cd 228.802†	11.4 -0.0034754 mg/L		0.00047530	-0.0034754 mg/L	0.00047530	13.68%
QC value within limits for Cd 228.802	Recovery = Not calculated					
Co 228.616†	16.5 -0.0049106 mg/L		0.00008323	-0.0049106 mg/L	0.00008323	1.69%
QC value within limits for Co 228.616	Recovery = Not calculated					
Cr 267.716†	-9.2 -0.0046255 mg/L		0.00007013	-0.0046255 mg/L	0.00007013	1.52%
QC value within limits for Cr 267.716	Recovery = Not calculated					
Cu 327.393†	-471.2 -0.0081239 mg/L		0.00272025	-0.0081239 mg/L	0.00272025	33.48%
QC value within limits for Cu 327.393	Recovery = Not calculated					
Fe 273.955†	72.9 -0.0462219 mg/L		0.00014729	-0.0462219 mg/L	0.00014729	0.32%
QC value within limits for Fe 273.955	Recovery = Not calculated					
K 404.721†	341.2				157.78	46.24%
Unable to evaluate QC.						
Mg 279.077†	-16.7 -0.552432 mg/L		0.0010499	-0.552432 mg/L	0.0010499	0.19%
QC value within limits for Mg 279.077	Recovery = Not calculated					
Mn 257.610†	-14.7 -0.0049522 mg/L		0.00003124	-0.0049522 mg/L	0.00003124	0.63%
QC value within limits for Mn 257.610	Recovery = Not calculated					
Mo 202.031†	-5.3 -0.0044302 mg/L		0.00025471	-0.0044302 mg/L	0.00025471	5.75%
QC value within limits for Mo 202.031	Recovery = Not calculated					
Na 330.237†	18.8 0.299336 mg/L		0.0157729	0.299336 mg/L	0.0157729	5.27%
QC value within limits for Na 330.237	Recovery = Not calculated					
Ni 231.604†	-16.7 -0.0060953 mg/L		0.00013601	-0.0060953 mg/L	0.00013601	2.23%
QC value within limits for Ni 231.604	Recovery = Not calculated					
Pb 220.353†	31.0 -0.0017526 mg/L		0.00026052	-0.0017526 mg/L	0.00026052	14.86%
QC value within limits for Pb 220.353	Recovery = Not calculated					
Sb 206.836†	1.2 -0.0028949 mg/L		0.00194372	-0.0028949 mg/L	0.00194372	67.14%
QC value within limits for Sb 206.836	Recovery = Not calculated					
Se 196.026†	5.2 -0.0041807 mg/L		0.00511385	-0.0041807 mg/L	0.00511385	122.32%
QC value within limits for Se 196.026	Recovery = Not calculated					
Sn 189.927†	4.5 -0.0024282 mg/L		0.00113379	-0.0024282 mg/L	0.00113379	46.69%
QC value within limits for Sn 189.927	Recovery = Not calculated					
Ti 334.940†	-51.1 -0.0035120 mg/L		0.00001978	-0.0035120 mg/L	0.00001978	0.56%
QC value within limits for Ti 334.940	Recovery = Not calculated					
Tl 190.801†	-0.0 -0.0044041 mg/L		0.00047630	-0.0044041 mg/L	0.00047630	10.81%
QC value within limits for Tl 190.801	Recovery = Not calculated					
V 290.880†	197.7 -0.0043140 mg/L		0.00139259	-0.0043140 mg/L	0.00139259	32.28%
QC value within limits for V 290.880	Recovery = Not calculated					
Zn 206.200†	-3.7 -0.0071280 mg/L		0.00001571	-0.0071280 mg/L	0.00001571	0.22%
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: 75646-002 SD
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 89
 Date Collected: 11/25/2013 12:01:31 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-002 SD

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	904849.6	100	%	0.1				0.08%
Y 371.029	290727.9	98.3	%	0.08				0.08%
Ag 328.068†	-87.3	-0.0011481	mg/L	0.00001619	-0.0011481	mg/L	0.00001619	1.41%
Al 308.215†	302.5	-0.0309904	mg/L	0.00082922	-0.0309904	mg/L	0.00082922	2.68%
As 188.979†	-3.0	-0.0027350	mg/L	0.00181931	-0.0027350	mg/L	0.00181931	66.52%
Ba 233.527†	814.3	0.0014079	mg/L	0.00006183	0.0014079	mg/L	0.00006183	4.39%
Be 313.107†	60.2	-0.0031396	mg/L	0.00001007	-0.0031396	mg/L	0.00001007	0.32%
Ca 315.887†	268552.1	1.95168	mg/L	0.000013	1.95168	mg/L	0.000013	0.00%
Cd 228.802†	-20.7	-0.0040174	mg/L	0.00018171	-0.0040174	mg/L	0.00018171	4.52%
Co 228.616†	14.1	-0.0049605	mg/L	0.00007810	-0.0049605	mg/L	0.00007810	1.57%
Cr 267.716†	26.2	-0.0041715	mg/L	0.00008818	-0.0041715	mg/L	0.00008818	2.11%
Cu 327.393†	-240.8	-0.0064442	mg/L	0.00033046	-0.0064442	mg/L	0.00033046	5.13%
Fe 273.955†	650.3	-0.0225262	mg/L	0.00141665	-0.0225262	mg/L	0.00141665	6.29%
K 404.721†	369.8						143.98	38.94%
Mg 279.077†	17315.7	0.337282	mg/L	0.0006781	0.337282	mg/L	0.0006781	0.20%
Mn 257.610†	21725.3	0.0236294	mg/L	0.00000037	0.0236294	mg/L	0.00000037	0.00%
Mo 202.031†	0.2	-0.0042438	mg/L	0.00000738	-0.0042438	mg/L	0.00000738	0.17%
Na 330.237†	7087.4	6.36380	mg/L	0.030941	6.36380	mg/L	0.030941	0.49%
Ni 231.604†	0.9	-0.0057514	mg/L	0.00013716	-0.0057514	mg/L	0.00013716	2.38%
Pb 220.353†	3.5	-0.0037054	mg/L	0.00017056	-0.0037054	mg/L	0.00017056	4.60%
Sb 206.836†	6.0	-0.0009173	mg/L	0.00210799	-0.0009173	mg/L	0.00210799	229.81%
Se 196.026†	2.6	-0.0057532	mg/L	0.00458193	-0.0057532	mg/L	0.00458193	79.64%
Sn 189.927†	2.1	-0.0029370	mg/L	0.00003946	-0.0029370	mg/L	0.00003946	1.34%
Ti 334.940†	-34.3	-0.0034879	mg/L	0.00014821	-0.0034879	mg/L	0.00014821	4.25%
Tl 190.801†	2.0	-0.0032761	mg/L	0.00162914	-0.0032761	mg/L	0.00162914	49.73%
V 290.880†	256.1	-0.0040017	mg/L	0.00064274	-0.0040017	mg/L	0.00064274	16.06%
Zn 206.200†	187.3	-0.0041555	mg/L	0.00013309	-0.0041555	mg/L	0.00013309	3.20%

Sequence No.: 24
 Sample ID: 75646-002 PS
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 88
 Date Collected: 11/25/2013 12:04:48 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-002 PS

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871053.5	96.3	%	0.36				0.37%
Y 371.029	275830.3	93.2	%	0.12				0.13%
Ag 328.068†	17648.0	0.0921041	mg/L	0.00093955	0.0921041	mg/L	0.00093955	1.02%
Al 308.215†	125852.3	4.62997	mg/L	0.027283	4.62997	mg/L	0.027283	0.59%
As 188.979†	745.7	0.463010	mg/L	0.0002565	0.463010	mg/L	0.0002565	0.06%
Ba 233.527†	69818.8	0.490793	mg/L	0.0020243	0.490793	mg/L	0.0020243	0.41%
Be 313.107†	1383433.8	0.457801	mg/L	0.0003987	0.457801	mg/L	0.0003987	0.09%
Ca 315.887†	6295887.3	58.0001	mg/L	0.11737	58.0001	mg/L	0.11737	0.20%
Cd 228.802†	28679.4	0.470801	mg/L	0.0045356	0.470801	mg/L	0.0045356	0.96%
Co 228.616†	21753.9	0.469555	mg/L	0.0050717	0.469555	mg/L	0.0050717	1.08%
Cr 267.716†	38249.4	0.475050	mg/L	0.0037795	0.475050	mg/L	0.0037795	0.80%
Cu 327.393†	62217.8	0.457256	mg/L	0.0022237	0.457256	mg/L	0.0022237	0.49%
Fe 273.955†	116526.9	4.73313	mg/L	0.007791	4.73313	mg/L	0.007791	0.16%
K 404.721†	4334.0						237.74	5.49%
Mg 279.077†	1010114.2	51.2967	mg/L	0.11393	51.2967	mg/L	0.11393	0.22%
Mn 257.610†	451748.2	0.587885	mg/L	0.0015497	0.587885	mg/L	0.0015497	0.26%
Mo 202.031†	9287.9	0.457397	mg/L	0.0045537	0.457397	mg/L	0.0045537	1.00%
Na 330.237†	91041.4	78.3918	mg/L	0.29308	78.3918	mg/L	0.29308	0.37%
Ni 231.604†	24113.0	0.466453	mg/L	0.0005781	0.466453	mg/L	0.0005781	0.12%
Pb 220.353†	6655.4	0.465535	mg/L	0.0026684	0.465535	mg/L	0.0026684	0.57%
Sb 206.836†	1148.8	0.473766	mg/L	0.0068099	0.473766	mg/L	0.0068099	1.44%
Se 196.026†	774.9	0.445455	mg/L	0.0040483	0.445455	mg/L	0.0040483	0.91%
Sn 189.927†	1995.2	0.466923	mg/L	0.0051441	0.466923	mg/L	0.0051441	1.10%
Ti 334.940†	314882.7	0.450242	mg/L	0.0023532	0.450242	mg/L	0.0023532	0.52%
Tl 190.801†	808.2	0.467952	mg/L	0.0045835	0.467952	mg/L	0.0045835	0.98%
V 290.880†	65472.4	0.460600	mg/L	0.0014865	0.460600	mg/L	0.0014865	0.32%
Zn 206.200†	30860.8	0.473017	mg/L	0.0050483	0.473017	mg/L	0.0050483	1.07%

Sequence No.: 25
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/25/2013 12:08:19 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	877231.4	97.0 %	0.42			0.43%
Y 371.029	276948.9	93.6 %	0.11			0.11%
Ag 328.068†	18748.7	0.0978868 mg/L	0.00164716	0.0978868 mg/L	0.00164716	1.68%
Al 308.215†	132757.0	4.88624 mg/L	0.028543	4.88624 mg/L	0.028543	0.58%
As 188.979†	780.1	0.484576 mg/L	0.0053124	0.484576 mg/L	0.0053124	1.10%
Ba 233.527†	70115.9	0.492891 mg/L	0.0029914	0.492891 mg/L	0.0029914	0.61%
Be 313.107†	1467118.5	0.485682 mg/L	0.0000482	0.485682 mg/L	0.0000482	0.01%
Ca 315.887†	5392359.8	49.5961 mg/L	0.03130	49.5961 mg/L	0.03130	0.06%
Cd 228.802†	30151.2	0.495197 mg/L	0.0022657	0.495197 mg/L	0.0022657	0.46%
Co 228.616†	22853.9	0.493563 mg/L	0.0035295	0.493563 mg/L	0.0035295	0.72%
Cr 267.716†	40368.7	0.501590 mg/L	0.0069775	0.501590 mg/L	0.0069775	1.39%
Cu 327.393†	65397.0	0.481011 mg/L	0.0022434	0.481011 mg/L	0.0022434	0.47%
Fe 273.955†	122460.6	4.97666 mg/L	0.016318	4.97666 mg/L	0.016318	0.33%
K 404.721†	4214.0				3.09	0.07%
Mg 279.077†	996909.4	50.6185 mg/L	0.05347	50.6185 mg/L	0.05347	0.11%
Mn 257.610†	372988.6	0.484255 mg/L	0.0021601	0.484255 mg/L	0.0021601	0.45%
Mo 202.031†	9875.0	0.486997 mg/L	0.0022417	0.486997 mg/L	0.0022417	0.46%
Na 330.237†	54032.9	46.6405 mg/L	0.03331	46.6405 mg/L	0.03331	0.07%
Ni 231.604†	25623.5	0.496035 mg/L	0.0036937	0.496035 mg/L	0.0036937	0.74%
Pb 220.353†	6994.0	0.489466 mg/L	0.0032617	0.489466 mg/L	0.0032617	0.67%
Sb 206.836†	1209.1	0.498811 mg/L	0.0022400	0.498811 mg/L	0.0022400	0.45%
Se 196.026†	818.6	0.471355 mg/L	0.0052431	0.471355 mg/L	0.0052431	1.11%
Sn 189.927†	2133.0	0.499093 mg/L	0.0058559	0.499093 mg/L	0.0058559	1.17%
Ti 334.940†	338689.3	0.484542 mg/L	0.0020062	0.484542 mg/L	0.0020062	0.41%
Tl 190.801†	851.7	0.493591 mg/L	0.0025046	0.493591 mg/L	0.0025046	0.51%
V 290.880†	68653.1	0.483638 mg/L	0.0016228	0.483638 mg/L	0.0016228	0.34%
Zn 206.200†	31823.6	0.487985 mg/L	0.0020743	0.487985 mg/L	0.0020743	0.43%

Sequence No.: 26

Sample ID: LLCCV V-177224 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/25/2013 12:11:47 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-177224 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	893084.8	98.7	%	0.17			0.17%
Y 371.029	289119.9	97.7	%	0.46			0.47%
Ag 328.068†	3777.9	0.0191088	mg/L	0.00053577	0.0191088 mg/L	0.00053577	2.80%
Al 308.215†	5433.9	0.159482	mg/L	0.0006301	0.159482 mg/L	0.0006301	0.40%
As 188.979†	31.0	0.0183890	mg/L	0.00259656	0.0183890 mg/L	0.00259656	14.12%
Ba 233.527†	7100.2	0.0459944	mg/L	0.00000936	0.0459944 mg/L	0.00000936	0.02%
Be 313.107†	34937.5	0.0084688	mg/L	0.00006246	0.0084688 mg/L	0.00006246	0.74%
Ca 315.887†	540170.7	4.47748	mg/L	0.020660	4.47748 mg/L	0.020660	0.46%
Cd 228.802†	729.6	0.0083895	mg/L	0.00019504	0.0083895 mg/L	0.00019504	2.32%
Co 228.616†	928.4	0.0149434	mg/L	0.00017120	0.0149434 mg/L	0.00017120	1.15%
Cr 267.716†	4037.9	0.0459630	mg/L	0.00066509	0.0459630 mg/L	0.00066509	1.45%
Cu 327.393†	6337.8	0.0424319	mg/L	0.00082111	0.0424319 mg/L	0.00082111	1.94%
Fe 273.955†	7343.4	0.252166	mg/L	0.0025595	0.252166 mg/L	0.0025595	1.02%
K 404.721†	861.9					32.34	3.75%
Mg 279.077†	99810.1	4.57131	mg/L	0.043275	4.57131 mg/L	0.043275	0.95%
Mn 257.610†	29988.9	0.0343555	mg/L	0.00034330	0.0343555 mg/L	0.00034330	1.00%
Mo 202.031†	414.9	0.0163606	mg/L	0.00050688	0.0163606 mg/L	0.00050688	3.10%
Na 330.237†	4682.7	4.30063	mg/L	0.145580	4.30063 mg/L	0.145580	3.39%
Ni 231.604†	2585.2	0.0448256	mg/L	0.00024223	0.0448256 mg/L	0.00024223	0.54%
Pb 220.353†	203.6	0.0103666	mg/L	0.00047533	0.0103666 mg/L	0.00047533	4.59%
Sb 206.836†	53.1	0.0186506	mg/L	0.00253676	0.0186506 mg/L	0.00253676	13.60%
Se 196.026†	71.8	0.0347387	mg/L	0.00262832	0.0347387 mg/L	0.00262832	7.57%
Sn 189.927†	199.9	0.0436363	mg/L	0.00008002	0.0436363 mg/L	0.00008002	0.18%
Ti 334.940†	32473.6	0.0433493	mg/L	0.00011885	0.0433493 mg/L	0.00011885	0.27%
Tl 190.801†	36.4	0.0170371	mg/L	0.00025852	0.0170371 mg/L	0.00025852	1.52%
V 290.880†	7237.5	0.0458853	mg/L	0.00076312	0.0458853 mg/L	0.00076312	1.66%
Zn 206.200†	3194.3	0.0426415	mg/L	0.00030922	0.0426415 mg/L	0.00030922	0.73%

Sequence No.: 27
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 11/25/2013 12:15:06 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
Sc 361.383	887078.3	98.1	%	1.19			1.21%
Y 371.029	290591.6	98.2	%	1.13			1.15%
Ag 328.068†	-35.2	-0.0008777	mg/L	0.00030767	-0.0008777	mg/L	0.00030767 35.06%
Al 308.215†	476.1	-0.0245264	mg/L	0.00316766	-0.0245264	mg/L	0.00316766 12.92%
As 188.979†	-0.9	-0.0013765	mg/L	0.00141862	-0.0013765	mg/L	0.00141862 103.06%
Ba 233.527†	-20.2	-0.0045110	mg/L	0.00010679	-0.0045110	mg/L	0.00010679 2.37%
Be 313.107†	24.6	-0.0031514	mg/L	0.00001414	-0.0031514	mg/L	0.00001414 0.45%
Ca 315.887†	-693.0	-0.552438	mg/L	0.0046938	-0.552438	mg/L	0.0046938 0.85%
Cd 228.802†	25.4	-0.0032436	mg/L	0.00004929	-0.0032436	mg/L	0.00004929 1.52%
Co 228.616†	-1.2	-0.0052963	mg/L	0.00026649	-0.0052963	mg/L	0.00026649 5.03%
Cr 267.716†	-1.4	-0.0045289	mg/L	0.00051252	-0.0045289	mg/L	0.00051252 11.32%
Cu 327.393†	-323.2	-0.0070236	mg/L	0.00009611	-0.0070236	mg/L	0.00009611 1.37%
Fe 273.955†	40.4	-0.0475575	mg/L	0.00095610	-0.0475575	mg/L	0.00095610 2.01%
K 404.721†	388.0					42.68	11.00%
Mg 279.077†	0.6	-0.551547	mg/L	0.0015878	-0.551547	mg/L	0.0015878 0.29%
Mn 257.610†	-45.3	-0.0049926	mg/L	0.00002798	-0.0049926	mg/L	0.00002798 0.56%
Mo 202.031†	-10.0	-0.0046614	mg/L	0.00012056	-0.0046614	mg/L	0.00012056 2.59%
Na 330.237†	0.2	0.283373	mg/L	0.0272133	0.283373	mg/L	0.0272133 9.60%
Ni 231.604†	8.8	-0.0055969	mg/L	0.00017121	-0.0055969	mg/L	0.00017121 3.06%
Pb 220.353†	34.2	-0.0015234	mg/L	0.00008721	-0.0015234	mg/L	0.00008721 5.72%
Sb 206.836†	0.6	-0.0031454	mg/L	0.00084706	-0.0031454	mg/L	0.00084706 26.93%
Se 196.026†	18.1	0.0033744	mg/L	0.00063006	0.0033744	mg/L	0.00063006 18.67%
Sn 189.927†	4.0	-0.0025428	mg/L	0.00009619	-0.0025428	mg/L	0.00009619 3.78%
Ti 334.940†	-78.9	-0.0035521	mg/L	0.00007296	-0.0035521	mg/L	0.00007296 2.05%
Tl 190.801†	1.9	-0.0033046	mg/L	0.00087104	-0.0033046	mg/L	0.00087104 26.36%
V 290.880†	278.1	-0.0037327	mg/L	0.00051520	-0.0037327	mg/L	0.00051520 13.80%
Zn 206.200†	13.5	-0.0068599	mg/L	0.00003391	-0.0068599	mg/L	0.00003391 0.49%

Sequence No.: 28
 Sample ID: 75646-006
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 90
 Date Collected: 11/25/2013 12:18:20 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-006

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	903139.2	99.9 %	0.43			0.43%
Y 371.029	288831.2	97.6 %	1.57			1.61%
Ag 328.068†	-75.9	-0.0007984 mg/L	0.00008134	-0.0007984 mg/L	0.00008134	10.19%
Al 308.215†	767.4	-0.0137292 mg/L	0.00880031	-0.0137292 mg/L	0.00880031	64.10%
As 188.979†	3.4	0.0012606 mg/L	0.00039018	0.0012606 mg/L	0.00039018	30.95%
Ba 233.527†	2780.0	0.0152278 mg/L	0.00000370	0.0152278 mg/L	0.00000370	0.02%
Be 313.107†	26.0	-0.0031510 mg/L	0.00000126	-0.0031510 mg/L	0.00000126	0.04%
Ca 315.887†	1555554.8	13.9174 mg/L	0.03516	13.9174 mg/L	0.03516	0.25%
Cd 228.802†	39.4	-0.0031051 mg/L	0.00026999	-0.0031051 mg/L	0.00026999	8.70%
Co 228.616†	92.2	-0.0032530 mg/L	0.00011126	-0.0032530 mg/L	0.00011126	3.42%
Cr 267.716†	18.6	-0.0042101 mg/L	0.00007691	-0.0042101 mg/L	0.00007691	1.83%
Cu 327.393†	-108.5	-0.0056238 mg/L	0.00018689	-0.0056238 mg/L	0.00018689	3.32%
Fe 273.955†	82085.3	3.31962 mg/L	0.035307	3.31962 mg/L	0.035307	1.06%
K 404.721†	466.6				84.46	18.10%
Mg 279.077†	69321.9	3.00487 mg/L	0.020839	3.00487 mg/L	0.020839	0.69%
Mn 257.610†	119720.1	0.152514 mg/L	0.0010388	0.152514 mg/L	0.0010388	0.68%
Mo 202.031†	34.8	-0.0029317 mg/L	0.00019009	-0.0029317 mg/L	0.00019009	6.48%
Na 330.237†	21113.2	18.3972 mg/L	0.18731	18.3972 mg/L	0.18731	1.02%
Ni 231.604†	53.0	-0.0047300 mg/L	0.00014770	-0.0047300 mg/L	0.00014770	3.12%
Pb 220.353†	26.8	-0.0024088 mg/L	0.00073915	-0.0024088 mg/L	0.00073915	30.69%
Sb 206.836†	1.1	-0.0026170 mg/L	0.00279614	-0.0026170 mg/L	0.00279614	106.84%
Se 196.026†	21.1	0.0054227 mg/L	0.00263730	0.0054227 mg/L	0.00263730	48.63%
Sn 189.927†	-5.9	-0.0045223 mg/L	0.00002907	-0.0045223 mg/L	0.00002907	0.64%
Ti 334.940†	-104.3	-0.0035886 mg/L	0.00004945	-0.0035886 mg/L	0.00004945	1.38%
Tl 190.801†	1.6	-0.0035071 mg/L	0.00228230	-0.0035071 mg/L	0.00228230	65.08%
V 290.880†	561.6	-0.0022324 mg/L	0.00040459	-0.0022324 mg/L	0.00040459	18.12%
Zn 206.200†	518.6	0.0008704 mg/L	0.00024182	0.0008704 mg/L	0.00024182	27.78%

Sequence No.: 29
 Sample ID: 75646-008
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 91
 Date Collected: 11/25/2013 12:21:47 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-008

Mean Data: 75010-000								
	Mean Corrected		Calib		Sample			
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Sc 361.383	904464.5	100	%	0.8				0.77%
Y 371.029	290117.2	98.0	%	0.24				0.25%
Ag 328.068†	-43.7	-0.0006094	mg/L	0.00033367	-0.0006094	mg/L	0.00033367	54.75%
Al 308.215†	881.8	-0.0094841	mg/L	0.00236165	-0.0094841	mg/L	0.00236165	24.90%
As 188.979†	-1.4	-0.0017659	mg/L	0.00042000	-0.0017659	mg/L	0.00042000	23.78%
Ba 233.527†	3166.9	0.0179636	mg/L	0.00004205	0.0179636	mg/L	0.00004205	0.23%
Be 313.107†	-184.2	-0.0032210	mg/L	0.00002927	-0.0032210	mg/L	0.00002927	0.91%
Ca 315.887†	1770313.9	15.9146	mg/L	0.06194	15.9146	mg/L	0.06194	0.39%
Cd 228.802†	36.2	-0.0031680	mg/L	0.00002288	-0.0031680	mg/L	0.00002288	0.72%
Co 228.616†	109.1	-0.0028823	mg/L	0.00005003	-0.0028823	mg/L	0.00005003	1.74%
Cr 267.716†	-7.2	-0.0045219	mg/L	0.00013884	-0.0045219	mg/L	0.00013884	3.07%
Cu 327.393†	-20.6	-0.0049978	mg/L	0.00033821	-0.0049978	mg/L	0.00033821	6.77%
Fe 273.955†	87794.0	3.55391	mg/L	0.004939	3.55391	mg/L	0.004939	0.14%
K 404.721†	308.0						89.94	29.20%
Mg 279.077†	80266.3	3.56654	mg/L	0.018771	3.56654	mg/L	0.018771	0.53%
Mn 257.610†	135465.1	0.173217	mg/L	0.0008228	0.173217	mg/L	0.0008228	0.48%
Mo 202.031†	46.1	-0.0024350	mg/L	0.00033072	-0.0024350	mg/L	0.00033072	13.58%
Na 330.237†	24481.0	21.2865	mg/L	0.19003	21.2865	mg/L	0.19003	0.89%
Ni 231.604†	121.9	-0.0033821	mg/L	0.00023114	-0.0033821	mg/L	0.00023114	6.83%
Pb 220.353†	22.2	-0.0027622	mg/L	0.00238119	-0.0027622	mg/L	0.00238119	86.21%
Sb 206.836†	3.7	-0.0015064	mg/L	0.00082046	-0.0015064	mg/L	0.00082046	54.47%
Se 196.026†	5.4	-0.0038065	mg/L	0.00027142	-0.0038065	mg/L	0.00027142	7.13%
Sn 189.927†	-3.0	-0.0037731	mg/L	0.00011287	-0.0037731	mg/L	0.00011287	2.99%
Ti 334.940†	-147.7	-0.0036511	mg/L	0.00012956	-0.0036511	mg/L	0.00012956	3.55%
Tl 190.801†	4.0	-0.0021635	mg/L	0.00093476	-0.0021635	mg/L	0.00093476	43.21%
V 290.880†	663.6	-0.0015726	mg/L	0.00036222	-0.0015726	mg/L	0.00036222	23.03%
Zn 206.200†	881.3	0.0065087	mg/L	0.00014874	0.0065087	mg/L	0.00014874	2.29%

Sequence No.: 30
 Sample ID: 75646-010
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 92
 Date Collected: 11/25/2013 12:25:15 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-010

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	909293.1	101	%	0.3			0.32%
Y 371.029	291614.9	98.6	%	0.02			0.02%
Ag 328.068†	-90.3	-0.0011651	mg/L	0.00033675	-0.0011651 mg/L	0.00033675	28.90%
Al 308.215†	348.9	-0.0292882	mg/L	0.00614760	-0.0292882 mg/L	0.00614760	20.99%
As 188.979†	-0.8	-0.0015606	mg/L	0.00144476	-0.0015606 mg/L	0.00144476	92.58%
Ba 233.527†	2002.5	0.0098385	mg/L	0.00009687	0.0098385 mg/L	0.00009687	0.98%
Be 313.107†	-190.1	-0.0032230	mg/L	0.00004003	-0.0032230 mg/L	0.00004003	1.24%
Ca 315.887†	1503506.6	13.4381	mg/L	0.00074	13.4381 mg/L	0.00074	0.01%
Cd 228.802†	525.7	0.0049815	mg/L	0.00004043	0.0049815 mg/L	0.00004043	0.81%
Co 228.616†	20.7	-0.0048114	mg/L	0.00000637	-0.0048114 mg/L	0.00000637	0.13%
Cr 267.716†	28.4	-0.0041237	mg/L	0.00000884	-0.0041237 mg/L	0.00000884	0.21%
Cu 327.393†	-261.6	-0.0067561	mg/L	0.00143581	-0.0067561 mg/L	0.00143581	21.25%
Fe 273.955†	372.2	-0.0339403	mg/L	0.00062584	-0.0339403 mg/L	0.00062584	1.84%
K 404.721†	968.2					305.68	31.57%
Mg 279.077†	46344.2	1.82736	mg/L	0.000679	1.82736 mg/L	0.000679	0.04%
Mn 257.610†	48513.1	0.0588332	mg/L	0.00003367	0.0588332 mg/L	0.00003367	0.06%
Mo 202.031†	29.4	-0.0031841	mg/L	0.00017234	-0.0031841 mg/L	0.00017234	5.41%
Na 330.237†	19272.7	16.8181	mg/L	0.03402	16.8181 mg/L	0.03402	0.20%
Ni 231.604†	6.3	-0.0056442	mg/L	0.00002079	-0.0056442 mg/L	0.00002079	0.37%
Pb 220.353†	20.2	-0.0025395	mg/L	0.00167759	-0.0025395 mg/L	0.00167759	66.06%
Sb 206.836†	6.1	-0.0008890	mg/L	0.00307797	-0.0008890 mg/L	0.00307797	346.24%
Se 196.026†	12.3	-0.0004271	mg/L	0.00306835	-0.0004271 mg/L	0.00306835	718.47%
Sn 189.927†	-1.5	-0.0035019	mg/L	0.00008051	-0.0035019 mg/L	0.00008051	2.30%
Ti 334.940†	-11.4	-0.0034548	mg/L	0.00011801	-0.0034548 mg/L	0.00011801	3.42%
Tl 190.801†	1.0	-0.0038207	mg/L	0.00026469	-0.0038207 mg/L	0.00026469	6.93%
V 290.880†	414.5	-0.0030426	mg/L	0.00036591	-0.0030426 mg/L	0.00036591	12.03%
Zn 206.200†	611.8	0.0024529	mg/L	0.00002764	0.0024529 mg/L	0.00002764	1.13%

Sequence No.: 31
 Sample ID: 75646-012
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 93
 Date Collected: 11/25/2013 12:28:31 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-012

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	902712.1	99.8 %		0.69			0.69%
Y 371.029	290435.0	98.2 %		0.29			0.29%
Ag 328.068†	-25.2	-0.0008233 mg/L		0.00033704	-0.0008233 mg/L	0.00033704	40.94%
Al 308.215†	437.5	-0.0259850 mg/L		0.00542600	-0.0259850 mg/L	0.00542600	20.88%
As 188.979†	0.9	-0.0004314 mg/L		0.00097185	-0.0004314 mg/L	0.00097185	225.28%
Ba 233.527†	4521.6	0.0277107 mg/L		0.00021949	0.0277107 mg/L	0.00021949	0.79%
Be 313.107†	-133.9	-0.0032042 mg/L		0.00000299	-0.0032042 mg/L	0.00000299	0.09%
Ca 315.887†	1095163.8	9.64030 mg/L		0.002135	9.64030 mg/L	0.002135	0.02%
Cd 228.802†	757.0	0.0088267 mg/L		0.00037635	0.0088267 mg/L	0.00037635	4.26%
Co 228.616†	8.7	-0.0050756 mg/L		0.00016093	-0.0050756 mg/L	0.00016093	3.17%
Cr 267.716†	38.7	-0.0040209 mg/L		0.00004871	-0.0040209 mg/L	0.00004871	1.21%
Cu 327.393†	-301.6	-0.0070017 mg/L		0.00097750	-0.0070017 mg/L	0.00097750	13.96%
Fe 273.955†	573.5	-0.0256767 mg/L		0.00022363	-0.0256767 mg/L	0.00022363	0.87%
K 404.721†	641.9					167.01	26.02%
Mg 279.077†	40169.6	1.51009 mg/L		0.007600	1.51009 mg/L	0.007600	0.50%
Mn 257.610†	1740.5	-0.0027182 mg/L		0.00000466	-0.0027182 mg/L	0.00000466	0.17%
Mo 202.031†	18.3	-0.0036051 mg/L		0.00042683	-0.0036051 mg/L	0.00042683	11.84%
Na 330.237†	44534.7	38.4915 mg/L		0.06338	38.4915 mg/L	0.06338	0.16%
Ni 231.604†	19.3	-0.0053911 mg/L		0.00058968	-0.0053911 mg/L	0.00058968	10.94%
Pb 220.353†	22.1	-0.0024034 mg/L		0.00054152	-0.0024034 mg/L	0.00054152	22.53%
Sb 206.836†	5.2	-0.0012583 mg/L		0.00040520	-0.0012583 mg/L	0.00040520	32.20%
Se 196.026†	9.5	-0.0019177 mg/L		0.00343064	-0.0019177 mg/L	0.00343064	178.90%
Sn 189.927†	-0.6	-0.0033739 mg/L		0.00156300	-0.0033739 mg/L	0.00156300	46.33%
Ti 334.940†	-147.7	-0.0036511 mg/L		0.00009445	-0.0036511 mg/L	0.00009445	2.59%
Tl 190.801†	4.4	-0.0018134 mg/L		0.00299901	-0.0018134 mg/L	0.00299901	165.38%
V 290.880†	328.7	-0.0036389 mg/L		0.00079410	-0.0036389 mg/L	0.00079410	21.82%
Zn 206.200†	390.0	-0.0010001 mg/L		0.00006296	-0.0010001 mg/L	0.00006296	6.29%

Sequence No.: 32
 Sample ID: 75646-014
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 94
 Date Collected: 11/25/2013 12:31:48 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-014

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	914542.7	101	%	0.5			0.50%
Y 371.029	296876.9	100	%	0.6			0.63%
Ag 328.068†	-96.3	-0.0011962	mg/L	0.00048240	-0.0011962	mg/L	0.00048240 40.33%
Al 308.215†	297.5	-0.0311977	mg/L	0.00412284	-0.0311977	mg/L	0.00412284 13.22%
As 188.979†	0.8	-0.0005149	mg/L	0.00098086	-0.0005149	mg/L	0.00098086 190.48%
Ba 233.527†	2114.4	0.0106324	mg/L	0.00003572	0.0106324	mg/L	0.00003572 0.34%
Be 313.107†	42.7	-0.0031454	mg/L	0.00000912	-0.0031454	mg/L	0.00000912 0.29%
Ca 315.887†	1131233.1	9.97579	mg/L	0.008273	9.97579	mg/L	0.008273 0.08%
Cd 228.802†	-5.7	-0.0038029	mg/L	0.00011709	-0.0038029	mg/L	0.00011709 3.08%
Co 228.616†	0.8	-0.0052454	mg/L	0.00005212	-0.0052454	mg/L	0.00005212 0.99%
Cr 267.716†	31.2	-0.0041118	mg/L	0.00007214	-0.0041118	mg/L	0.00007214 1.75%
Cu 327.393†	201.0	-0.0032679	mg/L	0.00064739	-0.0032679	mg/L	0.00064739 19.81%
Fe 273.955†	422.6	-0.0318718	mg/L	0.00173706	-0.0318718	mg/L	0.00173706 5.45%
K 404.721†	662.9						160.48 24.21%
Mg 279.077†	34825.3	1.23582	mg/L	0.000694	1.23582	mg/L	0.000694 0.06%
Mn 257.610†	2195.1	-0.0021095	mg/L	0.00004521	-0.0021095	mg/L	0.00004521 2.14%
Mo 202.031†	27.8	-0.0031426	mg/L	0.00003777	-0.0031426	mg/L	0.00003777 1.20%
Na 330.237†	8431.5	7.51693	mg/L	0.004725	7.51693	mg/L	0.004725 0.06%
Ni 231.604†	8.6	-0.0055988	mg/L	0.00006328	-0.0055988	mg/L	0.00006328 1.13%
Pb 220.353†	24.8	-0.0022077	mg/L	0.00039216	-0.0022077	mg/L	0.00039216 17.76%
Sb 206.836†	5.5	-0.0011283	mg/L	0.00122348	-0.0011283	mg/L	0.00122348 108.43%
Se 196.026†	11.2	-0.0009433	mg/L	0.00413904	-0.0009433	mg/L	0.00413904 438.79%
Sn 189.927†	-8.3	-0.0051770	mg/L	0.00029400	-0.0051770	mg/L	0.00029400 5.68%
Ti 334.940†	-28.4	-0.0034792	mg/L	0.00012679	-0.0034792	mg/L	0.00012679 3.64%
Tl 190.801†	7.0	-0.0003264	mg/L	0.00331875	-0.0003264	mg/L	0.00331875 >999.9%
V 290.880†	348.4	-0.0034598	mg/L	0.00028029	-0.0034598	mg/L	0.00028029 8.10%
Zn 206.200†	242.4	-0.0032979	mg/L	0.00009957	-0.0032979	mg/L	0.00009957 3.02%

Sequence No.: 33
 Sample ID: 75646-016
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 95
 Date Collected: 11/25/2013 12:35:08 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-016

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	911004.4	101 %		0.1			0.05%
Y 371.029	288271.3	97.4 %		0.63			0.65%
Ag 328.068†	-47.5	-0.0009420	mg/L	0.00039754	-0.0009420	mg/L	0.00039754 42.20%
Al 308.215†	539.9	-0.0221982	mg/L	0.00281324	-0.0221982	mg/L	0.00281324 12.67%
As 188.979†	0.4	-0.0009714	mg/L	0.00077667	-0.0009714	mg/L	0.00077667 79.95%
Ba 233.527†	3502.9	0.0204839	mg/L	0.00018708	0.0204839	mg/L	0.00018708 0.91%
Be 313.107†	-9.2	-0.0031626	mg/L	0.00000415	-0.0031626	mg/L	0.00000415 0.13%
Ca 315.887†	2325546.6	21.0844	mg/L	0.02956	21.0844	mg/L	0.02956 0.14%
Cd 228.802†	10.9	-0.0035746	mg/L	0.00013383	-0.0035746	mg/L	0.00013383 3.74%
Co 228.616†	6.2	-0.0051242	mg/L	0.00029040	-0.0051242	mg/L	0.00029040 5.67%
Cr 267.716†	12.5	-0.0043414	mg/L	0.00001334	-0.0043414	mg/L	0.00001334 0.31%
Cu 327.393†	-26.3	-0.0051104	mg/L	0.00097903	-0.0051104	mg/L	0.00097903 19.16%
Fe 273.955†	51.5	-0.0471021	mg/L	0.00088717	-0.0471021	mg/L	0.00088717 1.88%
K 404.721†	501.9					584.16	116.39%
Mg 279.077†	69998.1	3.04103	mg/L	0.019632	3.04103	mg/L	0.019632 0.65%
Mn 257.610†	1149.3	-0.0035527	mg/L	0.00000112	-0.0035527	mg/L	0.00000112 0.03%
Mo 202.031†	44.4	-0.0027020	mg/L	0.00000240	-0.0027020	mg/L	0.00000240 0.09%
Na 330.237†	24582.5	21.3737	mg/L	0.02210	21.3737	mg/L	0.02210 0.10%
Ni 231.604†	9.3	-0.0055838	mg/L	0.00036827	-0.0055838	mg/L	0.00036827 6.60%
Pb 220.353†	19.1	-0.0026228	mg/L	0.00001882	-0.0026228	mg/L	0.00001882 0.72%
Sb 206.836†	2.0	-0.0025775	mg/L	0.00056438	-0.0025775	mg/L	0.00056438 21.90%
Se 196.026†	15.1	0.0010598	mg/L	0.00042984	0.0010598	mg/L	0.00042984 40.56%
Sn 189.927†	-5.4	-0.0042394	mg/L	0.00068535	-0.0042394	mg/L	0.00068535 16.17%
Ti 334.940†	-176.2	-0.0036922	mg/L	0.00006389	-0.0036922	mg/L	0.00006389 1.73%
Tl 190.801†	0.4	-0.0040957	mg/L	0.00149579	-0.0040957	mg/L	0.00149579 36.52%
V 290.880†	634.6	-0.0016287	mg/L	0.00003577	-0.0016287	mg/L	0.00003577 2.20%
Zn 206.200†	336.1	-0.0018393	mg/L	0.00009292	-0.0018393	mg/L	0.00009292 5.05%

Sequence No.: 34
 Sample ID: 75646-018
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 96
 Date Collected: 11/25/2013 12:38:34 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-018

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	912215.9	101	%	0.9			0.85%
Y 371.029	296859.2	100	%	0.7			0.71%
Ag 328.068†	36.9	-0.0005001	mg/L	0.00028887	-0.0005001 mg/L	0.00028887	57.76%
Al 308.215†	153.9	-0.0365117	mg/L	0.00501367	-0.0365117 mg/L	0.00501367	13.73%
As 188.979†	-0.8	-0.0013562	mg/L	0.00144746	-0.0013562 mg/L	0.00144746	106.73%
Ba 233.527†	2.5	-0.0043505	mg/L	0.00014168	-0.0043505 mg/L	0.00014168	3.26%
Be 313.107†	-55.6	-0.0031782	mg/L	0.00002852	-0.0031782 mg/L	0.00002852	0.90%
Ca 315.887†	2297.7	-0.524625	mg/L	0.0083726	-0.524625 mg/L	0.0083726	1.60%
Cd 228.802†	13.6	-0.0034378	mg/L	0.00001644	-0.0034378 mg/L	0.00001644	0.48%
Co 228.616†	14.5	-0.0049522	mg/L	0.00018196	-0.0049522 mg/L	0.00018196	3.67%
Cr 267.716†	12.7	-0.0043509	mg/L	0.00000650	-0.0043509 mg/L	0.00000650	0.15%
Cu 327.393†	-507.8	-0.0083959	mg/L	0.00085677	-0.0083959 mg/L	0.00085677	10.20%
Fe 273.955†	91.6	-0.0454555	mg/L	0.00025738	-0.0454555 mg/L	0.00025738	0.57%
K 404.721†	433.0					35.92	8.30%
Mg 279.077†	40.2	-0.549511	mg/L	0.0007990	-0.549511 mg/L	0.0007990	0.15%
Mn 257.610†	9.7	-0.0049203	mg/L	0.00004426	-0.0049203 mg/L	0.00004426	0.90%
Mo 202.031†	-2.7	-0.0043018	mg/L	0.00044655	-0.0043018 mg/L	0.00044655	10.38%
Na 330.237†	73.0	0.345832	mg/L	0.0206675	0.345832 mg/L	0.0206675	5.98%
Ni 231.604†	-15.6	-0.0060733	mg/L	0.00033151	-0.0060733 mg/L	0.00033151	5.46%
Pb 220.353†	23.3	-0.0022919	mg/L	0.00128333	-0.0022919 mg/L	0.00128333	56.00%
Sb 206.836†	0.4	-0.0032172	mg/L	0.00009987	-0.0032172 mg/L	0.00009987	3.10%
Se 196.026†	10.7	-0.0009339	mg/L	0.00515687	-0.0009339 mg/L	0.00515687	552.17%
Sn 189.927†	4.0	-0.0025512	mg/L	0.00071322	-0.0025512 mg/L	0.00071322	27.96%
Ti 334.940†	-56.1	-0.0035192	mg/L	0.00006818	-0.0035192 mg/L	0.00006818	1.94%
Tl 190.801†	1.2	-0.0036812	mg/L	0.00346010	-0.0036812 mg/L	0.00346010	93.99%
V 290.880†	81.6	-0.0051535	mg/L	0.00005380	-0.0051535 mg/L	0.00005380	1.04%
Zn 206.200†	215.9	-0.0037090	mg/L	0.00003433	-0.0037090 mg/L	0.00003433	0.93%

Sequence No.: 35
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/25/2013 12:41:51 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
Sc 361.383	806104.4	89.1 %	0.66			0.74%
Y 371.029	252705.7	85.4 %	0.58			0.68%
Ag 328.068†	-3109.8	-0.0001927 mg/L	0.00023382	-0.0001927 mg/L	0.00023382	121.32%
Al 308.215†	13223233.9	491.667 mg/L	1.0623	491.667 mg/L	1.0623	0.22%
QC value within limits for Al 308.215 Recovery = 98.33%						
As 188.979†	41.9	-0.0044188 mg/L	0.00272509	-0.0044188 mg/L	0.00272509	61.67%
Ba 233.527†	1933.7	0.0020273 mg/L	0.00013076	0.0020273 mg/L	0.00013076	6.45%
Be 313.107†	-2697.3	-0.0040596 mg/L	0.00000064	-0.0040596 mg/L	0.00000064	0.02%
Ca 315.887†	51248050.2	475.774 mg/L	0.4521	475.774 mg/L	0.4521	0.10%
QC value within limits for Ca 315.887 Recovery = 95.15%						
Cd 228.802†	244.1	-0.0054797 mg/L	0.00006606	-0.0054797 mg/L	0.00006606	1.21%
Co 228.616†	-31.8	-0.0058524 mg/L	0.00029174	-0.0058524 mg/L	0.00029174	4.98%
Cr 267.716†	-423.2	-0.0096290 mg/L	0.00032954	-0.0096290 mg/L	0.00032954	3.42%
Cu 327.393†	680.5	-0.0120212 mg/L	0.00249397	-0.0120212 mg/L	0.00249397	20.75%
Fe 273.955†	4706673.4	193.116 mg/L	0.4773	193.116 mg/L	0.4773	0.25%
QC value within limits for Fe 273.955 Recovery = 96.56%						
K 404.721†	-1959.2				87.36	4.46%
Mg 279.077†	9937199.9	509.328 mg/L	0.4903	509.328 mg/L	0.4903	0.10%
QC value within limits for Mg 279.077 Recovery = 101.87%						
Mn 257.610†	1292.3	-0.0221411 mg/L	0.00003297	-0.0221411 mg/L	0.00003297	0.15%
Mo 202.031†	607.7	0.0006749 mg/L	0.00052603	0.0006749 mg/L	0.00052603	77.94%
Na 330.237†	93.2	0.363139 mg/L	0.1179940	0.363139 mg/L	0.1179940	32.49%
Ni 231.604†	63.1	-0.0044984 mg/L	0.00050182	-0.0044984 mg/L	0.00050182	11.16%
Pb 220.353†	-766.2	-0.0184135 mg/L	0.00145569	-0.0184135 mg/L	0.00145569	7.91%
Sb 206.836†	-66.2	-0.0072527 mg/L	0.00479161	-0.0072527 mg/L	0.00479161	66.07%
Se 196.026†	-24.2	-0.0141456 mg/L	0.00569196	-0.0141456 mg/L	0.00569196	40.24%
Sn 189.927†	0.5	-0.0021296 mg/L	0.00056877	-0.0021296 mg/L	0.00056877	26.71%
Ti 334.940†	1649.5	-0.0010618 mg/L	0.00019116	-0.0010618 mg/L	0.00019116	18.00%
Tl 190.801†	20.6	-0.0145904 mg/L	0.00284619	-0.0145904 mg/L	0.00284619	19.51%
V 290.880†	12765.4	0.0121728 mg/L	0.00317544	0.0121728 mg/L	0.00317544	26.09%
Zn 206.200†	829.9	-0.0100985 mg/L	0.00020849	-0.0100985 mg/L	0.00020849	2.06%

All analyte(s) passed QC.

Sequence No.: 36
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/25/2013 12:46:52 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	805212.0	89.0 %	0.96			1.08%
Y 371.029	254601.0	86.0 %	0.65			0.76%
Ag 328.068†	209267.1	1.11142 mg/L	0.016334	1.11142 mg/L	0.016334	1.47%
QC value within limits for Ag 328.068 Recovery = 111.14%						
Al 308.215†	13242303.2	492.377 mg/L	4.1617	492.377 mg/L	4.1617	0.85%
QC value within limits for Al 308.215 Recovery = 98.48%						
As 188.979†	1722.7	1.04316 mg/L	0.022157	1.04316 mg/L	0.022157	2.12%
QC value within limits for As 188.979 Recovery = 104.32%						
Ba 233.527†	75756.0	0.525825 mg/L	0.0081030	0.525825 mg/L	0.0081030	1.54%
QC value within limits for Ba 233.527 Recovery = 105.16%						
Be 313.107†	1562588.9	0.517679 mg/L	0.0022668	0.517679 mg/L	0.0022668	0.44%
QC value within limits for Be 313.107 Recovery = 103.54%						
Ca 315.887†	51154731.2	474.905 mg/L	4.9820	474.905 mg/L	4.9820	1.05%
QC value within limits for Ca 315.887 Recovery = 94.98%						
Cd 228.802†	64815.0	1.06360 mg/L	0.016765	1.06360 mg/L	0.016765	1.58%
QC value within limits for Cd 228.802 Recovery = 106.36%						
Co 228.616†	23491.3	0.506706 mg/L	0.0080382	0.506706 mg/L	0.0080382	1.59%
QC value within limits for Co 228.616 Recovery = 101.34%						
Cr 267.716†	41273.4	0.510491 mg/L	0.0083749	0.510491 mg/L	0.0083749	1.64%
QC value within limits for Cr 267.716 Recovery = 102.10%						
Cu 327.393†	73887.9	0.532403 mg/L	0.0084461	0.532403 mg/L	0.0084461	1.59%
QC value within limits for Cu 327.393 Recovery = 106.48%						
Fe 273.955†	4673205.9	191.742 mg/L	0.3717	191.742 mg/L	0.3717	0.19%
QC value within limits for Fe 273.955 Recovery = 95.87%						
K 404.721†	-1643.8				151.02	9.19%
Mg 279.077†	9876726.4	506.228 mg/L	5.8538	506.228 mg/L	5.8538	1.16%
QC value within limits for Mg 279.077 Recovery = 101.25%						
Mn 257.610†	393373.0	0.494038 mg/L	0.0082395	0.494038 mg/L	0.0082395	1.67%
QC value within limits for Mn 257.610 Recovery = 98.81%						
Mo 202.031†	602.9	0.0004513 mg/L	0.00040581	0.0004513 mg/L	0.00040581	89.91%
Na 330.237†	1849.0	1.86954 mg/L	0.029200	1.86954 mg/L	0.029200	1.56%
Ni 231.604†	51171.1	0.995243 mg/L	0.0186349	0.995243 mg/L	0.0186349	1.87%
QC value within limits for Ni 231.604 Recovery = 99.52%						
Pb 220.353†	13236.9	0.969982 mg/L	0.0135451	0.969982 mg/L	0.0135451	1.40%
QC value within limits for Pb 220.353 Recovery = 97.00%						
Sb 206.836†	2478.5	1.04833 mg/L	0.019326	1.04833 mg/L	0.019326	1.84%
QC value within limits for Sb 206.836 Recovery = 104.83%						
Se 196.026†	1660.0	0.971020 mg/L	0.0068923	0.971020 mg/L	0.0068923	0.71%
QC value within limits for Se 196.026 Recovery = 97.10%						
Sn 189.927†	-3.7	-0.0031891 mg/L	0.00095292	-0.0031891 mg/L	0.00095292	29.88%
Ti 334.940†	1588.4	-0.0011498 mg/L	0.00004840	-0.0011498 mg/L	0.00004840	4.21%
Tl 190.801†	1740.3	0.980400 mg/L	0.0131030	0.980400 mg/L	0.0131030	1.34%
QC value within limits for Tl 190.801 Recovery = 98.04%						
V 290.880†	81519.8	0.509615 mg/L	0.0075003	0.509615 mg/L	0.0075003	1.47%
QC value within limits for V 290.880 Recovery = 101.92%						
Zn 206.200†	64149.9	0.975786 mg/L	0.0185073	0.975786 mg/L	0.0185073	1.90%
QC value within limits for Zn 206.200 Recovery = 97.58%						

All analyte(s) passed QC.

Sequence No.: 37
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/25/2013 12:51:40 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	869065.7	96.1 %		0.48			0.49%
Y 371.029	275630.6	93.2 %		0.44			0.47%
Ag 328.068†	18776.7	0.0980374 mg/L	0.00176400		0.0980374 mg/L	0.00176400	1.80%
QC value within limits for Ag	328.068	Recovery = 98.04%					
Al 308.215†	133996.0	4.93224 mg/L	0.052969		4.93224 mg/L	0.052969	1.07%
QC value within limits for Al	308.215	Recovery = 98.64%					
As 188.979†	786.3	0.488442 mg/L	0.0018916		0.488442 mg/L	0.0018916	0.39%
QC value within limits for As	188.979	Recovery = 97.69%					
Ba 233.527†	70531.1	0.495835 mg/L	0.0051006		0.495835 mg/L	0.0051006	1.03%
QC value within limits for Ba	233.527	Recovery = 99.17%					
Be 313.107†	1467129.0	0.485685 mg/L	0.0028411		0.485685 mg/L	0.0028411	0.58%
QC value within limits for Be	313.107	Recovery = 97.14%					
Ca 315.887†	5390313.7	49.5770 mg/L	0.23330		49.5770 mg/L	0.23330	0.47%
QC value within limits for Ca	315.887	Recovery = 99.15%					
Cd 228.802†	30324.3	0.498061 mg/L	0.0015108		0.498061 mg/L	0.0015108	0.30%
QC value within limits for Cd	228.802	Recovery = 99.61%					
Co 228.616†	23035.1	0.497522 mg/L	0.0018655		0.497522 mg/L	0.0018655	0.37%
QC value within limits for Co	228.616	Recovery = 99.50%					
Cr 267.716†	40487.0	0.503086 mg/L	0.0067921		0.503086 mg/L	0.0067921	1.35%
QC value within limits for Cr	267.716	Recovery = 100.62%					
Cu 327.393†	65497.5	0.481759 mg/L	0.0044058		0.481759 mg/L	0.0044058	0.91%
QC value within limits for Cu	327.393	Recovery = 96.35%					
Fe 273.955†	123599.4	5.02339 mg/L	0.052324		5.02339 mg/L	0.052324	1.04%
QC value within limits for Fe	273.955	Recovery = 100.47%					
K 404.721†	4101.7					35.41	0.86%
Unable to evaluate QC.							
Mg 279.077†	996253.1	50.5849 mg/L	0.24335		50.5849 mg/L	0.24335	0.48%
QC value within limits for Mg	279.077	Recovery = 101.17%					
Mn 257.610†	375272.5	0.487263 mg/L	0.0046460		0.487263 mg/L	0.0046460	0.95%
QC value within limits for Mn	257.610	Recovery = 97.45%					
Mo 202.031†	9956.0	0.491042 mg/L	0.0019383		0.491042 mg/L	0.0019383	0.39%
QC value within limits for Mo	202.031	Recovery = 98.21%					
Na 330.237†	54373.6	46.9329 mg/L	0.45880		46.9329 mg/L	0.45880	0.98%
QC value within limits for Na	330.237	Recovery = 93.87%					
Ni 231.604†	25652.4	0.496604 mg/L	0.0015946		0.496604 mg/L	0.0015946	0.32%
QC value within limits for Ni	231.604	Recovery = 99.32%					
Pb 220.353†	7041.7	0.492835 mg/L	0.0014818		0.492835 mg/L	0.0014818	0.30%
QC value within limits for Pb	220.353	Recovery = 98.57%					
Sb 206.836†	1215.6	0.501542 mg/L	0.0015795		0.501542 mg/L	0.0015795	0.31%
QC value within limits for Sb	206.836	Recovery = 100.31%					
Se 196.026†	810.8	0.466824 mg/L	0.0091604		0.466824 mg/L	0.0091604	1.96%
QC value within limits for Se	196.026	Recovery = 93.36%					
Sn 189.927†	2156.4	0.504600 mg/L	0.0014388		0.504600 mg/L	0.0014388	0.29%
QC value within limits for Sn	189.927	Recovery = 100.92%					
Ti 334.940†	340160.8	0.486662 mg/L	0.0046152		0.486662 mg/L	0.0046152	0.95%
QC value within limits for Ti	334.940	Recovery = 97.33%					
Tl 190.801†	862.0	0.499548 mg/L	0.0001061		0.499548 mg/L	0.0001061	0.02%
QC value within limits for Tl	190.801	Recovery = 99.91%					
V 290.880†	69057.8	0.486567 mg/L	0.0060757		0.486567 mg/L	0.0060757	1.25%
QC value within limits for V	290.880	Recovery = 97.31%					
Zn 206.200†	31963.6	0.490161 mg/L	0.0014092		0.490161 mg/L	0.0014092	0.29%
QC value within limits for Zn	206.200	Recovery = 98.03%					

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 38

Sample ID: LLCCV V-177224 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/25/2013 12:55:08 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-177224 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	895725.6	99.0 %		1.18			1.19%
Y 371.029	290309.2	98.1 %		0.90			0.91%
Ag 328.068†	3794.9	0.0191980 mg/L	0.00004468	0.0191980 mg/L	0.00004468	0.23%	
QC value within limits for Ag	328.068	Recovery = 95.99%					
Al 308.215†	5585.4	0.165117 mg/L	0.0055655	0.165117 mg/L	0.0055655	3.37%	
QC value within limits for Al	308.215	Recovery = 82.56%					
As 188.979†	33.1	0.0197040 mg/L	0.00004118	0.0197040 mg/L	0.00004118	0.21%	
QC value within limits for As	188.979	Recovery = 98.52%					
Ba 233.527†	7132.5	0.0462232 mg/L	0.00008643	0.0462232 mg/L	0.00008643	0.19%	
QC value within limits for Ba	233.527	Recovery = 92.45%					
Be 313.107†	35077.8	0.0085155 mg/L	0.00000355	0.0085155 mg/L	0.00000355	0.04%	
QC value within limits for Be	313.107	Recovery = 70.96%					
Ca 315.887†	541710.5	4.49179 mg/L	0.004968	4.49179 mg/L	0.004968	0.11%	
QC value within limits for Ca	315.887	Recovery = 89.84%					
Cd 228.802†	718.0	0.0081972 mg/L	0.00012435	0.0081972 mg/L	0.00012435	1.52%	
QC value less than the lower limit for Cd	228.802	Recovery = 68.31%					
Co 228.616†	952.7	0.0154729 mg/L	0.00004935	0.0154729 mg/L	0.00004935	0.32%	
QC value within limits for Co	228.616	Recovery = 77.36%					
Cr 267.716†	4077.1	0.0464514 mg/L	0.00007544	0.0464514 mg/L	0.00007544	0.16%	
QC value within limits for Cr	267.716	Recovery = 92.90%					
Cu 327.393†	6244.6	0.0417385 mg/L	0.00043837	0.0417385 mg/L	0.00043837	1.05%	
QC value within limits for Cu	327.393	Recovery = 83.48%					
Fe 273.955†	7428.6	0.255663 mg/L	0.0003164	0.255663 mg/L	0.0003164	0.12%	
QC value within limits for Fe	273.955	Recovery = 85.22%					
K 404.721†	205.7					3.43	1.67%
Unable to evaluate QC.							
Mg 279.077†	100353.7	4.59921 mg/L	0.002412	4.59921 mg/L	0.002412	0.05%	
QC value within limits for Mg	279.077	Recovery = 91.98%					
Mn 257.610†	30208.2	0.0346431 mg/L	0.00002795	0.0346431 mg/L	0.00002795	0.08%	
QC value within limits for Mn	257.610	Recovery = 86.61%					
Mo 202.031†	413.9	0.0163114 mg/L	0.00042155	0.0163114 mg/L	0.00042155	2.58%	
QC value within limits for Mo	202.031	Recovery = 81.56%					
Na 330.237†	4665.5	4.28594 mg/L	0.013462	4.28594 mg/L	0.013462	0.31%	
QC value within limits for Na	330.237	Recovery = 85.72%					
Ni 231.604†	2605.9	0.0452294 mg/L	0.00031020	0.0452294 mg/L	0.00031020	0.69%	
QC value within limits for Ni	231.604	Recovery = 90.46%					
Pb 220.353†	207.4	0.0106397 mg/L	0.00078057	0.0106397 mg/L	0.00078057	7.34%	
QC value within limits for Pb	220.353	Recovery = 88.66%					
Sb 206.836†	52.8	0.0185375 mg/L	0.00010125	0.0185375 mg/L	0.00010125	0.55%	
QC value within limits for Sb	206.836	Recovery = 92.69%					
Se 196.026†	75.4	0.0368600 mg/L	0.00133852	0.0368600 mg/L	0.00133852	3.63%	
QC value within limits for Se	196.026	Recovery = 92.15%					
Sn 189.927†	199.5	0.0435473 mg/L	0.00120104	0.0435473 mg/L	0.00120104	2.76%	
QC value within limits for Sn	189.927	Recovery = 87.09%					
Ti 334.940†	32610.5	0.0435466 mg/L	0.00016528	0.0435466 mg/L	0.00016528	0.38%	
QC value within limits for Ti	334.940	Recovery = 87.09%					
Tl 190.801†	39.2	0.0186668 mg/L	0.00076053	0.0186668 mg/L	0.00076053	4.07%	
QC value within limits for Tl	190.801	Recovery = 93.33%					
V 290.880†	7319.0	0.0464711 mg/L	0.00076435	0.0464711 mg/L	0.00076435	1.64%	
QC value within limits for V	290.880	Recovery = 92.94%					
Zn 206.200†	3224.2	0.0431071 mg/L	0.00039029	0.0431071 mg/L	0.00039029	0.91%	
QC value within limits for Zn	206.200	Recovery = 86.21%					

QC Failed. Continue with analysis.

Sequence No.: 39

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 11/25/2013 12:58:27 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
Sc 361.383	890710.4	98.5 %	0.03			0.03%
Y 371.029	290834.7	98.3 %	0.06			0.07%
Ag 328.068†	55.0	-0.0004051 mg/L	0.00028238	-0.0004051 mg/L	0.00028238	69.70%
QC value within limits for Ag 328.068		Recovery = Not calculated				
Al 308.215†	436.1	-0.0260216 mg/L	0.00097517	-0.0260216 mg/L	0.00097517	3.75%
QC value within limits for Al 308.215		Recovery = Not calculated				
As 188.979†	0.3	-0.0006304 mg/L	0.00194875	-0.0006304 mg/L	0.00194875	309.15%
QC value within limits for As 188.979		Recovery = Not calculated				
Ba 233.527†	-7.1	-0.0044183 mg/L	0.00000889	-0.0044183 mg/L	0.00000889	0.20%
QC value within limits for Ba 233.527		Recovery = Not calculated				
Be 313.107†	-186.0	-0.0032217 mg/L	0.00001172	-0.0032217 mg/L	0.00001172	0.36%
QC value within limits for Be 313.107		Recovery = Not calculated				
Ca 315.887†	-1716.4	-0.561964 mg/L	0.0046568	-0.561964 mg/L	0.0046568	0.83%
QC value within limits for Ca 315.887		Recovery = Not calculated				
Cd 228.802†	17.1	-0.0033810 mg/L	0.00024259	-0.0033810 mg/L	0.00024259	7.18%
QC value within limits for Cd 228.802		Recovery = Not calculated				
Co 228.616†	23.0	-0.0047668 mg/L	0.00001572	-0.0047668 mg/L	0.00001572	0.33%
QC value within limits for Co 228.616		Recovery = Not calculated				
Cr 267.716†	-22.2	-0.0047861 mg/L	0.00023397	-0.0047861 mg/L	0.00023397	4.89%
QC value within limits for Cr 267.716		Recovery = Not calculated				
Cu 327.393†	-660.4	-0.0095302 mg/L	0.00023600	-0.0095302 mg/L	0.00023600	2.48%
QC value within limits for Cu 327.393		Recovery = Not calculated				
Fe 273.955†	102.6	-0.0450046 mg/L	0.00105826	-0.0450046 mg/L	0.00105826	2.35%
QC value within limits for Fe 273.955		Recovery = Not calculated				
K 404.721†	176.3				334.51	189.74%
Unable to evaluate QC.						
Mg 279.077†	68.7	-0.548047 mg/L	0.0011950	-0.548047 mg/L	0.0011950	0.22%
QC value within limits for Mg 279.077		Recovery = Not calculated				
Mn 257.610†	10.3	-0.0049195 mg/L	0.00001202	-0.0049195 mg/L	0.00001202	0.24%
QC value within limits for Mn 257.610		Recovery = Not calculated				
Mo 202.031†	0.5	-0.0041380 mg/L	0.00028058	-0.0041380 mg/L	0.00028058	6.78%
QC value within limits for Mo 202.031		Recovery = Not calculated				
Na 330.237†	27.5	0.306769 mg/L	0.0421622	0.306769 mg/L	0.0421622	13.74%
QC value within limits for Na 330.237		Recovery = Not calculated				
Ni 231.604†	-11.4	-0.0059912 mg/L	0.00007446	-0.0059912 mg/L	0.00007446	1.24%
QC value within limits for Ni 231.604		Recovery = Not calculated				
Pb 220.353†	24.0	-0.0022405 mg/L	0.00030880	-0.0022405 mg/L	0.00030880	13.78%
QC value within limits for Pb 220.353		Recovery = Not calculated				
Sb 206.836†	3.2	-0.0020449 mg/L	0.00152838	-0.0020449 mg/L	0.00152838	74.74%
QC value within limits for Sb 206.836		Recovery = Not calculated				
Se 196.026†	13.7	0.0008106 mg/L	0.00069601	0.0008106 mg/L	0.00069601	85.86%
QC value within limits for Se 196.026		Recovery = Not calculated				
Sn 189.927†	7.4	-0.0017613 mg/L	0.00068467	-0.0017613 mg/L	0.00068467	38.87%
QC value within limits for Sn 189.927		Recovery = Not calculated				
Ti 334.940†	-52.8	-0.0035144 mg/L	0.00000782	-0.0035144 mg/L	0.00000782	0.22%
QC value within limits for Ti 334.940		Recovery = Not calculated				
Tl 190.801†	5.0	-0.0014957 mg/L	0.00078963	-0.0014957 mg/L	0.00078963	52.79%
QC value within limits for Tl 190.801		Recovery = Not calculated				
V 290.880†	135.4	-0.0047644 mg/L	0.00060575	-0.0047644 mg/L	0.00060575	12.71%
QC value within limits for V 290.880		Recovery = Not calculated				
Zn 206.200†	2.9	-0.0070255 mg/L	0.00001531	-0.0070255 mg/L	0.00001531	0.22%
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.: 40
 Sample ID: 75646-020
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 97
 Date Collected: 11/25/2013 1:01:44 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-020

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	902035.2	99.7	%	0.13				0.13%
Y 371.029	284776.7	96.2	%	0.35				0.37%
Ag 328.068†	-113.3	-0.0011007	mg/L	0.00016467	-0.0011007	mg/L	0.00016467	14.96%
Al 308.215†	866.1	-0.0100865	mg/L	0.00551803	-0.0100865	mg/L	0.00551803	54.71%
As 188.979†	0.4	-0.0009263	mg/L	0.00320476	-0.0009263	mg/L	0.00320476	345.97%
Ba 233.527†	4704.5	0.0289277	mg/L	0.00005158	0.0289277	mg/L	0.00005158	0.18%
Be 313.107†	-54.9	-0.0031778	mg/L	0.00000291	-0.0031778	mg/L	0.00000291	0.09%
Ca 315.887†	3261546.3	29.7856	mg/L	0.03126	29.7856	mg/L	0.03126	0.10%
Cd 228.802†	11.4	-0.0036233	mg/L	0.00013440	-0.0036233	mg/L	0.00013440	3.71%
Co 228.616†	12.7	-0.0049773	mg/L	0.00012706	-0.0049773	mg/L	0.00012706	2.55%
Cr 267.716†	109.6	-0.0029830	mg/L	0.00001755	-0.0029830	mg/L	0.00001755	0.59%
Cu 327.393†	-243.8	-0.0068471	mg/L	0.00009710	-0.0068471	mg/L	0.00009710	1.42%
Fe 273.955†	52200.1	2.09312	mg/L	0.019891	2.09312	mg/L	0.019891	0.95%
K 404.721†	642.2						66.63	10.38%
Mg 279.077†	89343.6	4.03465	mg/L	0.041478	4.03465	mg/L	0.041478	1.03%
Mn 257.610†	293506.7	0.381217	mg/L	0.0034528	0.381217	mg/L	0.0034528	0.91%
Mo 202.031†	69.2	-0.0017671	mg/L	0.00022742	-0.0017671	mg/L	0.00022742	12.87%
Na 330.237†	40615.4	35.1291	mg/L	0.27055	35.1291	mg/L	0.27055	0.77%
Ni 231.604†	-14.8	-0.0060545	mg/L	0.00009461	-0.0060545	mg/L	0.00009461	1.56%
Pb 220.353†	18.4	-0.0028857	mg/L	0.00057436	-0.0028857	mg/L	0.00057436	19.90%
Sb 206.836†	7.9	0.0000801	mg/L	0.00135771	0.0000801	mg/L	0.00135771	>999.9%
Se 196.026†	8.5	-0.0027684	mg/L	0.00018479	-0.0027684	mg/L	0.00018479	6.67%
Sn 189.927†	-8.3	-0.0047075	mg/L	0.00046207	-0.0047075	mg/L	0.00046207	9.82%
Ti 334.940†	-221.5	-0.0037575	mg/L	0.00020794	-0.0037575	mg/L	0.00020794	5.53%
Tl 190.801†	1.0	-0.0040826	mg/L	0.00069596	-0.0040826	mg/L	0.00069596	17.05%
V 290.880†	741.2	-0.0009588	mg/L	0.00034612	-0.0009588	mg/L	0.00034612	36.10%
Zn 206.200†	730.7	0.0042200	mg/L	0.00009724	0.0042200	mg/L	0.00009724	2.30%

Sequence No.: 41
 Sample ID: 75646-022
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 98
 Date Collected: 11/25/2013 1:05:13 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-022

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	895604.7	99.0 %		0.05			0.05%
Y 371.029	287512.6	97.2 %		0.07			0.08%
Ag 328.068†	-60.0	-0.0004472 mg/L		0.00016780	-0.0004472 mg/L	0.00016780	37.52%
Al 308.215†	915.5	-0.0082388 mg/L		0.00171607	-0.0082388 mg/L	0.00171607	20.83%
As 188.979†	-1.9	-0.0017962 mg/L		0.00041045	-0.0017962 mg/L	0.00041045	22.85%
Ba 233.527†	6598.4	0.0422008 mg/L		0.00017656	0.0422008 mg/L	0.00017656	0.42%
Be 313.107†	-268.7	-0.0032491 mg/L		0.00003077	-0.0032491 mg/L	0.00003077	0.95%
Ca 315.887†	1486348.5	13.2618 mg/L		0.05766	13.2618 mg/L	0.05766	0.43%
Cd 228.802†	7060.1	0.113105 mg/L		0.0001358	0.113105 mg/L	0.0001358	0.12%
Co 228.616†	820.3	0.0126148 mg/L		0.00020533	0.0126148 mg/L	0.00020533	1.63%
Cr 267.716†	30.4	-0.0034866 mg/L		0.00017517	-0.0034866 mg/L	0.00017517	5.02%
Cu 327.393†	-336.6	-0.0073115 mg/L		0.00075955	-0.0073115 mg/L	0.00075955	10.39%
Fe 273.955†	157194.8	6.40217 mg/L		0.036108	6.40217 mg/L	0.036108	0.56%
K 404.721†	729.6					25.57	3.50%
Mg 279.077†	40227.2	1.51850 mg/L		0.006607	1.51850 mg/L	0.006607	0.44%
Mn 257.610†	1305370.8	1.71315 mg/L		0.008352	1.71315 mg/L	0.008352	0.49%
Mo 202.031†	53.1	-0.0019934 mg/L		0.00019858	-0.0019934 mg/L	0.00019858	9.96%
Na 330.237†	30645.0	26.5750 mg/L		0.03693	26.5750 mg/L	0.03693	0.14%
Ni 231.604†	-10.8	-0.0059773 mg/L		0.00011600	-0.0059773 mg/L	0.00011600	1.94%
Pb 220.353†	50.2	-0.0010290 mg/L		0.00013737	-0.0010290 mg/L	0.00013737	13.35%
Sb 206.836†	-4.5	-0.0046380 mg/L		0.00108826	-0.0046380 mg/L	0.00108826	23.46%
Se 196.026†	12.0	0.0000049 mg/L		0.00292717	0.0000049 mg/L	0.00292717	>999.9%
Sn 189.927†	-3.0	-0.0038720 mg/L		0.00003064	-0.0038720 mg/L	0.00003064	0.79%
Ti 334.940†	-129.4	-0.0036248 mg/L		0.00015165	-0.0036248 mg/L	0.00015165	4.18%
Tl 190.801†	3.7	-0.0039571 mg/L		0.00157417	-0.0039571 mg/L	0.00157417	39.78%
V 290.880†	470.2	-0.0023637 mg/L		0.00001470	-0.0023637 mg/L	0.00001470	0.62%
Zn 206.200†	328.8	-0.0022057 mg/L		0.00013991	-0.0022057 mg/L	0.00013991	6.34%

Sequence No.: 42
 Sample ID: 75646-024
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 99
 Date Collected: 11/25/2013 1:08:31 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-024

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	901346.5	99.7	%	0.18			0.18%
Y 371.029	291066.1	98.4	%	0.22			0.22%
Ag 328.068†	2.2	-0.0006565	mg/L	0.00013833	-0.0006565 mg/L	0.00013833	21.07%
Al 308.215†	1266.4	0.0048173	mg/L	0.00017610	0.0048173 mg/L	0.00017610	3.66%
As 188.979†	1.3	-0.0002172	mg/L	0.00047980	-0.0002172 mg/L	0.00047980	220.87%
Ba 233.527†	2548.9	0.0137048	mg/L	0.00013236	0.0137048 mg/L	0.00013236	0.97%
Be 313.107†	-50.5	-0.0031767	mg/L	0.00002716	-0.0031767 mg/L	0.00002716	0.85%
Ca 315.887†	1410996.0	12.5773	mg/L	0.02991	12.5773 mg/L	0.02991	0.24%
Cd 228.802†	140.3	-0.0013988	mg/L	0.00033493	-0.0013988 mg/L	0.00033493	23.94%
Co 228.616†	28.6	-0.0046382	mg/L	0.00026488	-0.0046382 mg/L	0.00026488	5.71%
Cr 267.716†	750.6	0.0048851	mg/L	0.00030865	0.0048851 mg/L	0.00030865	6.32%
Cu 327.393†	530.8	-0.0008517	mg/L	0.00014733	-0.0008517 mg/L	0.00014733	17.30%
Fe 273.955†	7171.4	0.245104	mg/L	0.0031950	0.245104 mg/L	0.0031950	1.30%
K 404.721†	289.3					40.52	14.00%
Mg 279.077†	53945.2	2.21728	mg/L	0.009165	2.21728 mg/L	0.009165	0.41%
Mn 257.610†	47260.9	0.0571709	mg/L	0.00014729	0.0571709 mg/L	0.00014729	0.26%
Mo 202.031†	44.8	-0.0023862	mg/L	0.00001059	-0.0023862 mg/L	0.00001059	0.44%
Na 330.237†	12664.3	11.1484	mg/L	0.05502	11.1484 mg/L	0.05502	0.49%
Ni 231.604†	66.4	-0.0044667	mg/L	0.00016092	-0.0044667 mg/L	0.00016092	3.60%
Pb 220.353†	46.9	-0.0006781	mg/L	0.00158106	-0.0006781 mg/L	0.00158106	233.16%
Sb 206.836†	6.2	-0.0008083	mg/L	0.00134832	-0.0008083 mg/L	0.00134832	166.81%
Se 196.026†	13.6	0.0004537	mg/L	0.00071043	0.0004537 mg/L	0.00071043	156.57%
Sn 189.927†	-3.9	-0.0040825	mg/L	0.00057275	-0.0040825 mg/L	0.00057275	14.03%
Ti 334.940†	375.5	-0.0028974	mg/L	0.00001827	-0.0028974 mg/L	0.00001827	0.63%
Tl 190.801†	4.2	-0.0019516	mg/L	0.00005753	-0.0019516 mg/L	0.00005753	2.95%
V 290.880†	1039.1	0.0014090	mg/L	0.00009164	0.0014090 mg/L	0.00009164	6.50%
Zn 206.200†	2359.2	0.0296480	mg/L	0.00034918	0.0296480 mg/L	0.00034918	1.18%

Sequence No.: 43
 Sample ID: 75646-026
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 100
 Date Collected: 11/25/2013 1:11:49 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-026

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	907251.4	100 %		0.3			0.26%
Y 371.029	292190.9	98.8 %		0.24			0.24%
Ag 328.068†	-35.4	-0.0008723	mg/L	0.00040007	-0.0008723	mg/L	0.00040007 45.87%
Al 308.215†	474.2	-0.0246266	mg/L	0.00099769	-0.0246266	mg/L	0.00099769 4.05%
As 188.979†	-1.2	-0.0017781	mg/L	0.00003419	-0.0017781	mg/L	0.00003419 1.92%
Ba 233.527†	2313.2	0.0120403	mg/L	0.00020406	0.0120403	mg/L	0.00020406 1.69%
Be 313.107†	-100.1	-0.0031930	mg/L	0.00001853	-0.0031930	mg/L	0.00001853 0.58%
Ca 315.887†	1299052.8	11.5365	mg/L	0.01163	11.5365	mg/L	0.01163 0.10%
Cd 228.802†	2015.6	0.0296558	mg/L	0.00023747	0.0296558	mg/L	0.00023747 0.80%
Co 228.616†	18.6	-0.0048573	mg/L	0.00019953	-0.0048573	mg/L	0.00019953 4.11%
Cr 267.716†	930.6	0.0071152	mg/L	0.00007487	0.0071152	mg/L	0.00007487 1.05%
Cu 327.393†	290.2	-0.0026265	mg/L	0.00048610	-0.0026265	mg/L	0.00048610 18.51%
Fe 273.955†	1911.9	0.0292509	mg/L	0.00067003	0.0292509	mg/L	0.00067003 2.29%
K 404.721†	387.0					323.78	83.67%
Mg 279.077†	37885.4	1.39302	mg/L	0.000168	1.39302	mg/L	0.000168 0.01%
Mn 257.610†	27650.5	0.0313896	mg/L	0.00003492	0.0313896	mg/L	0.00003492 0.11%
Mo 202.031†	29.2	-0.0031301	mg/L	0.00017451	-0.0031301	mg/L	0.00017451 5.58%
Na 330.237†	11199.9	9.89209	mg/L	0.000723	9.89209	mg/L	0.000723 0.01%
Ni 231.604†	61.2	-0.0045697	mg/L	0.00004540	-0.0045697	mg/L	0.00004540 0.99%
Pb 220.353†	16.4	-0.0028061	mg/L	0.00045333	-0.0028061	mg/L	0.00045333 16.16%
Sb 206.836†	3.1	-0.0021030	mg/L	0.00112775	-0.0021030	mg/L	0.00112775 53.62%
Se 196.026†	10.5	-0.0013943	mg/L	0.00502743	-0.0013943	mg/L	0.00502743 360.57%
Sn 189.927†	2.2	-0.0026804	mg/L	0.00008388	-0.0026804	mg/L	0.00008388 3.13%
Ti 334.940†	-63.7	-0.0035302	mg/L	0.00006209	-0.0035302	mg/L	0.00006209 1.76%
Tl 190.801†	-1.0	-0.0049661	mg/L	0.00034769	-0.0049661	mg/L	0.00034769 7.00%
V 290.880†	468.5	-0.0026049	mg/L	0.00072798	-0.0026049	mg/L	0.00072798 27.95%
Zn 206.200†	726.9	0.0042423	mg/L	0.00021726	0.0042423	mg/L	0.00021726 5.12%

Sequence No.: 44
 Sample ID: 75646-028
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 101
 Date Collected: 11/25/2013 1:15:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-028

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	906562.0	100 %		0.1			0.09%
Y 371.029	288374.7	97.5 %		0.98			1.00%
Ag 328.068†	-40.9	-0.0008510 mg/L		0.00026703	-0.0008510 mg/L	0.00026703	31.38%
Al 308.215†	2541.9	0.0522346 mg/L		0.00383743	0.0522346 mg/L	0.00383743	7.35%
As 188.979†	-1.2	-0.0019051 mg/L		0.00045139	-0.0019051 mg/L	0.00045139	23.69%
Ba 233.527†	2216.9	0.0113352 mg/L		0.00013052	0.0113352 mg/L	0.00013052	1.15%
Be 313.107†	-160.2	-0.0032133 mg/L		0.00001270	-0.0032133 mg/L	0.00001270	0.40%
Ca 315.887†	2252155.0	20.3957 mg/L		0.00414	20.3957 mg/L	0.00414	0.02%
Cd 228.802†	745.9	0.0085905 mg/L		0.00001231	0.0085905 mg/L	0.00001231	0.14%
Co 228.616†	11.3	-0.0050121 mg/L		0.00035875	-0.0050121 mg/L	0.00035875	7.16%
Cr 267.716†	43.6	-0.0035807 mg/L		0.00002144	-0.0035807 mg/L	0.00002144	0.60%
Cu 327.393†	188.9	-0.0035018 mg/L		0.00103247	-0.0035018 mg/L	0.00103247	29.48%
Fe 273.955†	15960.4	0.605814 mg/L		0.0014866	0.605814 mg/L	0.0014866	0.25%
K 404.721†	555.7					412.14	74.16%
Mg 279.077†	68604.1	2.97484 mg/L		0.020520	2.97484 mg/L	0.020520	0.69%
Mn 257.610†	764552.9	1.00126 mg/L		0.000467	1.00126 mg/L	0.000467	0.05%
Mo 202.031†	61.4	-0.0018293 mg/L		0.00036730	-0.0018293 mg/L	0.00036730	20.08%
Na 330.237†	28559.5	24.7857 mg/L		0.00068	24.7857 mg/L	0.00068	0.00%
Ni 231.604†	76.5	-0.0042695 mg/L		0.00002233	-0.0042695 mg/L	0.00002233	0.52%
Pb 220.353†	33.9	-0.0016320 mg/L		0.00008574	-0.0016320 mg/L	0.00008574	5.25%
Sb 206.836†	4.3	-0.0015439 mg/L		0.00002612	-0.0015439 mg/L	0.00002612	1.69%
Se 196.026†	15.8	0.0011147 mg/L		0.00474480	0.0011147 mg/L	0.00474480	425.66%
Sn 189.927†	-7.7	-0.0047834 mg/L		0.00014869	-0.0047834 mg/L	0.00014869	3.11%
Ti 334.940†	374.1	-0.0028993 mg/L		0.00013864	-0.0028993 mg/L	0.00013864	4.78%
Tl 190.801†	2.2	-0.0041185 mg/L		0.00283506	-0.0041185 mg/L	0.00283506	68.84%
V 290.880†	1086.1	0.0019073 mg/L		0.00061192	0.0019073 mg/L	0.00061192	32.08%
Zn 206.200†	1210.6	0.0117489 mg/L		0.00000327	0.0117489 mg/L	0.00000327	0.03%

Sequence No.: 45
 Sample ID: 75646-030
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 102
 Date Collected: 11/25/2013 1:18:36 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-030

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	905100.7	100 %		0.1			0.08%
Y 371.029	286434.9	96.8 %		0.19			0.20%
Ag 328.068†	-96.7	-0.0011994 mg/L		0.00003648	-0.0011994 mg/L	0.00003648	3.04%
Al 308.215†	631.2	-0.0188118 mg/L		0.00126377	-0.0188118 mg/L	0.00126377	6.72%
As 188.979†	-2.0	-0.0025094 mg/L		0.00078510	-0.0025094 mg/L	0.00078510	31.29%
Ba 233.527†	4712.2	0.0290634 mg/L		0.00004916	0.0290634 mg/L	0.00004916	0.17%
Be 313.107†	47.9	-0.0031436 mg/L		0.00001601	-0.0031436 mg/L	0.00001601	0.51%
Ca 315.887†	2928445.6	26.6889 mg/L		0.03862	26.6889 mg/L	0.03862	0.14%
Cd 228.802†	-2.8	-0.0038247 mg/L		0.00001089	-0.0038247 mg/L	0.00001089	0.28%
Co 228.616†	26.2	-0.0046871 mg/L		0.00019216	-0.0046871 mg/L	0.00019216	4.10%
Cr 267.716†	27.0	-0.0039375 mg/L		0.00030511	-0.0039375 mg/L	0.00030511	7.75%
Cu 327.393†	-14.9	-0.0051026 mg/L		0.00015527	-0.0051026 mg/L	0.00015527	3.04%
Fe 273.955†	57.2	-0.0468655 mg/L		0.00091941	-0.0468655 mg/L	0.00091941	1.96%
K 404.721†	526.5					294.87	56.00%
Mg 279.077†	92864.9	4.21813 mg/L		0.020538	4.21813 mg/L	0.020538	0.49%
Mn 257.610†	459678.6	0.599929 mg/L		0.0013060	0.599929 mg/L	0.0013060	0.22%
Mo 202.031†	54.2	-0.0024081 mg/L		0.00012257	-0.0024081 mg/L	0.00012257	5.09%
Na 330.237†	12625.9	11.1155 mg/L		0.03422	11.1155 mg/L	0.03422	0.31%
Ni 231.604†	17.6	-0.0054211 mg/L		0.00015689	-0.0054211 mg/L	0.00015689	2.89%
Pb 220.353†	24.9	-0.0022299 mg/L		0.00176440	-0.0022299 mg/L	0.00176440	79.13%
Sb 206.836†	3.9	-0.0017919 mg/L		0.00238888	-0.0017919 mg/L	0.00238888	133.32%
Se 196.026†	13.9	-0.0001019 mg/L		0.00284875	-0.0001019 mg/L	0.00284875	>999.9%
Sn 189.927†	-7.7	-0.0046244 mg/L		0.00053626	-0.0046244 mg/L	0.00053626	11.60%
Ti 334.940†	-214.5	-0.0037474 mg/L		0.00007186	-0.0037474 mg/L	0.00007186	1.92%
Tl 190.801†	1.6	-0.0040663 mg/L		0.00130444	-0.0040663 mg/L	0.00130444	32.08%
V 290.880†	699.7	-0.0011401 mg/L		0.00008666	-0.0011401 mg/L	0.00008666	7.60%
Zn 206.200†	354.6	-0.0015503 mg/L		0.00024204	-0.0015503 mg/L	0.00024204	15.61%

Sequence No.: 46
 Sample ID: 75646-032
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 103
 Date Collected: 11/25/2013 1:22:04 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-032

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	905702.8	100 %	%	1.2			1.23%
Y 371.029	292489.6	98.9 %	%	1.17			1.18%
Ag 328.068†	-31.4	-0.0008569	mg/L	0.00015296	-0.0008569	mg/L	0.00015296 17.85%
Al 308.215†	399.4	-0.0274067	mg/L	0.00509583	-0.0274067	mg/L	0.00509583 18.59%
As 188.979†	-2.7	-0.0027101	mg/L	0.00251559	-0.0027101	mg/L	0.00251559 92.82%
Ba 233.527†	1689.9	0.0076210	mg/L	0.00001183	0.0076210	mg/L	0.00001183 0.16%
Be 313.107†	-95.9	-0.0031916	mg/L	0.00002411	-0.0031916	mg/L	0.00002411 0.76%
Ca 315.887†	1390802.1	12.3901	mg/L	0.00561	12.3901	mg/L	0.00561 0.05%
Cd 228.802†	176.7	-0.0007926	mg/L	0.00019692	-0.0007926	mg/L	0.00019692 24.84%
Co 228.616†	4.5	-0.0051661	mg/L	0.00000389	-0.0051661	mg/L	0.00000389 0.08%
Cr 267.716†	325.7	-0.0004407	mg/L	0.00001687	-0.0004407	mg/L	0.00001687 3.83%
Cu 327.393†	-90.1	-0.0054662	mg/L	0.00036119	-0.0054662	mg/L	0.00036119 6.61%
Fe 273.955†	337.8	-0.0353493	mg/L	0.00126656	-0.0353493	mg/L	0.00126656 3.58%
K 404.721†	446.0					210.28	47.15%
Mg 279.077†	54973.5	2.26988	mg/L	0.007039	2.26988	mg/L	0.007039 0.31%
Mn 257.610†	403.8	-0.0045056	mg/L	0.00000889	-0.0045056	mg/L	0.00000889 0.20%
Mo 202.031†	25.7	-0.0033314	mg/L	0.00046458	-0.0033314	mg/L	0.00046458 13.95%
Na 330.237†	10793.4	9.54329	mg/L	0.040336	9.54329	mg/L	0.040336 0.42%
Ni 231.604†	32.3	-0.0051346	mg/L	0.00013789	-0.0051346	mg/L	0.00013789 2.69%
Pb 220.353†	22.2	-0.0024054	mg/L	0.00014527	-0.0024054	mg/L	0.00014527 6.04%
Sb 206.836†	6.4	-0.0007462	mg/L	0.00170237	-0.0007462	mg/L	0.00170237 228.14%
Se 196.026†	14.6	0.0010156	mg/L	0.00087017	0.0010156	mg/L	0.00087017 85.68%
Sn 189.927†	-5.1	-0.0043673	mg/L	0.00129963	-0.0043673	mg/L	0.00129963 29.76%
Ti 334.940†	-88.7	-0.0035662	mg/L	0.00001556	-0.0035662	mg/L	0.00001556 0.44%
Tl 190.801†	0.1	-0.0043054	mg/L	0.00182900	-0.0043054	mg/L	0.00182900 42.48%
V 290.880†	417.5	-0.0030971	mg/L	0.00096131	-0.0030971	mg/L	0.00096131 31.04%
Zn 206.200†	755.2	0.0046863	mg/L	0.00020247	0.0046863	mg/L	0.00020247 4.32%

Sequence No.: 47
 Sample ID: ICSA V-173614
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/25/2013 1:25:22 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
Sc 361.383	802157.5	88.7 %		0.41			0.46%
Y 371.029	255739.1	86.4 %		0.69			0.80%
Ag 328.068†	-3325.0	-0.0012323 mg/L		0.00014400	-0.0012323 mg/L	0.00014400	11.69%
Al 308.215†	13237642.0	492.203 mg/L		4.7364	492.203 mg/L	4.7364	0.96%
QC value within limits for Al 308.215 Recovery = 98.44%							
As 188.979†	33.5	-0.0096443 mg/L		0.00053441	-0.0096443 mg/L	0.00053441	5.54%
Ba 233.527†	1903.0	0.0017716 mg/L		0.00004174	0.0017716 mg/L	0.00004174	2.36%
Be 313.107†	-2785.2	-0.0040888 mg/L		0.00000460	-0.0040888 mg/L	0.00000460	0.11%
Ca 315.887†	51264530.9	475.926 mg/L		4.3194	475.926 mg/L	4.3194	0.91%
QC value within limits for Ca 315.887 Recovery = 95.19%							
Cd 228.802†	245.3	-0.0054721 mg/L		0.00030371	-0.0054721 mg/L	0.00030371	5.55%
Co 228.616†	-23.1	-0.0056616 mg/L		0.00004730	-0.0056616 mg/L	0.00004730	0.84%
Cr 267.716†	-455.5	-0.0100296 mg/L		0.00027173	-0.0100296 mg/L	0.00027173	2.71%
Cu 327.393†	463.8	-0.0136408 mg/L		0.00061301	-0.0136408 mg/L	0.00061301	4.49%
Fe 273.955†	4730960.1	194.113 mg/L		0.4371	194.113 mg/L	0.4371	0.23%
QC value within limits for Fe 273.955 Recovery = 97.06%							
K 404.721†	-1970.7					284.18	14.42%
Mg 279.077†	9944239.0	509.689 mg/L		4.9837	509.689 mg/L	4.9837	0.98%
QC value within limits for Mg 279.077 Recovery = 101.94%							
Mn 257.610†	1348.9	-0.0220799 mg/L		0.00021200	-0.0220799 mg/L	0.00021200	0.96%
Mo 202.031†	617.5	0.0011488 mg/L		0.00049117	0.0011488 mg/L	0.00049117	42.75%
Na 330.237†	153.2	0.414587 mg/L		0.1822791	0.414587 mg/L	0.1822791	43.97%
Ni 231.604†	28.3	-0.0051792 mg/L		0.00001962	-0.0051792 mg/L	0.00001962	0.38%
Pb 220.353†	-791.4	-0.0202184 mg/L		0.00232453	-0.0202184 mg/L	0.00232453	11.50%
Sb 206.836†	-56.0	-0.0029397 mg/L		0.00019263	-0.0029397 mg/L	0.00019263	6.55%
Se 196.026†	1.6	0.0011015 mg/L		0.00520710	0.0011015 mg/L	0.00520710	472.71%
Sn 189.927†	7.9	-0.0003822 mg/L		0.00334584	-0.0003822 mg/L	0.00334584	875.38%
Ti 334.940†	1567.5	-0.0011800 mg/L		0.00003077	-0.0011800 mg/L	0.00003077	2.61%
Tl 190.801†	24.7	-0.0122186 mg/L		0.00279734	-0.0122186 mg/L	0.00279734	22.89%
V 290.880†	12934.0	0.0133062 mg/L		0.00157598	0.0133062 mg/L	0.00157598	11.84%
Zn 206.200†	814.7	-0.0103824 mg/L		0.00007640	-0.0103824 mg/L	0.00007640	0.74%

All analyte(s) passed QC.

Sequence No.: 48
 Sample ID: ICSAB V-173231
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/25/2013 1:30:23 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	797546.4	88.2 %		0.48			0.54%
Y 371.029	252627.7	85.4 %		0.44			0.52%
Ag 328.068†	210243.7	1.11673 mg/L		0.002386	1.11673 mg/L	0.002386	0.21%
QC value within limits for Ag		328.068	Recovery =	111.67%			
Al 308.215†	13264154.9	493.189 mg/L		3.1661	493.189 mg/L	3.1661	0.64%
QC value within limits for Al		308.215	Recovery =	98.64%			
As 188.979†	1717.1	1.03968 mg/L		0.006764	1.03968 mg/L	0.006764	0.65%
QC value within limits for As		188.979	Recovery =	103.97%			
Ba 233.527†	76767.7	0.532916 mg/L		0.0028825	0.532916 mg/L	0.0028825	0.54%
QC value within limits for Ba		233.527	Recovery =	106.58%			
Be 313.107†	1582506.0	0.524318 mg/L		0.0004678	0.524318 mg/L	0.0004678	0.09%
QC value within limits for Be		313.107	Recovery =	104.86%			
Ca 315.887†	51242436.4	475.718 mg/L		2.8547	475.718 mg/L	2.8547	0.60%
QC value within limits for Ca		315.887	Recovery =	95.14%			
Cd 228.802†	66082.5	1.08455 mg/L		0.007442	1.08455 mg/L	0.007442	0.69%
QC value within limits for Cd		228.802	Recovery =	108.46%			
Co 228.616†	23752.3	0.512393 mg/L		0.0052300	0.512393 mg/L	0.0052300	1.02%
QC value within limits for Co		228.616	Recovery =	102.48%			
Cr 267.716†	41457.9	0.512794 mg/L		0.0048932	0.512794 mg/L	0.0048932	0.95%
QC value within limits for Cr		267.716	Recovery =	102.56%			
Cu 327.393†	74176.0	0.534524 mg/L		0.0006225	0.534524 mg/L	0.0006225	0.12%
QC value within limits for Cu		327.393	Recovery =	106.90%			
Fe 273.955†	4729006.5	194.033 mg/L		0.5842	194.033 mg/L	0.5842	0.30%
QC value within limits for Fe		273.955	Recovery =	97.02%			
K 404.721†	-1844.8					19.24	1.04%
Mg 279.077†	10049466.3	515.092 mg/L		0.2092	515.092 mg/L	0.2092	0.04%
QC value within limits for Mg		279.077	Recovery =	103.02%			
Mn 257.610†	396193.0	0.497421 mg/L		0.0007627	0.497421 mg/L	0.0007627	0.15%
QC value within limits for Mn		257.610	Recovery =	99.48%			
Mo 202.031†	609.4	0.0007365 mg/L		0.00122278	0.0007365 mg/L	0.00122278	166.02%
Na 330.237†	1860.3	1.87925 mg/L		0.014758	1.87925 mg/L	0.014758	0.79%
Ni 231.604†	51436.4	1.00043 mg/L		0.005831	1.00043 mg/L	0.005831	0.58%
QC value within limits for Ni		231.604	Recovery =	100.04%			
Pb 220.353†	13554.9	0.992184 mg/L		0.0079624	0.992184 mg/L	0.0079624	0.80%
QC value within limits for Pb		220.353	Recovery =	99.22%			
Sb 206.836†	2475.0	1.04708 mg/L		0.005163	1.04708 mg/L	0.005163	0.49%
QC value within limits for Sb		206.836	Recovery =	104.71%			
Se 196.026†	1703.1	0.996654 mg/L		0.0050929	0.996654 mg/L	0.0050929	0.51%
QC value within limits for Se		196.026	Recovery =	99.67%			
Sn 189.927†	-10.5	-0.0046949 mg/L		0.00017013	-0.0046949 mg/L	0.00017013	3.62%
Ti 334.940†	1693.5	-0.0009984 mg/L		0.00010692	-0.0009984 mg/L	0.00010692	10.71%
Tl 190.801†	1779.5	1.00306 mg/L		0.010336	1.00306 mg/L	0.010336	1.03%
QC value within limits for Tl		190.801	Recovery =	100.31%			
V 290.880†	81563.1	0.508677 mg/L		0.0002643	0.508677 mg/L	0.0002643	0.05%
QC value within limits for V		290.880	Recovery =	101.74%			
Zn 206.200†	64924.2	0.987739 mg/L		0.0061233	0.987739 mg/L	0.0061233	0.62%
QC value within limits for Zn		206.200	Recovery =	98.77%			

All analyte(s) passed QC.

Sequence No.: 49
 Sample ID: CCV V-173510
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/25/2013 1:34:43 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
Sc 361.383	863804.4	95.5 %	0.18			0.19%
Y 371.029	274444.8	92.8 %	0.62			0.67%
Ag 328.068†	18800.2	0.0981589 mg/L	0.00099334	0.0981589 mg/L	0.00099334	1.01%
QC value within limits for Ag		328.068 Recovery = 98.16%				
Al 308.215†	134153.3	4.93810 mg/L	0.054154	4.93810 mg/L	0.054154	1.10%
QC value within limits for Al		308.215 Recovery = 98.76%				
As 188.979†	780.3	0.484703 mg/L	0.0035664	0.484703 mg/L	0.0035664	0.74%
QC value within limits for As		188.979 Recovery = 96.94%				
Ba 233.527†	70633.6	0.496563 mg/L	0.0058723	0.496563 mg/L	0.0058723	1.18%
QC value within limits for Ba		233.527 Recovery = 99.31%				
Be 313.107†	1455631.5	0.481852 mg/L	0.0017510	0.481852 mg/L	0.0017510	0.36%
QC value within limits for Be		313.107 Recovery = 96.37%				
Ca 315.887†	5360523.3	49.2999 mg/L	0.20524	49.2999 mg/L	0.20524	0.42%
QC value within limits for Ca		315.887 Recovery = 98.60%				
Cd 228.802†	30157.6	0.495302 mg/L	0.0005400	0.495302 mg/L	0.0005400	0.11%
QC value within limits for Cd		228.802 Recovery = 99.06%				
Co 228.616†	22950.8	0.495681 mg/L	0.0000735	0.495681 mg/L	0.0000735	0.01%
QC value within limits for Co		228.616 Recovery = 99.14%				
Cr 267.716†	40415.4	0.502190 mg/L	0.0023332	0.502190 mg/L	0.0023332	0.46%
QC value within limits for Cr		267.716 Recovery = 100.44%				
Cu 327.393†	65419.0	0.481179 mg/L	0.0042615	0.481179 mg/L	0.0042615	0.89%
QC value within limits for Cu		327.393 Recovery = 96.24%				
Fe 273.955†	123150.3	5.00496 mg/L	0.050356	5.00496 mg/L	0.050356	1.01%
QC value within limits for Fe		273.955 Recovery = 100.10%				
K 404.721†	4315.6				106.04	2.46%
Unable to evaluate QC.						
Mg 279.077†	987411.7	50.1311 mg/L	0.21169	50.1311 mg/L	0.21169	0.42%
QC value within limits for Mg		279.077 Recovery = 100.26%				
Mn 257.610†	375439.5	0.487500 mg/L	0.0056149	0.487500 mg/L	0.0056149	1.15%
QC value within limits for Mn		257.610 Recovery = 97.50%				
Mo 202.031†	9940.2	0.490262 mg/L	0.0009201	0.490262 mg/L	0.0009201	0.19%
QC value within limits for Mo		202.031 Recovery = 98.05%				
Na 330.237†	54438.7	46.9886 mg/L	0.46901	46.9886 mg/L	0.46901	1.00%
QC value within limits for Na		330.237 Recovery = 93.98%				
Ni 231.604†	25664.0	0.496832 mg/L	0.0045774	0.496832 mg/L	0.0045774	0.92%
QC value within limits for Ni		231.604 Recovery = 99.37%				
Pb 220.353†	7021.2	0.491394 mg/L	0.0000010	0.491394 mg/L	0.0000010	0.00%
QC value within limits for Pb		220.353 Recovery = 98.28%				
Sb 206.836†	1214.2	0.500962 mg/L	0.0007503	0.500962 mg/L	0.0007503	0.15%
QC value within limits for Sb		206.836 Recovery = 100.19%				
Se 196.026†	816.7	0.470307 mg/L	0.0001258	0.470307 mg/L	0.0001258	0.03%
QC value within limits for Se		196.026 Recovery = 94.06%				
Sn 189.927†	2146.9	0.502341 mg/L	0.0030208	0.502341 mg/L	0.0030208	0.60%
QC value within limits for Sn		189.927 Recovery = 100.47%				
Ti 334.940†	340957.1	0.487809 mg/L	0.0052479	0.487809 mg/L	0.0052479	1.08%
QC value within limits for Ti		334.940 Recovery = 97.56%				
Tl 190.801†	859.1	0.497905 mg/L	0.0039692	0.497905 mg/L	0.0039692	0.80%
QC value within limits for Tl		190.801 Recovery = 99.58%				
V 290.880†	69221.2	0.487808 mg/L	0.0040144	0.487808 mg/L	0.0040144	0.82%
QC value within limits for V		290.880 Recovery = 97.56%				
Zn 206.200†	31757.9	0.486959 mg/L	0.0007637	0.486959 mg/L	0.0007637	0.16%
QC value within limits for Zn		206.200 Recovery = 97.39%				

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 50

Sample ID: LLCCV V-177224 [aq]

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/25/2013 1:38:11 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLCCV V-177224 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	889490.0	98.4 %		0.57			0.58%
Y 371.029	287900.3	97.3 %		0.77			0.79%
Ag 328.068†	3902.1	0.0197592 mg/L	0.00004272	0.0197592 mg/L	0.00004272	0.22%	
QC value within limits for Ag	328.068	Recovery = 98.80%					
Al 308.215†	5586.8	0.165162 mg/L	0.0022560	0.165162 mg/L	0.0022560	1.37%	
QC value within limits for Al	308.215	Recovery = 82.58%					
As 188.979†	30.3	0.0180066 mg/L	0.00040433	0.0180066 mg/L	0.00040433	2.25%	
QC value within limits for As	188.979	Recovery = 90.03%					
Ba 233.527†	7134.0	0.0462341 mg/L	0.00026280	0.0462341 mg/L	0.00026280	0.57%	
QC value within limits for Ba	233.527	Recovery = 92.47%					
Be 313.107†	34945.4	0.0084714 mg/L	0.00007424	0.0084714 mg/L	0.00007424	0.88%	
QC value within limits for Be	313.107	Recovery = 70.59%					
Ca 315.887†	541671.0	4.49142 mg/L	0.010389	4.49142 mg/L	0.010389	0.23%	
QC value within limits for Ca	315.887	Recovery = 89.83%					
Cd 228.802†	734.1	0.0084630 mg/L	0.00001110	0.0084630 mg/L	0.00001110	0.13%	
QC value within limits for Cd	228.802	Recovery = 70.52%					
Co 228.616†	958.0	0.0155890 mg/L	0.00006119	0.0155890 mg/L	0.00006119	0.39%	
QC value within limits for Co	228.616	Recovery = 77.95%					
Cr 267.716†	4046.8	0.0460751 mg/L	0.00058438	0.0460751 mg/L	0.00058438	1.27%	
QC value within limits for Cr	267.716	Recovery = 92.15%					
Cu 327.393†	6231.7	0.0416431 mg/L	0.00013659	0.0416431 mg/L	0.00013659	0.33%	
QC value within limits for Cu	327.393	Recovery = 83.29%					
Fe 273.955†	7446.9	0.256413 mg/L	0.0022169	0.256413 mg/L	0.0022169	0.86%	
QC value within limits for Fe	273.955	Recovery = 85.47%					
K 404.721†	435.4				79.37	18.23%	
Unable to evaluate QC.							
Mg 279.077†	100139.3	4.58821 mg/L	0.010444	4.58821 mg/L	0.010444	0.23%	
QC value within limits for Mg	279.077	Recovery = 91.76%					
Mn 257.610†	30156.0	0.0345748 mg/L	0.00008320	0.0345748 mg/L	0.00008320	0.24%	
QC value within limits for Mn	257.610	Recovery = 86.44%					
Mo 202.031†	421.9	0.0167125 mg/L	0.00069144	0.0167125 mg/L	0.00069144	4.14%	
QC value within limits for Mo	202.031	Recovery = 83.56%					
Na 330.237†	4758.0	4.36525 mg/L	0.084439	4.36525 mg/L	0.084439	1.93%	
QC value within limits for Na	330.237	Recovery = 87.31%					
Ni 231.604†	2611.0	0.0453303 mg/L	0.00075407	0.0453303 mg/L	0.00075407	1.66%	
QC value within limits for Ni	231.604	Recovery = 90.66%					
Pb 220.353†	199.7	0.0100973 mg/L	0.00043309	0.0100973 mg/L	0.00043309	4.29%	
QC value within limits for Pb	220.353	Recovery = 84.14%					
Sb 206.836†	52.6	0.0184299 mg/L	0.00371914	0.0184299 mg/L	0.00371914	20.18%	
QC value within limits for Sb	206.836	Recovery = 92.15%					
Se 196.026†	75.5	0.0368901 mg/L	0.00287105	0.0368901 mg/L	0.00287105	7.78%	
QC value within limits for Se	196.026	Recovery = 92.23%					
Sn 189.927†	205.7	0.0449884 mg/L	0.00099356	0.0449884 mg/L	0.00099356	2.21%	
QC value within limits for Sn	189.927	Recovery = 89.98%					
Ti 334.940†	32565.7	0.0434819 mg/L	0.00000989	0.0434819 mg/L	0.00000989	0.02%	
QC value within limits for Ti	334.940	Recovery = 86.96%					
Tl 190.801†	38.5	0.0182613 mg/L	0.00409916	0.0182613 mg/L	0.00409916	22.45%	
QC value within limits for Tl	190.801	Recovery = 91.31%					
V 290.880†	7255.0	0.0460100 mg/L	0.00012788	0.0460100 mg/L	0.00012788	0.28%	
QC value within limits for V	290.880	Recovery = 92.02%					
Zn 206.200†	3228.7	0.0431772 mg/L	0.00050750	0.0431772 mg/L	0.00050750	1.18%	
QC value within limits for Zn	206.200	Recovery = 86.35%					

All analyte(s) passed QC. One or more analytes were not evaluated.

Sequence No.: 51

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 11/25/2013 1:41:30 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	897596.9	99.2 %		0.54			0.54%
Y 371.029	292441.6	98.8 %		0.74			0.75%
Ag 328.068†	10.2	-0.0006399 mg/L	0.00016837	-0.0006399 mg/L	0.00016837	26.31%	
QC value within limits for Ag 328.068		Recovery = Not calculated					
Al 308.215†	411.3	-0.0269356 mg/L	0.00645302	-0.0269356 mg/L	0.00645302	23.96%	
QC value within limits for Al 308.215		Recovery = Not calculated					
As 188.979†	0.7	-0.0003814 mg/L	0.00192575	-0.0003814 mg/L	0.00192575	504.96%	
QC value within limits for As 188.979		Recovery = Not calculated					
Ba 233.527†	-11.6	-0.0044503 mg/L	0.00000545	-0.0044503 mg/L	0.00000545	0.12%	
QC value within limits for Ba 233.527		Recovery = Not calculated					
Be 313.107†	-136.7	-0.0032052 mg/L	0.00001048	-0.0032052 mg/L	0.00001048	0.33%	
QC value within limits for Be 313.107		Recovery = Not calculated					
Ca 315.887†	-1857.8	-0.563276 mg/L	0.0028676	-0.563276 mg/L	0.0028676	0.51%	
QC value within limits for Ca 315.887		Recovery = Not calculated					
Cd 228.802†	22.6	-0.0032898 mg/L	0.00001831	-0.0032898 mg/L	0.00001831	0.56%	
QC value within limits for Cd 228.802		Recovery = Not calculated					
Co 228.616†	22.3	-0.0047845 mg/L	0.00013017	-0.0047845 mg/L	0.00013017	2.72%	
QC value within limits for Co 228.616		Recovery = Not calculated					
Cr 267.716†	-0.3	-0.0045141 mg/L	0.00044427	-0.0045141 mg/L	0.00044427	9.84%	
QC value within limits for Cr 267.716		Recovery = Not calculated					
Cu 327.393†	-520.4	-0.0084893 mg/L	0.00167002	-0.0084893 mg/L	0.00167002	19.67%	
QC value within limits for Cu 327.393		Recovery = Not calculated					
Fe 273.955†	92.6	-0.0454124 mg/L	0.00010254	-0.0454124 mg/L	0.00010254	0.23%	
QC value within limits for Fe 273.955		Recovery = Not calculated					
K 404.721†	82.5				173.20	210.02%	
Unable to evaluate QC.							
Mg 279.077†	18.8	-0.550612 mg/L	0.0061123	-0.550612 mg/L	0.0061123	1.11%	
QC value within limits for Mg 279.077		Recovery = Not calculated					
Mn 257.610†	-13.3	-0.0049505 mg/L	0.00000592	-0.0049505 mg/L	0.00000592	0.12%	
QC value within limits for Mn 257.610		Recovery = Not calculated					
Mo 202.031†	-6.8	-0.0045016 mg/L	0.00021425	-0.0045016 mg/L	0.00021425	4.76%	
QC value within limits for Mo 202.031		Recovery = Not calculated					
Na 330.237†	24.4	0.304143 mg/L	0.0498043	0.304143 mg/L	0.0498043	16.38%	
QC value within limits for Na 330.237		Recovery = Not calculated					
Ni 231.604†	-2.5	-0.0058187 mg/L	0.00005735	-0.0058187 mg/L	0.00005735	0.99%	
QC value within limits for Ni 231.604		Recovery = Not calculated					
Pb 220.353†	27.1	-0.0020218 mg/L	0.00091651	-0.0020218 mg/L	0.00091651	45.33%	
QC value within limits for Pb 220.353		Recovery = Not calculated					
Sb 206.836†	1.0	-0.0029726 mg/L	0.00119799	-0.0029726 mg/L	0.00119799	40.30%	
QC value within limits for Sb 206.836		Recovery = Not calculated					
Se 196.026†	7.7	-0.0026901 mg/L	0.00247563	-0.0026901 mg/L	0.00247563	92.03%	
QC value within limits for Se 196.026		Recovery = Not calculated					
Sn 189.927†	5.4	-0.0022218 mg/L	0.00000583	-0.0022218 mg/L	0.00000583	0.26%	
QC value within limits for Sn 189.927		Recovery = Not calculated					
Ti 334.940†	-52.2	-0.0035135 mg/L	0.00007134	-0.0035135 mg/L	0.00007134	2.03%	
QC value within limits for Ti 334.940		Recovery = Not calculated					
Tl 190.801†	3.1	-0.0026299 mg/L	0.00049673	-0.0026299 mg/L	0.00049673	18.89%	
QC value within limits for Tl 190.801		Recovery = Not calculated					
V 290.880†	220.1	-0.0041519 mg/L	0.00088703	-0.0041519 mg/L	0.00088703	21.36%	
QC value within limits for V 290.880		Recovery = Not calculated					
Zn 206.200†	15.0	-0.0068375 mg/L	0.00012753	-0.0068375 mg/L	0.00012753	1.87%	
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.: 52
 Sample ID: A1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 146
 Date Collected: 11/25/2013 1:44:44 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: A1

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	856937.9	94.8	%	0.68				0.72%
Y 371.029	272421.8	92.1	%	0.75				0.82%
Ag 328.068†	152.6	0.0001066	mg/L	0.00004964	0.0001066	mg/L	0.00004964	46.56%
Al 308.215†	13206199.6	491.034	mg/L	1.7750	491.034	mg/L	1.7750	0.36%
As 188.979†	43.8	-0.0054969	mg/L	0.00107164	-0.0054969	mg/L	0.00107164	19.50%
Ba 233.527†	84.9	-0.0037666	mg/L	0.00006626	-0.0037666	mg/L	0.00006626	1.76%
Be 313.107†	122.3	-0.0031191	mg/L	0.00000116	-0.0031191	mg/L	0.00000116	0.04%
Ca 315.887†	-910.2	-0.658101	mg/L	0.0036422	-0.658101	mg/L	0.0036422	0.55%
Cd 228.802†	99.7	-0.0039857	mg/L	0.00002622	-0.0039857	mg/L	0.00002622	0.66%
Co 228.616†	-129.3	-0.0080593	mg/L	0.00008241	-0.0080593	mg/L	0.00008241	1.02%
Cr 267.716†	21.7	-0.0041987	mg/L	0.00012403	-0.0041987	mg/L	0.00012403	2.95%
Cu 327.393†	568.1	-0.0063225	mg/L	0.00190516	-0.0063225	mg/L	0.00190516	30.13%
Fe 273.955†	434.0	-0.0314023	mg/L	0.00012415	-0.0314023	mg/L	0.00012415	0.40%
K 404.721†	264.8						258.99	97.81%
Mg 279.077†	60.8	-0.548359	mg/L	0.0011031	-0.548359	mg/L	0.0011031	0.20%
Mn 257.610†	2228.6	-0.0019974	mg/L	0.00001416	-0.0019974	mg/L	0.00001416	0.71%
Mo 202.031†	152.0	-0.0054368	mg/L	0.00003067	-0.0054368	mg/L	0.00003067	0.56%
Na 330.237†	-35.9	0.252355	mg/L	0.0674771	0.252355	mg/L	0.0674771	26.74%
Ni 231.604†	87.2	-0.0040540	mg/L	0.00048227	-0.0040540	mg/L	0.00048227	11.90%
Pb 220.353†	-1042.9	-0.0124120	mg/L	0.00001559	-0.0124120	mg/L	0.00001559	0.13%
Sb 206.836†	-18.4	-0.0036422	mg/L	0.00189923	-0.0036422	mg/L	0.00189923	52.14%
Se 196.026†	30.1	-0.0098120	mg/L	0.00032387	-0.0098120	mg/L	0.00032387	3.30%
Sn 189.927†	44.3	-0.0079260	mg/L	0.00022480	-0.0079260	mg/L	0.00022480	2.84%
Ti 334.940†	281.3	-0.0030330	mg/L	0.00007618	-0.0030330	mg/L	0.00007618	2.51%
Tl 190.801†	44.6	-0.0026454	mg/L	0.00178776	-0.0026454	mg/L	0.00178776	67.58%
V 290.880†	381.9	-0.0029821	mg/L	0.00056227	-0.0029821	mg/L	0.00056227	18.85%
Zn 206.200†	259.3	-0.0113941	mg/L	0.00004189	-0.0113941	mg/L	0.00004189	0.37%

Sequence No.: 53
 Sample ID: Ca
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 147
 Date Collected: 11/25/2013 1:49:08 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: Ca

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	837638.4	92.6	%	0.42			0.45%
Y 371.029	270850.4	91.5	%	0.55			0.60%
Ag 328.068†	-1216.8	-0.0070627	mg/L	0.00013326	-0.0070627 mg/L	0.00013326	1.89%
Al 308.215†	1590.8	0.0166889	mg/L	0.00354682	0.0166889 mg/L	0.00354682	21.25%
As 188.979†	6.8	-0.0044367	mg/L	0.00107780	-0.0044367 mg/L	0.00107780	24.29%
Ba 233.527†	9.0	-0.0043044	mg/L	0.00003771	-0.0043044 mg/L	0.00003771	0.88%
Be 313.107†	-1875.2	-0.0037853	mg/L	0.00003159	-0.0037853 mg/L	0.00003159	0.83%
Ca 315.887†	55345528.3	514.234	mg/L	5.8365	514.234 mg/L	5.8365	1.13%
Cd 228.802†	37.7	-0.0052012	mg/L	0.00010548	-0.0052012 mg/L	0.00010548	2.03%
Co 228.616†	-26.1	-0.0057894	mg/L	0.00010703	-0.0057894 mg/L	0.00010703	1.85%
Cr 267.716†	63.9	-0.0036405	mg/L	0.00008626	-0.0036405 mg/L	0.00008626	2.37%
Cu 327.393†	197.8	-0.0102029	mg/L	0.00011470	-0.0102029 mg/L	0.00011470	1.12%
Fe 273.955†	167.6	-0.0423348	mg/L	0.00024271	-0.0423348 mg/L	0.00024271	0.57%
K 404.721†	-800.4					25.16	3.14%
Mg 279.077†	7.6	-0.551027	mg/L	0.0023608	-0.551027 mg/L	0.0023608	0.43%
Mn 257.610†	205.7	-0.0046578	mg/L	0.00006148	-0.0046578 mg/L	0.00006148	1.32%
Mo 202.031†	278.9	-0.0082017	mg/L	0.00032485	-0.0082017 mg/L	0.00032485	3.96%
Na 330.237†	298.1	0.538924	mg/L	0.0204949	0.538924 mg/L	0.0204949	3.80%
Ni 231.604†	-11.4	-0.0059764	mg/L	0.00003819	-0.0059764 mg/L	0.00003819	0.64%
Pb 220.353†	37.0	-0.0009788	mg/L	0.00084363	-0.0009788 mg/L	0.00084363	86.19%
Sb 206.836†	2.4	-0.0024035	mg/L	0.00056373	-0.0024035 mg/L	0.00056373	23.45%
Se 196.026†	35.9	0.0003434	mg/L	0.00040653	0.0003434 mg/L	0.00040653	118.40%
Sn 189.927†	-41.4	-0.0015768	mg/L	0.00176281	-0.0015768 mg/L	0.00176281	111.80%
Ti 334.940†	1119.1	-0.0018259	mg/L	0.00000742	-0.0018259 mg/L	0.00000742	0.41%
Tl 190.801†	-4.9	-0.0044730	mg/L	0.00148836	-0.0044730 mg/L	0.00148836	33.27%
V 290.880†	410.2	-0.0027769	mg/L	0.00086571	-0.0027769 mg/L	0.00086571	31.18%
Zn 206.200†	180.4	-0.0042672	mg/L	0.00021791	-0.0042672 mg/L	0.00021791	5.11%

Sequence No.: 54
 Sample ID: Fe
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 148
 Date Collected: 11/25/2013 1:52:53 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: Fe

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	904682.2	100	%	0.1			0.09%
Y 371.029	286398.2	96.8	%	0.26			0.27%
Ag 328.068†	-2137.0	0.0027558	mg/L	0.00041278	0.0027558	mg/L	0.00041278 14.98%
Al 308.215†	793.4	-0.0127285	mg/L	0.00167326	-0.0127285	mg/L	0.00167326 13.15%
As 188.979†	-17.0	0.0005042	mg/L	0.00183444	0.0005042	mg/L	0.00183444 363.83%
Ba 233.527†	1233.6	-0.0020038	mg/L	0.00024549	-0.0020038	mg/L	0.00024549 12.25%
Be 313.107†	-1095.6	-0.0035250	mg/L	0.00001498	-0.0035250	mg/L	0.00001498 0.42%
Ca 315.887†	63.0	-0.758967	mg/L	0.0037884	-0.758967	mg/L	0.0037884 0.50%
Cd 228.802†	75.3	-0.0040550	mg/L	0.00021613	-0.0040550	mg/L	0.00021613 5.33%
Co 228.616†	203.7	-0.0008323	mg/L	0.00003756	-0.0008323	mg/L	0.00003756 4.51%
Cr 267.716†	-230.7	-0.0073873	mg/L	0.00009528	-0.0073873	mg/L	0.00009528 1.29%
Cu 327.393†	-307.0	-0.0069035	mg/L	0.00038760	-0.0069035	mg/L	0.00038760 5.61%
Fe 273.955†	4105387.2	168.439	mg/L	0.0203	168.439	mg/L	0.0203 0.01%
K 404.721†	-870.9					92.07	10.57%
Mg 279.077†	1312.4	-0.601931	mg/L	0.0012506	-0.601931	mg/L	0.0012506 0.21%
Mn 257.610†	566.0	-0.0041904	mg/L	0.00004018	-0.0041904	mg/L	0.00004018 0.96%
Mo 202.031†	-5.6	-0.0044431	mg/L	0.00043748	-0.0044431	mg/L	0.00043748 9.85%
Na 330.237†	-144.1	0.159496	mg/L	0.0222520	0.159496	mg/L	0.0222520 13.95%
Ni 231.604†	16.6	-0.0054449	mg/L	0.00031328	-0.0054449	mg/L	0.00031328 5.75%
Pb 220.353†	236.4	-0.0034582	mg/L	0.00099637	-0.0034582	mg/L	0.00099637 28.81%
Sb 206.836†	-32.5	-0.0001911	mg/L	0.00237852	-0.0001911	mg/L	0.00237852 >999.9%
Se 196.026†	-43.7	0.0037255	mg/L	0.00249620	0.0037255	mg/L	0.00249620 67.00%
Sn 189.927†	-6.5	-0.0050236	mg/L	0.00004916	-0.0050236	mg/L	0.00004916 0.98%
Ti 334.940†	350.4	-0.0029336	mg/L	0.00005181	-0.0029336	mg/L	0.00005181 1.77%
Tl 190.801†	-1.8	-0.0012013	mg/L	0.00276142	-0.0012013	mg/L	0.00276142 229.87%
V 290.880†	1028.3	-0.0046029	mg/L	0.00010684	-0.0046029	mg/L	0.00010684 2.32%
Zn 206.200†	126.1	-0.0117112	mg/L	0.00002683	-0.0117112	mg/L	0.00002683 0.23%

Sequence No.: 55
 Sample ID: Mg
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 149
 Date Collected: 11/25/2013 1:56:26 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: Mg

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	844211.6	93.3	%	0.35			0.38%
Y 371.029	273645.7	92.5	%	0.57			0.62%
Ag 328.068†	266.6	0.0006997	mg/L	0.00040629	0.0006997 mg/L	0.00040629	58.07%
Al 308.215†	1654.9	0.0192751	mg/L	0.00038253	0.0192751 mg/L	0.00038253	1.98%
As 188.979†	5.7	-0.0018539	mg/L	0.00197877	-0.0018539 mg/L	0.00197877	106.73%
Ba 233.527†	-25.1	-0.0045451	mg/L	0.00007653	-0.0045451 mg/L	0.00007653	1.68%
Be 313.107†	-56.0	-0.0031799	mg/L	0.00000188	-0.0031799 mg/L	0.00000188	0.06%
Ca 315.887†	-1895.5	-0.563722	mg/L	0.0046523	-0.563722 mg/L	0.0046523	0.83%
Cd 228.802†	39.2	-0.0030152	mg/L	0.00019989	-0.0030152 mg/L	0.00019989	6.63%
Co 228.616†	56.7	-0.0040368	mg/L	0.00030460	-0.0040368 mg/L	0.00030460	7.55%
Cr 267.716†	-393.2	-0.0093954	mg/L	0.00027821	-0.0093954 mg/L	0.00027821	2.96%
Cu 327.393†	-37.8	-0.0049017	mg/L	0.00134685	-0.0049017 mg/L	0.00134685	27.48%
Fe 273.955†	-639.5	-0.0754588	mg/L	0.00210597	-0.0754588 mg/L	0.00210597	2.79%
K 404.721†	350.9					440.85	125.64%
Mg 279.077†	11059521.9	567.065	mg/L	5.6680	567.065 mg/L	5.6680	1.00%
Mn 257.610†	16102.1	-0.0047936	mg/L	0.00019162	-0.0047936 mg/L	0.00019162	4.00%
Mo 202.031†	33.2	-0.0025092	mg/L	0.00005498	-0.0025092 mg/L	0.00005498	2.19%
Na 330.237†	-175.7	0.132435	mg/L	0.0781949	0.132435 mg/L	0.0781949	59.04%
Ni 231.604†	83.6	-0.0041313	mg/L	0.00010331	-0.0041313 mg/L	0.00010331	2.50%
Pb 220.353†	102.8	-0.0048685	mg/L	0.00035804	-0.0048685 mg/L	0.00035804	7.35%
Sb 206.836†	10.5	-0.0023241	mg/L	0.00248203	-0.0023241 mg/L	0.00248203	106.80%
Se 196.026†	-0.9	-0.0098992	mg/L	0.00411787	-0.0098992 mg/L	0.00411787	41.60%
Sn 189.927†	13.8	0.0056967	mg/L	0.00218690	0.0056967 mg/L	0.00218690	38.39%
Ti 334.940†	3048.1	0.0009532	mg/L	0.00002215	0.0009532 mg/L	0.00002215	2.32%
Tl 190.801†	-2.4	-0.0118632	mg/L	0.00368894	-0.0118632 mg/L	0.00368894	31.10%
V 290.880†	11852.0	0.0051956	mg/L	0.00244149	0.0051956 mg/L	0.00244149	46.99%
Zn 206.200†	108.3	-0.0053855	mg/L	0.00006790	-0.0053855 mg/L	0.00006790	1.26%

Sequence No.: 56
 Sample ID: 75646-002
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 84
 Date Collected: 11/25/2013 2:00:52 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-002

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	898241.5	99.3 %	%	0.12			0.12%
Y 371.029	287869.5	97.3 %	%	0.27			0.28%
Ag 328.068†	-10.3	-0.0007436	mg/L	0.00022010	-0.0007436	mg/L	0.00022010 29.60%
Al 308.215†	644.6	-0.0182874	mg/L	0.00165149	-0.0182874	mg/L	0.00165149 9.03%
As 188.979†	-1.2	-0.0017978	mg/L	0.00130670	-0.0017978	mg/L	0.00130670 72.68%
Ba 233.527†	3671.0	0.0216753	mg/L	0.00005264	0.0216753	mg/L	0.00005264 0.24%
Be 313.107†	27.9	-0.0031503	mg/L	0.00002265	-0.0031503	mg/L	0.00002265 0.72%
Ca 315.887†	1263250.6	11.2030	mg/L	0.02261	11.2030	mg/L	0.02261 0.20%
Cd 228.802†	17.4	-0.0034256	mg/L	0.00007014	-0.0034256	mg/L	0.00007014 2.05%
Co 228.616†	45.1	-0.0042819	mg/L	0.00014154	-0.0042819	mg/L	0.00014154 3.31%
Cr 267.716†	-2.6	-0.0044857	mg/L	0.00019717	-0.0044857	mg/L	0.00019717 4.40%
Cu 327.393†	-198.2	-0.0062540	mg/L	0.00002202	-0.0062540	mg/L	0.00002202 0.35%
Fe 273.955†	1039.7	-0.0065447	mg/L	0.00055857	-0.0065447	mg/L	0.00055857 8.53%
K 404.721†	685.9					67.35	9.82%
Mg 279.077†	80840.7	3.59824	mg/L	0.001386	3.59824	mg/L	0.001386 0.04%
Mn 257.610†	102002.7	0.129172	mg/L	0.0001023	0.129172	mg/L	0.0001023 0.08%
Mo 202.031†	25.0	-0.0033283	mg/L	0.00024964	-0.0033283	mg/L	0.00024964 7.50%
Na 330.237†	35812.8	31.0086	mg/L	0.09669	31.0086	mg/L	0.09669 0.31%
Ni 231.604†	65.8	-0.0044797	mg/L	0.00044615	-0.0044797	mg/L	0.00044615 9.96%
Pb 220.353†	40.1	-0.0011602	mg/L	0.00061500	-0.0011602	mg/L	0.00061500 53.01%
Sb 206.836†	4.3	-0.0016067	mg/L	0.00037577	-0.0016067	mg/L	0.00037577 23.39%
Se 196.026†	15.9	0.0017019	mg/L	0.00615302	0.0017019	mg/L	0.00615302 361.53%
Sn 189.927†	-0.6	-0.0033291	mg/L	0.00126820	-0.0033291	mg/L	0.00126820 38.09%
Ti 334.940†	-136.1	-0.0036344	mg/L	0.00009165	-0.0036344	mg/L	0.00009165 2.52%
Tl 190.801†	2.2	-0.0032472	mg/L	0.00024841	-0.0032472	mg/L	0.00024841 7.65%
V 290.880†	628.9	-0.0017068	mg/L	0.00004948	-0.0017068	mg/L	0.00004948 2.90%
Zn 206.200†	787.5	0.0051878	mg/L	0.00006142	0.0051878	mg/L	0.00006142 1.18%

Sequence No.: 57

Sample ID: ICSEA V-173614

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 11/25/2013 2:04:10 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSEA V-173614

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	792554.8	87.6 %		0.37			0.43%
Y 371.029	252638.2	85.4 %		0.08			0.09%
Ag 328.068†	-3205.2	-0.0008293 mg/L		0.00073659	-0.0008293 mg/L	0.00073659	88.82%
Al 308.215†	13308207.2	494.827 mg/L		2.0956	494.827 mg/L	2.0956	0.42%
As 188.979†	38.6	-0.0068254 mg/L		0.00044915	-0.0068254 mg/L	0.00044915	6.58%
Ba 233.527†	1924.5	0.0020220 mg/L		0.00014390	0.0020220 mg/L	0.00014390	7.12%
Be 313.107†	-2628.8	-0.0040367 mg/L		0.00000032	-0.0040367 mg/L	0.00000032	0.01%
Ca 315.887†	51423347.2	477.406 mg/L		1.1199	477.406 mg/L	1.1199	0.23%
Cd 228.802†	235.1	-0.0056321 mg/L		0.00008045	-0.0056321 mg/L	0.00008045	1.43%
Co 228.616†	-37.2	-0.0059684 mg/L		0.00012172	-0.0059684 mg/L	0.00012172	2.04%
Cr 267.716†	-447.0	-0.0099244 mg/L		0.00015693	-0.0099244 mg/L	0.00015693	1.58%
Cu 327.393†	619.4	-0.0125357 mg/L		0.00056693	-0.0125357 mg/L	0.00056693	4.52%
Fe 273.955†	4668165.6	191.536 mg/L		0.2627	191.536 mg/L	0.2627	0.14%
K 404.721†	-1730.0					135.35	7.82%
Mg 279.077†	9936335.1	509.285 mg/L		1.6773	509.285 mg/L	1.6773	0.33%
Mn 257.610†	1285.6	-0.0221483 mg/L		0.00008725	-0.0221483 mg/L	0.00008725	0.39%
Mo 202.031†	614.7	0.0009096 mg/L		0.00105281	0.0009096 mg/L	0.00105281	115.74%
Na 330.237†	187.4	0.443969 mg/L		0.0623570	0.443969 mg/L	0.0623570	14.05%
Ni 231.604†	35.6	-0.0050375 mg/L		0.00025632	-0.0050375 mg/L	0.00025632	5.09%
Pb 220.353†	-755.5	-0.0170865 mg/L		0.00007831	-0.0170865 mg/L	0.00007831	0.46%
Sb 206.836†	-58.1	-0.0040235 mg/L		0.00153105	-0.0040235 mg/L	0.00153105	38.05%
Se 196.026†	-10.8	-0.0068552 mg/L		0.00407905	-0.0068552 mg/L	0.00407905	59.50%
Sn 189.927†	-0.4	-0.0023970 mg/L		0.00248604	-0.0023970 mg/L	0.00248604	103.71%
Ti 334.940†	1503.6	-0.0012720 mg/L		0.00017147	-0.0012720 mg/L	0.00017147	13.48%
Tl 190.801†	23.5	-0.0130776 mg/L		0.00058687	-0.0130776 mg/L	0.00058687	4.49%
V 290.880†	13021.8	0.0140901 mg/L		0.00040572	0.0140901 mg/L	0.00040572	2.88%
Zn 206.200†	807.0	-0.0104459 mg/L		0.00010945	-0.0104459 mg/L	0.00010945	1.05%

Sequence No.: 58

Sample ID: ICSAB V-173231

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 11/25/2013 2:08:51 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	799016.9	88.3 %		0.62			0.70%
Y 371.029	252935.0	85.5 %		0.45			0.53%
Ag 328.068†	211954.8	1.12583 mg/L		0.000172	1.12583 mg/L	0.000172	0.02%
Al 308.215†	13381196.3	497.541 mg/L		1.2970	497.541 mg/L	1.2970	0.26%
As 188.979†	1789.5	1.08449 mg/L		0.018812	1.08449 mg/L	0.018812	1.73%
Ba 233.527†	77685.1	0.539363 mg/L		0.0028217	0.539363 mg/L	0.0028217	0.52%
Be 313.107†	1593566.4	0.528005 mg/L		0.0011770	0.528005 mg/L	0.0011770	0.22%
Ca 315.887†	51933205.5	482.140 mg/L		0.9694	482.140 mg/L	0.9694	0.20%
Cd 228.802†	66880.3	1.09770 mg/L		0.006656	1.09770 mg/L	0.006656	0.61%
Co 228.616†	24296.8	0.524264 mg/L		0.0040874	0.524264 mg/L	0.0040874	0.78%
Cr 267.716†	42460.6	0.525307 mg/L		0.0063586	0.525307 mg/L	0.0063586	1.21%
Cu 327.393†	74113.4	0.533919 mg/L		0.0002556	0.533919 mg/L	0.0002556	0.05%
Fe 273.955†	4768846.0	195.668 mg/L		0.1576	195.668 mg/L	0.1576	0.08%
K 404.721†	-1880.9					264.58	14.07%
Mg 279.077†	10092224.2	517.286 mg/L		0.3196	517.286 mg/L	0.3196	0.06%
Mn 257.610†	398518.6	0.500401 mg/L		0.0006314	0.500401 mg/L	0.0006314	0.13%
Mo 202.031†	639.3	0.0019227 mg/L		0.00119589	0.0019227 mg/L	0.00119589	62.20%
Na 330.237†	1867.9	1.88573 mg/L		0.042559	1.88573 mg/L	0.042559	2.26%
Ni 231.604†	52513.9	1.02151 mg/L		0.007145	1.02151 mg/L	0.007145	0.70%
Pb 220.353†	13780.4	1.00849 mg/L		0.005088	1.00849 mg/L	0.005088	0.50%
Sb 206.836†	2562.1	1.08341 mg/L		0.017710	1.08341 mg/L	0.017710	1.63%
Se 196.026†	1721.6	1.00745 mg/L		0.000973	1.00745 mg/L	0.000973	0.10%
Sn 189.927†	0.2	-0.0021513 mg/L		0.00119555	-0.0021513 mg/L	0.00119555	55.57%
Ti 334.940†	1486.7	-0.0012963 mg/L		0.00012631	-0.0012963 mg/L	0.00012631	9.74%
Tl 190.801†	1785.2	1.00616 mg/L		0.005038	1.00616 mg/L	0.005038	0.50%
V 290.880†	82423.7	0.514547 mg/L		0.0006112	0.514547 mg/L	0.0006112	0.12%
Zn 206.200†	66461.4	1.01153 mg/L		0.005723	1.01153 mg/L	0.005723	0.57%

Sequence No.: 59

Sample ID: CCV V-173510

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 11/25/2013 2:13:20 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	866218.6	95.8 %		0.77			0.81%
Y 371.029	273288.0	92.4 %		0.27			0.29%
Ag 328.068†	18612.0	0.0971738 mg/L		0.00061727	0.0971738 mg/L	0.00061727	0.64%
Al 308.215†	133172.5	4.90163 mg/L		0.032575	4.90163 mg/L	0.032575	0.66%
As 188.979†	788.8	0.490004 mg/L		0.0114493	0.490004 mg/L	0.0114493	2.34%
Ba 233.527†	69852.0	0.491018 mg/L		0.0015949	0.491018 mg/L	0.0015949	0.32%
Be 313.107†	1458186.4	0.482705 mg/L		0.0014913	0.482705 mg/L	0.0014913	0.31%
Ca 315.887†	5374082.6	49.4261 mg/L		0.04705	49.4261 mg/L	0.04705	0.10%
Cd 228.802†	30202.5	0.496046 mg/L		0.0047712	0.496046 mg/L	0.0047712	0.96%
Co 228.616†	23071.4	0.498319 mg/L		0.0066551	0.498319 mg/L	0.0066551	1.34%
Cr 267.716†	40206.7	0.499587 mg/L		0.0008284	0.499587 mg/L	0.0008284	0.17%
Cu 327.393†	64823.8	0.476753 mg/L		0.0007235	0.476753 mg/L	0.0007235	0.15%
Fe 273.955†	123073.9	5.00182 mg/L		0.013508	5.00182 mg/L	0.013508	0.27%
K 404.721†	4259.6					258.57	6.07%
Mg 279.077†	992381.5	50.3862 mg/L		0.08519	50.3862 mg/L	0.08519	0.17%
Mn 257.610†	372458.1	0.483566 mg/L		0.0016333	0.483566 mg/L	0.0016333	0.34%
Mo 202.031†	9943.7	0.490435 mg/L		0.0040311	0.490435 mg/L	0.0040311	0.82%
Na 330.237†	54178.7	46.7656 mg/L		0.32144	46.7656 mg/L	0.32144	0.69%
Ni 231.604†	25513.9	0.493895 mg/L		0.0004619	0.493895 mg/L	0.0004619	0.09%
Pb 220.353†	7038.8	0.492635 mg/L		0.0064404	0.492635 mg/L	0.0064404	1.31%
Sb 206.836†	1222.8	0.504511 mg/L		0.0071384	0.504511 mg/L	0.0071384	1.41%
Se 196.026†	828.6	0.477250 mg/L		0.0016524	0.477250 mg/L	0.0016524	0.35%
Sn 189.927†	2169.4	0.507644 mg/L		0.0085177	0.507644 mg/L	0.0085177	1.68%
Ti 334.940†	337527.4	0.482868 mg/L		0.0021281	0.482868 mg/L	0.0021281	0.44%
Tl 190.801†	862.5	0.499804 mg/L		0.0053279	0.499804 mg/L	0.0053279	1.07%
V 290.880†	68413.9	0.481940 mg/L		0.0029033	0.481940 mg/L	0.0029033	0.60%
Zn 206.200†	31985.4	0.490502 mg/L		0.0056623	0.490502 mg/L	0.0056623	1.15%

Sequence No.: 60
 Sample ID: LLCCV V-177224 [aq]
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 11/25/2013 2:16:48 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LLCCV V-177224 [aq]

Analyte	Mean Corrected Intensity	Conc. Units	Calib %	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	885546.9	97.9	%	0.42			0.43%
Y 371.029	287060.7	97.0	%	0.44			0.45%
Ag 328.068†	3821.2	0.0193359	mg/L	0.00044303	0.0193359 mg/L	0.00044303	2.29%
Al 308.215†	5559.9	0.164171	mg/L	0.0069324	0.164171 mg/L	0.0069324	4.22%
As 188.979†	29.7	0.0175975	mg/L	0.00113786	0.0175975 mg/L	0.00113786	6.47%
Ba 233.527†	7075.0	0.0458151	mg/L	0.00047416	0.0458151 mg/L	0.00047416	1.03%
Be 313.107†	34755.5	0.0084082	mg/L	0.00005241	0.0084082 mg/L	0.00005241	0.62%
Ca 315.887†	538964.2	4.46625	mg/L	0.020529	4.46625 mg/L	0.020529	0.46%
Cd 228.802†	719.0	0.0082132	mg/L	0.00017070	0.0082132 mg/L	0.00017070	2.08%
Co 228.616†	933.3	0.0150481	mg/L	0.00007717	0.0150481 mg/L	0.00007717	0.51%
Cr 267.716†	4044.3	0.0460404	mg/L	0.00069365	0.0460404 mg/L	0.00069365	1.51%
Cu 327.393†	6291.9	0.0420911	mg/L	0.00124787	0.0420911 mg/L	0.00124787	2.96%
Fe 273.955†	7454.1	0.256708	mg/L	0.0008719	0.256708 mg/L	0.0008719	0.34%
K 404.721†	602.1					308.64	51.26%
Mg 279.077†	99563.4	4.55865	mg/L	0.033137	4.55865 mg/L	0.033137	0.73%
Mn 257.610†	29978.7	0.0343423	mg/L	0.00016262	0.0343423 mg/L	0.00016262	0.47%
Mo 202.031†	409.3	0.0160851	mg/L	0.00118710	0.0160851 mg/L	0.00118710	7.38%
Na 330.237†	4713.2	4.32686	mg/L	0.058122	4.32686 mg/L	0.058122	1.34%
Ni 231.604†	2584.2	0.0448053	mg/L	0.00065233	0.0448053 mg/L	0.00065233	1.46%
Pb 220.353†	194.0	0.0096904	mg/L	0.00013790	0.0096904 mg/L	0.00013790	1.42%
Sb 206.836†	53.5	0.0188179	mg/L	0.00048272	0.0188179 mg/L	0.00048272	2.57%
Se 196.026†	74.3	0.0361978	mg/L	0.00248085	0.0361978 mg/L	0.00248085	6.85%
Sn 189.927†	201.3	0.0439523	mg/L	0.00078607	0.0439523 mg/L	0.00078607	1.79%
Ti 334.940†	32402.0	0.0432461	mg/L	0.00013925	0.0432461 mg/L	0.00013925	0.32%
Tl 190.801†	40.5	0.0194265	mg/L	0.00195292	0.0194265 mg/L	0.00195292	10.05%
V 290.880†	7253.7	0.0460044	mg/L	0.00084184	0.0460044 mg/L	0.00084184	1.83%
Zn 206.200†	3168.0	0.0422318	mg/L	0.00042695	0.0422318 mg/L	0.00042695	1.01%

Sequence No.: 61
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 11/25/2013 2:20:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	892493.7	98.7	%	0.27			0.28%
Y 371.029	291542.5	98.5	%	0.13			0.13%
Ag 328.068†	47.2	-0.0004464	mg/L	0.00022404	-0.0004464 mg/L	0.00022404	50.18%
Al 308.215†	416.8	-0.0267408	mg/L	0.00071196	-0.0267408 mg/L	0.00071196	2.66%
As 188.979†	-2.2	-0.0021775	mg/L	0.00077825	-0.0021775 mg/L	0.00077825	35.74%
Ba 233.527†	-16.0	-0.0044813	mg/L	0.00008191	-0.0044813 mg/L	0.00008191	1.83%
Be 313.107†	15.2	-0.0031546	mg/L	0.00000310	-0.0031546 mg/L	0.00000310	0.10%
Ca 315.887†	-1306.7	-0.558152	mg/L	0.0058775	-0.558152 mg/L	0.0058775	1.05%
Cd 228.802†	11.9	-0.0034671	mg/L	0.00003895	-0.0034671 mg/L	0.00003895	1.12%
Co 228.616†	21.2	-0.0048064	mg/L	0.00039595	-0.0048064 mg/L	0.00039595	8.24%
Cr 267.716†	-1.1	-0.0045215	mg/L	0.00002492	-0.0045215 mg/L	0.00002492	0.55%
Cu 327.393†	-510.8	-0.0084182	mg/L	0.00065284	-0.0084182 mg/L	0.00065284	7.76%
Fe 273.955†	52.3	-0.0470671	mg/L	0.00014244	-0.0470671 mg/L	0.00014244	0.30%
K 404.721†	456.1					233.24	51.13%
Mg 279.077†	65.4	-0.548211	mg/L	0.0035705	-0.548211 mg/L	0.0035705	0.65%
Mn 257.610†	-39.1	-0.0049844	mg/L	0.00002681	-0.0049844 mg/L	0.00002681	0.54%
Mo 202.031†	4.9	-0.0039215	mg/L	0.00039837	-0.0039215 mg/L	0.00039837	10.16%
Na 330.237†	34.2	0.312494	mg/L	0.0156003	0.312494 mg/L	0.0156003	4.99%
Ni 231.604†	-25.4	-0.0062656	mg/L	0.00014452	-0.0062656 mg/L	0.00014452	2.31%
Pb 220.353†	32.3	-0.0016572	mg/L	0.00050175	-0.0016572 mg/L	0.00050175	30.28%
Sb 206.836†	-0.8	-0.0037265	mg/L	0.00200423	-0.0037265 mg/L	0.00200423	53.78%
Se 196.026†	14.5	0.0012753	mg/L	0.00158584	0.0012753 mg/L	0.00158584	124.35%
Sn 189.927†	-0.5	-0.0036033	mg/L	0.00031198	-0.0036033 mg/L	0.00031198	8.66%
Ti 334.940†	-90.0	-0.0035681	mg/L	0.00005184	-0.0035681 mg/L	0.00005184	1.45%
Tl 190.801†	2.1	-0.0031915	mg/L	0.00225646	-0.0031915 mg/L	0.00225646	70.70%
V 290.880†	199.8	-0.0042990	mg/L	0.00024829	-0.0042990 mg/L	0.00024829	5.78%
Zn 206.200†	-10.7	-0.0072380	mg/L	0.00003156	-0.0072380 mg/L	0.00003156	0.44%

Analyst JBL 11/22/13

=====
Analysis Begun

Start Time: 11/22/2013 12:00:15 PM

Plasma On Time: 11/22/2013 9:55:21 AM

Logged In Analyst: shiamala

Technique: ICP Continuous

Spectrometer Model: Optima 3300 DV, S/N 069N5072002 Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\11.21.13.sif

Batch ID: PEICP 1

Results Data Set: SW15727A

Results Library: C:\pe\Administrator\Results\Results.mdb

=====
Method Loaded

Method Name: PE 1 3000DV RADIAL

Method Last Saved: 11/21/2013 4:39:38 PM

IEC File: IEC042213R.iec

MSF File:

Method Description: 200.7/6010B/6010C

=====
Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blk 1 V-174666

Date Collected: 11/22/2013 12:00:15 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

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Mean Data: Calib Blk 1 V-174666

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	23.4	1.48	6.33%	[0.00]	mg/L
Ca 315.887	-80.5	2.46	3.06%	[0.00]	mg/L
Fe 273.955	12.9	2.49	19.32%	[0.00]	mg/L
Mg 279.077	7.6	0.73	9.64%	[0.00]	mg/L
Mn 257.610	-62.6	5.57	8.90%	[0.00]	mg/L
K 766.490	-3102.8	47.91	1.54%	[0.00]	mg/L
Na 589.592	4157.5	186.11	4.48%	[0.00]	mg/L
Ti 334.940	-0.6	7.06	>999.9%	[0.00]	mg/L

15727
27442

Na, K reported

75646.016-032 not reported

Sequence No.: 2
Sample ID: Calib Std 1 V-175715
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 160
Date Collected: 11/22/2013 12:03:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 1 V-175715

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	12.2	8.85	72.68%	[0.1]	mg/L
Ca 315.887	1244.0	4.37	0.35%	[1]	mg/L
Fe 273.955	11.6	5.17	44.51%	[0.1]	mg/L
Mg 279.077	166.8	5.36	3.21%	[1]	mg/L
Mn 257.610	32.6	2.41	7.40%	[0.01]	mg/L
K 766.490	3517.6	58.72	1.67%	[1]	mg/L
Na 589.592	10865.1	87.84	0.81%	[1]	mg/L
Ti 334.940	65.1	0.35	0.54%	[0.01]	mg/L

Sequence No.: 3
Sample ID: Calib Std 2 V-175281
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 11/22/2013 12:06:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 2 V-175281

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	898.7	4.22	0.47%	[5]	mg/L
Ca 315.887	70077.1	91.99	0.13%	[50]	mg/L
Fe 273.955	801.1	0.09	0.01%	[5]	mg/L
Mg 279.077	9163.7	12.99	0.14%	[50]	mg/L
Mn 257.610	1686.6	4.40	0.26%	[0.5]	mg/L
K 766.490	208391.5	0.60	0.00%	[50]	mg/L
Na 589.592	608953.4	114.72	0.02%	[50]	mg/L
Ti 334.940	3525.5	9.88	0.28%	[0.5]	mg/L

Sequence No.: 4

Sample ID: Calib Std 3 V-176344

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 11/22/2013 12:09:13 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib Std 3 V-176344

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	1667.0	9.21	0.55%	[10]	mg/L
Ca 315.887	132197.5	700.18	0.53%	[100]	mg/L
Fe 273.955	1472.2	8.04	0.55%	[10]	mg/L
Mg 279.077	16630.4	30.11	0.18%	[100]	mg/L
Mn 257.610	3077.9	7.90	0.26%	[1.0]	mg/L
K 766.490	395956.0	2340.60	0.59%	[100]	mg/L
Na 589.592	1144883.3	4826.21	0.42%	[100]	mg/L
Ti 334.940	6484.2	18.64	0.29%	[1.0]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Al 308.215	3	Lin, Calc Int	9.8	168.1	0.00000	0.999165	
Ca 315.887	3	Lin, Calc Int	688.7	1330	0.00000	0.999516	
Fe 273.955	3	Lin, Calc Int	10.4	148.6	0.00000	0.998950	
Mg 279.077	3	Lin, Calc Int	154.7	167.8	0.00000	0.998635	
Mn 257.610	3	Lin, Calc Int	27.7	3104	0.00000	0.998798	
K 766.490	3	Lin, Calc Int	1694.7	3981	0.00000	0.999626	
Na 589.592	3	Lin, Calc Int	6380.2	11520	0.00000	0.999458	
Ti 334.940	3	Lin, Calc Int	51.7	6535	0.00000	0.998996	

Sequence No.: 5

Sample ID: ICS3 V-175281

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 11/22/2013 12:12:17 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICS3 V-175281

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	899.2	5.29010 mg/L	0.027655	5.29010 mg/L	0.027655	0.52%
QC value within limits for Al 308.215 Recovery = 105.80%						
Ca 315.887	69437.9	51.7082 mg/L	0.27910	51.7082 mg/L	0.27910	0.54%
QC value within limits for Ca 315.887 Recovery = 103.42%						
Fe 273.955	792.6	5.26511 mg/L	0.059903	5.26511 mg/L	0.059903	1.14%
QC value within limits for Fe 273.955 Recovery = 105.30%						
Mg 279.077	9117.0	53.4012 mg/L	0.37523	53.4012 mg/L	0.37523	0.70%
QC value within limits for Mg 279.077 Recovery = 106.80%						
Mn 257.610	1668.5	0.528690 mg/L	0.0053734	0.528690 mg/L	0.0053734	1.02%
QC value within limits for Mn 257.610 Recovery = 105.74%						
K 766.490	207104.6	51.6014 mg/L	0.25987	51.6014 mg/L	0.25987	0.50%
QC value within limits for K 766.490 Recovery = 103.20%						
Na 589.592	604308.4	51.9136 mg/L	0.23023	51.9136 mg/L	0.23023	0.44%
QC value within limits for Na 589.592 Recovery = 103.83%						
Ti 334.940	3500.3	0.527698 mg/L	0.0046367	0.527698 mg/L	0.0046367	0.88%
QC value within limits for Ti 334.940 Recovery = 105.54%						

All analyte(s) passed QC.

Sequence No.: 6

Sample ID: ICV V-176789

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 11/22/2013 12:15:16 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICV V-176789

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	861.0	5.06294 mg/L	0.008206	5.06294 mg/L	0.008206	0.16%
QC value within limits for Al 308.215 Recovery = 101.26%						
Ca 315.887	67449.6	50.2127 mg/L	0.03888	50.2127 mg/L	0.03888	0.08%
QC value within limits for Ca 315.887 Recovery = 100.43%						
Fe 273.955	764.4	5.07565 mg/L	0.005476	5.07565 mg/L	0.005476	0.11%
QC value within limits for Fe 273.955 Recovery = 101.51%						
Mg 279.077	8909.3	52.1640 mg/L	0.06947	52.1640 mg/L	0.06947	0.13%
QC value within limits for Mg 279.077 Recovery = 104.33%						
Mn 257.610	1589.2	0.503122 mg/L	0.0029199	0.503122 mg/L	0.0029199	0.58%
QC value within limits for Mn 257.610 Recovery = 100.62%						
K 766.490	201024.1	50.0739 mg/L	0.00410	50.0739 mg/L	0.00410	0.01%
QC value within limits for K 766.490 Recovery = 100.15%						
Na 589.592	586364.9	50.3557 mg/L	0.03066	50.3557 mg/L	0.03066	0.06%
QC value within limits for Na 589.592 Recovery = 100.71%						
Ti 334.940	3349.0	0.504556 mg/L	0.0007320	0.504556 mg/L	0.0007320	0.15%
QC value within limits for Ti 334.940 Recovery = 100.91%						

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV [aq] V-176895

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 11/22/2013 12:18:17 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV [aq] V-176895

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	30.0	0.119966 mg/L	0.0489090	0.119966 mg/L	0.0489090	40.77%
QC value less than the lower limit for Al 308.215 Recovery = 59.98%						
Ca 315.887	6703.6	4.52399 mg/L	0.023282	4.52399 mg/L	0.023282	0.51%
QC value within limits for Ca 315.887 Recovery = 90.48%						
Fe 273.955	45.1	0.233452 mg/L	0.0247736	0.233452 mg/L	0.0247736	10.61%
QC value within limits for Fe 273.955 Recovery = 77.82%						
Mg 279.077	908.6	4.49208 mg/L	0.014596	4.49208 mg/L	0.014596	0.32%
QC value within limits for Mg 279.077 Recovery = 89.84%						
Mn 257.610	130.6	0.0331371 mg/L	0.00021764	0.0331371 mg/L	0.00021764	0.66%
QC value within limits for Mn 257.610 Recovery = 82.84%						
K 766.490	20268.0	4.66583 mg/L	0.038784	4.66583 mg/L	0.038784	0.83%
QC value within limits for K 766.490 Recovery = 93.32%						
Na 589.592	61139.0	4.75429 mg/L	0.012308	4.75429 mg/L	0.012308	0.26%
QC value within limits for Na 589.592 Recovery = 95.09%						
Ti 334.940	327.3	0.0421659 mg/L	0.00019119	0.0421659 mg/L	0.00019119	0.45%
QC value within limits for Ti 334.940 Recovery = 84.33%						
QC Failed. Continue with analysis.						

Sequence No.: 8

Sample ID: ICB V-174666

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 11/22/2013 12:21:20 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
Al 308.215	5.9	-0.0235523 mg/L	0.00669672	-0.0235523 mg/L	0.00669672	28.43%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887	-3.3	-0.520468 mg/L	0.0022698	-0.520468 mg/L	0.0022698	0.44%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955	-4.6	-0.100986 mg/L	0.0217083	-0.100986 mg/L	0.0217083	21.50%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	0.3	-0.919957 mg/L	0.0056842	-0.919957 mg/L	0.0056842	0.62%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	0.5	-0.0087728 mg/L	0.00032686	-0.0087728 mg/L	0.00032686	3.73%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490	163.9	-0.384553 mg/L	0.0467028	-0.384553 mg/L	0.0467028	12.14%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592	177.8	-0.538505 mg/L	0.0022229	-0.538505 mg/L	0.0022229	0.41%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940	3.3	-0.0074080 mg/L	0.00046077	-0.0074080 mg/L	0.00046077	6.22%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSA V-175629

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 11/22/2013 12:24:17 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA V-175629

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	86629.7	515.229 mg/L	2.5090	515.229 mg/L	2.5090	0.49%
QC value within limits for Al 308.215 Recovery = 103.05%						
Ca 315.887	653851.9	491.262 mg/L	2.7245	491.262 mg/L	2.7245	0.55%
QC value within limits for Ca 315.887 Recovery = 98.25%						
Fe 273.955	29192.5	196.435 mg/L	1.3865	196.435 mg/L	1.3865	0.71%
QC value within limits for Fe 273.955 Recovery = 98.22%						
Mg 279.077	86495.7	514.456 mg/L	3.4160	514.456 mg/L	3.4160	0.66%
QC value within limits for Mg 279.077 Recovery = 102.89%						
Mn 257.610	10.5	-0.0055392 mg/L	0.00264457	-0.0055392 mg/L	0.00264457	47.74%
K 766.490	232.0	-0.367435 mg/L	0.0684584	-0.367435 mg/L	0.0684584	18.63%
Na 589.592	915.4	-0.474468 mg/L	0.0076911	-0.474468 mg/L	0.0076911	1.62%
Ti 334.940	-58.1	-0.0168063 mg/L	0.00006512	-0.0168063 mg/L	0.00006512	0.39%

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSAB V-175630
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/22/2013 12:27:39 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-175630

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	87711.9	521.666 mg/L	2.8640	521.666 mg/L	2.8640	0.55%
QC value within limits for Al 308.215 Recovery = 104.33%						
Ca 315.887	660066.7	495.936 mg/L	2.7491	495.936 mg/L	2.7491	0.55%
QC value within limits for Ca 315.887 Recovery = 99.19%						
Fe 273.955	28886.0	194.372 mg/L	0.6068	194.372 mg/L	0.6068	0.31%
QC value within limits for Fe 273.955 Recovery = 97.19%						
Mg 279.077	87583.8	520.940 mg/L	1.5363	520.940 mg/L	1.5363	0.29%
QC value within limits for Mg 279.077 Recovery = 104.19%						
Mn 257.610	1650.2	0.522783 mg/L	0.0022390	0.522783 mg/L	0.0022390	0.43%
QC value within limits for Mn 257.610 Recovery = 104.56%						
K 766.490	249.0	-0.363161 mg/L	0.0350227	-0.363161 mg/L	0.0350227	9.64%
Na 589.592	937.5	-0.472545 mg/L	0.0060508	-0.472545 mg/L	0.0060508	1.28%
Ti 334.940	-61.8	-0.0173678 mg/L	0.00064377	-0.0173678 mg/L	0.00064377	3.71%

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: MB 27442 (1)
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 75
 Date Collected: 11/22/2013 12:31:01 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB 27442 (1)

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Al 308.215	-0.8	-0.0632768	mg/L	0.04560681	-0.0632768	mg/L	0.04560681	72.08%
Ca 315.887	23.9	-0.500000	mg/L	0.0064278	-0.500000	mg/L	0.0064278	1.29%
Fe 273.955	-2.6	-0.0874113	mg/L	0.02775867	-0.0874113	mg/L	0.02775867	31.76%
Mg 279.077	-1.5	-0.930641	mg/L	0.0164384	-0.930641	mg/L	0.0164384	1.77%
Mn 257.610	1.3	-0.0085098	mg/L	0.00038218	-0.0085098	mg/L	0.00038218	4.49%
K 766.490	-117.7	-0.455278	mg/L	0.0059946	-0.455278	mg/L	0.0059946	1.32%
Na 589.592	-271.9	-0.577551	mg/L	0.0029462	-0.577551	mg/L	0.0029462	0.51%
Ti 334.940	4.2	-0.0072681	mg/L	0.00004472	-0.0072681	mg/L	0.00004472	0.62%

Sequence No.: 12
Sample ID: LCSW 27442
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 76
Date Collected: 11/22/2013 12:33:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCSW 27442

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	886.7	5.21558 mg/L	0.028838	5.21558 mg/L	0.028838	0.55%
Ca 315.887	70111.8	52.2151 mg/L	0.28052	52.2151 mg/L	0.28052	0.54%
Fe 273.955	781.8	5.19262 mg/L	0.038731	5.19262 mg/L	0.038731	0.75%
Mg 279.077	9103.0	53.3176 mg/L	0.00994	53.3176 mg/L	0.00994	0.02%
Mn 257.610	1624.9	0.514643 mg/L	0.0013388	0.514643 mg/L	0.0013388	0.26%
K 766.490	208131.8	51.8594 mg/L	0.26436	51.8594 mg/L	0.26436	0.51%
Na 589.592	606120.0	52.0709 mg/L	0.34215	52.0709 mg/L	0.34215	0.66%
Ti 334.940	3419.2	0.515285 mg/L	0.0004907	0.515285 mg/L	0.0004907	0.10%

Sequence No.: 13
Sample ID: LCSW MR 27442
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 77
Date Collected: 11/22/2013 12:36:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCSW MR 27442

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Al 308.215	859.7	5.05509	mg/L	0.064810	5.05509	mg/L	0.064810 1.28%
Ca 315.887	67628.4	50.3472	mg/L	0.75924	50.3472	mg/L	0.75924 1.51%
Fe 273.955	773.9	5.13940	mg/L	0.035865	5.13940	mg/L	0.035865 0.70%
Mg 279.077	8968.1	52.5140	mg/L	0.19288	52.5140	mg/L	0.19288 0.37%
Mn 257.610	1600.5	0.506787	mg/L	0.0038362	0.506787	mg/L	0.0038362 0.76%
K 766.490	200523.3	49.9481	mg/L	0.64203	49.9481	mg/L	0.64203 1.29%
Na 589.592	584796.4	50.2195	mg/L	0.52730	50.2195	mg/L	0.52730 1.05%
Ti 334.940	3350.8	0.504824	mg/L	0.0019580	0.504824	mg/L	0.0019580 0.39%

Sequence No.: 14
 Sample ID: 75646-002
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 78
 Date Collected: 11/22/2013 12:39:55 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-002

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Al 308.215	-1.1	-0.0648162	mg/L	0.01926984	-0.0648162	mg/L	0.01926984 29.73%
Ca 315.887	17782.3	12.8566	mg/L	0.11553	12.8566	mg/L	0.11553 0.90%
Fe 273.955	1.1	-0.0627179	mg/L	0.00851132	-0.0627179	mg/L	0.00851132 13.57%
Mg 279.077	823.3	3.98396	mg/L	0.072223	3.98396	mg/L	0.072223 1.81%
Mn 257.610	486.9	0.147956	mg/L	0.0019483	0.147956	mg/L	0.0019483 1.32%
K 766.490	6531.6	1.21511	mg/L	0.023925	1.21511	mg/L	0.023925 1.97%
Na 589.592	472487.4	40.4686	mg/L	1.27616	40.4686	mg/L	1.27616 3.15%
Ti 334.940	-2.6	-0.0083052	mg/L	0.00045301	-0.0083052	mg/L	0.00045301 5.45%

Sequence No.: 15
Sample ID: 75646-002 MR
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 79
Date Collected: 11/22/2013 12:42:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-002 MR

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Al 308.215	-2.0	-0.0702111	mg/L	0.05652612	-0.0702111	mg/L	0.05652612	80.51%
Ca 315.887	17128.1	12.3645	mg/L	0.22547	12.3645	mg/L	0.22547	1.82%
Fe 273.955	3.1	-0.0490014	mg/L	0.01522516	-0.0490014	mg/L	0.01522516	31.07%
Mg 279.077	789.6	3.78339	mg/L	0.041077	3.78339	mg/L	0.041077	1.09%
Mn 257.610	472.5	0.143314	mg/L	0.0023086	0.143314	mg/L	0.0023086	1.61%
K 766.490	5874.5	1.05002	mg/L	0.034832	1.05002	mg/L	0.034832	3.32%
Na 589.592	454122.2	38.8741	mg/L	0.35456	38.8741	mg/L	0.35456	0.91%
Ti 334.940	5.0	-0.0071489	mg/L	0.00043593	-0.0071489	mg/L	0.00043593	6.10%

Sequence No.: 16
Sample ID: 75646-004 MS 1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 80
Date Collected: 11/22/2013 12:46:02 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-004 MS 1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	855.3	5.02878 mg/L		0.018334	5.02878 mg/L	0.018334	0.36%
Ca 315.887	85152.4	63.5275 mg/L		1.35644	63.5275 mg/L	1.35644	2.14%
Fe 273.955	773.4	5.13622 mg/L		0.011234	5.13622 mg/L	0.011234	0.22%
Mg 279.077	9676.4	56.7345 mg/L		0.37949	56.7345 mg/L	0.37949	0.67%
Mn 257.610	2090.4	0.664630 mg/L		0.0031106	0.664630 mg/L	0.0031106	0.47%
K 766.490	204068.9	50.8388 mg/L		1.05715	50.8388 mg/L	1.05715	2.08%
Na 589.592	1054883.5	91.0337 mg/L		1.10417	91.0337 mg/L	1.10417	1.21%
Ti 334.940	3317.7	0.499753 mg/L		0.0028148	0.499753 mg/L	0.0028148	0.56%

Sequence No.: 17
Sample ID: 75646-034 MS 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 81
Date Collected: 11/22/2013 12:49:06 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-034 MS 2

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	859.4	5.05314	mg/L	0.011699	5.05314 mg/L	0.011699	0.23%
Ca 315.887	85583.1	63.8514	mg/L	0.87233	63.8514 mg/L	0.87233	1.37%
Fe 273.955	782.2	5.19522	mg/L	0.020663	5.19522 mg/L	0.020663	0.40%
Mg 279.077	9655.0	56.6067	mg/L	0.07112	56.6067 mg/L	0.07112	0.13%
Mn 257.610	2064.7	0.656356	mg/L	0.0013844	0.656356 mg/L	0.0013844	0.21%
K 766.490	207136.5	51.6094	mg/L	0.70059	51.6094 mg/L	0.70059	1.36%
Na 589.592	1032003.3	89.0471	mg/L	1.08250	89.0471 mg/L	1.08250	1.22%
Ti 334.940	3355.0	0.505461	mg/L	0.0014759	0.505461 mg/L	0.0014759	0.29%

Sequence No.: 18
Sample ID: 75646-002 PS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 82
Date Collected: 11/22/2013 12:52:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-002 PS

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	982.4	5.78527 mg/L	0.002481	5.78527 mg/L	0.002481	0.04%
Ca 315.887	94017.7	70.1953 mg/L	0.56773	70.1953 mg/L	0.56773	0.81%
Fe 273.955	893.7	5.94565 mg/L	0.025073	5.94565 mg/L	0.025073	0.42%
Mg 279.077	10871.3	63.8545 mg/L	0.12419	63.8545 mg/L	0.12419	0.19%
Mn 257.610	2300.5	0.732340 mg/L	0.0013911	0.732340 mg/L	0.0013911	0.19%
K 766.490	240210.9	59.9181 mg/L	1.24231	59.9181 mg/L	1.24231	2.07%
Na 589.592	1120765.0	96.7536 mg/L	1.88809	96.7536 mg/L	1.88809	1.95%
Ti 334.940	3215.8	0.484173 mg/L	0.0014091	0.484173 mg/L	0.0014091	0.29%

Sequence No.: 19
 Sample ID: CCV V-176789
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 11/22/2013 12:55:16 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: CCV V-176789

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	863.6	5.07840 mg/L	0.031738	5.07840 mg/L	0.031738	0.62%
QC value within limits for Al 308.215 Recovery = 101.57%						
Ca 315.887	69345.2	51.6384 mg/L	0.19864	51.6384 mg/L	0.19864	0.38%
QC value within limits for Ca 315.887 Recovery = 103.28%						
Fe 273.955	773.0	5.13341 mg/L	0.005228	5.13341 mg/L	0.005228	0.10%
QC value within limits for Fe 273.955 Recovery = 102.67%						
Mg 279.077	8927.7	52.2735 mg/L	0.11604	52.2735 mg/L	0.11604	0.22%
QC value within limits for Mg 279.077 Recovery = 104.55%						
Mn 257.610	1590.2	0.503464 mg/L	0.0006614	0.503464 mg/L	0.0006614	0.13%
QC value within limits for Mn 257.610 Recovery = 100.69%						
K 766.490	206720.3	51.5048 mg/L	0.20912	51.5048 mg/L	0.20912	0.41%
QC value within limits for K 766.490 Recovery = 103.01%						
Na 589.592	600819.1	51.6107 mg/L	0.18191	51.6107 mg/L	0.18191	0.35%
QC value within limits for Na 589.592 Recovery = 103.22%						
Ti 334.940	3344.5	0.503852 mg/L	0.0015974	0.503852 mg/L	0.0015974	0.32%
QC value within limits for Ti 334.940 Recovery = 100.77%						

All analyte(s) passed QC.

Sequence No.: 20
 Sample ID: LLCCV [aq] V-176895
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/22/2013 12:58:17 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LLCCV [aq] V-176895

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	31.7	0.130021 mg/L	0.0119109	0.130021 mg/L	0.0119109	9.16%
QC value less than the lower limit for Al 308.215 Recovery = 65.01%						
Ca 315.887	6716.6	4.53379 mg/L	0.018621	4.53379 mg/L	0.018621	0.41%
QC value within limits for Ca 315.887 Recovery = 90.68%						
Fe 273.955	39.9	0.198707 mg/L	0.0402512	0.198707 mg/L	0.0402512	20.26%
QC value less than the lower limit for Fe 273.955 Recovery = 66.24%						
Mg 279.077	905.4	4.47287 mg/L	0.011863	4.47287 mg/L	0.011863	0.27%
QC value within limits for Mg 279.077 Recovery = 89.46%						
Mn 257.610	132.2	0.0336549 mg/L	0.00107401	0.0336549 mg/L	0.00107401	3.19%
QC value within limits for Mn 257.610 Recovery = 84.14%						
K 766.490	20357.9	4.68843 mg/L	0.001303	4.68843 mg/L	0.001303	0.03%
QC value within limits for K 766.490 Recovery = 93.77%						
Na 589.592	61776.3	4.80962 mg/L	0.064564	4.80962 mg/L	0.064564	1.34%
QC value within limits for Na 589.592 Recovery = 96.19%						
Ti 334.940	320.3	0.0411013 mg/L	0.00027631	0.0411013 mg/L	0.00027631	0.67%
QC value within limits for Ti 334.940 Recovery = 82.20%						
QC Failed. Continue with analysis.						

Sequence No.: 21
 Sample ID: CCB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/22/2013 1:01:20 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB V-174666

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	8.7	-0.0066951 mg/L	0.00061767	-0.0066951 mg/L	0.00061767	9.23%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887	4.7	-0.514456 mg/L	0.0082854	-0.514456 mg/L	0.0082854	1.61%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955	-7.1	-0.118213 mg/L	0.0137776	-0.118213 mg/L	0.0137776	11.65%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	-2.5	-0.936288 mg/L	0.0105098	-0.936288 mg/L	0.0105098	1.12%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	0.7	-0.0087105 mg/L	0.00041562	-0.0087105 mg/L	0.00041562	4.77%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490	225.9	-0.368976 mg/L	0.0738680	-0.368976 mg/L	0.0738680	20.02%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592	381.2	-0.520849 mg/L	0.0074088	-0.520849 mg/L	0.0074088	1.42%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940	6.0	-0.0069934 mg/L	0.00089649	-0.0069934 mg/L	0.00089649	12.82%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 22
Sample ID: 75646-002 SD
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 83
Date Collected: 11/22/2013 1:04:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-002 SD

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	-4.8	-0.0868329 mg/L		0.00405875	-0.0868329 mg/L	0.00405875	4.67%
Ca 315.887	3439.1	2.06868 mg/L		0.016773	2.06868 mg/L	0.016773	0.81%
Fe 273.955	-7.1	-0.117911 mg/L		0.0250862	-0.117911 mg/L	0.0250862	21.28%
Mg 279.077	161.3	0.0395705 mg/L		0.00498973	0.0395705 mg/L	0.00498973	12.61%
Mn 257.610	96.3	0.0221038 mg/L		0.00026932	0.0221038 mg/L	0.00026932	1.22%
K 766.490	1264.7	-0.108021 mg/L		0.0242522	-0.108021 mg/L	0.0242522	22.45%
Na 589.592	92545.7	7.48111 mg/L		0.166172	7.48111 mg/L	0.166172	2.22%
Ti 334.940	4.9	-0.0071614 mg/L		0.00056474	-0.0071614 mg/L	0.00056474	7.89%

Sequence No.: 23
Sample ID: 75646-006
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 84
Date Collected: 11/22/2013 1:07:26 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-006

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Al 308.215	4.2	-0.0337074	mg/L	0.00988634	-0.0337074	mg/L	0.00988634	29.33%
Ca 315.887	20685.7	15.0403	mg/L	0.61989	15.0403	mg/L	0.61989	4.12%
Fe 273.955	524.2	3.45876	mg/L	0.005953	3.45876	mg/L	0.005953	0.17%
Mg 279.077	655.6	2.98483	mg/L	0.026211	2.98483	mg/L	0.026211	0.88%
Mn 257.610	528.2	0.161276	mg/L	0.0014416	0.161276	mg/L	0.0014416	0.89%
K 766.490	4477.9	0.699173	mg/L	0.0484019	0.699173	mg/L	0.0484019	6.92%
Na 589.592	260317.7	22.0475	mg/L	0.85825	22.0475	mg/L	0.85825	3.89%
Ti 334.940	-0.3	-0.0079621	mg/L	0.00141205	-0.0079621	mg/L	0.00141205	17.73%

Sequence No.: 24
Sample ID: 75646-008
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 85
Date Collected: 11/22/2013 1:10:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-008

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Al 308.215	0.8	-0.0537779	mg/L	0.02323225	-0.0537779	mg/L 0.02323225	43.20%
Ca 315.887	23209.6	16.9386	mg/L	0.21997	16.9386	mg/L 0.21997	1.30%
Fe 273.955	559.7	3.69770	mg/L	0.029821	3.69770	mg/L 0.029821	0.81%
Mg 279.077	746.0	3.52336	mg/L	0.029841	3.52336	mg/L 0.029841	0.85%
Mn 257.610	596.1	0.183143	mg/L	0.0003907	0.183143	mg/L 0.0003907	0.21%
K 766.490	5079.1	0.850203	mg/L	0.0063423	0.850203	mg/L 0.0063423	0.75%
Na 589.592	295181.3	25.0744	mg/L	0.21973	25.0744	mg/L 0.21973	0.88%
Ti 334.940	4.5	-0.0072306	mg/L	0.00058439	-0.0072306	mg/L 0.00058439	8.08%

Sequence No.: 25
Sample ID: 75646-010
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 11/22/2013 1:13:29 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-010

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	-3.9	-0.0816414 mg/L	0.01016189	-0.0816414 mg/L	0.01016189	12.45%
Ca 315.887	20209.0	14.6818 mg/L	0.09127	14.6818 mg/L	0.09127	0.62%
Fe 273.955	-1.9	-0.0831207 mg/L	0.00633237	-0.0831207 mg/L	0.00633237	7.62%
Mg 279.077	436.3	1.67803 mg/L	0.065180	1.67803 mg/L	0.065180	3.88%
Mn 257.610	217.4	0.0611175 mg/L	0.00122274	0.0611175 mg/L	0.00122274	2.00%
K 766.490	8465.4	1.70089 mg/L	0.020302	1.70089 mg/L	0.020302	1.19%
Na 589.592	243706.7	20.6053 mg/L	0.19337	20.6053 mg/L	0.19337	0.94%
Ti 334.940	1.2	-0.0077306 mg/L	0.00127002	-0.0077306 mg/L	0.00127002	16.43%

Sequence No.: 26
Sample ID: 75646-012
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 87
Date Collected: 11/22/2013 1:16:24 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-012

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	-0.8	-0.0633682	mg/L	0.06623459	-0.0633682	mg/L	0.06623459	104.52%
Ca 315.887	14593.4	10.4581	mg/L	0.13556	10.4581	mg/L	0.13556	1.30%
Fe 273.955	-5.8	-0.109513	mg/L	0.0001777	-0.109513	mg/L	0.0001777	0.16%
Mg 279.077	382.4	1.35680	mg/L	0.039785	1.35680	mg/L	0.039785	2.93%
Mn 257.610	10.0	-0.0057068	mg/L	0.00026782	-0.0057068	mg/L	0.00026782	4.69%
K 766.490	6431.5	1.18995	mg/L	0.036656	1.18995	mg/L	0.036656	3.08%
Na 589.592	527856.8	45.2759	mg/L	0.27489	45.2759	mg/L	0.27489	0.61%
Ti 334.940	1.2	-0.0077344	mg/L	0.00022335	-0.0077344	mg/L	0.00022335	2.89%

Sequence No.: 27
Sample ID: 75646-014
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 88
Date Collected: 11/22/2013 1:19:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-014

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Al 308.215	-5.3	-0.0901388	mg/L	0.01079101	-0.0901388	mg/L	0.01079101 11.97%
Ca 315.887	15423.7	11.0826	mg/L	0.06835	11.0826	mg/L	0.06835 0.62%
Fe 273.955	-5.5	-0.107365	mg/L	0.0275131	-0.107365	mg/L	0.0275131 25.63%
Mg 279.077	333.0	1.06239	mg/L	0.006403	1.06239	mg/L	0.006403 0.60%
Mn 257.610	11.9	-0.0050956	mg/L	0.00066244	-0.0050956	mg/L	0.00066244 13.00%
K 766.490	6063.9	1.09759	mg/L	0.025107	1.09759	mg/L	0.025107 2.29%
Na 589.592	110350.1	9.02693	mg/L	0.071312	9.02693	mg/L	0.071312 0.79%
Ti 334.940	9.0	-0.0065316	mg/L	0.00156705	-0.0065316	mg/L	0.00156705 23.99%

Sequence No.: 28
 Sample ID: ICSA V-175629
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 11/22/2013 1:22:18 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSA V-175629

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	86269.8	513.088 mg/L	6.3440	513.088 mg/L	6.3440	1.24%
QC value within limits for Al 308.215 Recovery = 102.62%						
Ca 315.887	657730.7	494.179 mg/L	6.3689	494.179 mg/L	6.3689	1.29%
QC value within limits for Ca 315.887 Recovery = 98.84%						
Fe 273.955	29114.7	195.912 mg/L	2.9650	195.912 mg/L	2.9650	1.51%
QC value within limits for Fe 273.955 Recovery = 97.96%						
Mg 279.077	86700.7	515.678 mg/L	7.0355	515.678 mg/L	7.0355	1.36%
QC value within limits for Mg 279.077 Recovery = 103.14%						
Mn 257.610	8.1	-0.0063336 mg/L	0.00092870	-0.0063336 mg/L	0.00092870	14.66%
K 766.490	-24.3	-0.431818 mg/L	0.0362685	-0.431818 mg/L	0.0362685	8.40%
Na 589.592	690.2	-0.494023 mg/L	0.0023265	-0.494023 mg/L	0.0023265	0.47%
Ti 334.940	-56.2	-0.0165200 mg/L	0.00057658	-0.0165200 mg/L	0.00057658	3.49%

All analyte(s) passed QC.

Sequence No.: 29
 Sample ID: ICSAB V-175630
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/22/2013 1:25:40 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-175630

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	87451.5	520.117 mg/L		10.0311	520.117 mg/L	10.0311	1.93%
QC value within limits for Al 308.215 Recovery = 104.02%							
Ca 315.887	665492.4	500.017 mg/L		8.9943	500.017 mg/L	8.9943	1.80%
QC value within limits for Ca 315.887 Recovery = 100.00%							
Fe 273.955	29064.5	195.574 mg/L		0.6376	195.574 mg/L	0.6376	0.33%
QC value within limits for Fe 273.955 Recovery = 97.79%							
Mg 279.077	87726.0	521.787 mg/L		10.0773	521.787 mg/L	10.0773	1.93%
QC value within limits for Mg 279.077 Recovery = 104.36%							
Mn 257.610	1655.7	0.524547 mg/L		0.0019119	0.524547 mg/L	0.0019119	0.36%
QC value within limits for Mn 257.610 Recovery = 104.91%							
K 766.490	-47.5	-0.437653 mg/L		0.0553526	-0.437653 mg/L	0.0553526	12.65%
Na 589.592	725.6	-0.490950 mg/L		0.0091643	-0.490950 mg/L	0.0091643	1.87%
Ti 334.940	-57.4	-0.0167031 mg/L		0.00046435	-0.0167031 mg/L	0.00046435	2.78%

All analyte(s) passed QC.

Sequence No.: 30
 Sample ID: CCV V-176789
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 11/22/2013 1:29:02 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-176789

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	866.6	5.09630 mg/L	0.002314	5.09630 mg/L	0.002314	0.05%
QC value within limits for Al 308.215 Recovery = 101.93%						
Ca 315.887	69161.3	51.5001 mg/L	0.96492	51.5001 mg/L	0.96492	1.87%
QC value within limits for Ca 315.887 Recovery = 103.00%						
Fe 273.955	767.7	5.09739 mg/L	0.049135	5.09739 mg/L	0.049135	0.96%
QC value within limits for Fe 273.955 Recovery = 101.95%						
Mg 279.077	8918.6	52.2193 mg/L	0.29641	52.2193 mg/L	0.29641	0.57%
QC value within limits for Mg 279.077 Recovery = 104.44%						
Mn 257.610	1590.4	0.503525 mg/L	0.0017919	0.503525 mg/L	0.0017919	0.36%
QC value within limits for Mn 257.610 Recovery = 100.71%						
K 766.490	204314.7	50.9005 mg/L	1.07382	50.9005 mg/L	1.07382	2.11%
QC value within limits for K 766.490 Recovery = 101.80%						
Na 589.592	593837.2	51.0045 mg/L	1.06110	51.0045 mg/L	1.06110	2.08%
QC value within limits for Na 589.592 Recovery = 102.01%						
Ti 334.940	3340.1	0.503193 mg/L	0.0005018	0.503193 mg/L	0.0005018	0.10%
QC value within limits for Ti 334.940 Recovery = 100.64%						

All analyte(s) passed QC.

Sequence No.: 31
 Sample ID: LLCCV [aq] V-176895
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/22/2013 1:32:04 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LLCCV [aq] V-176895

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	30.1	0.120776 mg/L	0.0204718	0.120776 mg/L	0.0204718	16.95%
QC value less than the lower limit for Al 308.215 Recovery = 60.39%						
Ca 315.887	6857.4	4.63963 mg/L	0.036005	4.63963 mg/L	0.036005	0.78%
QC value within limits for Ca 315.887 Recovery = 92.79%						
Fe 273.955	45.7	0.237424 mg/L	0.0384875	0.237424 mg/L	0.0384875	16.21%
QC value within limits for Fe 273.955 Recovery = 79.14%						
Mg 279.077	924.5	4.58702 mg/L	0.030566	4.58702 mg/L	0.030566	0.67%
QC value within limits for Mg 279.077 Recovery = 91.74%						
Mn 257.610	134.6	0.0344420 mg/L	0.00048281	0.0344420 mg/L	0.00048281	1.40%
QC value within limits for Mn 257.610 Recovery = 86.10%						
K 766.490	19810.1	4.55080 mg/L	0.042569	4.55080 mg/L	0.042569	0.94%
QC value within limits for K 766.490 Recovery = 91.02%						
Na 589.592	59984.7	4.65408 mg/L	0.042512	4.65408 mg/L	0.042512	0.91%
QC value within limits for Na 589.592 Recovery = 93.08%						
Ti 334.940	330.3	0.0426223 mg/L	0.00018109	0.0426223 mg/L	0.00018109	0.42%
QC value within limits for Ti 334.940 Recovery = 85.24%						
QC Failed. Continue with analysis.						

Sequence No.: 32
 Sample ID: CCB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/22/2013 1:35:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB V-174666

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	8.7	-0.0065913 mg/L	0.02261457	-0.0065913 mg/L	0.02261457	343.10%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887	5.6	-0.513800 mg/L	0.0081755	-0.513800 mg/L	0.0081755	1.59%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955	-4.9	-0.103351 mg/L	0.0408002	-0.103351 mg/L	0.0408002	39.48%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	1.7	-0.911358 mg/L	0.0140664	-0.911358 mg/L	0.0140664	1.54%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	0.4	-0.0088061 mg/L	0.00043902	-0.0088061 mg/L	0.00043902	4.99%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490	44.7	-0.414500 mg/L	0.0638787	-0.414500 mg/L	0.0638787	15.41%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592	130.4	-0.542626 mg/L	0.0008391	-0.542626 mg/L	0.0008391	0.15%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940	3.0	-0.0074561 mg/L	0.00083278	-0.0074561 mg/L	0.00083278	11.17%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 33
 Sample ID: 75646-016
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 89
 Date Collected: 11/22/2013 1:38:11 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-016

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Al 308.215	-4.6	-0.0860222	mg/L	0.01652311	-0.0860222	mg/L	0.01652311 19.21%
Ca 315.887	31202.3	22.9501	mg/L	0.07875	22.9501	mg/L	0.07875 0.34%
Fe 273.955	-5.4	-0.106214	mg/L	0.0232723	-0.106214	mg/L	0.0232723 21.91%
Mg 279.077	662.5	3.02597	mg/L	0.041323	3.02597	mg/L	0.041323 1.37%
Mn 257.610	6.9	-0.0067059	mg/L	0.00069729	-0.0067059	mg/L	0.00069729 10.40%
K 766.490	10279.0	2.15650	mg/L	0.008736	2.15650	mg/L	0.008736 0.41%
Na 589.592	305507.4	25.9710	mg/L	0.07490	25.9710	mg/L	0.07490 0.29%
Ti 334.940	-2.9	-0.0083548	mg/L	0.00153195	-0.0083548	mg/L	0.00153195 18.34%

Sequence No.: 34
 Sample ID: 75646-018
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 90
 Date Collected: 11/22/2013 1:41:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-018

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Al 308.215	-17.9	-0.164781	mg/L	0.0096633	-0.164781	mg/L	0.0096633	5.86%
Ca 315.887	5.8	-0.513591	mg/L	0.0029464	-0.513591	mg/L	0.0029464	0.57%
Fe 273.955	-1.2	-0.0785452	mg/L	0.01812375	-0.0785452	mg/L	0.01812375	23.07%
Mg 279.077	3.8	-0.899306	mg/L	0.0128108	-0.899306	mg/L	0.0128108	1.42%
Mn 257.610	-19.9	-0.0153329	mg/L	0.00002146	-0.0153329	mg/L	0.00002146	0.14%
K 766.490	-938.7	-0.661538	mg/L	0.0196101	-0.661538	mg/L	0.0196101	2.96%
Na 589.592	43.2	-0.550190	mg/L	0.0046302	-0.550190	mg/L	0.0046302	0.84%
Ti 334.940	-2.1	-0.0082415	mg/L	0.00016268	-0.0082415	mg/L	0.00016268	1.97%

Sequence No.: 35
Sample ID: 75646-020
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 91
Date Collected: 11/22/2013 1:44:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-020

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	-23.7	-0.199538	mg/L	0.0030922	-0.199538	mg/L	0.0030922	1.55%
Ca 315.887	17.3	-0.504986	mg/L	0.0088068	-0.504986	mg/L	0.0088068	1.74%
Fe 273.955	-4.9	-0.103460	mg/L	0.0226667	-0.103460	mg/L	0.0226667	21.91%
Mg 279.077	5.3	-0.889857	mg/L	0.0228900	-0.889857	mg/L	0.0228900	2.57%
Mn 257.610	-18.0	-0.0147427	mg/L	0.00084909	-0.0147427	mg/L	0.00084909	5.76%
K 766.490	-1081.1	-0.697299	mg/L	0.0378867	-0.697299	mg/L	0.0378867	5.43%
Na 589.592	158.9	-0.540146	mg/L	0.0022957	-0.540146	mg/L	0.0022957	0.43%
Ti 334.940	1.3	-0.0077097	mg/L	0.00054581	-0.0077097	mg/L	0.00054581	7.08%

Sequence No.: 36
Sample ID: 75646-022
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 92
Date Collected: 11/22/2013 1:47:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-022

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Al 308.215	-22.4	-0.191705	mg/L	0.0195588	-0.191705	mg/L 0.0195588	10.20%
Ca 315.887	21.7	-0.501667	mg/L	0.0000416	-0.501667	mg/L 0.0000416	0.01%
Fe 273.955	-5.1	-0.104372	mg/L	0.0107032	-0.104372	mg/L 0.0107032	10.25%
Mg 279.077	0.9	-0.916389	mg/L	0.0007250	-0.916389	mg/L 0.0007250	0.08%
Mn 257.610	-12.3	-0.0129022	mg/L	0.00080617	-0.0129022	mg/L 0.00080617	6.25%
K 766.490	-1070.7	-0.694679	mg/L	0.0226270	-0.694679	mg/L 0.0226270	3.26%
Na 589.592	-41.9	-0.557583	mg/L	0.0124035	-0.557583	mg/L 0.0124035	2.22%
Ti 334.940	1.8	-0.0076417	mg/L	0.00027860	-0.0076417	mg/L 0.00027860	3.65%

Sequence No.: 37
 Sample ID: 75646-024
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 93
 Date Collected: 11/22/2013 1:49:58 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-024

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Al 308.215	-17.8	-0.164221	mg/L	0.0388827	-0.164221	mg/L	0.0388827	23.68%
Ca 315.887	24.0	-0.499919	mg/L	0.0032983	-0.499919	mg/L	0.0032983	0.66%
Fe 273.955	-5.6	-0.107978	mg/L	0.0048825	-0.107978	mg/L	0.0048825	4.52%
Mg 279.077	-3.5	-0.942242	mg/L	0.0027672	-0.942242	mg/L	0.0027672	0.29%
Mn 257.610	-12.2	-0.0128684	mg/L	0.00131334	-0.0128684	mg/L	0.00131334	10.21%
K 766.490	-864.4	-0.642857	mg/L	0.0423337	-0.642857	mg/L	0.0423337	6.59%
Na 589.592	-53.7	-0.558607	mg/L	0.0054000	-0.558607	mg/L	0.0054000	0.97%
Ti 334.940	0.3	-0.0078609	mg/L	0.00195685	-0.0078609	mg/L	0.00195685	24.89%

Sequence No.: 38
 Sample ID: CCV V-176789
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 11/22/2013 1:52:56 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: CCV V-176789

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	-25.2	-0.208491 mg/L	0.0030405	-0.208491 mg/L	0.0030405	1.46%
QC value less than the lower limit for Al 308.215 Recovery = -4.17%						
Ca 315.887	15.1	-0.506656 mg/L	0.0024162	-0.506656 mg/L	0.0024162	0.48%
QC value less than the lower limit for Ca 315.887 Recovery = -1.01%						
Fe 273.955	-6.7	-0.114962 mg/L	0.0243249	-0.114962 mg/L	0.0243249	21.16%
QC value less than the lower limit for Fe 273.955 Recovery = -2.30%						
Mg 279.077	2.3	-0.907954 mg/L	0.0085504	-0.907954 mg/L	0.0085504	0.94%
QC value less than the lower limit for Mg 279.077 Recovery = -1.82%						
Mn 257.610	-12.2	-0.0128593 mg/L	0.00072009	-0.0128593 mg/L	0.00072009	5.60%
QC value less than the lower limit for Mn 257.610 Recovery = -2.57%						
K 766.490	-952.9	-0.665100 mg/L	0.0621660	-0.665100 mg/L	0.0621660	9.35%
QC value less than the lower limit for K 766.490 Recovery = -1.33%						
Na 589.592	-269.9	-0.577375 mg/L	0.0183931	-0.577375 mg/L	0.0183931	3.19%
QC value less than the lower limit for Na 589.592 Recovery = -1.15%						
Ti 334.940	1.1	-0.0077388 mg/L	0.00134116	-0.0077388 mg/L	0.00134116	17.33%
QC value less than the lower limit for Ti 334.940 Recovery = -1.55%						
QC Failed. Continue with analysis.						

File SW15727B

Batch 15727 3110835 0642
SW846

Method: PE 1 3000DV RADIAL

Page 1

Date: 11/22/2013 2:02:42 PM

Analyst SBL 11/22/13

=====
Analysis Begun

Start Time: 11/22/2013 2:00:43 PM

Plasma On Time: 11/22/2013 9:55:21 AM

Logged In Analyst: shiamala

Technique: ICP Continuous

Spectrometer Model: Optima 3300 DV, S/N 069N5072002 Autosampler Model: AS-91

Sample Information File: C:\pe\Administrator\Sample Information\11.21.13.sif

Batch ID: PEICP 1

Results Data Set: SW15727B

Results Library: C:\pe\Administrator\Results\Results.mdb

=====
Method Loaded

Method Name: PE 1 3000DV RADIAL

Method Last Saved: 11/21/2013 4:39:38 PM

IEC File: IEC042213R.iec

MSF File:

Method Description: 200.7/6010B/6010C

=====
Sequence No.: 1

Autosampler Location: 1

Sample ID: Calib Blk 1 V-174666

Date Collected: 11/22/2013 2:00:46 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
Al 308.215	24.6	7.09	28.83%	[0.00]	mg/L
Ca 315.887	-86.4	5.72	6.62%	[0.00]	mg/L
Fe 273.955	13.8	0.46	3.35%	[0.00]	mg/L
Mg 279.077	3.2	0.58	18.41%	[0.00]	mg/L
Mn 257.610	-61.2	1.90	3.10%	[0.00]	mg/L
K 766.490	-3248.5	88.72	2.73%	[0.00]	mg/L
Na 589.592	4148.5	40.96	0.99%	[0.00]	mg/L
Ti 334.940	9.9	0.15	1.52%	[0.00]	mg/L

15727
27442

75646-016-032 NaK reported

Sequence No.: 2
Sample ID: Calib Std 1 V-175715
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 160
Date Collected: 11/22/2013 2:03:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 1 V-175715

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Al 308.215	16.7	2.26	13.59%	[0.1] mg/L
Ca 315.887	1331.8	7.77	0.58%	[1] mg/L
Fe 273.955	9.7	0.07	0.67%	[0.1] mg/L
Mg 279.077	181.3	0.84	0.46%	[1] mg/L
Mn 257.610	31.2	1.69	5.41%	[0.01] mg/L
K 766.490	3611.6	81.97	2.27%	[1] mg/L
Na 589.592	11156.1	15.37	0.14%	[1] mg/L
Ti 334.940	67.8	3.34	4.93%	[0.01] mg/L

Sequence No.: 3
Sample ID: Calib Std 2 V-175281
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 11/22/2013 2:06:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Std 2 V-175281

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Al 308.215	917.7	5.33	0.58%	[5] mg/L
Ca 315.887	75221.2	44.59	0.06%	[50] mg/L
Fe 273.955	827.5	1.20	0.15%	[5] mg/L
Mg 279.077	9569.5	23.64	0.25%	[50] mg/L
Mn 257.610	1737.2	6.42	0.37%	[0.5] mg/L
K 766.490	217572.1	75.80	0.03%	[50] mg/L
Na 589.592	629369.4	133.20	0.02%	[50] mg/L
Ti 334.940	3646.9	13.48	0.37%	[0.5] mg/L

Sequence No.: 4

Sample ID: Calib Std 3 V-176344

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 11/22/2013 2:09:43 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: Calib Std 3 V-176344

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Al 308.215	1706.5	23.69	1.39%	[10]	mg/L
Ca 315.887	140076.3	467.96	0.33%	[100]	mg/L
Fe 273.955	1546.0	13.93	0.90%	[10]	mg/L
Mg 279.077	17641.6	60.69	0.34%	[100]	mg/L
Mn 257.610	3220.4	12.56	0.39%	[1.0]	mg/L
K 766.490	414576.4	1938.68	0.47%	[100]	mg/L
Na 589.592	1187813.6	6692.12	0.56%	[100]	mg/L
Ti 334.940	6850.0	35.46	0.52%	[1.0]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Al 308.215	3	Lin, Calc Int	11.6	171.8	0.00000	0.999245	
Ca 315.887	3	Lin, Calc Int	912.0	1410	0.00000	0.999273	
Fe 273.955	3	Lin, Calc Int	7.3	155.9	0.00000	0.999306	
Mg 279.077	3	Lin, Calc Int	138.5	177.7	0.00000	0.999055	
Mn 257.610	3	Lin, Calc Int	22.7	3244	0.00000	0.999177	
K 766.490	3	Lin, Calc Int	1629.2	4167	0.00000	0.999665	
Na 589.592	3	Lin, Calc Int	6126.4	11950	0.00000	0.999524	
Ti 334.940	3	Lin, Calc Int	40.1	6890	0.00000	0.999444	

Sequence No.: 5

Sample ID: ICS3 V-175281

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 11/22/2013 2:12:43 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICS3 V-175281

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	912.1	5.24095 mg/L	0.006109	5.24095 mg/L	0.006109	0.12%
QC value within limits for Al 308.215 Recovery = 104.82%						
Ca 315.887	75158.5	52.6395 mg/L	0.11440	52.6395 mg/L	0.11440	0.22%
QC value within limits for Ca 315.887 Recovery = 105.28%						
Fe 273.955	824.5	5.24214 mg/L	0.001715	5.24214 mg/L	0.001715	0.03%
QC value within limits for Fe 273.955 Recovery = 104.84%						
Mg 279.077	9532.5	52.8534 mg/L	0.32447	52.8534 mg/L	0.32447	0.61%
QC value within limits for Mg 279.077 Recovery = 105.71%						
Mn 257.610	1735.6	0.528060 mg/L	0.0022417	0.528060 mg/L	0.0022417	0.42%
QC value within limits for Mn 257.610 Recovery = 105.61%						
K 766.490	218294.6	51.9933 mg/L	0.22084	51.9933 mg/L	0.22084	0.42%
QC value within limits for K 766.490 Recovery = 103.99%						
Na 589.592	631382.4	52.3406 mg/L	0.23958	52.3406 mg/L	0.23958	0.46%
QC value within limits for Na 589.592 Recovery = 104.68%						
Ti 334.940	3642.8	0.522859 mg/L	0.0026240	0.522859 mg/L	0.0026240	0.50%
QC value within limits for Ti 334.940 Recovery = 104.57%						

All analyte(s) passed QC.

Sequence No.: 6

Sample ID: ICV V-176789

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 11/22/2013 2:15:42 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICV V-176789

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	879.1	5.04870 mg/L	0.023654	5.04870 mg/L	0.023654	0.47%
QC value within limits for Al 308.215 Recovery = 100.97%						
Ca 315.887	71567.6	50.0936 mg/L	0.09655	50.0936 mg/L	0.09655	0.19%
QC value within limits for Ca 315.887 Recovery = 100.19%						
Fe 273.955	798.5	5.07518 mg/L	0.000880	5.07518 mg/L	0.000880	0.02%
QC value within limits for Fe 273.955 Recovery = 101.50%						
Mg 279.077	9336.4	51.7499 mg/L	0.08402	51.7499 mg/L	0.08402	0.16%
QC value within limits for Mg 279.077 Recovery = 103.50%						
Mn 257.610	1650.3	0.501776 mg/L	0.0016168	0.501776 mg/L	0.0016168	0.32%
QC value within limits for Mn 257.610 Recovery = 100.36%						
K 766.490	208090.0	49.5446 mg/L	0.23160	49.5446 mg/L	0.23160	0.47%
QC value within limits for K 766.490 Recovery = 99.09%						
Na 589.592	601805.9	49.8647 mg/L	0.25648	49.8647 mg/L	0.25648	0.51%
QC value within limits for Na 589.592 Recovery = 99.73%						
Ti 334.940	3477.1	0.498814 mg/L	0.0000719	0.498814 mg/L	0.0000719	0.01%
QC value within limits for Ti 334.940 Recovery = 99.76%						

All analyte(s) passed QC.

Sequence No.: 7
 Sample ID: LLICV [aq] V-176895
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/22/2013 2:18:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: LLICV [aq] V-176895

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	36.2	0.143538 mg/L	0.0003275	0.143538 mg/L	0.0003275	0.23%
QC value within limits for Al 308.215 Recovery = 71.77%						
Ca 315.887	7045.4	4.34845 mg/L	0.016026	4.34845 mg/L	0.016026	0.37%
QC value within limits for Ca 315.887 Recovery = 86.97%						
Fe 273.955	43.4	0.231237 mg/L	0.0102672	0.231237 mg/L	0.0102672	4.44%
QC value within limits for Fe 273.955 Recovery = 77.08%						
Mg 279.077	951.1	4.57196 mg/L	0.004444	4.57196 mg/L	0.004444	0.10%
QC value within limits for Mg 279.077 Recovery = 91.44%						
Mn 257.610	130.1	0.0331072 mg/L	0.00009975	0.0331072 mg/L	0.00009975	0.30%
QC value within limits for Mn 257.610 Recovery = 82.77%						
K 766.490	20804.9	4.60161 mg/L	0.000581	4.60161 mg/L	0.000581	0.01%
QC value within limits for K 766.490 Recovery = 92.03%						
Na 589.592	62273.0	4.70007 mg/L	0.024073	4.70007 mg/L	0.024073	0.51%
QC value within limits for Na 589.592 Recovery = 94.00%						
Ti 334.940	324.9	0.0413306 mg/L	0.00019010	0.0413306 mg/L	0.00019010	0.46%
QC value within limits for Ti 334.940 Recovery = 82.66%						

All analyte(s) passed QC.

Sequence No.: 8
 Sample ID: ICB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 11/22/2013 2:21:46 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
Al 308.215	2.6	-0.0523663 mg/L	0.00817814	-0.0523663 mg/L	0.00817814	15.62%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887	-4.2	-0.649540 mg/L	0.0021432	-0.649540 mg/L	0.0021432	0.33%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955	-4.7	-0.0768678 mg/L	0.00995464	-0.0768678 mg/L	0.00995464	12.95%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	3.5	-0.759369 mg/L	0.0260595	-0.759369 mg/L	0.0260595	3.43%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	-2.9	-0.0078760 mg/L	0.00045523	-0.0078760 mg/L	0.00045523	5.78%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490	249.7	-0.331041 mg/L	0.0079811	-0.331041 mg/L	0.0079811	2.41%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592	95.1	-0.504886 mg/L	0.0017078	-0.504886 mg/L	0.0017078	0.34%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940	-3.5	-0.0063270 mg/L	0.00070706	-0.0063270 mg/L	0.00070706	11.18%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 9
 Sample ID: ICSA V-175629
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 11/22/2013 2:24:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-175629

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	84237.5	490.165 mg/L		5.7141	490.165 mg/L	5.7141	1.17%
QC value within limits for Al 308.215 Recovery = 98.03%							
Ca 315.887	651993.5	461.605 mg/L		5.6076	461.605 mg/L	5.6076	1.21%
QC value within limits for Ca 315.887 Recovery = 92.32%							
Fe 273.955	28836.4	184.926 mg/L		2.7581	184.926 mg/L	2.7581	1.49%
QC value within limits for Fe 273.955 Recovery = 92.46%							
Mg 279.077	85735.4	481.590 mg/L		6.3223	481.590 mg/L	6.3223	1.31%
QC value within limits for Mg 279.077 Recovery = 96.32%							
Mn 257.610	8.8	-0.0042695 mg/L		0.00146297	-0.0042695 mg/L	0.00146297	34.27%
K 766.490	328.9	-0.312037 mg/L		0.0423571	-0.312037 mg/L	0.0423571	13.57%
Na 589.592	1101.0	-0.420686 mg/L		0.0060528	-0.420686 mg/L	0.0060528	1.44%
Ti 334.940	-65.1	-0.0152667 mg/L		0.00108039	-0.0152667 mg/L	0.00108039	7.08%

All analyte(s) passed QC.

Sequence No.: 10
 Sample ID: ICSAB V-175630
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/22/2013 2:28:05 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSAB V-175630

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	84464.8	491.488 mg/L		8.7839	491.488 mg/L	8.7839	1.79%
QC value within limits for Al 308.215 Recovery = 98.30%							
Ca 315.887	652869.5	462.227 mg/L		8.6218	462.227 mg/L	8.6218	1.87%
QC value within limits for Ca 315.887 Recovery = 92.45%							
Fe 273.955	28499.1	182.762 mg/L		0.1138	182.762 mg/L	0.1138	0.06%
QC value within limits for Fe 273.955 Recovery = 91.38%							
Mg 279.077	86156.4	483.959 mg/L		7.7966	483.959 mg/L	7.7966	1.61%
QC value within limits for Mg 279.077 Recovery = 96.79%							
Mn 257.610	1610.2	0.489407 mg/L		0.0020619	0.489407 mg/L	0.0020619	0.42%
QC value within limits for Mn 257.610 Recovery = 97.88%							
K 766.490	-59.0	-0.405120 mg/L		0.0159879	-0.405120 mg/L	0.0159879	3.95%
Na 589.592	740.4	-0.450873 mg/L		0.0055064	-0.450873 mg/L	0.0055064	1.22%
Ti 334.940	-62.1	-0.0148283 mg/L		0.00044496	-0.0148283 mg/L	0.00044496	3.00%

All analyte(s) passed QC.

Sequence No.: 11
Sample ID: 75646-016
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 89
Date Collected: 11/22/2013 2:31:27 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-016

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	-2.3	-0.0803542	mg/L	0.00917258	-0.0803542	mg/L	0.00917258	11.42%
Ca 315.887	31462.3	21.6596	mg/L	0.09743	21.6596	mg/L	0.09743	0.45%
Fe 273.955	-4.4	-0.0753149	mg/L	0.00789157	-0.0753149	mg/L	0.00789157	10.48%
Mg 279.077	683.0	3.06361	mg/L	0.022295	3.06361	mg/L	0.022295	0.73%
Mn 257.610	4.7	-0.0055360	mg/L	0.00085923	-0.0055360	mg/L	0.00085923	15.52%
K 766.490	10201.2	2.05703	mg/L	0.060064	2.05703	mg/L	0.060064	2.92%
Na 589.592	303874.6	24.9247	mg/L	0.15098	24.9247	mg/L	0.15098	0.61%
Ti 334.940	-10.5	-0.0073453	mg/L	0.00019226	-0.0073453	mg/L	0.00019226	2.62%

Sequence No.: 12
 Sample ID: 75646-018
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 90
 Date Collected: 11/22/2013 2:34:23 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-018

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Al 308.215	-9.3	-0.121297	mg/L	0.0018000	-0.121297	mg/L	0.0018000	1.48%
Ca 315.887	35.5	-0.621442	mg/L	0.0061503	-0.621442	mg/L	0.0061503	0.99%
Fe 273.955	-4.9	-0.0781692	mg/L	0.00967452	-0.0781692	mg/L	0.00967452	12.38%
Mg 279.077	5.7	-0.747292	mg/L	0.0020528	-0.747292	mg/L	0.0020528	0.27%
Mn 257.610	-0.3	-0.0070913	mg/L	0.00093888	-0.0070913	mg/L	0.00093888	13.24%
K 766.490	-34.3	-0.399197	mg/L	0.0028699	-0.399197	mg/L	0.0028699	0.72%
Na 589.592	44.4	-0.509136	mg/L	0.0036151	-0.509136	mg/L	0.0036151	0.71%
Ti 334.940	-9.4	-0.0071870	mg/L	0.00087461	-0.0071870	mg/L	0.00087461	12.17%

Sequence No.: 13
 Sample ID: 75646-020
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 91
 Date Collected: 11/22/2013 2:37:19 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-020

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Al 308.215	-1.3	-0.0748784	mg/L	0.03209230	-0.0748784	mg/L	0.03209230	42.86%
Ca 315.887	44157.0	30.6599	mg/L	0.42933	30.6599	mg/L	0.42933	1.40%
Fe 273.955	346.4	2.17512	mg/L	0.045191	2.17512	mg/L	0.045191	2.08%
Mg 279.077	876.8	4.15397	mg/L	0.020806	4.15397	mg/L	0.020806	0.50%
Mn 257.610	1332.2	0.403692	mg/L	0.0040687	0.403692	mg/L	0.0040687	1.01%
K 766.490	12019.7	2.49342	mg/L	0.079998	2.49342	mg/L	0.079998	3.21%
Na 589.592	494316.4	40.8667	mg/L	0.04820	40.8667	mg/L	0.04820	0.12%
Ti 334.940	-15.8	-0.0081108	mg/L	0.00103922	-0.0081108	mg/L	0.00103922	12.81%

Sequence No.: 14
Sample ID: 75646-022
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 92
Date Collected: 11/22/2013 2:40:21 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-022

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	-2.3	-0.0803642	mg/L	0.02442740	-0.0803642	mg/L	0.02442740 30.40%
Ca 315.887	20359.0	13.7876	mg/L	0.38297	13.7876	mg/L	0.38297 2.78%
Fe 273.955	1058.3	6.74188	mg/L	0.003242	6.74188	mg/L	0.003242 0.05%
Mg 279.077	392.2	1.42728	mg/L	0.015381	1.42728	mg/L	0.015381 1.08%
Mn 257.610	5918.2	1.81748	mg/L	0.003192	1.81748	mg/L	0.003192 0.18%
K 766.490	15291.5	3.27855	mg/L	0.118537	3.27855	mg/L	0.118537 3.62%
Na 589.592	376000.6	30.9624	mg/L	0.78906	30.9624	mg/L	0.78906 2.55%
Ti 334.940	-5.8	-0.0066663	mg/L	0.00032160	-0.0066663	mg/L	0.00032160 4.82%

Sequence No.: 15
Sample ID: 75646-024
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 93
Date Collected: 11/22/2013 2:43:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-024

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	5.7	-0.0341828	mg/L	0.01736609	-0.0341828	mg/L	0.01736609	50.80%
Ca 315.887	19402.2	13.1093	mg/L	0.09791	13.1093	mg/L	0.09791	0.75%
Fe 273.955	43.5	0.232253	mg/L	0.0011969	0.232253	mg/L	0.0011969	0.52%
Mg 279.077	528.7	2.19540	mg/L	0.008481	2.19540	mg/L	0.008481	0.39%
Mn 257.610	213.5	0.0588242	mg/L	0.00136324	0.0588242	mg/L	0.00136324	2.32%
K 766.490	16985.3	3.68502	mg/L	0.014917	3.68502	mg/L	0.014917	0.40%
Na 589.592	159590.3	12.8466	mg/L	0.12477	12.8466	mg/L	0.12477	0.97%
Ti 334.940	-2.6	-0.0062009	mg/L	0.00038738	-0.0062009	mg/L	0.00038738	6.25%

Sequence No.: 16
 Sample ID: CCV V-176789
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 11/22/2013 2:46:16 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-176789

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	881.3	5.06171 mg/L	0.078502	5.06171 mg/L	0.078502	1.55%
QC value within limits for Al 308.215 Recovery = 101.23%						
Ca 315.887	71648.7	50.1511 mg/L	0.80835	50.1511 mg/L	0.80835	1.61%
QC value within limits for Ca 315.887 Recovery = 100.30%						
Fe 273.955	800.6	5.08837 mg/L	0.084765	5.08837 mg/L	0.084765	1.67%
QC value within limits for Fe 273.955 Recovery = 101.77%						
Mg 279.077	9280.1	51.4331 mg/L	0.38074	51.4331 mg/L	0.38074	0.74%
QC value within limits for Mg 279.077 Recovery = 102.87%						
Mn 257.610	1638.9	0.498241 mg/L	0.0050421	0.498241 mg/L	0.0050421	1.01%
QC value within limits for Mn 257.610 Recovery = 99.65%						
K 766.490	208769.9	49.7077 mg/L	0.67604	49.7077 mg/L	0.67604	1.36%
QC value within limits for K 766.490 Recovery = 99.42%						
Na 589.592	607438.9	50.3362 mg/L	0.74537	50.3362 mg/L	0.74537	1.48%
QC value within limits for Na 589.592 Recovery = 100.67%						
Ti 334.940	3451.8	0.495139 mg/L	0.0041097	0.495139 mg/L	0.0041097	0.83%
QC value within limits for Ti 334.940 Recovery = 99.03%						

All analyte(s) passed QC.

Sequence No.: 17
 Sample ID: LLCCV [aq] V-176895
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/22/2013 2:49:18 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: LLCCV [aq] V-176895

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	27.9	0.0951397 mg/L	0.00737127	0.0951397 mg/L	0.00737127	7.75%
QC value less than the lower limit for Al 308.215 Recovery = 47.57%						
Ca 315.887	7012.6	4.32522 mg/L	0.014170	4.32522 mg/L	0.014170	0.33%
QC value within limits for Ca 315.887 Recovery = 86.50%						
Fe 273.955	40.7	0.214473 mg/L	0.0245931	0.214473 mg/L	0.0245931	11.47%
QC value within limits for Fe 273.955 Recovery = 71.49%						
Mg 279.077	946.7	4.54729 mg/L	0.001442	4.54729 mg/L	0.001442	0.03%
QC value within limits for Mg 279.077 Recovery = 90.95%						
Mn 257.610	130.8	0.0333285 mg/L	0.00171911	0.0333285 mg/L	0.00171911	5.16%
QC value within limits for Mn 257.610 Recovery = 83.32%						
K 766.490	20413.7	4.50774 mg/L	0.094031	4.50774 mg/L	0.094031	2.09%
QC value within limits for K 766.490 Recovery = 90.15%						
Na 589.592	61373.7	4.62478 mg/L	0.092825	4.62478 mg/L	0.092825	2.01%
QC value within limits for Na 589.592 Recovery = 92.50%						
Ti 334.940	327.9	0.0417653 mg/L	0.00027143	0.0417653 mg/L	0.00027143	0.65%
QC value within limits for Ti 334.940 Recovery = 83.53%						
QC Failed. Continue with analysis.						

Sequence No.: 18
 Sample ID: CCB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/22/2013 2:52:21 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB V-174666

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	5.2	-0.0367131 mg/L	0.00505514	-0.0367131 mg/L	0.00505514	13.77%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887	12.3	-0.637856 mg/L	0.0022529	-0.637856 mg/L	0.0022529	0.35%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955	-3.9	-0.0718925 mg/L	0.01620410	-0.0718925 mg/L	0.01620410	22.54%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	5.9	-0.746228 mg/L	0.0079631	-0.746228 mg/L	0.0079631	1.07%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	1.5	-0.0065385 mg/L	0.00031171	-0.0065385 mg/L	0.00031171	4.77%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490	327.8	-0.312285 mg/L	0.0022451	-0.312285 mg/L	0.0022451	0.72%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592	395.9	-0.479710 mg/L	0.0091201	-0.479710 mg/L	0.0091201	1.90%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940	-3.3	-0.0062957 mg/L	0.00019893	-0.0062957 mg/L	0.00019893	3.16%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 19
Sample ID: 75646-026
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 94
Date Collected: 11/22/2013 2:55:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-026

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Al 308.215	-5.2	-0.0974561	mg/L	0.02058161	-0.0974561	mg/L	0.02058161	21.12%
Ca 315.887	17682.8	11.8902	mg/L	0.07408	11.8902	mg/L	0.07408	0.62%
Fe 273.955	5.3	-0.0126325	mg/L	0.01948999	-0.0126325	mg/L	0.01948999	154.28%
Mg 279.077	372.0	1.31388	mg/L	0.017889	1.31388	mg/L	0.017889	1.36%
Mn 257.610	120.4	0.0301248	mg/L	0.00167508	0.0301248	mg/L	0.00167508	5.56%
K 766.490	6375.0	1.13885	mg/L	0.045156	1.13885	mg/L	0.045156	3.97%
Na 589.592	141170.4	11.3046	mg/L	0.09594	11.3046	mg/L	0.09594	0.85%
Ti 334.940	-6.1	-0.0067065	mg/L	0.00065137	-0.0067065	mg/L	0.00065137	9.71%

Sequence No.: 20
Sample ID: 75646-028
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 95
Date Collected: 11/22/2013 2:58:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-028

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	8.1	-0.0202749	mg/L	0.01416244	-0.0202749	0.01416244	69.85%
Ca 315.887	30869.6	21.2394	mg/L	0.00919	21.2394	0.00919	0.04%
Fe 273.955	124.7	0.752942	mg/L	0.0050992	0.752942	0.0050992	0.68%
Mg 279.077	672.8	3.00627	mg/L	0.007218	3.00627	0.007218	0.24%
Mn 257.610	3486.8	1.06791	mg/L	0.001343	1.06791	0.001343	0.13%
K 766.490	20165.3	4.44812	mg/L	0.027784	4.44812	0.027784	0.62%
Na 589.592	348687.2	28.6760	mg/L	0.00501	28.6760	0.00501	0.02%
Ti 334.940	-1.6	-0.0060547	mg/L	0.00050354	-0.0060547	0.00050354	8.32%

Sequence No.: 21
Sample ID: 75646-030
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 96
Date Collected: 11/22/2013 3:01:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 75646-030

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Al 308.215	-3.1	-0.0851026	mg/L	0.04449280	-0.0851026	mg/L	0.04449280	52.28%
Ca 315.887	39566.8	27.4056	mg/L	0.64053	27.4056	mg/L	0.64053	2.34%
Fe 273.955	-8.6	-0.101975	mg/L	0.0427166	-0.101975	mg/L	0.0427166	41.89%
Mg 279.077	907.6	4.32734	mg/L	0.016961	4.32734	mg/L	0.016961	0.39%
Mn 257.610	2097.1	0.639502	mg/L	0.0019651	0.639502	mg/L	0.0019651	0.31%
K 766.490	15263.4	3.27181	mg/L	0.051228	3.27181	mg/L	0.051228	1.57%
Na 589.592	157795.2	12.6963	mg/L	0.25763	12.6963	mg/L	0.25763	2.03%
Ti 334.940	-5.7	-0.0066424	mg/L	0.00011445	-0.0066424	mg/L	0.00011445	1.72%

Sequence No.: 22
 Sample ID: 75646-032
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 97
 Date Collected: 11/22/2013 3:04:22 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: 75646-032

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	-0.3	-0.0689691 mg/L	0.02365205	-0.0689691 mg/L	0.02365205	34.29%
Ca 315.887	19109.0	12.9014 mg/L	0.37124	12.9014 mg/L	0.37124	2.88%
Fe 273.955	-4.0	-0.0724286 mg/L	0.01862771	-0.0724286 mg/L	0.01862771	25.72%
Mg 279.077	544.9	2.28685 mg/L	0.001985	2.28685 mg/L	0.001985	0.09%
Mn 257.610	-1.6	-0.0074746 mg/L	0.00097002	-0.0074746 mg/L	0.00097002	12.98%
K 766.490	3743.7	0.507426 mg/L	0.0369109	0.507426 mg/L	0.0369109	7.27%
Na 589.592	139033.6	11.1257 mg/L	0.31446	11.1257 mg/L	0.31446	2.83%
Ti 334.940	-9.7	-0.0072305 mg/L	0.00038145	-0.0072305 mg/L	0.00038145	5.28%

Sequence No.: 23
 Sample ID: ICSA V-175629
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 11/22/2013 3:07:21 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: ICSA V-175629

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	87037.9	506.462 mg/L	6.6672	506.462 mg/L	6.6672	1.32%
QC value within limits for Al 308.215 Recovery = 101.29%						
Ca 315.887	673174.2	476.622 mg/L	6.9072	476.622 mg/L	6.9072	1.45%
QC value within limits for Ca 315.887 Recovery = 95.32%						
Fe 273.955	29757.7	190.836 mg/L	2.2863	190.836 mg/L	2.2863	1.20%
QC value within limits for Fe 273.955 Recovery = 95.42%						
Mg 279.077	88290.5	495.966 mg/L	4.8082	495.966 mg/L	4.8082	0.97%
QC value within limits for Mg 279.077 Recovery = 99.19%						
Mn 257.610	11.0	-0.0036003 mg/L	0.00040895	-0.0036003 mg/L	0.00040895	11.36%
K 766.490	68.9	-0.374420 mg/L	0.0007355	-0.374420 mg/L	0.0007355	0.20%
Na 589.592	735.7	-0.451265 mg/L	0.0007755	-0.451265 mg/L	0.0007755	0.17%
Ti 334.940	-73.0	-0.0164109 mg/L	0.00133138	-0.0164109 mg/L	0.00133138	8.11%

All analyte(s) passed QC.

Sequence No.: 24
 Sample ID: ICSAB V-175630
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 11/22/2013 3:10:43 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: ICSAB V-175630

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	87292.7	507.945 mg/L	5.4034	507.945 mg/L	5.4034	1.06%
QC value within limits for Al 308.215 Recovery = 101.59%						
Ca 315.887	673628.5	476.944 mg/L	4.2710	476.944 mg/L	4.2710	0.90%
QC value within limits for Ca 315.887 Recovery = 95.39%						
Fe 273.955	29078.2	186.477 mg/L	0.5071	186.477 mg/L	0.5071	0.27%
QC value within limits for Fe 273.955 Recovery = 93.24%						
Mg 279.077	88683.7	498.178 mg/L	2.8374	498.178 mg/L	2.8374	0.57%
QC value within limits for Mg 279.077 Recovery = 99.64%						
Mn 257.610	1644.7	0.500038 mg/L	0.0044923	0.500038 mg/L	0.0044923	0.90%
QC value within limits for Mn 257.610 Recovery = 100.01%						
K 766.490	86.7	-0.370153 mg/L	0.0103155	-0.370153 mg/L	0.0103155	2.79%
Na 589.592	427.2	-0.477091 mg/L	0.0058797	-0.477091 mg/L	0.0058797	1.23%
Ti 334.940	-71.4	-0.0161842 mg/L	0.00181545	-0.0161842 mg/L	0.00181545	11.22%

All analyte(s) passed QC.

Sequence No.: 25
 Sample ID: CCV V-176789
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 11/22/2013 3:14:06 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCV V-176789

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	901.3	5.17821 mg/L	0.031859	5.17821 mg/L	0.031859	0.62%
QC value within limits for Al 308.215 Recovery = 103.56%						
Ca 315.887	73227.7	51.2706 mg/L	0.11508	51.2706 mg/L	0.11508	0.22%
QC value within limits for Ca 315.887 Recovery = 102.54%						
Fe 273.955	815.4	5.18331 mg/L	0.022116	5.18331 mg/L	0.022116	0.43%
QC value within limits for Fe 273.955 Recovery = 103.67%						
Mg 279.077	9414.7	52.1905 mg/L	0.13673	52.1905 mg/L	0.13673	0.26%
QC value within limits for Mg 279.077 Recovery = 104.38%						
Mn 257.610	1665.2	0.506373 mg/L	0.0029459	0.506373 mg/L	0.0029459	0.58%
QC value within limits for Mn 257.610 Recovery = 101.27%						
K 766.490	212950.9	50.7110 mg/L	0.09433	50.7110 mg/L	0.09433	0.19%
QC value within limits for K 766.490 Recovery = 101.42%						
Na 589.592	619664.7	51.3597 mg/L	0.10632	51.3597 mg/L	0.10632	0.21%
QC value within limits for Na 589.592 Recovery = 102.72%						
Ti 334.940	3520.1	0.505052 mg/L	0.0006596	0.505052 mg/L	0.0006596	0.13%
QC value within limits for Ti 334.940 Recovery = 101.01%						

All analyte(s) passed QC.

Sequence No.: 26
 Sample ID: LLCCV [aq] V-176895
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 11/22/2013 3:17:07 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: LLCCV [aq] V-176895

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	33.7	0.129009 mg/L	0.0124869	0.129009 mg/L	0.0124869	9.68%
QC value less than the lower limit for Al 308.215 Recovery = 64.50%						
Ca 315.887	7249.3	4.49306 mg/L	0.031040	4.49306 mg/L	0.031040	0.69%
QC value within limits for Ca 315.887 Recovery = 89.86%						
Fe 273.955	42.7	0.227279 mg/L	0.0236187	0.227279 mg/L	0.0236187	10.39%
QC value within limits for Fe 273.955 Recovery = 75.76%						
Mg 279.077	959.1	4.61672 mg/L	0.044218	4.61672 mg/L	0.044218	0.96%
QC value within limits for Mg 279.077 Recovery = 92.33%						
Mn 257.610	130.2	0.0331625 mg/L	0.00045134	0.0331625 mg/L	0.00045134	1.36%
QC value within limits for Mn 257.610 Recovery = 82.91%						
K 766.490	20554.6	4.54154 mg/L	0.028873	4.54154 mg/L	0.028873	0.64%
QC value within limits for K 766.490 Recovery = 90.83%						
Na 589.592	61913.1	4.66994 mg/L	0.002981	4.66994 mg/L	0.002981	0.06%
QC value within limits for Na 589.592 Recovery = 93.40%						
Ti 334.940	328.0	0.0417880 mg/L	0.00103469	0.0417880 mg/L	0.00103469	2.48%
QC value within limits for Ti 334.940 Recovery = 83.58%						
QC Failed. Continue with analysis.						

Sequence No.: 27
 Sample ID: CCB V-174666
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 11/22/2013 3:20:10 PM
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB V-174666

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Al 308.215	3.6	-0.0459872 mg/L	0.06244169	-0.0459872 mg/L	0.06244169	135.78%
QC value within limits for Al 308.215 Recovery = Not calculated						
Ca 315.887	-2.3	-0.648212 mg/L	0.0000594	-0.648212 mg/L	0.0000594	0.01%
QC value within limits for Ca 315.887 Recovery = Not calculated						
Fe 273.955	-2.1	-0.0600952 mg/L	0.01194448	-0.0600952 mg/L	0.01194448	19.88%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	2.8	-0.763642 mg/L	0.0258097	-0.763642 mg/L	0.0258097	3.38%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	-0.2	-0.0070543 mg/L	0.00042162	-0.0070543 mg/L	0.00042162	5.98%
QC value within limits for Mn 257.610 Recovery = Not calculated						
K 766.490	24.3	-0.385120 mg/L	0.0401836	-0.385120 mg/L	0.0401836	10.43%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592	-77.9	-0.519368 mg/L	0.0014914	-0.519368 mg/L	0.0014914	0.29%
QC value within limits for Na 589.592 Recovery = Not calculated						
Ti 334.940	-6.6	-0.0067785 mg/L	0.00040032	-0.0067785 mg/L	0.00040032	5.91%
QC value within limits for Ti 334.940 Recovery = Not calculated						

All analyte(s) passed QC.

C:\ICPCHEM\1\DATA\S112213B.b\001CALB.D\001CALB.D#

Calibration Blank QC Report

File: S112213B

Data File: C:\ICPCHEM\1\DATA\S112213B.b\001CALB.D\001CALB.D#
 Date Acquired: Nov 22 2013 04:08 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 22 2013 04:13 pm
 Sample Type: CalBlk

B- 15727
 QL 27442

Paul C 11/25/13

QC Elements

Element	IS	Ref	Tune	CPS Mean	RSD(%)
9	Be	45	2	137	2.44
23	Na	45	1	143135	0.85
24	Mg	45	1	1344	5.47
27	Al	45	1	549	23.99
39	K	45	1	65430	1.46
44	Ca	45	1	486	7.03
51	V	45	1	90	4.45
52	Cr	45	1	742	7.59
55	Mn	45	1	513	5.54
56	Fe	45	1	22237	3.29
59	Co	45	1	184	11.07
60	Ni	45	1	147	12.47
65	Cu	45	1	392	9.09
66	Zn	45	1	1579	5.22
75	As	115	1	20	7.10
78	Se	115	1	146	10.74
83	Kr	115	2	368	7.55
95	Mo	115	2	90	3.70
107	Ag	115	2	211	6.38
111	Cd	115	2	50	14.39
121	Sb	115	2	158	20.30
137	Ba	159	2	236	10.04
205	Tl	165	2	759	6.95
206	(Pb)	165	2	499	7.80
207	(Pb)	165	2	428	3.92
208	Pb	165	2	2015	3.85

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Internal Standard Elements

Element	Tune	CPS Mean	RSD(%)	
45	Sc	1	95747	5.03
45	Sc	2	1461354	1.22
115	In	1	561936	7.19
115	In	2	1679605	2.03
159	Tb	1	1306927	4.08
159	Tb	2	2246149	0.83
165	Ho	1	1281532	3.01
165	Ho	2	2185026	1.09

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\S112213B.b\002CALB.D\002CALB.D#

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\002CALB.D\002CALB.D#
 Date Acquired: Nov 22 2013 04:14 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 22 2013 04:13 pm
 Sample Type: CalBlk

QC Elements

Element	IS	Ref	Tune	CPS	Mean	RSD(%)
9	Be	45	2	123		16.44
23	Na	45	1	142850		2.31
24	Mg	45	1	1126		2.17
27	Al	45	1	426		3.15
39	K	45	1	65518		2.14
44	Ca	45	1	464		1.11
51	V	45	1	94		22.17
52	Cr	45	1	773		3.63
55	Mn	45	1	457		4.75
56	Fe	45	1	21004		2.52
59	Co	45	1	152		4.56
60	Ni	45	1	140		4.66
65	Cu	45	1	429		15.34
66	Zn	45	1	1735		0.86
75	As	115	1	19		4.08
78	Se	115	1	145		3.57
83	Kr	115	2	351		13.10
95	Mo	115	2	83		26.23
107	Aq	115	2	159		12.82
111	Cd	115	2	42		16.22
121	Sb	115	2	151		9.18
137	Ba	159	2	211		3.29
205	Tl	165	2	726		1.86
206	(Pb)	165	2	491		3.21
207	(Pb)	165	2	399		10.58
208	Pb	165	2	1980		4.52

Internal Standard Elements

Element	Tune	CPS	Mean	RSD(%)
45	Sc	1	103014	1.28
45	Sc	2	1505216	1.15
115	In	1	627502	0.97
115	In	2	1713882	1.22
159	Tb	1	1421955	1.36
159	Tb	2	2311468	2.12
165	Ho	1	1382986	0.75
165	Ho	2	2231264	2.27

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nodas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

C:\ICPCHEM\1\DATA\S112213B.b\003CALI.D\003CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\003CALI.D\003CALI.D#
 Date Acquired: Nov 22 2013 04:20 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 22 2013 04:19 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
9 Be	45	2	3402	2.19
23 Na	45	1	403307	3.05
24 Mg	45	1	88018	6.80
27 Al	45	1	35532	8.05
39 K	45	1	140534	3.48
44 Ca	45	1	9505	7.02
51 V	45	1	2457	1.82
52 Cr	45	1	3611	3.15
55 Mn	45	1	2670	2.09
56 Fe	45	1	1437203	8.29
59 Co	45	1	4632	1.70
60 Ni	45	1	1308	0.85
65 Cu	45	1	2035	2.56
66 Zn	45	1	2627	4.75
75 As	115	1	395	4.02
78 Se	115	1	360	3.43
83 Kr	115	2	363	11.93
95 Mo	115	2	9880	2.23
107 Ag	115	2	7197	1.90
111 Cd	115	2	1560	2.14
121 Sb	115	2	5535	1.26
137 Ba	159	2	2270	0.53
205 Tl	165	2	13929	1.82
206 (Pb)	165	2	4924	3.23
207 (Pb)	165	2	4056	4.96
208 Pb	165	2	18919	1.77

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	DC Range(%)	Flag
45 Sc	1	102922	8.50	103014	99.9	30 - 120	
45 Sc	2	1477419	0.48	1505216	98.2	30 - 120	
115 In	1	615994	7.87	627502	98.2	30 - 120	
115 In	2	1732133	1.07	1713882	101.1	30 - 120	
159 Tb	1	1390026	6.16	1421955	97.8	30 - 120	
159 Tb	2	2275051	0.12	2311468	98.4	30 - 120	
165 Ho	1	1370807	6.48	1382986	99.1	30 - 120	
165 Ho	2	2200848	1.10	2231264	98.6	30 - 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\S112213B.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112213B.b\004CALI.D\004CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\004CALI.D\004CALI.D#
 Date Acquired: Nov 22 2013 04:26 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 22 2013 04:24 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	33763	1.92
23	Na	45	1	736473	15.65
24	Mg	45	1	326158	16.87
27	Al	45	1	54392	16.70
39	K	45	1	361269	15.92
44	Ca	45	1	16664	15.56
51	V	45	1	23525	17.23
52	Cr	45	1	29047	16.84
55	Mn	45	1	21964	16.28
56	Fe	45	1	2683035	16.64
59	Co	45	1	44571	16.97
60	Ni	45	1	11745	16.91
65	Cu	45	1	15726	18.73
66	Zn	45	1	8162	13.82
75	As	115	1	3687	18.54
78	Se	115	1	2083	16.13
83	Kr	115	2	374	10.32
95	Mo	115	2	26027	2.22
107	Aq	115	2	71119	1.30
111	Cd	115	2	15176	1.75
121	Sb	115	2	53137	0.97
137	Ba	159	2	20819	0.90
205	Tl	165	2	134908	0.45
206	(Pb)	165	2	45939	1.66
207	(Pb)	165	2	36687	0.41
208	Pb	165	2	174895	0.69

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	111354	17.22	103014	108.1	30 - 120
45	Sc	2	1466654	0.49	1505216	97.4	30 - 120
115	In	1	671252	18.22	627502	107.0	30 - 120
115	In	2	1695458	2.43	1713882	98.9	30 - 120
159	Tb	1	1523102	17.06	1421955	107.1	30 - 120
159	Tb	2	2261110	1.07	2311468	97.8	30 - 120
165	Ho	1	1490327	17.55	1382986	107.8	30 - 120
165	Ho	2	2198061	0.37	2231264	98.5	30 - 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\S112213B.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112213B.b\005CALI.D\005CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\005CALI.D\005CALI.D#
 Date Acquired: Nov 22 2013 04:32 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 22 2013 04:30 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	63972	6.08
23	Na	45	1	1246082	1.00
24	Mg	45	1	619046	0.75
27	Al	45	1	99388	2.54
39	K	45	1	621261	0.48
44	Ca	45	1	30472	1.27
51	V	45	1	45002	0.04
52	Cr	45	1	54526	0.77
55	Mn	45	1	40871	1.58
56	Fe	45	1	4944358	1.45
59	Co	45	1	85613	1.46
60	Ni	45	1	22167	0.81
65	Cu	45	1	29332	0.15
66	Zn	45	1	13969	0.92
75	As	115	1	6974	0.90
78	Se	115	1	3855	2.20
83	Kr	115	2	356	3.01
95	Mo	115	2	49325	6.18
107	Aq	115	2	135659	7.79
111	Cd	115	2	28709	6.57
121	Sb	115	2	100330	6.20
137	Ba	159	2	38944	4.17
205	Tl	165	2	253085	5.58
206	(Pb)	165	2	85595	4.27
207	(Pb)	165	2	70038	4.62
208	Pb	165	2	330477	4.64

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	100089	1.25	103014	97.2	80 - 120
45	Sc	2	1393834	6.14	1505216	92.6	80 - 120
115	In	1	605070	1.21	627502	96.4	80 - 120
115	In	2	1573153	6.27	1713882	91.8	80 - 120
159	Tb	1	1382608	1.82	1421955	97.2	80 - 120
159	Tb	2	2136497	4.96	2311468	92.4	80 - 120
165	Ho	1	1348192	1.77	1382986	97.5	80 - 120
165	Ho	2	2071735	4.48	2231264	92.9	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\S112213B.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112213B.b\006CALI.D\006CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\006CALI.D\006CALI.D#
 Date Acquired: Nov 22 2013 04:38 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 22 2013 04:36 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	319767	0.91
23	Na	45	1	5323699	1.37
24	Mg	45	1	2940909	1.44
27	Al	45	1	485402	0.93
39	K	45	1	2789857	2.51
44	Ca	45	1	146536	1.51
51	V	45	1	222868	1.12
52	Cr	45	1	263864	1.02
55	Mn	45	1	199214	0.82
56	Fe	45	1	23941240	1.06
59	Co	45	1	418670	2.07
60	Ni	45	1	106730	1.68
65	Cu	45	1	139413	0.47
66	Zn	45	1	57410	1.52
75	As	115	1	34249	1.21
78	Se	115	1	18445	0.46
83	Kr	115	2	334	6.78
95	Mo	115	2	251642	1.44
107	Aq	115	2	686159	1.13
111	Cd	115	2	145962	0.90
121	Sb	115	2	503984	0.80
137	Ba	159	2	196248	1.11
205	Tl	165	2	1396826	1.65
206	(Pb)	165	2	437840	1.70
207	(Pb)	165	2	360098	2.57
208	Pb	165	2	1747018	1.86

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	97064	1.99	103014	94.2	80 - 120
45	Sc	2	1398512	1.16	1505216	92.9	80 - 120
115	In	1	592859	2.04	627502	94.5	80 - 120
115	In	2	1589976	0.46	1713882	92.8	80 - 120
159	Tb	1	1348805	3.30	1421955	94.9	80 - 120
159	Tb	2	2186589	0.96	2311468	94.6	80 - 120
165	Ho	1	1305082	2.57	1382986	94.4	80 - 120
165	Ho	2	2151189	2.27	2231264	96.4	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\S112213B.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112213B.b\007CALI.D\007CALI.D#

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\007CALI.D\007CALI.D#
 Date Acquired: Nov 22 2013 04:44 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 22 2013 04:42 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
9	Be	45	2	661325	1.24
23	Na	45	1	10954190	1.19
24	Mg	45	1	6007047	1.18
27	Al	45	1	1013239	0.91
39	K	45	1	5625165	1.06
44	Ca	45	1	303820	1.14
51	V	45	1	460492	0.86
52	Cr	45	1	546845	0.68
55	Mn	45	1	412408	1.53
56	Fe	45	1	49897460	1.71
59	Co	45	1	879589	1.54
60	Ni	45	1	220522	1.25
65	Cu	45	1	289870	1.05
66	Zn	45	1	115444	0.46
75	As	115	1	70927	0.55
78	Se	115	1	37368	1.05
83	Kr	115	2	374	13.63
95	Mo	115	2	517246	2.24
107	Aq	115	2	1420312	1.43
111	Cd	115	2	293883	1.86
121	Sb	115	2	1075901	2.18
137	Ba	159	2	403414	0.60
205	Tl	165	2	2791828	0.78
206	(Pb)	165	2	913917	3.99
207	(Pb)	165	2	726998	1.08
208	Pb	165	2	3563769	0.98

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45	Sc	1	101399	0.61	103014	98.4	80 - 120
45	Sc	2	1424067	0.72	1505216	94.6	80 - 120
115	In	1	611937	1.00	627502	97.5	80 - 120
115	In	2	1641171	1.47	1713882	95.8	80 - 120
159	Tb	1	1411553	1.82	1421955	99.3	80 - 120
159	Tb	2	2238747	0.70	2311468	96.9	80 - 120
165	Ho	1	1374982	1.04	1382986	99.4	80 - 120
165	Ho	2	2191208	0.56	2231264	98.2	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\S112213B.b\002CALB.D\002CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

C:\ICPCHEM\1\DATA\S112213B.b\008_ICV.D\008_ICV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\008_ICV.D\008_ICV.D#
 Date Acquired: Nov 22 2013 04:50 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 22 2013 04:48 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	49.75	ppb	1.37	333472	50	99.5	90 - 110	
23 Na	45	1	5050.00	ppb	0.48	5760746	5000	101.0	90 - 110	
24 Mg	45	1	5118.00	ppb	2.41	3174463	5000	102.4	90 - 110	
27 Al	45	1	4918.00	ppb	0.63	1706854	5000	98.4	90 - 110	
39 K	45	1	5168.00	ppb	1.15	3034191	5000	103.4	90 - 110	
44 Ca	45	1	4851.00	ppb	1.61	151881	5000	97.0	90 - 110	
51 V	45	1	50.22	ppb	1.97	238078	50	100.4	90 - 110	
52 Cr	45	1	48.48	ppb	1.80	273082	50	97.0	90 - 110	
55 Mn	45	1	49.42	ppb	2.35	209916	50	98.8	90 - 110	
56 Fe	45	1	4982.00	ppb	1.26	25567680	5000	99.6	90 - 110	
59 Co	45	1	46.79	ppb	0.81	422462	50	93.6	90 - 110	
60 Ni	45	1	48.36	ppb	2.13	109863	50	96.7	90 - 110	
65 Cu	45	1	49.15	ppb	0.97	146767	50	98.3	90 - 110	
66 Zn	45	1	49.95	ppb	2.90	60445	50	99.9	90 - 110	
75 As	115	1	50.55	ppb	0.58	36312	50	101.1	90 - 110	
78 Se	115	1	51.14	ppb	1.42	4069	50	102.3	90 - 110	
83 Kr	115	2	-----	ppb	-----	359	50	#VALUE!	##### - #####	
95 Mo	115	2	49.45	ppb	0.63	258683	50	98.9	90 - 110	
107 Ag	115	2	10.04	ppb	1.24	144114	10	100.4	90 - 110	
111 Cd	115	2	49.86	ppb	0.95	148835	50	99.7	90 - 110	
121 Sb	115	2	46.30	ppb	0.26	499975	50	92.6	90 - 110	
137 Ba	159	2	49.61	ppb	0.37	201977	50	99.2	90 - 110	
205 Tl	165	2	49.39	ppb	0.95	1375904	50	98.8	90 - 110	
206 (Pb)	165	2	49.08	ppb	0.57	444030	50	98.2	90 - 110	
207 (Pb)	165	2	52.50	ppb	1.36	380337	50	105.0	90 - 110	
208 Pb	165	2	51.28	ppb	0.89	1816957	50	102.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	104212	3.26	103014	101.2	80 - 120	
45 Sc	2	1447810	1.49	1505216	96.2	80 - 120	
115 In	1	620130	2.50	627502	98.8	80 - 120	
115 In	2	1658174	1.28	1713882	96.7	80 - 120	
159 Tb	1	1433772	2.91	1421955	100.8	80 - 120	
159 Tb	2	2259932	0.37	2311468	97.8	80 - 120	
165 Ho	1	1408951	3.04	1382986	101.9	80 - 120	
165 Ho	2	2178442	0.22	2231264	97.6	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\S112213B.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\S112213B.b\009_CCV.D\009_CCV.D#

Initial Calibration Verification (ICV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\009_CCV.D\009_CCV.D#
 Date Acquired: Nov 22 2013 04:56 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 22 2013 04:48 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	0.51	ppb	6.02	1	102.3	70 - 130	
23 Na	45	1	254.20	ppb	1.72	250	101.7	70 - 130	
24 Mg	45	1	269.40	ppb	2.10	250	107.8	70 - 130	
27 Al	45	1	106.50	ppb	2.06	100	106.5	70 - 130	
39 K	45	1	261.40	ppb	0.83	250	104.6	70 - 130	
44 Ca	45	1	257.50	ppb	0.54	250	103.0	70 - 130	
51 V	45	1	1.03	ppb	1.99	1	103.0	70 - 130	
52 Cr	45	1	1.03	ppb	0.32	1	103.3	70 - 130	
55 Mn	45	1	3.02	ppb	0.45	3	100.8	70 - 130	
56 Fe	45	1	172.00	ppb	2.58	150	114.7	70 - 130	
59 Co	45	1	1.01	ppb	1.12	1	100.9	70 - 130	
60 Ni	45	1	1.52	ppb	1.92	2	101.2	70 - 130	
65 Cu	45	1	5.17	ppb	1.66	5	103.3	70 - 130	
66 Zn	45	1	10.26	ppb	1.20	10	102.6	70 - 130	
75 As	115	1	1.04	ppb	4.92	1	103.7	70 - 130	
78 Se	115	1	4.37	ppb	5.67	5	87.4	70 - 130	
83 Kr	115	2		ppb		1	#VALUE!	##### - #####	
95 Mo	115	2	1.06	ppb	0.73	1	106.2	70 - 130	
107 Ag	115	2	0.52	ppb	3.74	1	104.6	70 - 130	
111 Cd	115	2	1.02	ppb	0.58	1	101.9	70 - 130	
121 Sb	115	2	1.12	ppb	1.40	1	111.9	70 - 130	
137 Ba	159	2	2.53	ppb	0.81	3	101.2	70 - 130	
205 Tl	165	2	1.01	ppb	1.70	1	100.5	70 - 130	
206 (Pb)	165	2	1.45	ppb	1.61	2	96.5	70 - 130	
207 (Pb)	165	2	1.59	ppb	2.72	2	105.9	70 - 130	
208 Pb	165	2	1.48	ppb	2.13	2	98.5	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	103376	1.30	103014	100.4	80 - 120	
45 Sc	2	1481665	1.66	1505216	98.4	80 - 120	
115 In	1	633961	1.90	627502	101.0	80 - 120	
115 In	2	1692869	1.61	1713882	98.8	80 - 120	
159 Tb	1	1413825	1.65	1421955	99.4	80 - 120	
159 Tb	2	2286555	1.69	2311468	98.9	80 - 120	
165 Ho	1	1405945	2.06	1382986	101.7	80 - 120	
165 Ho	2	2209815	1.34	2231264	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\S112213B.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\S112213B.b\010_ICB.D\010_ICB.D#

Initial Calibration Blank (ICB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\010_ICB.D\010_ICB.D#
 Date Acquired: Nov 22 2013 05:02 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 22 2013 04:48 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	33.94	188	0.50	
23 Na	45	1	0.03	ppb	4871.10	140305	250.00	
24 Mg	45	1	1.87	ppb	7.29	2229	250.00	
27 Al	45	1	1.01	ppb	15.04	759	100.00	
39 K	45	1	2.37	ppb	64.80	65654	250.00	
44 Ca	45	1	-0.90	ppb	12.62	429	250.00	
51 V	45	1	0.02	ppb	10.99	163	1.00	
52 Cr	45	1	0.01	ppb	59.27	817	1.00	
55 Mn	45	1	0.09	ppb	183.01	823	3.00	
56 Fe	45	1	2.51	ppb	5.44	33128	150.00	
59 Co	45	1	0.02	ppb	4.36	304	1.00	
60 Ni	45	1	0.02	ppb	9.23	184	1.50	
65 Cu	45	1	-0.03	ppb	28.14	420	5.00	
66 Zn	45	1	0.01	ppb	252.30	1720	10.00	
75 As	115	1	0.02	ppb	43.87	33	1.00	
78 Se	115	1	-1.00	ppb	7.56	131	5.00	
83 Kr	115	2	-----	ppb	-----	331	1.00	
95 Mo	115	2	0.02	ppb	6.37	204	1.00	
107 Ag	115	2	0.01	ppb	15.62	333	0.50	
111 Cd	115	2	0.02	ppb	10.79	95	1.00	
121 Sb	115	2	0.05	ppb	7.71	737	1.00	
137 Ba	159	2	-0.01	ppb	40.44	176	2.50	
205 Tl	165	2	0.02	ppb	17.71	1233	1.00	
206 (Pb)	165	2	0.01	ppb	67.57	533	1.50	
207 (Pb)	165	2	0.01	ppb	28.60	447	1.50	
208 Pb	165	2	0.01	ppb	29.48	2201	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	101152	0.73	103014	98.2	80 - 120	
45 Sc	2	1435229	1.82	1505216	95.4	80 - 120	
115 In	1	615118	0.84	627502	98.0	80 - 120	
115 In	2	1655853	1.10	1713882	96.6	80 - 120	
159 Tb	1	1396543	1.03	1421955	98.2	80 - 120	
159 Tb	2	2215049	0.91	2311468	95.8	80 - 120	
165 Ho	1	1376617	0.32	1382986	99.5	80 - 120	
165 Ho	2	2165562	1.08	2231264	97.1	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\S112213B.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\S112213B.b\011ICSA.D\011ICSA.D#

Interference Check Solution A (ICS-A) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\011ICSA.D\011ICSA.D#
 Date Acquired: Nov 22 2013 05:07 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 22 2013 04:48 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	9.44	0.50	
23 Na	45	1	123600.00 ppb	1.47	250.00	
24 Mg	45	1	49010.00 ppb	0.98	250.00	
27 Al	45	1	47510.00 ppb	0.94	100.00	
39 K	45	1	49020.00 ppb	0.98	250.00	
44 Ca	45	1	146000.00 ppb	1.16	250.00	
51 V	45	1	0.06 ppb	3.87	1.00	
52 Cr	45	1	0.80 ppb	4.39	1.00	
55 Mn	45	1	4.55 ppb	1.74	3.00	**
56 Fe	45	1	118500.00 ppb	1.87	150.00	
59 Co	45	1	1.78 ppb	2.59	1.00	**
60 Ni	45	1	3.23 ppb	2.06	1.50	**
65 Cu	45	1	1.52 ppb	6.02	5.00	
66 Zn	45	1	1.45 ppb	7.31	10.00	
75 As	115	1	0.29 ppb	6.23	1.00	
78 Se	115	1	-0.34 ppb	10.87	5.00	
83 Kr	115	2	----- ppb	-----	1.00	
95 Mo	115	2	1006.00 ppb	0.69	1.00	
107 Ag	115	2	0.04 ppb	5.04	0.50	
111 Cd	115	2	1.20 ppb	1.03	1.00	**
121 Sb	115	2	0.30 ppb	3.53	1.00	
137 Ba	159	2	0.98 ppb	3.46	2.50	
205 Tl	165	2	0.04 ppb	30.13	1.00	
206 (Pb)	165	2	0.23 ppb	1.32	1.50	
207 (Pb)	165	2	0.24 ppb	3.96	1.50	
208 Pb	165	2	0.23 ppb	3.72	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	91408	1.29	103014	88.7	70 - 150	
45 Sc	2	1290271	0.74	1505216	85.7	70 - 150	
115 In	1	531380	1.54	627502	84.7	70 - 150	
115 In	2	1429549	0.84	1713882	83.4	70 - 150	
159 Tb	1	1296154	0.37	1421955	91.2	70 - 150	
159 Tb	2	1996183	1.04	2311468	86.4	70 - 150	
165 Ho	1	1278520	0.81	1382986	92.4	70 - 150	
165 Ho	2	1952637	0.32	2231264	87.5	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\S112213B.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\S112213B.b\012ICSB.D\012ICSB.D#

Interference Check Solution AB (ICS-AB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\012ICSB.D\012ICSB.D#
 Date Acquired: Nov 22 2013 05:13 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 22 2013 04:48 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	27.42	---		-	
23 Na	45	1		135300.00	3.00	---		-	
24 Mg	45	1		54060.00	2.99	---		-	
27 Al	45	1		52530.00	3.39	---		-	
39 K	45	1		55220.00	2.90	---		-	
44 Ca	45	1		163600.00	5.22	---		-	
51 V	45	1		230.60	3.34	200	115.3	80 - 120	
52 Cr	45	1		218.00	3.81	200	109.0	80 - 120	
55 Mn	45	1		228.00	3.95	200	114.0	80 - 120	
56 Fe	45	1		131200.00	4.81	---		-	
59 Co	45	1		212.00	5.14	200	106.0	80 - 120	
60 Ni	45	1		203.30	4.85	200	101.7	80 - 120	
65 Cu	45	1		202.00	3.31	---		-	
66 Zn	45	1		100.70	3.82	100	100.7	80 - 120	
75 As	115	1		116.20	4.98	100	116.2	80 - 120	
78 Se	115	1		107.30	4.61	100	107.3	80 - 120	
83 Kr	115	2		-----	---			-	
95 Mo	115	2		1039.00	0.20	---		-	
107 Ag	115	2		47.49	0.30	50	95.0	80 - 120	
111 Cd	115	2		99.78	0.93	100	99.8	80 - 120	
121 Sb	115	2		0.27	2.44	---		-	
137 Ba	159	2		1.04	2.71	---		-	
205 Tl	165	2		0.02	9.28	---		-	
206 (Pb)	165	2		0.22	8.37	---		-	
207 (Pb)	165	2		0.22	3.89	---		-	
208 Pb	165	2		0.21	1.38	---		-	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	87583	5.06	103014	85.0	70 - 150	
45 Sc	2	1386698	3.24	1505216	92.1	70 - 150	
115 In	1	506161	5.50	627502	80.7	70 - 150	
115 In	2	1520119	2.16	1713882	88.7	70 - 150	
159 Tb	1	1222826	5.14	1421955	86.0	70 - 150	
159 Tb	2	2156171	2.96	2311468	93.3	70 - 150	
165 Ho	1	1201191	5.44	1382986	86.9	70 - 150	
165 Ho	2	2072478	2.12	2231264	92.9	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\S112213B.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\S112213B.b\013_CCV.D\013_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\013_CCV.D\013_CCV.D#
 Date Acquired: Nov 22 2013 05:19 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 22 2013 04:48 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	48.70 ppb	0.42	349066	50	97.4	90 - 110	
23 Na	45	1	5129.00 ppb	0.59	5999589	5000	102.6	90 - 110	
24 Mg	45	1	5121.00 ppb	1.25	3258524	5000	102.4	90 - 110	
27 Al	45	1	1516.00 ppb	1.00	540028	1500	101.1	90 - 110	
39 K	45	1	5088.00 ppb	1.81	3065812	5000	101.8	90 - 110	
44 Ca	45	1	5114.00 ppb	1.07	164267	5000	102.3	90 - 110	
51 V	45	1	50.99 ppb	0.45	248075	50	102.0	90 - 110	
52 Cr	45	1	50.42 ppb	1.04	291363	50	100.8	90 - 110	
55 Mn	45	1	50.81 ppb	0.65	221471	50	101.6	90 - 110	
56 Fe	45	1	5124.00 ppb	1.17	26976660	5000	102.5	90 - 110	
59 Co	45	1	49.98 ppb	0.28	462923	50	100.0	90 - 110	
60 Ni	45	1	50.65 ppb	0.59	118066	50	101.3	90 - 110	
65 Cu	45	1	50.46 ppb	1.41	154563	50	100.9	90 - 110	
66 Zn	45	1	50.79 ppb	0.52	63043	50	101.6	90 - 110	
75 As	115	1	51.31 ppb	0.67	38175	50	102.6	90 - 110	
78 Se	115	1	252.40 ppb	1.53	19952	250	101.0	90 - 110	
83 Kr	115	2	----- ppb -----	-----	394	50	#VALUE!	##### - #####	
95 Mo	115	2	50.76 ppb	0.23	280487	50	101.5	90 - 110	
107 Ag	115	2	49.38 ppb	0.45	748258	50	98.8	90 - 110	
111 Cd	115	2	50.29 ppb	0.47	158577	50	100.6	90 - 110	
121 Sb	115	2	48.54 ppb	0.12	553748	50	97.1	90 - 110	
137 Ba	159	2	51.37 ppb	1.56	215534	50	102.7	90 - 110	
205 Tl	165	2	50.52 ppb	0.78	1469196	50	101.0	90 - 110	
206 (Pb)	165	2	48.54 ppb	0.96	458453	50	97.1	90 - 110	
207 (Pb)	165	2	50.20 ppb	0.72	379765	50	100.4	90 - 110	
208 Pb	165	2	49.90 ppb	0.72	1846141	50	99.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
45 Sc	1	106885	1.86	103014	103.8	80 - 120	
45 Sc	2	1547837	1.34	1505216	102.8	80 - 120	
115 In	1	642239	1.54	627502	102.3	80 - 120	
115 In	2	1751479	1.54	1713882	102.2	80 - 120	
159 Tb	1	1439433	1.55	1421955	101.2	80 - 120	
159 Tb	2	2329336	2.40	2311468	100.8	80 - 120	
165 Ho	1	1403762	1.90	1382986	101.5	80 - 120	
165 Ho	2	2274605	1.00	2231264	101.9	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\S112213B.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\S112213B.b\014_CCV.D\014_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\014_CCV.D\014_CCV.D#
 Date Acquired: Nov 22 2013 05:25 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 22 2013 04:48 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	0.51 ppb		2.59	1	102.5	70 - 130	
23 Na	45	1	282.90 ppb		0.83	250	113.2	70 - 130	
24 Mg	45	1	282.90 ppb		1.21	250	113.2	70 - 130	
27 Al	45	1	117.30 ppb		1.23	100	117.3	70 - 130	
39 K	45	1	274.40 ppb		0.74	250	109.8	70 - 130	
44 Ca	45	1	291.30 ppb		1.20	250	116.5	70 - 130	
51 V	45	1	1.05 ppb		1.24	1	105.4	70 - 130	
52 Cr	45	1	1.05 ppb		1.78	1	105.4	70 - 130	
55 Mn	45	1	3.06 ppb		0.27	3	101.9	70 - 130	
56 Fe	45	1	201.80 ppb		1.68	150	134.5	70 - 130	FAIL
59 Co	45	1	1.03 ppb		1.17	1	103.2	70 - 130	
60 Ni	45	1	1.52 ppb		1.42	2	101.5	70 - 130	
65 Cu	45	1	5.21 ppb		2.94	5	104.2	70 - 130	
66 Zn	45	1	10.17 ppb		1.68	10	101.7	70 - 130	
75 As	115	1	1.07 ppb		5.16	1	106.9	70 - 130	
78 Se	115	1	4.38 ppb		7.45	5	87.7	70 - 130	
83 Kr	115	2	----- ppb		-----	1	#VALUE! ##### - #####		
95 Mo	115	2	1.34 ppb		2.09	1	133.5	70 - 130	FAIL
107 Ag	115	2	0.53 ppb		1.99	1	106.2	70 - 130	
111 Cd	115	2	1.04 ppb		0.51	1	104.1	70 - 130	
121 Sb	115	2	0.99 ppb		1.17	1	99.1	70 - 130	
137 Ba	159	2	2.55 ppb		0.50	3	101.8	70 - 130	
205 Tl	165	2	0.98 ppb		1.90	1	98.1	70 - 130	
206 (Pb)	165	2	1.49 ppb		4.67	2	99.1	70 - 130	
207 (Pb)	165	2	1.57 ppb		0.86	2	104.5	70 - 130	
208 Pb	165	2	1.48 ppb		2.36	2	98.3	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	108455	0.85	103014	105.3	80 - 120	
45 Sc	2	1539206	2.50	1505216	102.3	80 - 120	
115 In	1	640148	0.72	627502	102.0	80 - 120	
115 In	2	1766186	2.46	1713882	103.1	80 - 120	
159 Tb	1	1431058	2.05	1421955	100.6	80 - 120	
159 Tb	2	2339337	2.51	2311468	101.2	80 - 120	
165 Ho	1	1401267	1.45	1382986	101.3	80 - 120	
165 Ho	2	2257637	2.48	2231264	101.2	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\S112213B.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\S112213B.b\015_CCB.D\015_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\015_CCB.D\015_CCB.D#
 Date Acquired: Nov 22 2013 05:31 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 22 2013 04:48 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	0.007	ppb	11.17	177	0.50	
23 Na	45	1	26.550	ppb	9.44	182020	250.00	
24 Mg	45	1	9.842	ppb	6.19	7575	250.00	
27 Al	45	1	9.249	ppb	4.11	3808	100.00	
39 K	45	1	8.994	ppb	17.43	74722	250.00	
44 Ca	45	1	24.190	ppb	2.87	1281	250.00	
51 V	45	1	0.034	ppb	5.45	268	1.00	
52 Cr	45	1	0.033	ppb	8.24	1009	1.00	
55 Mn	45	1	0.019	ppb	42.60	566	3.00	
56 Fe	45	1	23.970	ppb	4.03	150767	150.00	
59 Co	45	1	0.030	ppb	10.59	442	1.00	
60 Ni	45	1	0.030	ppb	24.94	220	1.50	
65 Cu	45	1	0.013	ppb	108.62	598	5.00	
66 Zn	45	1	0.078	ppb	34.08	1932	10.00	
75 As	115	1	0.026	ppb	19.42	40	1.00	
78 Se	115	1	-0.767	ppb	7.34	159	5.00	
83 Kr	115	2	-----	ppb	-----	373	1.00	
95 Mo	115	2	0.197	ppb	1.29	1163	1.00	
107 Ag	115	2	0.014	ppb	7.83	370	0.50	
111 Cd	115	2	0.024	ppb	9.55	118	1.00	
121 Sb	115	2	0.025	ppb	9.55	431	1.00	
137 Ba	159	2	-0.009	ppb	66.94	174	2.50	
205 Tl	165	2	0.010	ppb	21.96	1016	1.00	
206 (Pb)	165	2	0.004	ppb	61.17	529	1.50	
207 (Pb)	165	2	0.005	ppb	96.00	436	1.50	
208 Pb	165	2	0.007	ppb	35.97	2234	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	108990	0.59	103014	105.8	80 - 120	
45 Sc	2	1515489	0.60	1505216	100.7	80 - 120	
115 In	1	655540	0.88	627502	104.5	80 - 120	
115 In	2	1739936	0.87	1713882	101.5	80 - 120	
159 Tb	1	1452578	2.03	1421955	102.2	80 - 120	
159 Tb	2	2313844	0.73	2311468	100.1	80 - 120	
165 Ho	1	1426820	1.58	1382986	103.2	80 - 120	
165 Ho	2	2226985	1.82	2231264	99.8	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\S112213B.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\S112213B.b\016SMPL.D\016SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\016SMPL.D\016SMPL.D#
 Date Acquired: Nov 22 2013 05:37 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: MB 27442
 Misc Info: MS 7500 6020 AQUEOUS
 Vial Number: 1201
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	96.36	132	2700	
23 Na	45	1		92.39	92.39	ppb	34.08	212746	225000	
24 Mg	45	1		11.28	11.28	ppb	16.69	7058	225000	
27 Al	45	1		12.94	12.94	ppb	13.73	4263	67500	
39 K	45	1		41.04	41.04	ppb	49.39	77423	225000	
44 Ca	45	1		48.59	48.59	ppb	15.87	1722	225000	
51 V	45	1		0.21	0.21	ppb	15.16	930	2700	
52 Cr	45	1		0.11	0.11	ppb	31.98	1222	2700	
55 Mn	45	1		0.29	0.29	ppb	21.84	1456	2700	
56 Fe	45	1		25.46	25.46	ppb	19.72	131423	202500	
59 Co	45	1		0.04	0.04	ppb	19.29	434	2700	
60 Ni	45	1		0.08	0.08	ppb	17.24	280	2700	
65 Cu	45	1		1.13	1.13	ppb	19.61	3344	2700	
66 Zn	45	1		1.59	1.59	ppb	19.26	3129	2700	
75 As	115	1		0.15	0.15	ppb	23.61	110	2250	
78 Se	115	1		-0.65	-0.65	ppb	32.21	142	2700	
83 Kr	115	2		----	-----	ppb	-----	333	2700	
95 Mo	115	2		0.11	0.11	ppb	18.88	574	2700	
107 Ag	115	2		0.05	0.05	ppb	7.99	746	900	
111 Cd	115	2		0.02	0.02	ppb	11.97	77	2700	
121 Sb	115	2		0.07	0.07	ppb	8.34	821	1125	
137 Ba	159	2		0.03	0.03	ppb	33.69	288	1350	
205 Tl	165	2		0.02	0.02	ppb	5.20	1065	900	
206 (Pb)	165	2		0.06	0.06	ppb	10.68	891	2700	
207 (Pb)	165	2		0.06	0.06	ppb	20.48	720	2700	
208 Pb	165	2		0.06	0.06	ppb	1.68	3448	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	91047	16.30	103014	88.4	70 - 150	
45 Sc	2	1292267	1.06	1505216	85.9	70 - 150	
115 In	1	555020	13.77	627502	88.4	70 - 150	
115 In	2	1460597	1.57	1713882	85.2	70 - 150	
159 Tb	1	1295361	11.84	1421955	91.1	70 - 150	
159 Tb	2	1977235	1.89	2311468	85.5	70 - 150	
165 Ho	1	1264529	13.42	1382986	91.4	70 - 150	
165 Ho	2	1924414	1.48	2231264	86.2	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\S112213B.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\S112213B.b\017SMPL.D\017SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\017SMPL.D\017SMPL.D#
 Date Acquired: Nov 22 2013 05:43 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW 27442
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1202
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	256.10	256.10	ppb	2.04	1534308	2700	
23 Na	45	1	26,120.00	26120.00	ppb	0.65	26095000	225000	
24 Mg	45	1	25,900.00	25900.00	ppb	1.59	14357300	225000	
27 Al	45	1	2,552.00	2552.00	ppb	1.23	791717	67500	
39 K	45	1	25,460.00	25460.00	ppb	1.48	13130570	225000	
44 Ca	45	1	26,000.00	26000.00	ppb	0.80	725790	225000	
51 V	45	1	257.70	257.70	ppb	1.92	1091529	2700	
52 Cr	45	1	253.10	253.10	ppb	2.68	1271231	2700	
55 Mn	45	1	259.80	259.80	ppb	1.63	984529	2700	
56 Fe	45	1	2,575.00	2575.00	ppb	2.11	11818600	202500	
59 Co	45	1	243.40	243.40	ppb	1.90	1962814	2700	
60 Ni	45	1	246.30	246.30	ppb	2.40	499685	2700	
65 Cu	45	1	247.30	247.30	ppb	1.22	658021	2700	
66 Zn	45	1	246.10	246.10	ppb	1.06	260013	2700	
75 As	115	1	262.30	262.30	ppb	1.70	164784	2250	
78 Se	115	1	257.70	257.70	ppb	1.74	17203	2700	
83 Kr	115	2	----	-----	ppb	-----	410	2700	
95 Mo	115	2	264.00	264.00	ppb	1.27	1184701	2700	
107 Ag	115	2	49.41	49.41	ppb	1.72	607979	900	
111 Cd	115	2	258.70	258.70	ppb	1.09	662457	2700	
121 Sb	115	2	264.20	264.20	ppb	2.24	2446778	1125	
137 Ba	159	2	265.30	265.30	ppb	2.18	929238	1350	
205 Tl	165	2	234.30	234.30	ppb	0.97	5744529	900	
206 (Pb)	165	2	243.90	243.90	ppb	2.02	1940511	2700	
207 (Pb)	165	2	277.70	277.70	ppb	2.33	1770367	2700	
208 Pb	165	2	251.00	251.00	ppb	1.87	7823152	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93120	1.61	103014	90.4	70 - 150	
45 Sc	2	1295034	3.79	1505216	86.0	70 - 150	
115 In	1	542554	1.31	627502	86.5	70 - 150	
115 In	2	1422866	2.51	1713882	83.0	70 - 150	
159 Tb	1	1286794	1.09	1421955	90.5	70 - 150	
159 Tb	2	1946619	2.71	2311468	84.2	70 - 150	
165 Ho	1	1274186	1.74	1382986	92.1	70 - 150	
165 Ho	2	1918297	2.03	2231264	86.0	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nodas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112213B.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\S112213B.b\018SMPL.D\018SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\018SMPL.D\018SMPL.D#
 Date Acquired: Nov 22 2013 05:48 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: LCSW MR 27442
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1203
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	238.60	238.60	ppb	2.84	1467209	2700	
23 Na	45	1	23,810.00	23810.00	ppb	1.13	23766370	225000	
24 Mg	45	1	24,020.00	24020.00	ppb	0.79	13295100	225000	
27 Al	45	1	2,346.00	2346.00	ppb	1.84	726680	67500	
39 K	45	1	23,410.00	23410.00	ppb	2.49	12056370	225000	
44 Ca	45	1	23,160.00	23160.00	ppb	1.46	645497	225000	
51 V	45	1	241.00	241.00	ppb	2.75	1019255	2700	
52 Cr	45	1	235.80	235.80	ppb	2.93	1182742	2700	
55 Mn	45	1	239.10	239.10	ppb	2.01	904693	2700	
56 Fe	45	1	2,366.00	2366.00	ppb	1.99	10845430	202500	
59 Co	45	1	227.60	227.60	ppb	3.27	1832636	2700	
60 Ni	45	1	228.00	228.00	ppb	2.50	461768	2700	
65 Cu	45	1	232.40	232.40	ppb	0.56	617455	2700	
66 Zn	45	1	229.40	229.40	ppb	2.06	242129	2700	
75 As	115	1	239.30	239.30	ppb	1.78	152446	2250	
78 Se	115	1	235.00	235.00	ppb	1.01	15931	2700	
83 Kr	115	2	----	-----	ppb	-----	377	2700	
95 Mo	115	2	242.10	242.10	ppb	1.52	1123697	2700	
107 Ag	115	2	45.27	45.27	ppb	1.63	576182	900	
111 Cd	115	2	240.50	240.50	ppb	1.38	637000	2700	
121 Sb	115	2	242.30	242.30	ppb	1.50	2321483	1125	
137 Ba	159	2	243.80	243.80	ppb	0.13	883680	1350	
205 Tl	165	2	222.20	222.20	ppb	2.44	5556954	900	
206 (Pb)	165	2	230.50	230.50	ppb	3.00	1870936	2700	
207 (Pb)	165	2	260.20	260.20	ppb	2.11	1691938	2700	
208 Pb	165	2	234.70	234.70	ppb	2.09	7463602	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	92992	2.31	103014	90.3	70 - 150	
45 Sc	2	1329147	3.19	1505216	88.3	70 - 150	
115 In	1	550229	1.55	627502	87.7	70 - 150	
115 In	2	1471663	2.32	1713882	85.9	70 - 150	
159 Tb	1	1327650	3.18	1421955	93.4	70 - 150	
159 Tb	2	2013764	2.07	2311468	87.1	70 - 150	
165 Ho	1	1296767	3.79	1382986	93.8	70 - 150	
165 Ho	2	1957237	1.87	2231264	87.7	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112213B.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\S112213B.b\019SMPL.D\019SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\019SMPL.D\019SMPL.D#
 Date Acquired: Nov 22 2013 05:54 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-002
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1204
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	10.09	813	2700	
23 Na	45	1		18,530.00	18530.00	ppb	1.35	19254240	225000	
24 Mg	45	1		2,170.00	2170.00	ppb	1.14	1249044	225000	
27 Al	45	1		12.25	12.25	ppb	12.94	4344	67500	
39 K	45	1		788.30	788.30	ppb	1.72	481395	225000	
44 Ca	45	1		6,571.00	6571.00	ppb	1.07	190645	225000	
51 V	45	1		0.33	0.33	ppb	2.40	1527	2700	
52 Cr	45	1		0.22	0.22	ppb	6.83	1849	2700	
55 Mn	45	1		68.82	68.82	ppb	1.26	270981	2700	
56 Fe	45	1		31.82	31.82	ppb	13.65	171063	202500	
59 Co	45	1		0.44	0.44	ppb	3.26	3838	2700	
60 Ni	45	1		0.66	0.66	ppb	4.26	1525	2700	
65 Cu	45	1		0.69	0.69	ppb	4.12	2404	2700	
66 Zn	45	1		5.69	5.69	ppb	2.79	7826	2700	
75 As	115	1		0.30	0.30	ppb	7.61	226	2250	
78 Se	115	1		-0.71	-0.71	ppb	4.65	147	2700	
83 Kr	115	2		----	-----	ppb	-----	340	2700	
95 Mo	115	2		0.14	0.14	ppb	7.57	791	2700	
107 Ag	115	2		0.03	0.03	ppb	21.60	584	900	
111 Cd	115	2		0.11	0.11	ppb	6.48	354	2700	
121 Sb	115	2		0.14	0.14	ppb	6.30	1639	1125	
137 Ba	159	2		13.45	13.45	ppb	0.80	52017	1350	
205 Tl	165	2		0.34	0.34	ppb	5.25	9572	900	
206 (Pb)	165	2		0.08	0.08	ppb	3.31	1185	2700	
207 (Pb)	165	2		0.10	0.10	ppb	3.79	1047	2700	
208 Pb	165	2		0.10	0.10	ppb	6.01	5044	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	96629	2.02	103014	93.8	70 - 150	
45 Sc	2	1407903	0.79	1505216	93.5	70 - 150	
115 In	1	591552	1.25	627502	94.3	70 - 150	
115 In	2	1596713	0.18	1713882	93.2	70 - 150	
159 Tb	1	1373516	1.13	1421955	96.6	70 - 150	
159 Tb	2	2140533	0.93	2311468	92.6	70 - 150	
165 Ho	1	1341146	1.91	1382986	97.0	70 - 150	
165 Ho	2	2073113	0.53	2231264	92.9	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\S112213B.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\S112213B.b\020SMPL.D\020SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\020SMPL.D\020SMPL.D#
 Date Acquired: Nov 22 2013 06:00 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-002 MR
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1205
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	21.43	818	2700	
23 Na	45	1		17,430.00	17430.00	ppb	0.23	18258710	225000	
24 Mg	45	1		2,050.00	2050.00	ppb	0.71	1189637	225000	
27 Al	45	1		9.66	9.66	ppb	4.25	3538	67500	
39 K	45	1		740.40	740.40	ppb	1.06	459583	225000	
44 Ca	45	1		6,240.00	6240.00	ppb	1.09	182546	225000	
51 V	45	1		0.27	0.27	ppb	1.83	1267	2700	
52 Cr	45	1		0.12	0.12	ppb	8.30	1352	2700	
55 Mn	45	1		64.82	64.82	ppb	1.12	257343	2700	
56 Fe	45	1		24.16	24.16	ppb	2.28	135741	202500	
59 Co	45	1		0.35	0.35	ppb	0.96	3130	2700	
60 Ni	45	1		0.55	0.55	ppb	0.56	1307	2700	
65 Cu	45	1		0.54	0.54	ppb	8.41	2010	2700	
66 Zn	45	1		5.57	5.57	ppb	3.33	7762	2700	
75 As	115	1		0.21	0.21	ppb	3.52	164	2250	
78 Se	115	1		-0.73	-0.73	ppb	4.82	147	2700	
83 Kr	115	2		---	---	ppb	---	396	2700	
95 Mo	115	2		0.18	0.18	ppb	38.79	989	2700	
107 Ag	115	2		0.03	0.03	ppb	29.68	618	900	
111 Cd	115	2		0.13	0.13	ppb	32.33	406	2700	
121 Sb	115	2		0.14	0.14	ppb	13.39	1600	1125	
137 Ba	159	2		12.42	12.42	ppb	2.06	48350	1350	
205 Tl	165	2		0.17	0.17	ppb	18.28	5226	900	
206 (Pb)	165	2		0.09	0.09	ppb	28.72	1263	2700	
207 (Pb)	165	2		0.10	0.10	ppb	28.73	1061	2700	
208 Pb	165	2		0.10	0.10	ppb	26.83	5229	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97422	2.15	103014	94.6	70 - 150	
45 Sc	2	1390453	0.89	1505216	92.4	70 - 150	
115 In	1	595256	0.80	627502	94.9	70 - 150	
115 In	2	1612827	0.51	1713882	94.1	70 - 150	
159 Tb	1	1410766	0.92	1421955	99.2	70 - 150	
159 Tb	2	2154606	1.76	2311468	93.2	70 - 150	
165 Ho	1	1371187	0.74	1382986	99.1	70 - 150	
165 Ho	2	2105333	0.54	2231264	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\S112213B.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\S112213B.b\021SMPL.D\021SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\021SMPL.D\021SMPL.D#
 Date Acquired: Nov 22 2013 06:06 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-002 SD
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1209
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	12.99	382	2700	
23 Na	45	1		3,626.00	3626.00	ppb	0.87	4188015	225000	
24 Mg	45	1		438.20	438.20	ppb	0.28	273673	225000	
27 Al	45	1		5.45	5.45	ppb	19.04	2326	67500	
39 K	45	1		170.40	170.40	ppb	1.81	164577	225000	
44 Ca	45	1		1,304.00	1304.00	ppb	1.47	41292	225000	
51 V	45	1		0.12	0.12	ppb	13.79	649	2700	
52 Cr	45	1		0.07	0.07	ppb	19.01	1192	2700	
55 Mn	45	1		13.67	13.67	ppb	0.48	58595	2700	
56 Fe	45	1		10.89	10.89	ppb	22.09	77264	202500	
59 Co	45	1		0.11	0.11	ppb	10.37	1189	2700	
60 Ni	45	1		0.22	0.22	ppb	14.33	652	2700	
65 Cu	45	1		0.25	0.25	ppb	12.07	1291	2700	
66 Zn	45	1		1.81	1.81	ppb	5.28	3892	2700	
75 As	115	1		0.09	0.09	ppb	6.04	89	2250	
78 Se	115	1		-0.88	-0.88	ppb	12.02	148	2700	
83 Kr	115	2		-----	-----	ppb	-----	382	2700	
95 Mo	115	2		0.09	0.09	ppb	11.55	578	2700	
107 Ag	115	2		0.01	0.01	ppb	16.67	286	900	
111 Cd	115	2		0.05	0.05	ppb	11.82	194	2700	
121 Sb	115	2		0.06	0.06	ppb	13.36	812	1125	
137 Ba	159	2		2.67	2.67	ppb	1.86	11347	1350	
205 Tl	165	2		0.08	0.08	ppb	8.39	2912	900	
206 (Pb)	165	2		0.07	0.07	ppb	8.66	1168	2700	
207 (Pb)	165	2		0.08	0.08	ppb	13.19	1011	2700	
208 Pb	165	2		0.08	0.08	ppb	4.36	4765	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	104476	0.81	103014	101.4	70 - 150	
45 Sc	2	1506388	0.23	1505216	100.1	70 - 150	
115 In	1	645299	0.80	627502	102.8	70 - 150	
115 In	2	1745105	1.67	1713882	101.8	70 - 150	
159 Tb	1	1463858	1.47	1421955	102.9	70 - 150	
159 Tb	2	2321185	0.65	2311468	100.4	70 - 150	
165 Ho	1	1417597	0.82	1382986	102.5	70 - 150	
165 Ho	2	2243109	0.91	2231264	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\S112213B.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\S112213B.b\022SMPL.D\022SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\022SMPL.D\022SMPL.D#
 Date Acquired: Nov 22 2013 06:12 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-004 MS 1
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1206
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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		253.10	253.10	ppb	0.18	1461416	2700	
23 Na	45	1		46,780.00	46780.00	ppb	2.98	42690552	225000	
24 Mg	45	1		28,690.00	28690.00	ppb	2.83	14558660	225000	
27 Al	45	1		2,612.00	2612.00	ppb	1.19	742207	67500	
39 K	45	1		26,690.00	26690.00	ppb	2.22	12598770	225000	
44 Ca	45	1		33,830.00	33830.00	ppb	1.79	864741	225000	
51 V	45	1		265.20	265.20	ppb	2.65	1028531	2700	
52 Cr	45	1		261.40	261.40	ppb	3.02	1202287	2700	
55 Mn	45	1		350.00	350.00	ppb	3.90	1214236	2700	
56 Fe	45	1		2,684.00	2684.00	ppb	2.46	11277760	202500	
59 Co	45	1		253.80	253.80	ppb	3.32	1873866	2700	
60 Ni	45	1		250.80	250.80	ppb	2.58	465760	2700	
65 Cu	45	1		258.50	258.50	ppb	2.27	629727	2700	
66 Zn	45	1		257.10	257.10	ppb	2.89	248718	2700	
75 As	115	1		265.20	265.20	ppb	2.41	156421	2250	
78 Se	115	1		255.00	255.00	ppb	3.69	15982	2700	
83 Kr	115	2		----	-----	ppb	-----	358	2700	
95 Mo	115	2		254.00	254.00	ppb	2.17	1101795	2700	
107 Ag	115	2		47.61	47.61	ppb	2.90	566273	900	
111 Cd	115	2		252.50	252.50	ppb	0.96	625080	2700	
121 Sb	115	2		261.50	261.50	ppb	2.21	2341448	1125	
137 Ba	159	2		268.40	268.40	ppb	1.41	943483	1350	
205 Tl	165	2		231.00	231.00	ppb	0.02	5559828	900	
206 (Pb)	165	2		240.60	240.60	ppb	1.04	1879500	2700	
207 (Pb)	165	2		274.90	274.90	ppb	0.95	1720266	2700	
208 Pb	165	2		246.60	246.60	ppb	0.38	7545816	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	85290	2.73	103014	82.8	70 - 150	
45 Sc	2	1247377	1.45	1505216	82.9	70 - 150	
115 In	1	509648	3.06	627502	81.2	70 - 150	
115 In	2	1375607	2.81	1713882	80.3	70 - 150	
159 Tb	1	1252132	1.89	1421955	88.1	70 - 150	
159 Tb	2	1952922	0.58	2311468	84.5	70 - 150	
165 Ho	1	1226284	1.12	1382986	88.7	70 - 150	
165 Ho	2	1883053	0.93	2231264	84.4	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\S112213B.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\S112213B.b\023SMPL.D\023SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\023SMPL.D\023SMPL.D#
 Date Acquired: Nov 22 2013 06:17 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-034 MS 2
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1207
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	240.70	240.70	ppb	1.18	1398092	2700	
23 Na	45	1	40,870.00	40870.00	ppb	1.16	39678488	225000	
24 Mg	45	1	25,600.00	25600.00	ppb	1.31	13816220	225000	
27 Al	45	1	2,367.00	2367.00	ppb	0.54	715029	67500	
39 K	45	1	23,610.00	23610.00	ppb	1.77	11857340	225000	
44 Ca	45	1	30,130.00	30130.00	ppb	2.97	818899	225000	
51 V	45	1	236.00	236.00	ppb	0.48	973538	2700	
52 Cr	45	1	233.10	233.10	ppb	1.33	1140436	2700	
55 Mn	45	1	304.90	304.90	ppb	1.60	1125310	2700	
56 Fe	45	1	2,362.00	2362.00	ppb	1.22	10557530	202500	
59 Co	45	1	222.50	222.50	ppb	1.50	1747734	2700	
60 Ni	45	1	223.10	223.10	ppb	0.43	440650	2700	
65 Cu	45	1	232.70	232.70	ppb	0.36	602861	2700	
66 Zn	45	1	229.90	229.90	ppb	0.57	236669	2700	
75 As	115	1	236.30	236.30	ppb	1.47	148643	2250	
78 Se	115	1	226.70	226.70	ppb	0.67	15178	2700	
83 Kr	115	2	----	-----	ppb	-----	378	2700	
95 Mo	115	2	246.50	246.50	ppb	1.04	1089389	2700	
107 Ag	115	2	45.38	45.38	ppb	2.16	549848	900	
111 Cd	115	2	241.80	241.80	ppb	1.93	609662	2700	
121 Sb	115	2	250.80	250.80	ppb	0.61	2287679	1125	
137 Ba	159	2	254.90	254.90	ppb	1.99	900808	1350	
205 Tl	165	2	224.50	224.50	ppb	1.49	5478995	900	
206 (Pb)	165	2	231.40	231.40	ppb	1.06	1833435	2700	
207 (Pb)	165	2	263.20	263.20	ppb	0.48	1669971	2700	
208 Pb	165	2	236.90	236.90	ppb	0.43	7351821	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	90670	0.13	103014	88.0	70 - 150	
45 Sc	2	1254867	1.79	1505216	83.4	70 - 150	
115 In	1	543218	0.25	627502	86.6	70 - 150	
115 In	2	1400855	1.70	1713882	81.7	70 - 150	
159 Tb	1	1316265	0.76	1421955	92.6	70 - 150	
159 Tb	2	1963008	0.69	2311468	84.9	70 - 150	
165 Ho	1	1294082	1.07	1382986	93.6	70 - 150	
165 Ho	2	1909443	0.31	2231264	85.6	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\S112213B.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\S112213B.b\024SMPL.D\024SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\024SMPL.D\024SMPL.D#
 Date Acquired: Nov 22 2013 06:23 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-002 PS
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1208
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	51.70	51.70	ppb	0.22	299967	2700	
23 Na	45	1	23,300.00	23300.00	ppb	1.20	21918450	225000	
24 Mg	45	1	7,269.00	7269.00	ppb	0.98	3793216	225000	
27 Al	45	1	1,487.00	1487.00	ppb	1.68	434354	67500	
39 K	45	1	5,774.00	5774.00	ppb	0.60	2845661	225000	
44 Ca	45	1	11,400.00	11400.00	ppb	1.99	299826	225000	
51 V	45	1	50.91	50.91	ppb	1.20	203089	2700	
52 Cr	45	1	50.47	50.47	ppb	0.62	239201	2700	
55 Mn	45	1	119.30	119.30	ppb	1.38	425825	2700	
56 Fe	45	1	5,100.00	5100.00	ppb	0.63	22016400	202500	
59 Co	45	1	50.72	50.72	ppb	0.48	385188	2700	
60 Ni	45	1	51.57	51.57	ppb	1.02	98575	2700	
65 Cu	45	1	52.65	52.65	ppb	1.94	132217	2700	
66 Zn	45	1	55.51	55.51	ppb	1.32	56360	2700	
75 As	115	1	51.18	51.18	ppb	0.48	32078	2250	
78 Se	115	1	242.80	242.80	ppb	0.79	16176	2700	
83 Kr	115	2	-----	-----	ppb	-----	396	2700	
95 Mo	115	2	49.63	49.63	ppb	2.40	225721	2700	
107 Ag	115	2	48.16	48.16	ppb	2.55	600564	900	
111 Cd	115	2	49.82	49.82	ppb	1.12	129314	2700	
121 Sb	115	2	49.48	49.48	ppb	1.54	464561	1125	
137 Ba	159	2	62.97	62.97	ppb	1.39	228362	1350	
205 Tl	165	2	49.90	49.90	ppb	0.94	1241360	900	
206 (Pb)	165	2	47.63	47.63	ppb	1.43	384826	2700	
207 (Pb)	165	2	49.08	49.08	ppb	0.31	317619	2700	
208 Pb	165	2	47.65	47.65	ppb	1.09	1507918	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	87651	0.78	103014	85.1	70 - 150	
45 Sc	2	1253067	0.81	1505216	83.2	70 - 150	
115 In	1	541038	0.63	627502	86.2	70 - 150	
115 In	2	1441969	2.30	1713882	84.1	70 - 150	
159 Tb	1	1281669	1.33	1421955	90.1	70 - 150	
159 Tb	2	2013565	1.42	2311468	87.1	70 - 150	
165 Ho	1	1261227	0.46	1382986	91.2	70 - 150	
165 Ho	2	1945673	0.69	2231264	87.2	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\S112213B.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\S112213B.b\025SMPL.D\025SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\025SMPL.D\025SMPL.D#
 Date Acquired: Nov 22 2013 06:29 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 22 2013 04:48 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	0.86	0.86	ppb	2.59	5854	2700	
23 Na	45	1	330.90	330.90	ppb	1.10	494438	225000	
24 Mg	45	1	158.80	158.80	ppb	0.79	96112	225000	
27 Al	45	1	67.92	67.92	ppb	2.20	23154	67500	
39 K	45	1	160.80	160.80	ppb	1.91	153047	225000	
44 Ca	45	1	290.60	290.60	ppb	0.51	9204	225000	
51 V	45	1	0.95	0.95	ppb	1.01	4444	2700	
52 Cr	45	1	0.94	0.94	ppb	1.98	5868	2700	
55 Mn	45	1	2.06	2.06	ppb	0.48	8853	2700	
56 Fe	45	1	172.40	172.40	ppb	0.70	873186	202500	
59 Co	45	1	0.91	0.91	ppb	1.86	8090	2700	
60 Ni	45	1	0.96	0.96	ppb	2.27	2237	2700	
65 Cu	45	1	1.01	1.01	ppb	0.31	3426	2700	
66 Zn	45	1	1.27	1.27	ppb	5.24	3133	2700	
75 As	115	1	0.96	0.96	ppb	3.82	701	2250	
78 Se	115	1	1.10	1.10	ppb	32.59	290	2700	
83 Kr	115	2	-----	-----	ppb	-----	342	2700	
95 Mo	115	2	1.86	1.86	ppb	3.17	9773	2700	
107 Ag	115	2	0.38	0.38	ppb	3.22	5599	900	
111 Cd	115	2	1.00	1.00	ppb	1.30	3000	2700	
121 Sb	115	2	0.89	0.89	ppb	5.05	9664	1125	
137 Ba	159	2	0.98	0.98	ppb	5.59	4125	1350	
205 Tl	165	2	0.98	0.98	ppb	2.82	27554	900	
206 (Pb)	165	2	0.91	0.91	ppb	1.95	8559	2700	
207 (Pb)	165	2	1.01	1.01	ppb	1.29	7620	2700	
208 Pb	165	2	0.92	0.92	ppb	2.14	34147	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	100515	1.68	103014	97.6	70 - 150	
45 Sc	2	1440565	0.98	1505216	95.7	70 - 150	
115 In	1	615710	1.49	627502	98.1	70 - 150	
115 In	2	1649965	1.94	1713882	96.3	70 - 150	
159 Tb	1	1419609	1.87	1421955	99.8	70 - 150	
159 Tb	2	2229049	1.10	2311468	96.4	70 - 150	
165 Ho	1	1402811	1.37	1382986	101.4	70 - 150	
165 Ho	2	2152946	1.66	2231264	96.5	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\S112213B.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\S112213B.b\026_CCV.D\026_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\026_CCV.D\026_CCV.D#
 Date Acquired: Nov 22 2013 06:35 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 22 2013 04:48 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	52.06 ppb	0.96	328068	50	104.1	90 - 110	
23 Na	45	1	5513.00 ppb	4.63	5504943	5000	110.3	90 - 110	Fail
24 Mg	45	1	5555.00 ppb	4.69	3023182	5000	111.1	90 - 110	Fail
27 Al	45	1	1628.00 ppb	5.32	495726	1500	108.5	90 - 110	
39 K	45	1	5430.00 ppb	6.14	2793254	5000	108.6	90 - 110	
44 Ca	45	1	5461.00 ppb	4.26	149946	5000	109.2	90 - 110	
51 V	45	1	54.06 ppb	5.31	224857	50	108.1	90 - 110	
52 Cr	45	1	53.44 ppb	4.27	264083	50	106.9	90 - 110	
55 Mn	45	1	54.91 ppb	4.73	204623	50	109.8	90 - 110	
56 Fe	45	1	5526.00 ppb	5.22	24872090	5000	110.5	90 - 110	Fail
59 Co	45	1	53.38 ppb	4.45	422741	50	106.8	90 - 110	
60 Ni	45	1	54.15 ppb	3.81	107945	50	108.3	90 - 110	
65 Cu	45	1	53.79 ppb	6.16	140822	50	107.6	90 - 110	
66 Zn	45	1	53.93 ppb	5.17	57141	50	107.9	90 - 110	
75 As	115	1	54.39 ppb	5.34	34715	50	108.8	90 - 110	
78 Se	115	1	269.50 ppb	4.38	18267	250	107.8	90 - 110	
83 Kr	115	2	-----	-----	397	50	#VALUE!	##### - #####	
95 Mo	115	2	51.25 ppb	0.45	253254	50	102.5	90 - 110	
107 Ag	115	2	50.20 ppb	0.91	680165	50	100.4	90 - 110	
111 Cd	115	2	51.77 ppb	0.20	145992	50	103.5	90 - 110	
121 Sb	115	2	49.62 ppb	0.41	506162	50	99.2	90 - 110	
137 Ba	159	2	52.69 ppb	2.46	198272	50	105.4	90 - 110	
205 Tl	165	2	52.77 ppb	1.79	1368576	50	105.5	90 - 110	
206 (Pb)	165	2	50.91 ppb	1.99	428806	50	101.8	90 - 110	
207 (Pb)	165	2	52.22 ppb	2.15	352214	50	104.4	90 - 110	
208 Pb	165	2	51.30 ppb	3.47	1692306	50	102.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	91477	2.84	103014	88.8	80 - 120	
45 Sc	2	1361073	1.98	1505216	90.4	80 - 120	
115 In	1	551537	3.02	627502	87.9	80 - 120	
115 In	2	1566292	0.72	1713882	91.4	80 - 120	
159 Tb	1	1288768	3.29	1421955	90.6	80 - 120	
159 Tb	2	2089482	2.21	2311468	90.4	80 - 120	
165 Ho	1	1261577	3.39	1382986	91.2	80 - 120	
165 Ho	2	2028526	1.42	2231264	90.9	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\S112213B.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\S112213B.b\027_CCV.D\027_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\027_CCV.D\027_CCV.D#
 Date Acquired: Nov 22 2013 06:41 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 22 2013 04:48 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	0.58 ppb	3.28	1	115.8	70 - 130	
23 Na	45	1	291.70 ppb	2.35	250	116.7	70 - 130	
24 Mg	45	1	285.70 ppb	1.43	250	114.3	70 - 130	
27 Al	45	1	107.80 ppb	1.07	100	107.8	70 - 130	
39 K	45	1	279.60 ppb	2.53	250	111.8	70 - 130	
44 Ca	45	1	272.90 ppb	0.77	250	109.2	70 - 130	
51 V	45	1	1.11 ppb	3.14	1	111.2	70 - 130	
52 Cr	45	1	1.12 ppb	4.05	1	111.7	70 - 130	
55 Mn	45	1	3.12 ppb	1.99	3	104.1	70 - 130	
56 Fe	45	1	181.90 ppb	2.14	150	121.3	70 - 130	
59 Co	45	1	1.10 ppb	3.35	1	110.2	70 - 130	
60 Ni	45	1	1.65 ppb	3.88	2	110.1	70 - 130	
65 Cu	45	1	5.39 ppb	2.39	5	107.9	70 - 130	
66 Zn	45	1	10.47 ppb	0.69	10	104.7	70 - 130	
75 As	115	1	1.17 ppb	4.98	1	117.3	70 - 130	
78 Se	115	1	4.59 ppb	3.28	5	91.8	70 - 130	
83 Kr	115	2	----- ppb -----	-----	1	#VALUE! ##### - #####		
95 Mo	115	2	1.16 ppb	5.18	1	115.7	70 - 130	
107 Ag	115	2	0.55 ppb	3.50	1	109.7	70 - 130	
111 Cd	115	2	1.08 ppb	2.39	1	107.7	70 - 130	
121 Sb	115	2	1.05 ppb	2.63	1	104.7	70 - 130	
137 Ba	159	2	2.58 ppb	5.95	3	103.0	70 - 130	
205 Tl	165	2	1.07 ppb	1.80	1	106.6	70 - 130	
206 (Pb)	165	2	1.52 ppb	5.21	2	101.3	70 - 130	
207 (Pb)	165	2	1.64 ppb	2.34	2	109.4	70 - 130	
208 Pb	165	2	1.52 ppb	4.00	2	101.2	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	95488	1.12	103014	92.7	80 - 120	
45 Sc	2	1380014	1.19	1505216	91.7	80 - 120	
115 In	1	581240	2.07	627502	92.6	80 - 120	
115 In	2	1579600	0.36	1713882	92.2	80 - 120	
159 Tb	1	1317238	2.50	1421955	92.6	80 - 120	
159 Tb	2	2149218	2.73	2311468	93.0	80 - 120	
165 Ho	1	1300006	1.14	1382986	94.0	80 - 120	
165 Ho	2	2086629	2.41	2231264	93.5	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\S112213B.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\S112213B.b\028_CCB.D\028_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\028_CCB.D\028_CCB.D#
 Date Acquired: Nov 22 2013 06:46 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 22 2013 04:48 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	0.043	ppb	8.65	380	0.50	
23 Na	45	1	36.370	ppb	9.58	167639	250.00	
24 Mg	45	1	7.797	ppb	6.88	5415	250.00	
27 Al	45	1	2.484	ppb	4.70	1172	100.00	
39 K	45	1	21.080	ppb	10.44	71051	250.00	
44 Ca	45	1	8.871	ppb	10.02	677	250.00	
51 V	45	1	0.057	ppb	6.46	330	1.00	
52 Cr	45	1	0.064	ppb	7.92	1033	1.00	
55 Mn	45	1	0.051	ppb	25.05	614	3.00	
56 Fe	45	1	6.183	ppb	5.70	47996	150.00	
59 Co	45	1	0.056	ppb	5.52	596	1.00	
60 Ni	45	1	0.056	ppb	22.90	243	1.50	
65 Cu	45	1	0.028	ppb	91.47	560	5.00	
66 Zn	45	1	0.100	ppb	3.34	1698	10.00	
75 As	115	1	0.069	ppb	11.53	63	1.00	
78 Se	115	1	-0.518	ppb	9.19	157	5.00	
83 Kr	115	2	-----	ppb	-----	343	1.00	
95 Mo	115	2	0.067	ppb	18.46	408	1.00	
107 Ag	115	2	0.020	ppb	32.72	413	0.50	
111 Cd	115	2	0.041	ppb	8.82	154	1.00	
121 Sb	115	2	0.051	ppb	9.46	659	1.00	
137 Ba	159	2	0.021	ppb	50.24	274	2.50	
205 Tl	165	2	0.081	ppb	5.73	2773	1.00	
206 (Pb)	165	2	0.047	ppb	8.92	849	1.50	
207 (Pb)	165	2	0.053	ppb	10.24	723	1.50	
208 Pb	165	2	0.049	ppb	6.64	3438	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	94457	0.80	103014	91.7	80 - 120	
45 Sc	2	1344856	0.95	1505216	89.3	80 - 120	
115 In	1	574597	1.73	627502	91.6	80 - 120	
115 In	2	1570094	1.42	1713882	91.6	80 - 120	
159 Tb	1	1311830	2.18	1421955	92.3	80 - 120	
159 Tb	2	2120242	0.89	2311468	91.7	80 - 120	
165 Ho	1	1282918	1.24	1382986	92.8	80 - 120	
165 Ho	2	2036796	1.40	2231264	91.3	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\S112213B.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\S112213B.b\029SMPL.D\029SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\029SMPL.D\029SMPL.D#
 Date Acquired: Nov 22 2013 06:52 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-006
 Misc Info: MS 7500 6020 AQUEOUS
 Vial Number: 1210
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	34.73	191	2700	
23 Na	45	1		10,900.00	10900.00	ppb	1.56	10018300	225000	
24 Mg	45	1		1,824.00	1824.00	ppb	0.29	925137	225000	
27 Al	45	1		8.53	8.53	ppb	21.38	2772	67500	
39 K	45	1		630.40	630.40	ppb	0.54	349899	225000	
44 Ca	45	1		7,131.00	7131.00	ppb	0.88	182205	225000	
51 V	45	1		0.23	0.23	ppb	20.31	983	2700	
52 Cr	45	1		0.21	0.21	ppb	19.32	1594	2700	
55 Mn	45	1		78.15	78.15	ppb	0.55	271038	2700	
56 Fe	45	1		1,668.00	1668.00	ppb	0.68	7005372	202500	
59 Co	45	1		0.98	0.98	ppb	3.88	7362	2700	
60 Ni	45	1		0.62	0.62	ppb	5.63	1263	2700	
65 Cu	45	1		1.00	1.00	ppb	10.81	2873	2700	
66 Zn	45	1		4.36	4.36	ppb	1.45	5619	2700	
75 As	115	1		0.90	0.90	ppb	3.62	560	2250	
78 Se	115	1		-0.63	-0.63	ppb	15.08	136	2700	
83 Kr	115	2		-----	-----	ppb	-----	329	2700	
95 Mo	115	2		0.06	0.06	ppb	20.45	329	2700	
107 Ag	115	2		0.02	0.02	ppb	11.00	379	900	
111 Cd	115	2		0.23	0.23	ppb	2.03	589	2700	
121 Sb	115	2		0.08	0.08	ppb	6.07	786	1125	
137 Ba	159	2		9.68	9.68	ppb	1.11	32909	1350	
205 Tl	165	2		0.07	0.07	ppb	7.95	2180	900	
206 (Pb)	165	2		1.26	1.26	ppb	1.97	9933	2700	
207 (Pb)	165	2		1.39	1.39	ppb	3.34	8700	2700	
208 Pb	165	2		1.28	1.28	ppb	3.39	39547	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	85113	0.53	103014	82.6	70 - 150	
45 Sc	2	1172940	5.48	1505216	77.9	70 - 150	
115 In	1	525320	0.96	627502	83.7	70 - 150	
115 In	2	1346803	4.87	1713882	78.6	70 - 150	
159 Tb	1	1236172	3.46	1421955	86.9	70 - 150	
159 Tb	2	1879043	3.14	2311468	81.3	70 - 150	
165 Ho	1	1219279	3.83	1382986	88.2	70 - 150	
165 Ho	2	1820601	3.34	2231264	81.6	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\S112213B.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\S112213B.b\030SMPL.D\030SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\030SMPL.D\030SMPL.D#
 Date Acquired: Nov 22 2013 06:58 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-008
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1301
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	14.41	270	2700	
23 Na	45	1	12,280.00	12280.00	ppb	1.16	11552590	225000	
24 Mg	45	1	2,038.00	2038.00	ppb	0.96	1058608	225000	
27 Al	45	1	9.40	9.40	ppb	6.67	3088	67500	
39 K	45	1	699.60	699.60	ppb	0.80	391740	225000	
44 Ca	45	1	7,852.00	7852.00	ppb	0.57	205504	225000	
51 V	45	1	0.23	0.23	ppb	5.08	1007	2700	
52 Cr	45	1	0.16	0.16	ppb	10.96	1386	2700	
55 Mn	45	1	85.69	85.69	ppb	1.02	304408	2700	
56 Fe	45	1	1,731.00	1731.00	ppb	0.88	7446256	202500	
59 Co	45	1	1.10	1.10	ppb	2.68	8409	2700	
60 Ni	45	1	1.30	1.30	ppb	5.91	2578	2700	
65 Cu	45	1	7.45	7.45	ppb	1.34	18993	2700	
66 Zn	45	1	7.18	7.18	ppb	1.98	8530	2700	
75 As	115	1	0.97	0.97	ppb	1.30	622	2250	
78 Se	115	1	-0.47	-0.47	ppb	25.50	151	2700	
83 Kr	115	2	-----	-----	ppb	-----	353	2700	
95 Mo	115	2	0.06	0.06	ppb	24.22	356	2700	
107 Ag	115	2	0.02	0.02	ppb	18.78	376	900	
111 Cd	115	2	0.27	0.27	ppb	2.97	720	2700	
121 Sb	115	2	0.07	0.07	ppb	12.56	746	1125	
137 Ba	159	2	10.50	10.50	ppb	0.87	37288	1350	
205 Tl	165	2	0.06	0.06	ppb	5.66	2119	900	
206 (Pb)	165	2	0.18	0.18	ppb	5.44	1791	2700	
207 (Pb)	165	2	0.19	0.19	ppb	6.31	1515	2700	
208 Pb	165	2	0.18	0.18	ppb	2.22	7127	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	87195	2.36	103014	84.6	70 - 150	
45 Sc	2	1223430	0.82	1505216	81.3	70 - 150	
115 In	1	540182	1.81	627502	86.1	70 - 150	
115 In	2	1411182	1.06	1713882	82.3	70 - 150	
159 Tb	1	1275751	1.14	1421955	89.7	70 - 150	
159 Tb	2	1964656	0.42	2311468	85.0	70 - 150	
165 Ho	1	1254669	0.35	1382986	90.7	70 - 150	
165 Ho	2	1891338	0.86	2231264	84.8	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\S112213B.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\S112213B.b\031SMPL.D\031SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\031SMPL.D\031SMPL.D#
 Date Acquired: Nov 22 2013 07:04 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-010
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1302
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	9.73	204	2700	
23 Na	45	1		10,520.00	10520.00	ppb	0.83	9660423	225000	
24 Mg	45	1		1,291.00	1291.00	ppb	1.46	654076	225000	
27 Al	45	1		8.73	8.73	ppb	7.04	2820	67500	
39 K	45	1		1,152.00	1152.00	ppb	1.61	593776	225000	
44 Ca	45	1		7,152.00	7152.00	ppb	1.25	182475	225000	
51 V	45	1		0.24	0.24	ppb	3.43	1019	2700	
52 Cr	45	1		0.48	0.48	ppb	2.47	2846	2700	
55 Mn	45	1		33.52	33.52	ppb	1.11	116295	2700	
56 Fe	45	1		12.29	12.29	ppb	13.26	68643	202500	
59 Co	45	1		0.18	0.18	ppb	11.78	1479	2700	
60 Ni	45	1		0.90	0.90	ppb	1.74	1773	2700	
65 Cu	45	1		0.60	0.60	ppb	8.79	1897	2700	
66 Zn	45	1		4.89	4.89	ppb	1.46	6117	2700	
75 As	115	1		0.19	0.19	ppb	9.60	135	2250	
78 Se	115	1		-0.73	-0.73	ppb	17.77	133	2700	
83 Kr	115	2		-----	-----	ppb	-----	353	2700	
95 Mo	115	2		0.03	0.03	ppb	3.46	194	2700	
107 Ag	115	2		0.02	0.02	ppb	11.10	330	900	
111 Cd	115	2		4.47	4.47	ppb	1.66	11272	2700	
121 Sb	115	2		0.07	0.07	ppb	2.71	772	1125	
137 Ba	159	2		7.03	7.03	ppb	2.19	24733	1350	
205 Tl	165	2		0.04	0.04	ppb	6.57	1566	900	
206 (Pb)	165	2		0.07	0.07	ppb	4.58	978	2700	
207 (Pb)	165	2		0.07	0.07	ppb	6.93	789	2700	
208 Pb	165	2		0.07	0.07	ppb	4.24	3846	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	84991	1.70	103014	82.5	70 - 150	
45 Sc	2	1219932	1.65	1505216	81.0	70 - 150	
115 In	1	536855	1.08	627502	85.6	70 - 150	
115 In	2	1398196	1.38	1713882	81.6	70 - 150	
159 Tb	1	1279989	1.49	1421955	90.0	70 - 150	
159 Tb	2	1941078	0.70	2311468	84.0	70 - 150	
165 Ho	1	1251713	1.11	1382986	90.5	70 - 150	
165 Ho	2	1882971	0.92	2231264	84.4	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\

1STD Ref File : C:\ICPCHEM\1\DATA\S112213B.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\S112213B.b\032SMPL.D\032SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\032SMPL.D\032SMPL.D#
 Date Acquired: Nov 22 2013 07:10 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-012
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1303
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	55.88	197	2700	
23 Na	45		1	23,120.00	23120.00	ppb	2.11	20702170	225000	
24 Mg	45		1	1,110.00	1110.00	ppb	1.06	552174	225000	
27 Al	45		1	7.16	7.16	ppb	0.81	2335	67500	
39 K	45		1	844.30	844.30	ppb	2.01	441272	225000	
44 Ca	45		1	5,180.00	5180.00	ppb	0.62	129832	225000	
51 V	45		1	0.25	0.25	ppb	2.94	1028	2700	
52 Cr	45		1	0.25	0.25	ppb	1.91	1761	2700	
55 Mn	45		1	1.32	1.32	ppb	2.57	4840	2700	
56 Fe	45		1	8.97	8.97	ppb	8.44	53806	202500	
59 Co	45		1	0.05	0.05	ppb	16.58	491	2700	
60 Ni	45		1	0.28	0.28	ppb	7.72	622	2700	
65 Cu	45		1	0.70	0.70	ppb	8.91	2084	2700	
66 Zn	45		1	3.04	3.04	ppb	1.70	4262	2700	
75 As	115		1	0.17	0.17	ppb	17.34	120	2250	
78 Se	115		1	-0.66	-0.66	ppb	20.41	134	2700	
83 Kr	115		2	-----	-----	ppb	-----	372	2700	
95 Mo	115		2	0.04	0.04	ppb	32.97	258	2700	
107 Ag	115		2	0.01	0.01	ppb	20.91	297	900	
111 Cd	115		2	6.37	6.37	ppb	1.23	16255	2700	
121 Sb	115		2	0.07	0.07	ppb	7.32	798	1125	
137 Ba	159		2	16.07	16.07	ppb	1.22	56651	1350	
205 Tl	165		2	0.03	0.03	ppb	18.89	1259	900	
206 (Pb)	165		2	0.04	0.04	ppb	18.02	758	2700	
207 (Pb)	165		2	0.04	0.04	ppb	10.76	624	2700	
208 Pb	165		2	0.04	0.04	ppb	19.15	2967	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	83415	2.00	103014	81.0	70 - 150	
45 Sc	2	1207040	1.17	1505216	80.2	70 - 150	
115 In	1	523641	2.10	627502	83.4	70 - 150	
115 In	2	1415182	0.84	1713882	82.6	70 - 150	
159 Tb	1	1250665	0.77	1421955	88.0	70 - 150	
159 Tb	2	1953021	1.66	2311468	84.5	70 - 150	
165 Ho	1	1237291	1.55	1382986	89.5	70 - 150	
165 Ho	2	1912614	2.42	2231264	85.7	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\S112213B.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\S112213B.b\033SMPL.D\033SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\033SMPL.D\033SMPL.D#
 Date Acquired: Nov 22 2013 07:16 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-014
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1304
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	5.02	226	2700	
23 Na	45	1	4,748.00	4748.00	ppb	1.42	4496673	225000	
24 Mg	45	1	951.80	951.80	ppb	1.11	490101	225000	
27 Al	45	1	13.22	13.22	ppb	3.02	4159	67500	
39 K	45	1	807.90	807.90	ppb	0.55	439477	225000	
44 Ca	45	1	5,331.00	5331.00	ppb	2.03	138307	225000	
51 V	45	1	0.28	0.28	ppb	5.34	1180	2700	
52 Cr	45	1	0.22	0.22	ppb	9.58	1685	2700	
55 Mn	45	1	1.67	1.67	ppb	2.88	6261	2700	
56 Fe	45	1	9.35	9.35	ppb	17.72	57290	202500	
59 Co	45	1	0.04	0.04	ppb	26.56	443	2700	
60 Ni	45	1	0.09	0.09	ppb	8.42	283	2700	
65 Cu	45	1	1.15	1.15	ppb	8.70	3276	2700	
66 Zn	45	1	2.32	2.32	ppb	1.43	3714	2700	
75 As	115	1	0.18	0.18	ppb	5.40	128	2250	
78 Se	115	1	-0.61	-0.61	ppb	50.77	143	2700	
83 Kr	115	2	-----	-----	ppb	-----	353	2700	
95 Mo	115	2	0.02	0.02	ppb	19.01	176	2700	
107 Ag	115	2	0.01	0.01	ppb	14.48	289	900	
111 Cd	115	2	0.03	0.03	ppb	15.10	115	2700	
121 Sb	115	2	0.05	0.05	ppb	10.03	590	1125	
137 Ba	159	2	7.47	7.47	ppb	1.47	26572	1350	
205 Tl	165	2	0.01	0.01	ppb	20.56	980	900	
206 (Pb)	165	2	0.13	0.13	ppb	7.50	1428	2700	
207 (Pb)	165	2	0.15	0.15	ppb	7.33	1261	2700	
208 Pb	165	2	0.13	0.13	ppb	5.89	5763	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range (%)	Flag
45 Sc	1	86348	1.24	103014	83.8	70 - 150	
45 Sc	2	1216176	1.71	1505216	80.8	70 - 150	
115 In	1	545254	0.49	627502	86.9	70 - 150	
115 In	2	1431075	0.82	1713882	83.5	70 - 150	
159 Tb	1	1295558	1.23	1421955	91.1	70 - 150	
159 Tb	2	1962759	0.29	2311468	84.9	70 - 150	
165 Ho	1	1278881	1.27	1382986	92.5	70 - 150	
165 Ho	2	1896755	1.47	2231264	85.0	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\S112213B.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\S112213B.b\034SMPL.D\034SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\034SMPL.D\034SMPL.D#
 Date Acquired: Nov 22 2013 07:22 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-016
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1305
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	158.37	113	2700	
23 Na	45	1		13,710.00	13710.00	ppb	11.65	12246450	225000	
24 Mg	45	1		2,006.00	2006.00	ppb	10.96	991669	225000	
27 Al	45	1		8.05	8.05	ppb	13.58	2565	67500	
39 K	45	1		1,488.00	1488.00	ppb	10.65	733900	225000	
44 Ca	45	1		11,390.00	11390.00	ppb	11.69	283368	225000	
51 V	45	1		0.32	0.32	ppb	12.45	1274	2700	
52 Cr	45	1		0.13	0.13	ppb	21.02	1217	2700	
55 Mn	45	1		1.05	1.05	ppb	12.53	3922	2700	
56 Fe	45	1		4.75	4.75	ppb	31.12	36197	202500	
59 Co	45	1		0.07	0.07	ppb	23.04	611	2700	
60 Ni	45	1		0.31	0.31	ppb	11.37	672	2700	
65 Cu	45	1		0.75	0.75	ppb	16.75	2199	2700	
66 Zn	45	1		2.80	2.80	ppb	13.11	4020	2700	
75 As	115	1		0.23	0.23	ppb	9.37	155	2250	
78 Se	115	1		-0.40	-0.40	ppb	44.50	151	2700	
83 Kr	115	2		-----	-----	ppb	-----	329	2700	
95 Mo	115	2		0.06	0.06	ppb	9.76	347	2700	
107 Ag	115	2		0.01	0.01	ppb	28.91	230	900	
111 Cd	115	2		0.03	0.03	ppb	27.08	107	2700	
121 Sb	115	2		0.09	0.09	ppb	2.67	913	1125	
137 Ba	159	2		12.90	12.90	ppb	2.18	45160	1350	
205 Tl	165	2		0.01	0.01	ppb	15.87	789	900	
206 (Pb)	165	2		0.08	0.08	ppb	6.12	1056	2700	
207 (Pb)	165	2		0.09	0.09	ppb	8.93	872	2700	
208 Pb	165	2		0.08	0.08	ppb	5.90	4019	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	83649	11.44	103014	81.2	70 - 150	
45 Sc	2	1222562	1.47	1505216	81.2	70 - 150	
115 In	1	527579	9.98	627502	84.1	70 - 150	
115 In	2	1387805	1.57	1713882	81.0	70 - 150	
159 Tb	1	1242912	10.03	1421955	87.4	70 - 150	
159 Tb	2	1938319	0.28	2311468	83.9	70 - 150	
165 Ho	1	1221329	10.20	1382986	88.3	70 - 150	
165 Ho	2	1858194	0.71	2231264	83.3	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\S112213B.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\S112213B.b\035SMPL.D\035SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\035SMPL.D\035SMPL.D#
 Date Acquired: Nov 22 2013 07:28 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-018
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1306
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	208.85	114	2700	
23 Na	45	1		100.00	100.00	ppb	4.14	208748	225000	
24 Mg	45	1		3.17	3.17	ppb	9.23	2534	225000	
27 Al	45	1		6.85	6.85	ppb	2.58	2291	67500	
39 K	45	1		38.60	38.60	ppb	5.78	72192	225000	
44 Ca	45	1		30.43	30.43	ppb	7.05	1159	225000	
51 V	45	1		0.26	0.26	ppb	0.94	1075	2700	
52 Cr	45	1		0.15	0.15	ppb	6.68	1339	2700	
55 Mn	45	1		0.17	0.17	ppb	11.75	977	2700	
56 Fe	45	1		5.30	5.30	ppb	3.98	39504	202500	
59 Co	45	1		0.01	0.01	ppb	64.51	165	2700	
60 Ni	45	1		0.04	0.04	ppb	4.14	186	2700	
65 Cu	45	1		0.39	0.39	ppb	9.40	1390	2700	
66 Zn	45	1		1.98	1.98	ppb	2.02	3330	2700	
75 As	115	1		0.15	0.15	ppb	12.71	107	2250	
78 Se	115	1		-0.73	-0.73	ppb	17.64	131	2700	
83 Kr	115	2		----	-----	ppb	-----	357	2700	
95 Mo	115	2		0.02	0.02	ppb	17.92	141	2700	
107 Ag	115	2		0.01	0.01	ppb	19.05	199	900	
111 Cd	115	2		0.00	0.00	ppb	67.23	48	2700	
121 Sb	115	2		0.04	0.04	ppb	25.54	494	1125	
137 Ba	159	2		0.04	0.04	ppb	4.69	338	1350	
205 Tl	165	2		0.00	0.00	ppb	296.16	608	900	
206 (Pb)	165	2		0.01	0.01	ppb	25.68	519	2700	
207 (Pb)	165	2		0.01	0.01	ppb	15.28	416	2700	
208 Pb	165	2		0.01	0.01	ppb	14.00	2056	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	85040	1.38	103014	82.6	70 - 150	
45 Sc	2	1227133	1.07	1505216	81.5	70 - 150	
115 In	1	530816	2.63	627502	84.6	70 - 150	
115 In	2	1434428	1.86	1713882	83.7	70 - 150	
159 Tb	1	1259674	1.31	1421955	88.6	70 - 150	
159 Tb	2	1967659	1.86	2311468	85.1	70 - 150	
165 Ho	1	1233510	0.53	1382986	89.2	70 - 150	
165 Ho	2	1913384	1.88	2231264	85.8	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nodas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112213B.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\S112213B.b\036SMPL.D\036SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\036SMPL.D\036SMPL.D#
 Date Acquired: Nov 22 2013 07:34 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-020
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1307
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	97.41	123	2700	
23 Na	45	1	19,490.00	19490.00	ppb	1.20	18025050	225000	
24 Mg	45	1	2,301.00	2301.00	ppb	1.74	1180008	225000	
27 Al	45	1	8.21	8.21	ppb	4.36	2708	67500	
39 K	45	1	1,463.00	1463.00	ppb	0.68	749034	225000	
44 Ca	45	1	14,200.00	14200.00	ppb	1.30	366537	225000	
51 V	45	1	0.32	0.32	ppb	6.99	1336	2700	
52 Cr	45	1	0.58	0.58	ppb	4.61	3327	2700	
55 Mn	45	1	184.20	184.20	ppb	1.28	645574	2700	
56 Fe	45	1	1,030.00	1030.00	ppb	1.31	4381207	202500	
59 Co	45	1	0.17	0.17	ppb	3.69	1392	2700	
60 Ni	45	1	0.15	0.15	ppb	5.24	395	2700	
65 Cu	45	1	0.55	0.55	ppb	7.52	1780	2700	
66 Zn	45	1	5.74	5.74	ppb	0.81	7025	2700	
75 As	115	1	0.36	0.36	ppb	3.49	239	2250	
78 Se	115	1	-0.64	-0.64	ppb	15.68	138	2700	
83 Kr	115	2	----	-----	ppb	-----	326	2700	
95 Mo	115	2	0.06	0.06	ppb	5.60	342	2700	
107 Ag	115	2	0.01	0.01	ppb	26.92	202	900	
111 Cd	115	2	0.05	0.05	ppb	4.83	152	2700	
121 Sb	115	2	0.06	0.06	ppb	9.50	664	1125	
137 Ba	159	2	15.50	15.50	ppb	0.75	55040	1350	
205 Tl	165	2	0.00	0.00	ppb	96.77	678	900	
206 (Pb)	165	2	0.06	0.06	ppb	16.24	926	2700	
207 (Pb)	165	2	0.07	0.07	ppb	12.06	786	2700	
208 Pb	165	2	0.06	0.06	ppb	10.71	3695	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	86072	1.07	103014	83.6	70 - 150	
45 Sc	2	1212879	2.01	1505216	80.6	70 - 150	
115 In	1	536278	1.16	627502	85.5	70 - 150	
115 In	2	1415345	1.08	1713882	82.6	70 - 150	
159 Tb	1	1282571	1.65	1421955	90.2	70 - 150	
159 Tb	2	1966695	0.70	2311468	85.1	70 - 150	
165 Ho	1	1274598	0.81	1382986	92.2	70 - 150	
165 Ho	2	1906560	1.19	2231264	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\S112213B.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\S112213B.b\037SMPL.D\037SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\037SMPL.D\037SMPL.D#
 Date Acquired: Nov 22 2013 07:40 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-022
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1308
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	233.63	108	2700	
23 Na	45	1		16,270.00	16270.00	ppb	12.85	14306920	225000	
24 Mg	45	1		1,105.00	1105.00	ppb	11.80	539060	225000	
27 Al	45	1		12.51	12.51	ppb	12.93	3752	67500	
39 K	45	1		1,990.00	1990.00	ppb	11.88	950207	225000	
44 Ca	45	1		6,888.00	6888.00	ppb	12.42	169133	225000	
51 V	45	1		0.22	0.22	ppb	11.09	903	2700	
52 Cr	45	1		0.22	0.22	ppb	21.97	1577	2700	
55 Mn	45	1		886.30	886.30	ppb	10.90	2952227	2700	
56 Fe	45	1		3,300.00	3300.00	ppb	11.51	13305070	202500	
59 Co	45	1		8.57	8.57	ppb	11.75	60838	2700	
60 Ni	45	1		0.26	0.26	ppb	5.28	573	2700	
65 Cu	45	1		0.65	0.65	ppb	20.34	1938	2700	
66 Zn	45	1		2.54	2.54	ppb	11.93	3734	2700	
75 As	115	1		0.43	0.43	ppb	9.54	273	2250	
78 Se	115	1		-0.56	-0.56	ppb	54.97	139	2700	
83 Kr	115	2		-----	-----	ppb	-----	343	2700	
95 Mo	115	2		0.60	0.60	ppb	2.66	2722	2700	
107 Ag	115	2		0.00	0.00	ppb	68.41	176	900	
111 Cd	115	2		58.08	58.08	ppb	1.43	147308	2700	
121 Sb	115	2		0.05	0.05	ppb	3.74	599	1125	
137 Ba	159	2		22.15	22.15	ppb	0.88	78609	1350	
205 Tl	165	2		0.14	0.14	ppb	3.42	4115	900	
206 (Pb)	165	2		0.03	0.03	ppb	17.78	663	2700	
207 (Pb)	165	2		0.03	0.03	ppb	9.36	527	2700	
208 Pb	165	2		0.03	0.03	ppb	3.75	2616	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	82577	12.21	103014	80.2	70 - 150	
45 Sc	2	1228159	0.86	1505216	81.6	70 - 150	
115 In	1	523842	10.34	627502	83.5	70 - 150	
115 In	2	1408890	1.29	1713882	82.2	70 - 150	
159 Tb	1	1229477	9.34	1421955	86.5	70 - 150	
159 Tb	2	1967943	1.23	2311468	85.1	70 - 150	
165 Ho	1	1225118	10.18	1382986	88.6	70 - 150	
165 Ho	2	1916220	1.08	2231264	85.9	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\S112213B.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\S112213B.b\038SMPL.D\038SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\038SMPL.D\038SMPL.D#
 Date Acquired: Nov 22 2013 07:46 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 22 2013 04:48 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	2.26	5199	2700	
23 Na	45	1	331.60	331.60	ppb	1.03	521194	225000	
24 Mg	45	1	147.70	147.70	ppb	0.44	94173	225000	
27 Al	45	1	62.92	62.92	ppb	1.72	22603	67500	
39 K	45	1	144.90	144.90	ppb	1.91	151784	225000	
44 Ca	45	1	290.50	290.50	ppb	1.26	9685	225000	
51 V	45	1	0.85	0.85	ppb	2.68	4193	2700	
52 Cr	45	1	0.84	0.84	ppb	0.86	5592	2700	
55 Mn	45	1	2.55	2.55	ppb	0.70	11446	2700	
56 Fe	45	1	169.40	169.40	ppb	1.35	903740	202500	
59 Co	45	1	0.83	0.83	ppb	0.81	7752	2700	
60 Ni	45	1	0.88	0.88	ppb	2.81	2175	2700	
65 Cu	45	1	0.90	0.90	ppb	4.58	3271	2700	
66 Zn	45	1	1.14	1.14	ppb	2.05	3144	2700	
75 As	115	1	0.83	0.83	ppb	3.53	644	2250	
78 Se	115	1	0.78	0.78	ppb	9.91	280	2700	
83 Kr	115	2	-----	-----	ppb	-----	350	2700	
95 Mo	115	2	1.65	1.65	ppb	2.98	9106	2700	
107 Ag	115	2	0.36	0.36	ppb	0.99	5557	900	
111 Cd	115	2	0.91	0.91	ppb	5.52	2886	2700	
121 Sb	115	2	0.72	0.72	ppb	3.34	8271	1125	
137 Ba	159	2	0.88	0.88	ppb	5.59	3927	1350	
205 Tl	165	2	0.72	0.72	ppb	2.96	21884	900	
206 (Pb)	165	2	0.75	0.75	ppb	2.24	7592	2700	
207 (Pb)	165	2	0.83	0.83	ppb	1.88	6681	2700	
208 Pb	165	2	0.77	0.77	ppb	2.15	30512	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	105802	1.49	103014	102.7	70 - 150	
45 Sc	2	1491479	1.04	1505216	99.1	70 - 150	
115 In	1	649605	1.61	627502	103.5	70 - 150	
115 In	2	1738222	2.70	1713882	101.4	70 - 150	
159 Tb	1	1488083	0.73	1421955	104.7	70 - 150	
159 Tb	2	2347931	1.46	2311468	101.6	70 - 150	
165 Ho	1	1470924	0.81	1382986	106.4	70 - 150	
165 Ho	2	2287376	0.80	2231264	102.5	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\S112213B.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\S112213B.b\039_CCV.D\039_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\039_CCV.D\039_CCV.D#
 Date Acquired: Nov 22 2013 07:51 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 22 2013 04:48 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	50.85	ppb	1.35	331030	50	101.7	90 - 110	
23 Na	45	1	5113.00	ppb	0.43	5598593	5000	102.3	90 - 110	
24 Mg	45	1	5155.00	ppb	0.47	3070936	5000	103.1	90 - 110	
27 Al	45	1	1528.00	ppb	0.32	509316	1500	101.9	90 - 110	
39 K	45	1	5115.00	ppb	0.31	2884371	5000	102.3	90 - 110	
44 Ca	45	1	5120.00	ppb	1.28	153900	5000	102.4	90 - 110	
51 V	45	1	51.22	ppb	1.30	233213	50	102.4	90 - 110	
52 Cr	45	1	50.90	ppb	0.78	275328	50	101.8	90 - 110	
55 Mn	45	1	50.99	ppb	1.39	207995	50	102.0	90 - 110	
56 Fe	45	1	5157.00	ppb	0.87	25413160	5000	103.1	90 - 110	
59 Co	45	1	50.20	ppb	1.03	435197	50	100.4	90 - 110	
60 Ni	45	1	50.98	ppb	0.86	111223	50	102.0	90 - 110	
65 Cu	45	1	51.45	ppb	0.69	147485	50	102.9	90 - 110	
66 Zn	45	1	51.27	ppb	1.14	59549	50	102.5	90 - 110	
75 As	115	1	50.79	ppb	1.20	35894	50	101.6	90 - 110	
78 Se	115	1	250.90	ppb	0.94	18847	250	100.4	90 - 110	
83 Kr	115	2	-----	ppb	-----	347	50	#VALUE!	##### - #####	
95 Mo	115	2	50.50	ppb	0.82	259275	50	101.0	90 - 110	
107 Ag	115	2	49.27	ppb	2.62	693463	50	98.5	90 - 110	
111 Cd	115	2	50.63	ppb	2.01	148293	50	101.3	90 - 110	
121 Sb	115	2	49.16	ppb	2.36	520818	50	98.3	90 - 110	
137 Ba	159	2	50.71	ppb	1.90	202663	50	101.4	90 - 110	
205 Tl	165	2	52.02	ppb	0.13	1425120	50	104.0	90 - 110	
206 (Pb)	165	2	49.86	ppb	0.85	443548	50	99.7	90 - 110	
207 (Pb)	165	2	51.42	ppb	1.95	366341	50	102.8	90 - 110	
208 Pb	165	2	51.14	ppb	2.01	1781595	50	102.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	100047	0.24	103014	97.1	80 - 120	
45 Sc	2	1406093	2.41	1505216	93.4	80 - 120	
115 In	1	610101	0.67	627502	97.2	80 - 120	
115 In	2	1627468	2.62	1713882	95.0	80 - 120	
159 Tb	1	1422353	1.61	1421955	100.0	80 - 120	
159 Tb	2	2218786	0.54	2311468	96.0	80 - 120	
165 Ho	1	1384566	0.64	1382986	100.1	80 - 120	
165 Ho	2	2142365	1.83	2231264	96.0	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\S112213B.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\S112213B.b\040_CCV.D\040_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\040_CCV.D\040_CCV.D#
 Date Acquired: Nov 22 2013 07:57 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 22 2013 04:48 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	0.56 ppb	4.15	1	112.2	70 - 130	
23 Na	45	1	276.80 ppb	0.41	250	110.7	70 - 130	
24 Mg	45	1	273.60 ppb	0.63	250	109.4	70 - 130	
27 Al	45	1	106.20 ppb	0.98	100	106.2	70 - 130	
39 K	45	1	268.10 ppb	0.94	250	107.2	70 - 130	
44 Ca	45	1	259.80 ppb	1.82	250	103.9	70 - 130	
51 V	45	1	1.07 ppb	1.91	1	106.5	70 - 130	
52 Cr	45	1	1.05 ppb	1.98	1	105.1	70 - 130	
55 Mn	45	1	3.14 ppb	1.54	3	104.7	70 - 130	
56 Fe	45	1	177.00 ppb	1.07	150	118.0	70 - 130	
59 Co	45	1	1.04 ppb	1.57	1	104.1	70 - 130	
60 Ni	45	1	1.52 ppb	1.03	2	101.4	70 - 130	
65 Cu	45	1	5.32 ppb	1.59	5	106.4	70 - 130	
66 Zn	45	1	10.63 ppb	1.30	10	106.3	70 - 130	
75 As	115	1	1.07 ppb	2.67	1	106.7	70 - 130	
78 Se	115	1	4.45 ppb	4.04	5	89.0	70 - 130	
83 Kr	115	2	----- ppb -----	-----	1	#VALUE! ##### - #####		
95 Mo	115	2	1.05 ppb	2.17	1	105.3	70 - 130	
107 Ag	115	2	0.53 ppb	1.34	1	105.4	70 - 130	
111 Cd	115	2	1.02 ppb	3.72	1	102.2	70 - 130	
121 Sb	115	2	1.03 ppb	4.54	1	102.5	70 - 130	
137 Ba	159	2	2.53 ppb	1.09	3	101.1	70 - 130	
205 Tl	165	2	1.00 ppb	0.23	1	99.6	70 - 130	
206 (Pb)	165	2	1.49 ppb	0.69	2	99.5	70 - 130	
207 (Pb)	165	2	1.61 ppb	0.12	2	107.5	70 - 130	
208 Pb	165	2	1.51 ppb	1.13	2	100.4	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93892	1.06	103014	91.1	80 - 120	
45 Sc	2	1332720	1.17	1505216	88.5	80 - 120	
115 In	1	578275	1.55	627502	92.2	80 - 120	
115 In	2	1579702	1.49	1713882	92.2	80 - 120	
159 Tb	1	1348879	1.27	1421955	94.9	80 - 120	
159 Tb	2	2105675	1.09	2311468	91.1	80 - 120	
165 Ho	1	1333614	0.71	1382986	96.4	80 - 120	
165 Ho	2	2042890	2.02	2231264	91.6	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\S112213B.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\S112213B.b\041_CCB.D\041_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\041_CCB.D\041_CCB.D#
 Date Acquired: Nov 22 2013 08:03 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 22 2013 04:48 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	0.011	ppb	17.40	187	0.50	
23 Na	45	1	28.000	ppb	35.00	164119	250.00	
24 Mg	45	1	5.091	ppb	58.50	4012	250.00	
27 Al	45	1	1.836	ppb	55.56	998	100.00	
39 K	45	1	11.730	ppb	44.33	68227	250.00	
44 Ca	45	1	7.786	ppb	77.83	666	250.00	
51 V	45	1	0.033	ppb	59.12	234	1.00	
52 Cr	45	1	0.032	ppb	67.02	896	1.00	
55 Mn	45	1	0.139	ppb	68.70	980	3.00	
56 Fe	45	1	6.120	ppb	42.52	49159	150.00	
59 Co	45	1	0.031	ppb	58.22	406	1.00	
60 Ni	45	1	0.027	ppb	93.90	189	1.50	
65 Cu	45	1	-0.001	ppb	3180.00	496	5.00	
66 Zn	45	1	0.109	ppb	46.89	1760	10.00	
75 As	115	1	0.038	ppb	38.28	44	1.00	
78 Se	115	1	-0.724	ppb	23.63	149	5.00	
83 Kr	115	2	-----	ppb	-----	368	1.00	
95 Mo	115	2	0.033	ppb	14.46	248	1.00	
107 Ag	115	2	0.007	ppb	39.02	250	0.50	
111 Cd	115	2	0.022	ppb	10.44	103	1.00	
121 Sb	115	2	0.014	ppb	26.02	288	1.00	
137 Ba	159	2	-0.005	ppb	132.66	178	2.50	
205 Tl	165	2	0.016	ppb	13.12	1127	1.00	
206 (Pb)	165	2	0.006	ppb	113.43	518	1.50	
207 (Pb)	165	2	0.006	ppb	89.86	421	1.50	
208 Pb	165	2	0.007	ppb	77.16	2137	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97374	0.26	103014	94.5	80 - 120	
45 Sc	2	1380904	0.32	1505216	91.7	80 - 120	
115 In	1	601266	0.67	627502	95.8	80 - 120	
115 In	2	1619467	2.00	1713882	94.5	80 - 120	
159 Tb	1	1384611	1.99	1421955	97.4	80 - 120	
159 Tb	2	2173713	0.52	2311468	94.0	80 - 120	
165 Ho	1	1369539	0.48	1382986	99.0	80 - 120	
165 Ho	2	2127127	0.43	2231264	95.3	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\S112213B.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\S112213B.b\042SMPL.D\042SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\042SMPL.D\042SMPL.D#
 Date Acquired: Nov 22 2013 08:09 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-024
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1309
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	41.75	148	2700	
23 Na	45	1		6,196.00	6196.00	ppb	1.75	6155360	225000	
24 Mg	45	1		1,339.00	1339.00	ppb	1.48	727636	225000	
27 Al	45	1		19.76	19.76	ppb	1.42	6376	67500	
39 K	45	1		2,007.00	2007.00	ppb	1.06	1066555	225000	
44 Ca	45	1		5,971.00	5971.00	ppb	1.18	163477	225000	
51 V	45	1		2.17	2.17	ppb	2.23	9092	2700	
52 Cr	45	1		4.38	4.38	ppb	2.15	22214	2700	
55 Mn	45	1		29.11	29.11	ppb	2.33	108382	2700	
56 Fe	45	1		144.90	144.90	ppb	0.46	668556	202500	
59 Co	45	1		0.44	0.44	ppb	1.65	3594	2700	
60 Ni	45	1		0.92	0.92	ppb	1.79	1959	2700	
65 Cu	45	1		3.23	3.23	ppb	1.78	8871	2700	
66 Zn	45	1		17.10	17.10	ppb	1.34	19126	2700	
75 As	115	1		0.22	0.22	ppb	6.00	163	2250	
78 Se	115	1		-0.74	-0.74	ppb	27.66	140	2700	
83 Kr	115	2				ppb		324	2700	
95 Mo	115	2		0.25	0.25	ppb	5.33	1233	2700	
107 Ag	115	2		0.01	0.01	ppb	21.33	304	900	
111 Cd	115	2		1.13	1.13	ppb	1.52	3004	2700	
121 Sb	115	2		0.20	0.20	ppb	0.89	2017	1125	
137 Ba	159	2		8.19	8.19	ppb	1.22	29881	1350	
205 Tl	165	2		0.01	0.01	ppb	31.04	955	900	
206 (Pb)	165	2		0.24	0.24	ppb	2.86	2376	2700	
207 (Pb)	165	2		0.25	0.25	ppb	3.05	1940	2700	
208 Pb	165	2		0.24	0.24	ppb	3.06	9408	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	91154	0.86	103014	88.5	70 - 150	
45 Sc	2	1256458	2.77	1505216	83.5	70 - 150	
115 In	1	567744	1.27	627502	90.5	70 - 150	
115 In	2	1458002	1.29	1713882	85.1	70 - 150	
159 Tb	1	1354658	2.77	1421955	95.3	70 - 150	
159 Tb	2	2015446	0.93	2311468	87.2	70 - 150	
165 Ho	1	1337972	3.38	1382986	96.7	70 - 150	
165 Ho	2	1942944	1.31	2231264	87.1	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\S112213B.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\S112213B.b\043SMPL.D\043SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\043SMPL.D\043SMPL.D#
 Date Acquired: Nov 22 2013 08:15 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-026
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1310
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	77.77	138	2700	
23 Na	45	1		5,801.00	5801.00	ppb	1.23	5496959	225000	
24 Mg	45	1		969.80	969.80	ppb	0.64	502295	225000	
27 Al	45	1		11.94	11.94	ppb	2.11	3813	67500	
39 K	45	1		811.20	811.20	ppb	1.19	443625	225000	
44 Ca	45	1		5,753.00	5753.00	ppb	1.07	150097	225000	
51 V	45	1		0.31	0.31	ppb	4.98	1290	2700	
52 Cr	45	1		5.38	5.38	ppb	1.20	25850	2700	
55 Mn	45	1		17.68	17.68	ppb	0.13	62859	2700	
56 Fe	45	1		40.34	40.34	ppb	0.31	190132	202500	
59 Co	45	1		0.18	0.18	ppb	2.96	1475	2700	
60 Ni	45	1		0.67	0.67	ppb	3.92	1379	2700	
65 Cu	45	1		2.93	2.93	ppb	0.84	7705	2700	
66 Zn	45	1		5.70	5.70	ppb	2.76	7043	2700	
75 As	115	1		0.15	0.15	ppb	4.35	112	2250	
78 Se	115	1		-0.87	-0.87	ppb	1.33	127	2700	
83 Kr	115	2		-----	-----	ppb	-----	387	2700	
95 Mo	115	2		0.03	0.03	ppb	17.88	206	2700	
107 Ag	115	2		0.01	0.01	ppb	51.54	221	900	
111 Cd	115	2		17.51	17.51	ppb	8.79	45044	2700	
121 Sb	115	2		0.05	0.05	ppb	11.73	591	1125	
137 Ba	159	2		8.41	8.41	ppb	6.84	29764	1350	
205 Tl	165	2		0.05	0.05	ppb	4.53	1905	900	
206 (Pb)	165	2		0.04	0.04	ppb	18.74	751	2700	
207 (Pb)	165	2		0.04	0.04	ppb	19.76	620	2700	
208 Pb	165	2		0.04	0.04	ppb	10.40	2971	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range (%)	Flag
45 Sc	1	86844	2.96	103014	84.3	70 - 150	
45 Sc	2	1221448	6.35	1505216	81.1	70 - 150	
115 In	1	551709	2.25	627502	87.9	70 - 150	
115 In	2	1434805	8.19	1713882	83.7	70 - 150	
159 Tb	1	1300004	1.02	1421955	91.4	70 - 150	
159 Tb	2	1961331	6.22	2311468	84.9	70 - 150	
165 Ho	1	1277162	1.08	1382986	92.3	70 - 150	
165 Ho	2	1920973	6.90	2231264	86.1	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\S112213B.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\S112213B.b\044SMPL.D\044SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\044SMPL.D\044SMPL.D#
 Date Acquired: Nov 22 2013 08:21 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-028
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1401
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	284.15	119	2700	
23 Na	45	1	14,660.00	14660.00	ppb	2.59	14277190	225000	
24 Mg	45	1	1,828.00	1828.00	ppb	1.48	985577	225000	
27 Al	45	1	41.85	41.85	ppb	1.56	12984	67500	
39 K	45	1	2,571.00	2571.00	ppb	1.24	1339487	225000	
44 Ca	45	1	10,390.00	10390.00	ppb	0.71	282003	225000	
51 V	45	1	1.85	1.85	ppb	2.32	7705	2700	
52 Cr	45	1	0.28	0.28	ppb	2.30	2067	2700	
55 Mn	45	1	531.00	531.00	ppb	0.72	1954998	2700	
56 Fe	45	1	345.40	345.40	ppb	0.67	1556369	202500	
59 Co	45	1	0.13	0.13	ppb	2.68	1163	2700	
60 Ni	45	1	0.96	0.96	ppb	2.85	2019	2700	
65 Cu	45	1	2.07	2.07	ppb	2.78	5804	2700	
66 Zn	45	1	9.58	9.58	ppb	0.65	11297	2700	
75 As	115	1	0.44	0.44	ppb	4.95	306	2250	
78 Se	115	1	-0.68	-0.68	ppb	32.73	144	2700	
83 Kr	115	2	----	-----	ppb	-----	382	2700	
95 Mo	115	2	0.43	0.43	ppb	2.48	2095	2700	
107 Ag	115	2	0.01	0.01	ppb	30.87	237	900	
111 Cd	115	2	6.45	6.45	ppb	0.56	17484	2700	
121 Sb	115	2	0.13	0.13	ppb	7.18	1387	1125	
137 Ba	159	2	7.82	7.82	ppb	2.29	29718	1350	
205 Tl	165	2	0.04	0.04	ppb	10.20	1719	900	
206 (Pb)	165	2	0.20	0.20	ppb	8.03	2111	2700	
207 (Pb)	165	2	0.21	0.21	ppb	3.15	1827	2700	
208 Pb	165	2	0.20	0.20	ppb	3.45	8551	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	90477	1.25	103014	87.8	70 - 150	
45 Sc	2	1314268	1.44	1505216	87.3	70 - 150	
115 In	1	568677	1.83	627502	90.6	70 - 150	
115 In	2	1503977	0.73	1713882	87.8	70 - 150	
159 Tb	1	1350548	2.30	1421955	95.0	70 - 150	
159 Tb	2	2099019	2.49	2311468	90.8	70 - 150	
165 Ho	1	1329149	1.71	1382986	96.1	70 - 150	
165 Ho	2	2050320	1.64	2231264	91.9	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\S112213B.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\S112213B.b\045SMPL.D\045SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\045SMPL.D\045SMPL.D#
 Date Acquired: Nov 22 2013 08:27 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-030
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1402
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	81.01	93	2700	
23 Na	45	1		6,624.00	6624.00	ppb	1.60	6628029	225000	
24 Mg	45	1		2,450.00	2450.00	ppb	2.39	1341520	225000	
27 Al	45	1		4.90	4.90	ppb	5.03	1881	67500	
39 K	45	1		1,911.00	1911.00	ppb	0.85	1027016	225000	
44 Ca	45	1		13,040.00	13040.00	ppb	0.26	359471	225000	
51 V	45	1		0.23	0.23	ppb	4.58	1054	2700	
52 Cr	45	1		0.10	0.10	ppb	6.32	1196	2700	
55 Mn	45	1		313.30	313.30	ppb	1.43	1172304	2700	
56 Fe	45	1		3.99	3.99	ppb	19.50	36797	202500	
59 Co	45	1		0.30	0.30	ppb	3.25	2487	2700	
60 Ni	45	1		0.26	0.26	ppb	4.54	649	2700	
65 Cu	45	1		0.90	0.90	ppb	6.31	2845	2700	
66 Zn	45	1		2.79	2.79	ppb	0.79	4439	2700	
75 As	115	1		0.17	0.17	ppb	9.74	131	2250	
78 Se	115	1		-0.96	-0.96	ppb	23.91	127	2700	
83 Kr	115	2		-----	-----	ppb	-----	350	2700	
95 Mo	115	2		0.01	0.01	ppb	12.76	139	2700	
107 Ag	115	2		0.00	0.00	ppb	496.95	147	900	
111 Cd	115	2		0.06	0.06	ppb	5.25	198	2700	
121 Sb	115	2		0.03	0.03	ppb	3.49	462	1125	
137 Ba	159	2		16.37	16.37	ppb	1.03	61809	1350	
205 Tl	165	2		0.00	0.00	ppb	112.72	617	900	
206 (Pb)	165	2		0.02	0.02	ppb	27.55	592	2700	
207 (Pb)	165	2		0.02	0.02	ppb	22.64	491	2700	
208 Pb	165	2		0.02	0.02	ppb	16.20	2458	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	91938	0.26	103014	89.2	70 - 150	
45 Sc	2	1311409	0.79	1505216	87.1	70 - 150	
115 In	1	579602	1.84	627502	92.4	70 - 150	
115 In	2	1524440	0.93	1713882	88.9	70 - 150	
159 Tb	1	1384068	1.82	1421955	97.3	70 - 150	
159 Tb	2	2091805	0.40	2311468	90.5	70 - 150	
165 Ho	1	1357347	0.29	1382986	98.1	70 - 150	
165 Ho	2	2020248	0.44	2231264	90.5	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\S112213B.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\S112213B.b\046SMPL.D\046SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\046SMPL.D\046SMPL.D#
 Date Acquired: Nov 22 2013 08:33 pm
 Acq. Method: 6020AQ.M
 Operator: GK
 Sample Name: 75646-032
 Misc Info: MS_7500 6020 AQUEOUS
 Vial Number: 1403
 Current Method: C:\ICPCHEM\1\METHODS\6020AQ.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020AQ.C
 Last Cal. Update: Nov 22 2013 04:48 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	173.66	118	2700	
23 Na	45	1		5,446.00	5446.00	ppb	13.93	5417372	225000	
24 Mg	45	1		1,377.00	1377.00	ppb	14.23	746556	225000	
27 Al	45	1		5.77	5.77	ppb	15.59	2129	67500	
39 K	45	1		483.20	483.20	ppb	16.71	300330	225000	
44 Ca	45	1		6,063.00	6063.00	ppb	14.39	165596	225000	
51 V	45	1		0.27	0.27	ppb	16.81	1209	2700	
52 Cr	45	1		1.91	1.91	ppb	14.20	10072	2700	
55 Mn	45	1		0.64	0.64	ppb	18.70	2785	2700	
56 Fe	45	1		12.41	12.41	ppb	17.89	74148	202500	
59 Co	45	1		0.07	0.07	ppb	21.51	719	2700	
60 Ni	45	1		0.34	0.34	ppb	17.90	787	2700	
65 Cu	45	1		0.90	0.90	ppb	16.53	2810	2700	
66 Zn	45	1		5.23	5.23	ppb	14.53	6923	2700	
75 As	115	1		0.18	0.18	ppb	18.88	136	2250	
78 Se	115	1		-0.79	-0.79	ppb	11.02	140	2700	
83 Kr	115	2		----	----	ppb	-----	364	2700	
95 Mo	115	2		0.01	0.01	ppb	23.18	136	2700	
107 Ag	115	2		0.00	0.00	ppb	98.92	182	900	
111 Cd	115	2		1.49	1.49	ppb	2.24	4051	2700	
121 Sb	115	2		0.04	0.04	ppb	3.27	538	1125	
137 Ba	159	2		5.42	5.42	ppb	0.65	20428	1350	
205 Tl	165	2		0.00	0.00	ppb	38.05	558	900	
206 (Pb)	165	2		0.01	0.01	ppb	122.86	497	2700	
207 (Pb)	165	2		0.02	0.02	ppb	26.48	468	2700	
208 Pb	165	2		0.01	0.01	ppb	32.12	2178	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	92212	14.36	103014	89.5	70 - 150	
45 Sc	2	1293638	0.46	1505216	85.9	70 - 150	
115 In	1	583509	12.39	627502	93.0	70 - 150	
115 In	2	1499236	0.54	1713882	87.5	70 - 150	
159 Tb	1	1374483	13.06	1421955	96.7	70 - 150	
159 Tb	2	2073411	0.88	2311468	89.7	70 - 150	
165 Ho	1	1358148	12.28	1382986	98.2	70 - 150	
165 Ho	2	2028951	1.42	2231264	90.9	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\S112213B.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\S112213B.b\047SMPL.D\047SMPL.D#

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\047SMPL.D\047SMPL.D#
 Date Acquired: Nov 22 2013 08:39 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 22 2013 04:48 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	3.54	5029	2700	
23 Na	45	1	350.60	350.60	ppb	0.69	528604	225000	
24 Mg	45	1	153.60	153.60	ppb	0.77	95338	225000	
27 Al	45	1	65.13	65.13	ppb	1.37	22777	67500	
39 K	45	1	148.60	148.60	ppb	1.44	149944	225000	
44 Ca	45	1	313.40	313.40	ppb	1.12	10139	225000	
51 V	45	1	0.89	0.89	ppb	2.52	4249	2700	
52 Cr	45	1	0.86	0.86	ppb	2.54	5525	2700	
55 Mn	45	1	2.79	2.79	ppb	1.11	12160	2700	
56 Fe	45	1	174.60	174.60	ppb	0.56	906310	202500	
59 Co	45	1	0.85	0.85	ppb	1.53	7772	2700	
60 Ni	45	1	0.90	0.90	ppb	3.48	2166	2700	
65 Cu	45	1	0.99	0.99	ppb	2.78	3428	2700	
66 Zn	45	1	1.28	1.28	ppb	5.22	3224	2700	
75 As	115	1	0.84	0.84	ppb	4.96	643	2250	
78 Se	115	1	0.84	0.84	ppb	7.02	281	2700	
83 Kr	115	2	----	-----	ppb	-----	378	2700	
95 Mo	115	2	1.66	1.66	ppb	2.06	8909	2700	
107 Ag	115	2	0.37	0.37	ppb	6.01	5486	900	
111 Cd	115	2	0.88	0.88	ppb	2.71	2714	2700	
121 Sb	115	2	0.74	0.74	ppb	1.94	8282	1125	
137 Ba	159	2	0.88	0.88	ppb	0.45	3861	1350	
205 Tl	165	2	0.74	0.74	ppb	0.90	21736	900	
206 (Pb)	165	2	0.76	0.76	ppb	1.01	7471	2700	
207 (Pb)	165	2	0.82	0.82	ppb	0.53	6397	2700	
208 Pb	165	2	0.78	0.78	ppb	1.38	29810	2700	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	103052	0.58	103014	100.0	70 - 150	
45 Sc	2	1435165	1.94	1505216	95.3	70 - 150	
115 In	1	641148	0.54	627502	102.2	70 - 150	
115 In	2	1682044	2.86	1713882	98.1	70 - 150	
159 Tb	1	1484827	0.19	1421955	104.4	70 - 150	
159 Tb	2	2297335	1.70	2311468	99.4	70 - 150	
165 Ho	1	1470065	0.50	1382986	106.3	70 - 150	
165 Ho	2	2211100	0.77	2231264	99.1	70 - 150	

Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112213B.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\S112213B.b\048_CCV.D\048_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\048_CCV.D\048_CCV.D#
 Date Acquired: Nov 22 2013 08:44 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 22 2013 04:48 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	50.79 ppb	1.18	324755	50	101.6	90 - 110	
23 Na	45	1	5063.00 ppb	1.32	5400175	5000	101.3	90 - 110	
24 Mg	45	1	5124.00 ppb	1.48	2972430	5000	102.5	90 - 110	
27 Al	45	1	1504.00 ppb	0.85	488363	1500	100.3	90 - 110	
39 K	45	1	5043.00 ppb	2.28	2770250	5000	100.9	90 - 110	
44 Ca	45	1	4989.00 ppb	0.70	146062	5000	99.8	90 - 110	
51 V	45	1	49.99 ppb	1.60	221669	50	100.0	90 - 110	
52 Cr	45	1	49.86 ppb	1.12	262662	50	99.7	90 - 110	
55 Mn	45	1	50.66 ppb	0.57	201268	50	101.3	90 - 110	
56 Fe	45	1	5131.00 ppb	1.16	24620730	5000	102.6	90 - 110	
59 Co	45	1	49.34 ppb	0.25	416554	50	98.7	90 - 110	
60 Ni	45	1	50.17 ppb	2.06	106609	50	100.3	90 - 110	
65 Cu	45	1	50.86 ppb	0.95	141999	50	101.7	90 - 110	
66 Zn	45	1	50.58 ppb	0.54	57239	50	101.2	90 - 110	
75 As	115	1	49.04 ppb	1.53	34261	50	98.1	90 - 110	
78 Se	115	1	244.00 ppb	1.37	18123	250	97.6	90 - 110	
83 Kr	115	2	----- ppb	-----	368	50	#VALUE!	##### - #####	
95 Mo	115	2	49.62 ppb	1.60	250596	50	99.2	90 - 110	
107 Ag	115	2	48.26 ppb	1.13	668301	50	96.5	90 - 110	
111 Cd	115	2	49.45 ppb	1.44	142500	50	98.9	90 - 110	
121 Sb	115	2	48.45 ppb	1.47	505040	50	96.9	90 - 110	
137 Ba	159	2	49.99 ppb	0.85	197963	50	100.0	90 - 110	
205 Tl	165	2	51.23 ppb	0.86	1391505	50	102.5	90 - 110	
206 (Pb)	165	2	49.06 ppb	2.38	432659	50	98.1	90 - 110	
207 (Pb)	165	2	50.00 ppb	3.65	353132	50	100.0	90 - 110	
208 Pb	165	2	49.88 ppb	3.50	1722497	50	99.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97433	0.63	103014	94.6	80 - 120	
45 Sc	2	1381032	0.99	1505216	91.7	80 - 120	
115 In	1	603083	0.59	627502	96.1	80 - 120	
115 In	2	1600745	0.74	1713882	93.4	80 - 120	
159 Tb	1	1388562	0.94	1421955	97.7	80 - 120	
159 Tb	2	2198200	1.15	2311468	95.1	80 - 120	
165 Ho	1	1376452	0.59	1382986	99.5	80 - 120	
165 Ho	2	2124724	2.67	2231264	95.2	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\S112213B.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\S112213B.b\049_CCV.D\049_CCV.D#

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\049_CCV.D\049_CCV.D#
 Date Acquired: Nov 22 2013 08:50 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 22 2013 04:48 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	5.11	1	105.3	70 - 130	
23 Na	45	1	261.90 ppb	2.51	250	104.8	70 - 130	
24 Mg	45	1	266.80 ppb	2.15	250	106.7	70 - 130	
27 Al	45	1	105.20 ppb	2.28	100	105.2	70 - 130	
39 K	45	1	259.80 ppb	2.67	250	103.9	70 - 130	
44 Ca	45	1	253.10 ppb	2.37	250	101.2	70 - 130	
51 V	45	1	1.02 ppb	2.19	1	101.8	70 - 130	
52 Cr	45	1	1.04 ppb	4.59	1	103.5	70 - 130	
55 Mn	45	1	2.96 ppb	3.70	3	98.7	70 - 130	
56 Fe	45	1	169.40 ppb	3.88	150	112.9	70 - 130	
59 Co	45	1	0.99 ppb	1.86	1	98.6	70 - 130	
60 Ni	45	1	1.50 ppb	2.69	2	100.3	70 - 130	
65 Cu	45	1	5.13 ppb	0.49	5	102.6	70 - 130	
66 Zn	45	1	10.22 ppb	1.42	10	102.2	70 - 130	
75 As	115	1	0.98 ppb	3.91	1	98.2	70 - 130	
78 Se	115	1	4.12 ppb	5.71	5	82.4	70 - 130	
83 Kr	115	2	----- ppb -----	-----	1	#VALUE! #####	70 - 130	
95 Mo	115	2	1.08 ppb	1.35	1	107.6	70 - 130	
107 Ag	115	2	0.53 ppb	4.50	1	106.4	70 - 130	
111 Cd	115	2	1.04 ppb	2.90	1	103.5	70 - 130	
121 Sb	115	2	1.01 ppb	2.17	1	100.5	70 - 130	
137 Ba	159	2	2.47 ppb	3.58	3	98.8	70 - 130	
205 Tl	165	2	1.01 ppb	0.71	1	100.5	70 - 130	
206 (Pb)	165	2	1.49 ppb	3.75	2	99.2	70 - 130	
207 (Pb)	165	2	1.60 ppb	1.00	2	106.5	70 - 130	
208 Pb	165	2	1.50 ppb	1.17	2	100.2	70 - 130	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	97531	1.02	103014	94.7	80 - 120	
45 Sc	2	1379848	0.85	1505216	91.7	80 - 120	
115 In	1	605350	0.63	627502	96.5	80 - 120	
115 In	2	1596753	1.34	1713882	93.2	80 - 120	
159 Tb	1	1398538	1.08	1421955	98.4	80 - 120	
159 Tb	2	2158695	1.31	2311468	93.4	80 - 120	
165 Ho	1	1374315	1.64	1382986	99.4	80 - 120	
165 Ho	2	2104632	2.39	2231264	94.3	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\S112213B.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\S112213B.b\050_CCB.D\050_CCB.D#

Continuing Calibration Blank (CCB) QC Report

Data File: C:\ICPCHEM\1\DATA\S112213B.b\050_CCB.D\050_CCB.D#
 Date Acquired: Nov 22 2013 08:56 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 22 2013 04:48 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	0.007	ppb	44.07	153	0.50	
23 Na	45	1	23.790	ppb	16.33	153522	250.00	
24 Mg	45	1	2.746	ppb	6.16	2555	250.00	
27 Al	45	1	1.007	ppb	0.97	702	100.00	
39 K	45	1	11.600	ppb	32.89	65495	250.00	
44 Ca	45	1	3.841	ppb	31.35	530	250.00	
51 V	45	1	0.019	ppb	20.32	165	1.00	
52 Cr	45	1	0.026	ppb	37.59	834	1.00	
55 Mn	45	1	0.064	ppb	8.98	659	3.00	
56 Fe	45	1	3.545	ppb	1.87	35418	150.00	
59 Co	45	1	0.015	ppb	13.55	263	1.00	
60 Ni	45	1	0.017	ppb	59.76	161	1.50	
65 Cu	45	1	-0.023	ppb	35.11	418	5.00	
66 Zn	45	1	0.105	ppb	40.23	1687	10.00	
75 As	115	1	0.018	ppb	9.55	30	1.00	
78 Se	115	1	-0.747	ppb	31.37	142	5.00	
83 Kr	115	2	-----	ppb	-----	347	1.00	
95 Mo	115	2	0.025	ppb	15.84	202	1.00	
107 Ag	115	2	0.007	ppb	14.63	238	0.50	
111 Cd	115	2	0.014	ppb	32.14	77	1.00	
121 Sb	115	2	0.014	ppb	18.87	286	1.00	
137 Ba	159	2	-0.012	ppb	44.05	152	2.50	
205 Tl	165	2	0.007	ppb	43.71	861	1.00	
206 (Pb)	165	2	-0.001	ppb	312.09	449	1.50	
207 (Pb)	165	2	-0.004	ppb	47.81	344	1.50	
208 Pb	165	2	0.001	ppb	61.01	1875	1.50	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
45 Sc	1	93619	2.93	103014	90.9	80 - 120	
45 Sc	2	1349518	2.75	1505216	89.7	80 - 120	
115 In	1	582516	4.02	627502	92.8	80 - 120	
115 In	2	1573882	1.54	1713882	91.8	80 - 120	
159 Tb	1	1338482	2.24	1421955	94.1	80 - 120	
159 Tb	2	2158317	1.86	2311468	93.4	80 - 120	
165 Ho	1	1303278	2.18	1382986	94.2	80 - 120	
165 Ho	2	2078314	0.93	2231264	93.1	80 - 120	

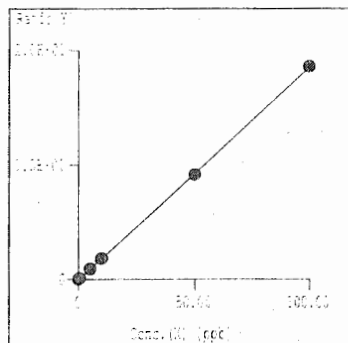
Tune File# 1 c:\icpchem\1\7500\he.u
 Tune File# 2 c:\icpchem\1\7500\nogas.u
 Tune File# 3 C:\ICPCHEM\1\7500\

ISTD Ref File : C:\ICPCHEM\1\DATA\S112213B.b\002CALB.D\002CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

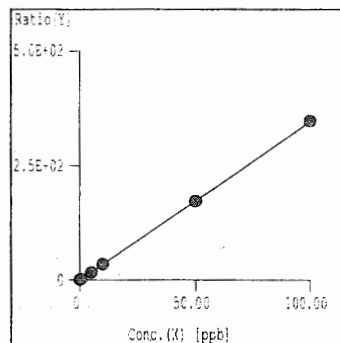
=== Graph Detail ===

Step Mass Element (2) 9 Be ISTD 45 Unit ppb



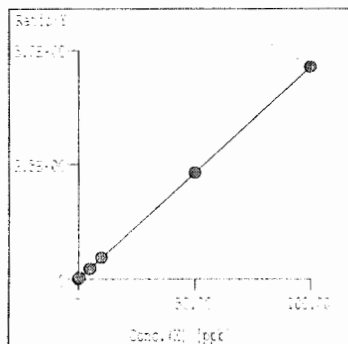
Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 1.851E-001 \cdot X + 3.282E-003$
 $X = 5.401E+000 \cdot Y - 1.773E-002$
 $DL = 9.282E-03 \text{ ppb}$
 $BEC = 1.773E-02 \text{ ppb}$

Step Mass Element (1) 59 Co ISTD 45 Unit ppb



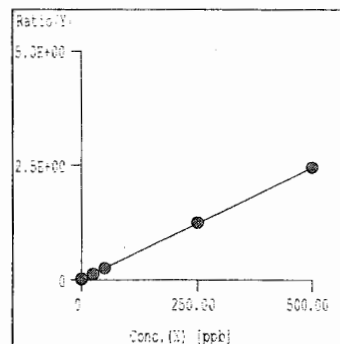
Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 3.465E+000 \cdot X + 5.913E-002$
 $X = 2.886E-001 \cdot Y - 1.707E-002$
 $DL = 2.818E-03 \text{ ppb}$
 $BEC = 1.707E-02 \text{ ppb}$

Step Mass Element (1) 75 As ISTD 115 Unit ppb



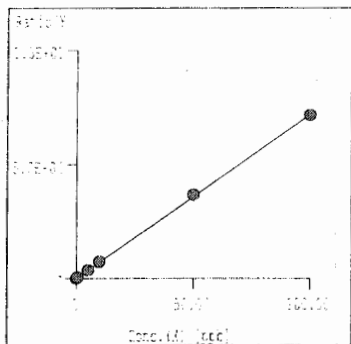
Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 4.632E-002 \cdot X + 1.204E-003$
 $X = 2.159E+001 \cdot Y - 2.600E-002$
 $DL = 3.847E-03 \text{ ppb}$
 $BEC = 2.600E-02 \text{ ppb}$

Step Mass Element (1) 78 Se ISTD 115 Unit ppb



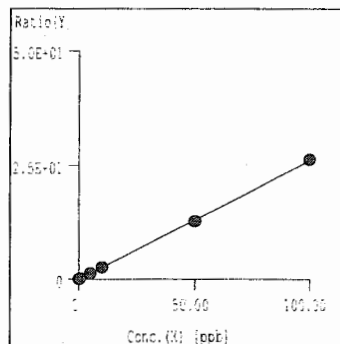
Curve Fit: $Y=aX+b$
 $r = 1.0000$
 $Y = 4.871E-003 \cdot X + 1.343E-002$
 $X = 2.053E+002 \cdot Y - 2.758E+000$
 $DL = 1.661E-01 \text{ ppb}$
 $BEC = 2.758 \text{ ppb}$

Step Mass Element (2) 111 Cd ISTD 115 Unit ppb



Curve Fit: $Y=aX+[blank]$
 $r = 0.9999$
 $Y = 7.200E-002 \cdot X + 9.778E-004$
 $X = 1.389E+001 \cdot Y - 1.358E-002$
 $DL = 6.970E-03 \text{ ppb}$
 $BEC = 1.358E-02 \text{ ppb}$

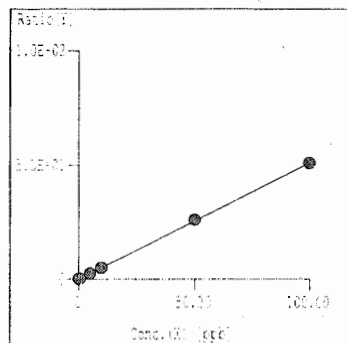
Step Mass Element (2) 121 Sb ISTD 115 Unit ppb



Curve Fit: $Y=aX+[blank]$
 $r = 0.9999$
 $Y = 2.604E-001 \cdot X + 3.526E-003$
 $X = 3.840E+000 \cdot Y - 1.354E-002$
 $DL = 3.443E-03 \text{ ppb}$
 $BEC = 1.354E-02 \text{ ppb}$

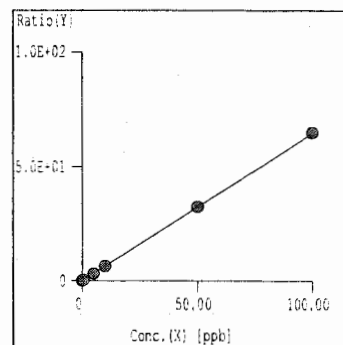
=== Graph Detail ===

Step Mass Element ISTD Unit
(2) 205 Tl 165 ppb



Curve Fit: $Y=aX+[blank]$
 $r = 0.9999$
 $Y = 5.112E-001 \cdot X + 1.301E-002$
 $X = 1.956E+000 \cdot Y - 2.545E-002$
DL = 6.585E-04 ppb
BEC = 2.545E-02 ppb

Step Mass Element ISTD Unit
(2) 208 Pb 165 ppb



Curve Fit: $Y=aX+[blank]$
 $r = 1.0000$
 $Y = 6.499E-001 \cdot X + 3.550E-002$
 $X = 1.539E+000 \cdot Y - 5.462E-002$
DL = 6.466E-03 ppb
BEC = 5.462E-02 ppb

H157268W

3110835 0721

Method: HGC2 SWH20 (7470A)

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Date: 11/20/2013 5:46:34 PM

1st Review OA

11/21/2013

V-177138

Analysis Begun

Logged In Analyst: johns

Technique: AA FIMS-MHS

Spectrometer Model: FIMS-100, S/N B050-9550

Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H15726SW.sif

Batch ID: H15726SW

Results Data Set: H15726SW

Results Library: C:\data-AA\johns\Results\Results.mdb

Method Loaded

Method Name: HGC2 SWH20 (7470A)

Method Last Saved: 8/7/2013 12:04:09 PM

Method Description: HgCV2 SW846H20 (7470A)

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calibration Blank

Date Collected: 11/20/2013 5:41:09 PM

Analyst:

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]	0.0002	0.0014	0.0002	17:42:06	Yes
2		[0.00]	0.0001	0.0004	0.0001	17:42:38	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	28.99				

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: .2 PPB

Date Collected: 11/20/2013 5:42:39 PM

Analyst:

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]	0.0014	0.0063	0.0016	17:43:35	Yes
2		[0.2]	0.0014	0.0059	0.0015	17:44:08	Yes
Mean:		[0.2]	0.0014				
SD:		0.0	0.0000				
%RSD:		0.0	1.27				

Standard number 1 applied. [0.2]

Correlation Coef.: 1.000000 Slope: 0.00697 Intercept: 0.00000

Sequence No.: 3

Autosampler Location: 3

Sample ID: .5 PPB

Date Collected: 11/20/2013 5:44:09 PM

Analyst:

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]	0.0033	0.0155	0.0035	17:45:04	Yes
2		[0.5]	0.0032	0.0137	0.0033	17:45:36	Yes
Mean:		[0.5]	0.0033				
SD:		0.0	0.0001				
%RSD:		0.0	2.97				

Standard number 2 applied. [0.5]

Correlation Coef.: 0.999489 Slope: 0.00649 Intercept: 0.00004

Sequence No.: 4

Autosampler Location: 4

Sample ID: 1 PPB

Date Collected: 11/20/2013 5:45:37 PM

Analyst:

Data Type: Original

Replicate Data: 1 PPB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored

Method: HGCV2 SWH2O (7470A)

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1	[1]	0.0067	0.0292	0.0068	17:46:33	Yes
2	[1]	0.0065	0.0274	0.0067	17:47:05	Yes
Mean:	[1]	0.0066				
SD:	0	0.0001				
%RSD:	0	1.53				

Standard number 3 applied. [1]
Correlation Coef.: 0.999877 Slope: 0.00655 Intercept: 0.00003

Sequence No.: 5 Autosampler Location: 5
Sample ID: 2 PPB Date Collected: 11/20/2013 5:47:06 PM
Analyst: Data Type: Original

Replicate Data: 2 PPB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[2]	0.0127	0.0528	0.0129	17:48:02	Yes
2		[2]	0.0129	0.0536	0.0130	17:48:34	Yes
Mean:		[2]	0.0128				
SD:	0		0.0001				
%RSD:	0		0.77				

Standard number 4 applied. [2]
Correlation Coef.: 0.999894 Slope: 0.00640 Intercept: 0.00008

Sequence No.: 6 Autosampler Location: 6
Sample ID: 5 PPB Date Collected: 11/20/2013 5:48:35 PM
Analyst: Data Type: Original

Replicate Data: 5 PPB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[5]	0.0327	0.1356	0.0328	17:49:31	Yes
2		[5]	0.0329	0.1349	0.0330	17:50:03	Yes
Mean:		[5]	0.0328				
SD:	0		0.0001				
%RSD:	0		0.38				

Standard number 5 applied. [5]
Correlation Coef.: 0.999943 Slope: 0.00654 Intercept: -0.00001

Sequence No.: 7 Autosampler Location: 7
Sample ID: 10 PPB Date Collected: 11/20/2013 5:50:04 PM
Analyst: Data Type: Original

Replicate Data: 10 PPB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[10]	0.0652	0.2662	0.0653	17:51:00	Yes
2		[10]	0.0648	0.2647	0.0650	17:51:32	Yes
Mean:		[10]	0.0650				
SD:	0		0.0002				
%RSD:	0		0.35				

Standard number 6 applied. [10]
Correlation Coef.: 0.999982 Slope: 0.00651 Intercept: 0.00003

Sequence No.: 8 Autosampler Location: 8
Sample ID: 25 PPB Date Collected: 11/20/2013 5:51:33 PM
Analyst: Data Type: Original

Replicate Data: 25 PPB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[25]	0.1579	0.6536	0.1581	17:52:29	Yes
2		[25]	0.1588	0.6539	0.1590	17:53:02	Yes
Mean:		[25]	0.1584				
SD:	0		0.0006				
%RSD:	0		0.39				

Standard number 7 applied. [25]
Correlation Coef.: 0.999937 Slope: 0.00634 Intercept: 0.00038

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	-0.060	0.00	29.0
.2 PPB	0.0014	0.2	0.160	0.00	1.3
.5 PPB	0.0033	0.5	0.454	0.00	3.0
1 PPB	0.0066	1.0	0.978	0.00	1.5
2 PPB	0.0128	2.0	1.961	0.00	0.8
5 PPB	0.0328	5.0	5.110	0.00	0.4
10 PPB	0.0650	10.0	10.188	0.00	0.4
25 PPB	0.1584	25.0	24.908	0.00	0.4

Correlation Coef.: 0.999937 Slope: 0.00634 Intercept: 0.00038

Sequence No.: 9

Sample ID: ICV (2)

Analyst:

Autosampler Location: 10

Date Collected: 11/20/2013 5:53:03 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	19.48	19.48	0.1239	0.5128	0.1241	17:54:02	Yes
2	19.38	19.38	0.1233	0.5066	0.1235	17:54:34	Yes
Mean:	19.43	19.43	0.1236				
SD:	0.066	0.066	0.0004				
%RSD:	0.338	0.338	0.34				

QC value within limits for Hg 253.7 Recovery = 97.15%
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICB

Analyst:

Autosampler Location: 1

Date Collected: 11/20/2013 5:54:36 PM

Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.085	-0.085	-0.0002	-0.0023	-0.0000	17:55:31	Yes
2	-0.070	-0.070	-0.0001	0.0002	0.0001	17:56:04	Yes
Mean:	-0.077	-0.077	-0.0001				
SD:	0.011	0.011	0.0001				
%RSD:	13.75	13.75	59.46				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11

Sample ID: MB 27441 (1)

Analyst:

Autosampler Location: 11

Date Collected: 11/20/2013 5:56:05 PM

Data Type: Original

Replicate Data: MB 27441 (1)

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.058	-0.058	0.0000	0.0008	0.0002	17:57:02	Yes
2	-0.058	-0.058	0.0000	0.0009	0.0002	17:57:34	Yes
Mean:	-0.058	-0.058	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.748	0.748	29.54				

Sequence No.: 12

Sample ID: LCSW 27441

Analyst:

Autosampler Location: 12

Date Collected: 11/20/2013 5:57:35 PM

Data Type: Original

Replicate Data: LCSW 27441

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.905	9.905	0.0632	0.2588	0.0634	17:58:30	Yes
2	9.758	9.758	0.0623	0.2526	0.0624	17:59:03	Yes
Mean:	9.832	9.832	0.0627				

SD: 0.104 0.104 0.0007
 %RSD: 1.056 1.056 1.05

Sequence No.: 13
 Sample ID: LCSW MR 27441
 Analyst:

Autosampler Location: 13
 Date Collected: 11/20/2013 5:59:04 PM
 Data Type: Original

Replicate Data: LCSW MR 27441

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.771	9.771	0.0624	0.2563	0.0625	18:00:00	Yes
2	9.742	9.742	0.0622	0.2540	0.0623	18:00:32	Yes
Mean:	9.757	9.757	0.0623				
SD:	0.021	0.021	0.0001				
%RSD:	0.211	0.211	0.21				

Sequence No.: 14
 Sample ID: 75646-001
 Analyst:

Autosampler Location: 14
 Date Collected: 11/20/2013 6:00:34 PM
 Data Type: Original

Replicate Data: 75646-001

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.066	-0.066	-0.0000	0.0004	0.0001	18:01:29	Yes
2	-0.052	-0.052	0.0000	0.0012	0.0002	18:02:02	Yes
Mean:	-0.059	-0.059	0.0000				
SD:	0.010	0.010	0.0001				
%RSD:	16.81	16.81	>999.9%				

Sequence No.: 15
 Sample ID: 75646-001 MR
 Analyst:

Autosampler Location: 15
 Date Collected: 11/20/2013 6:02:03 PM
 Data Type: Original

Replicate Data: 75646-001 MR

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.062	-0.062	-0.0000	0.0007	0.0001	18:02:58	Yes
2	-0.063	-0.063	-0.0000	0.0006	0.0001	18:03:30	Yes
Mean:	-0.062	-0.062	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.670	1.670	37.24				

Sequence No.: 16
 Sample ID: 75646-003 MS1
 Analyst:

Autosampler Location: 16
 Date Collected: 11/20/2013 6:03:32 PM
 Data Type: Original

Replicate Data: 75646-003 MS1

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.642	9.642	0.0615	0.2511	0.0617	18:04:27	Yes
2	9.637	9.637	0.0615	0.2500	0.0617	18:05:00	Yes
Mean:	9.640	9.640	0.0615				
SD:	0.003	0.003	0.0000				
%RSD:	0.036	0.036	0.04				

Sequence No.: 17
 Sample ID: 75646-033 MS2
 Analyst:

Autosampler Location: 17
 Date Collected: 11/20/2013 6:05:01 PM
 Data Type: Original

Replicate Data: 75646-033 MS2

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.676	9.676	0.0618	0.2530	0.0619	18:05:56	Yes
2	9.686	9.686	0.0618	0.2517	0.0620	18:06:28	Yes
Mean:	9.681	9.681	0.0618				
SD:	0.007	0.007	0.0000				

%RSD: 0.069 0.069 0.07

Sequence No.: 18
 Sample ID: 75646-005
 Analyst:

Autosampler Location: 18
 Date Collected: 11/20/2013 6:06:30 PM
 Data Type: Original

Replicate Data: 75646-005

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.070	-0.070	-0.0001	-0.0001	0.0001	18:07:25	Yes
2	-0.057	-0.057	0.0000	0.0008	0.0002	18:07:58	Yes
Mean:	-0.063	-0.063	-0.0000				
SD:	0.009	0.009	0.0001				
%RSD:	13.53	13.53	219.48				

Sequence No.: 19
 Sample ID: 75646-007
 Analyst:

Autosampler Location: 19
 Date Collected: 11/20/2013 6:07:59 PM
 Data Type: Original

Replicate Data: 75646-007

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.081	-0.081	-0.0001	-0.0013	0.0000	18:08:58	Yes
2	-0.068	-0.068	-0.0001	0.0002	0.0001	18:09:30	Yes
Mean:	-0.075	-0.075	-0.0001				
SD:	0.010	0.010	0.0001				
%RSD:	12.77	12.77	63.16				

Sequence No.: 20
 Sample ID: CCV
 Analyst:

Autosampler Location: 9
 Date Collected: 11/20/2013 6:09:31 PM
 Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.965	9.965	0.0636	0.2609	0.0637	18:10:28	Yes
2	9.814	9.814	0.0626	0.2570	0.0628	18:11:00	Yes
Mean:	9.889	9.889	0.0631				
SD:	0.107	0.107	0.0007				
%RSD:	1.079	1.079	1.07				

QC value within limits for Hg 253.7 Recovery = 98.89%
 All analyte(s) passed QC.

Sequence No.: 21
 Sample ID: CCB
 Analyst:

Autosampler Location: 1
 Date Collected: 11/20/2013 6:11:01 PM
 Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.050	-0.050	0.0001	0.0013	0.0002	18:11:57	Yes
2	-0.058	-0.058	0.0000	0.0001	0.0002	18:12:30	Yes
Mean:	-0.054	-0.054	0.0000				
SD:	0.006	0.006	0.0000				
%RSD:	10.36	10.36	107.67				

QC value within limits for Hg 253.7 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 22
 Sample ID: 75646-009
 Analyst:

Autosampler Location: 20
 Date Collected: 11/20/2013 6:12:31 PM
 Data Type: Original

Replicate Data: 75646-009

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.037	-0.037	0.0001	0.0021	0.0003	18:13:27	Yes

Method: HGCV2 SWH2O (7470A)

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2	-0.042	-0.042	0.0001	0.0017	0.0003	18:13:59	Yes
Mean:	-0.040	-0.040	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	7.954	7.954	15.93				

Sequence No.: 23
 Sample ID: 75646-011
 Analyst:

Autosampler Location: 21
 Date Collected: 11/20/2013 6:14:01 PM
 Data Type: Original

Replicate Data: 75646-011

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.045	-0.045	0.0001	0.0016	0.0002	18:14:56	Yes
2	-0.041	-0.041	0.0001	0.0021	0.0003	18:15:29	Yes
Mean:	-0.043	-0.043	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	7.492	7.492	19.50				

Sequence No.: 24
 Sample ID: 75646-013
 Analyst:

Autosampler Location: 22
 Date Collected: 11/20/2013 6:15:30 PM
 Data Type: Original

Replicate Data: 75646-013

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.070	-0.070	-0.0001	0.0001	0.0001	18:16:26	Yes
2	-0.068	-0.068	-0.0001	0.0003	0.0001	18:16:58	Yes
Mean:	-0.069	-0.069	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	1.688	1.688	12.07				

Sequence No.: 25
 Sample ID: 75646-015
 Analyst:

Autosampler Location: 23
 Date Collected: 11/20/2013 6:16:59 PM
 Data Type: Original

Replicate Data: 75646-015

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.058	-0.058	0.0000	0.0005	0.0002	18:17:55	Yes
2	-0.063	-0.063	-0.0000	0.0004	0.0001	18:18:27	Yes
Mean:	-0.060	-0.060	-0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	6.501	6.501	447.23				

Sequence No.: 26
 Sample ID: 75646-017
 Analyst:

Autosampler Location: 24
 Date Collected: 11/20/2013 6:18:28 PM
 Data Type: Original

Replicate Data: 75646-017

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.066	-0.066	-0.0000	0.0006	0.0001	18:19:24	Yes
2	-0.059	-0.059	0.0000	0.0010	0.0001	18:19:56	Yes
Mean:	-0.062	-0.062	-0.0000				
SD:	0.005	0.005	0.0000				
%RSD:	8.464	8.464	185.45				

Sequence No.: 27
 Sample ID: 75646-019
 Analyst:

Autosampler Location: 25
 Date Collected: 11/20/2013 6:19:57 PM
 Data Type: Original

Replicate Data: 75646-019

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.055	-0.055	0.0000	0.0010	0.0002	18:20:52	Yes
2	-0.064	-0.064	-0.0000	0.0003	0.0001	18:21:25	Yes

Mean: -0.060 -0.060 -0.0000
 SD: 0.006 0.006 0.0000
 %RSD: 10.49 10.49 >999.9%

Sequence No.: 28
 Sample ID: 75646-021
 Analyst:

Autosampler Location: 26
 Date Collected: 11/20/2013 6:21:26 PM
 Data Type: Original

Replicate Data: 75646-021

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.071	-0.071	-0.0001	-0.0001	0.0001	18:22:21	Yes
2	-0.062	-0.062	-0.0000	0.0008	0.0001	18:22:54	Yes
Mean:	-0.066	-0.066	-0.0000				
SD:	0.006	0.006	0.0000				
%RSD:	9.010	9.010	87.10				

Sequence No.: 29
 Sample ID: 75646-023
 Analyst:

Autosampler Location: 27
 Date Collected: 11/20/2013 6:22:55 PM
 Data Type: Original

Replicate Data: 75646-023

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.058	-0.058	0.0000	0.0001	0.0002	18:23:50	Yes
2	-0.058	-0.058	0.0000	-0.0005	0.0002	18:24:22	Yes
Mean:	-0.058	-0.058	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.499	0.499	18.15				

Sequence No.: 30
 Sample ID: 75646-025
 Analyst:

Autosampler Location: 28
 Date Collected: 11/20/2013 6:24:24 PM
 Data Type: Original

Replicate Data: 75646-025

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.063	-0.063	-0.0000	-0.0001	0.0001	18:25:22	Yes
2	-0.059	-0.059	0.0000	-0.0002	0.0001	18:25:54	Yes
Mean:	-0.061	-0.061	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	5.100	5.100	183.98				

Sequence No.: 31
 Sample ID: CCV
 Analyst:

Autosampler Location: 9
 Date Collected: 11/20/2013 6:25:55 PM
 Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.893	9.893	0.0631	0.2573	0.0633	18:26:52	Yes
2	9.885	9.885	0.0631	0.2572	0.0632	18:27:25	Yes
Mean:	9.889	9.889	0.0631				
SD:	0.006	0.006	0.0000				
%RSD:	0.059	0.059	0.06				

QC value within limits for Hg 253.7 Recovery = 98.89%
 All analyte(s) passed QC.

Sequence No.: 32
 Sample ID: CCB
 Analyst:

Autosampler Location: 1
 Date Collected: 11/20/2013 6:27:26 PM
 Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.067	-0.067	-0.0000	0.0001	0.0001	18:28:21	Yes

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2	-0.030	-0.030	0.0002	0.0026	0.0003	18:28:54	Yes
Mean:	-0.049	-0.049	0.0001				
SD:	0.026	0.026	0.0002				
%RSD:	52.97	52.97	237.36				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 33

Sample ID: 75646-027

Analyst:

Autosampler Location: 29

Date Collected: 11/20/2013 6:28:55 PM

Data Type: Original

Replicate Data: 75646-027

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.060	-0.060	-0.0000	0.0008	0.0001	18:29:52	Yes
2	-0.054	-0.054	0.0000	0.0012	0.0002	18:30:24	Yes
Mean:	-0.057	-0.057	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	6.320	6.320	142.96				

Sequence No.: 34

Sample ID: 75646-029

Analyst:

Autosampler Location: 30

Date Collected: 11/20/2013 6:30:25 PM

Data Type: Original

Replicate Data: 75646-029

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.074	-0.074	-0.0001	-0.0001	0.0001	18:31:21	Yes
2	-0.049	-0.049	0.0001	0.0019	0.0002	18:31:53	Yes
Mean:	-0.061	-0.061	-0.0000				
SD:	0.018	0.018	0.0001				
%RSD:	28.99	28.99	>999.9%				

Sequence No.: 35

Sample ID: 75646-031

Analyst:

Autosampler Location: 31

Date Collected: 11/20/2013 6:31:54 PM

Data Type: Original

Replicate Data: 75646-031

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.058	-0.058	0.0000	0.0008	0.0002	18:32:50	Yes
2	-0.059	-0.059	0.0000	0.0011	0.0001	18:33:23	Yes
Mean:	-0.058	-0.058	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	1.430	1.430	63.02				

Sequence No.: 36

Sample ID: CCV

Analyst:

Autosampler Location: 9

Date Collected: 11/20/2013 6:33:24 PM

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.629	9.629	0.0615	0.2554	0.0616	18:34:21	Yes
2	9.655	9.655	0.0616	0.2545	0.0618	18:34:53	Yes
Mean:	9.642	9.642	0.0615				
SD:	0.018	0.018	0.0001				
%RSD:	0.191	0.191	0.19				

QC value within limits for Hg 253.7 Recovery = 96.42%
All analyte(s) passed QC.

Sequence No.: 37

Sample ID: CCB

Analyst:

Autosampler Location: 1

Date Collected: 11/20/2013 6:34:55 PM

Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.063	-0.063	-0.0000	-0.0003	0.0001	18:35:51	Yes
2	-0.042	-0.042	0.0001	0.0015	0.0003	18:36:23	Yes
Mean:	-0.053	-0.053	0.0000				
SD:	0.015	0.015	0.0001				
%RSD:	27.96	27.96	221.97				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

H15727SW

3110835 0730

Method: HGCV2 SWH20 (7470A)

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Date: 11/22/2013 5:05:12 PM

1st Review BA 11/22/2013 V-177236

Analysis Begun

Logged In Analyst: johns

Technique: AA FIMS-MHS

Spectrometer Model: FIMS-100, S/N B050-9550

Autosampler Model: AS-90

Sample Information File: C:\data-AA\johns\Sample Information\H15727SW.sif

Batch ID: H15727SW

Results Data Set: H15727SW

Results Library: C:\data-AA\johns\Results\Results.mdb

Method Loaded

Method Name: HGCV2 SWH20 (7470A)

Method Last Saved: 8/7/2013 12:04:09 PM

Method Description: HgCV2 SWB46H20 (7470A)

Sequence No.: 1

Autosampler Location: 1

Sample ID: Calibration Blank

Date Collected: 11/22/2013 4:59:47 PM

Analyst:

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]	0.0002	0.0003	0.0002	17:00:43	Yes
2		[0.00]	0.0001	0.0000	0.0001	17:01:16	Yes
Mean:		[0.00]	0.0001				
SD:		0.00	0.0000				
%RSD:		0.00	36.81				

Auto-zero performed.

Sequence No.: 2

Autosampler Location: 2

Sample ID: .2 PPB

Date Collected: 11/22/2013 5:01:17 PM

Analyst:

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]	0.0013	0.0042	0.0014	17:02:13	Yes
2		[0.2]	0.0013	0.0053	0.0014	17:02:45	Yes
Mean:		[0.2]	0.0013				
SD:		0.0	0.0000				
%RSD:		0.0	2.17				

Standard number 1 applied. [0.2]

Correlation Coef.: 1.000000 Slope: 0.00639 Intercept: 0.00000

Sequence No.: 3

Autosampler Location: 3

Sample ID: .5 PPB

Date Collected: 11/22/2013 5:02:46 PM

Analyst:

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]	0.0032	0.0125	0.0033	17:03:42	Yes
2		[0.5]	0.0030	0.0094	0.0031	17:04:14	Yes
Mean:		[0.5]	0.0031				
SD:		0.0	0.0001				
%RSD:		0.0	4.85				

Standard number 2 applied. [0.5]

Correlation Coef.: 0.999868 Slope: 0.00616 Intercept: 0.00002

Sequence No.: 4

Autosampler Location: 4

Sample ID: 1 PPB

Date Collected: 11/22/2013 5:04:15 PM

Analyst:

Data Type: Original

Replicate Data: 1 PPB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored

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1	[1]	0.0062	0.0202	0.0063	17:05:11	Yes
2	[1]	0.0063	0.0218	0.0064	17:05:44	Yes
Mean:	[1]	0.0062				
SD:	0	0.0001				
%RSD:	0	1.06				

Standard number 3 applied. [1]
Correlation Coef.: 0.999955 Slope: 0.00622 Intercept: 0.00001

Sequence No.: 5
Sample ID: 2 PPB
Analyst:

Autosampler Location: 5
Date Collected: 11/22/2013 5:05:45 PM
Data Type: Original

Replicate Data: 2 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[2]	[2]	0.0126	0.0439	0.0127	17:06:40	Yes
2	[2]	[2]	0.0124	0.0415	0.0126	17:07:12	Yes
Mean:	[2]	[2]	0.0125				
SD:	0	0	0.0001				
%RSD:	0	0	0.85				

Standard number 4 applied. [2]
Correlation Coef.: 0.999988 Slope: 0.00625 Intercept: -0.00000

Sequence No.: 6
Sample ID: 5 PPB
Analyst:

Autosampler Location: 6
Date Collected: 11/22/2013 5:07:14 PM
Data Type: Original

Replicate Data: 5 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[5]	[5]	0.0305	0.1053	0.0307	17:08:09	Yes
2	[5]	[5]	0.0303	0.1054	0.0305	17:08:42	Yes
Mean:	[5]	[5]	0.0304				
SD:	0	0	0.0001				
%RSD:	0	0	0.47				

Standard number 5 applied. [5]
Correlation Coef.: 0.999940 Slope: 0.00609 Intercept: 0.00010

Sequence No.: 7
Sample ID: 10 PPB
Analyst:

Autosampler Location: 7
Date Collected: 11/22/2013 5:08:43 PM
Data Type: Original

Replicate Data: 10 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[10]	[10]	0.0618	0.2174	0.0619	17:09:38	Yes
2	[10]	[10]	0.0619	0.2150	0.0620	17:10:11	Yes
Mean:	[10]	[10]	0.0618				
SD:	0	0	0.0001				
%RSD:	0	0	0.10				

Standard number 6 applied. [10]
Correlation Coef.: 0.999965 Slope: 0.00617 Intercept: 0.00001

Sequence No.: 8
Sample ID: 25 PPB
Analyst:

Autosampler Location: 8
Date Collected: 11/22/2013 5:10:12 PM
Data Type: Original

Replicate Data: 25 PPB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	[25]	[25]	0.1503	0.5291	0.1505	17:11:07	Yes
2	[25]	[25]	0.1495	0.5254	0.1496	17:11:39	Yes
Mean:	[25]	[25]	0.1499				
SD:	0	0	0.0006				
%RSD:	0	0	0.39				

Standard number 7 applied. [25]
Correlation Coef.: 0.999928 Slope: 0.00601 Intercept: 0.00036

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	-0.059	0.00	36.8
.2 PPB	0.0013	0.2	0.153	0.00	2.2
.5 PPB	0.0031	0.5	0.454	0.00	4.9
1 PPB	0.0062	1.0	0.980	0.00	1.1
2 PPB	0.0125	2.0	2.023	0.00	0.8
5 PPB	0.0304	5.0	5.010	0.00	0.5
10 PPB	0.0618	10.0	10.236	0.00	0.1
25 PPB	0.1499	25.0	24.904	0.00	0.4

Correlation Coef.: 0.999928 Slope: 0.00601 Intercept: 0.00036

Sequence No.: 9

Sample ID: ICV (2)

Analyst:

Autosampler Location: 10

Date Collected: 11/22/2013 5:11:41 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	19.21	19.21	0.1157	0.4061	0.1158	17:12:40	Yes
2	19.07	19.07	0.1149	0.4006	0.1150	17:13:12	Yes
Mean:	19.14	19.14	0.1153				
SD:	0.095	0.095	0.0006				
%RSD:	0.498	0.498	0.50				

QC value within limits for Hg 253.7 Recovery = 95.71%

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICB

Analyst:

Autosampler Location: 1

Date Collected: 11/22/2013 5:13:13 PM

Data Type: Original

Replicate Data: ICB

Repl	SampleConc # ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.073	-0.073	-0.0001	-0.0008	0.0000	17:14:09	Yes
2	-0.065	-0.065	-0.0000	-0.0005	0.0001	17:14:41	Yes
Mean:	-0.069	-0.069	-0.0001				
SD:	0.006	0.006	0.0000				
%RSD:	7.998	7.998	56.96				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: MB 27442 (1)

Analyst:

Autosampler Location: 11

Date Collected: 11/22/2013 5:14:42 PM

Data Type: Original

Replicate Data: MB 27442 (1)

Repl	SampleConc # ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.073	-0.073	-0.0001	-0.0008	0.0000	17:15:38	Yes
2	-0.063	-0.063	-0.0000	-0.0001	0.0001	17:16:11	Yes
Mean:	-0.068	-0.068	-0.0001				
SD:	0.007	0.007	0.0000				
%RSD:	10.42	10.42	83.99				

Sequence No.: 12

Sample ID: LCSW 27442

Analyst:

Autosampler Location: 12

Date Collected: 11/22/2013 5:16:12 PM

Data Type: Original

Replicate Data: LCSW 27442

Repl	SampleConc # ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	10.07	10.07	0.0608	0.2109	0.0609	17:17:07	Yes
2	9.928	9.928	0.0600	0.2063	0.0601	17:17:40	Yes
Mean:	9.997	9.997	0.0604				

SD: 0.097 0.097 0.0006
%RSD: 0.975 0.975 0.97

Sequence No.: 13
Sample ID: LCSW MR 27442
Analyst:

Autosampler Location: 13
Date Collected: 11/22/2013 5:17:41 PM
Data Type: Original

Replicate Data: LCSW MR 27442

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.204	9.204	0.0556	0.1914	0.0558	17:18:36	Yes
2	9.221	9.221	0.0557	0.1922	0.0559	17:19:09	Yes
Mean:	9.213	9.213	0.0557				
SD:	0.012	0.012	0.0001				
%RSD:	0.132	0.132	0.13				

Sequence No.: 14
Sample ID: 75646-002
Analyst:

Autosampler Location: 14
Date Collected: 11/22/2013 5:19:10 PM
Data Type: Original

Replicate Data: 75646-002

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.045	-0.045	0.0001	0.0008	0.0002	17:20:06	Yes
2	-0.065	-0.065	-0.0000	-0.0002	0.0001	17:20:38	Yes
Mean:	-0.055	-0.055	0.0000				
SD:	0.014	0.014	0.0001				
%RSD:	26.09	26.09	318.95				

Sequence No.: 15
Sample ID: 75646-002 MR
Analyst:

Autosampler Location: 15
Date Collected: 11/22/2013 5:20:39 PM
Data Type: Original

Replicate Data: 75646-002 MR

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.063	-0.063	-0.0000	0.0002	0.0001	17:21:35	Yes
2	-0.074	-0.074	-0.0001	-0.0015	0.0000	17:22:07	Yes
Mean:	-0.068	-0.068	-0.0001				
SD:	0.008	0.008	0.0000				
%RSD:	11.77	11.77	91.10				

Sequence No.: 16
Sample ID: 75646-004 MS1
Analyst:

Autosampler Location: 16
Date Collected: 11/22/2013 5:22:09 PM
Data Type: Original

Replicate Data: 75646-004 MS1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.755	9.755	0.0589	0.2027	0.0591	17:23:04	Yes
2	9.851	9.851	0.0595	0.2041	0.0596	17:23:37	Yes
Mean:	9.803	9.803	0.0592				
SD:	0.068	0.068	0.0004				
%RSD:	0.691	0.691	0.69				

Sequence No.: 17
Sample ID: 75646-034 MS2
Analyst:

Autosampler Location: 17
Date Collected: 11/22/2013 5:23:38 PM
Data Type: Original

Replicate Data: 75646-034 MS2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.876	9.876	0.0597	0.2074	0.0598	17:24:33	Yes
2	9.795	9.795	0.0592	0.2060	0.0593	17:25:06	Yes
Mean:	9.836	9.836	0.0594				
SD:	0.057	0.057	0.0003				

%RSD: 0.584 0.584 0.58

Sequence No.: 18
Sample ID: 75646-006
Analyst:

Autosampler Location: 18
Date Collected: 11/22/2013 5:25:07 PM
Data Type: Original

Replicate Data: 75646-006

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.060	-0.060	-0.0000	0.0003	0.0001	17:26:03	Yes
2	-0.070	-0.070	-0.0001	-0.0012	0.0001	17:26:35	Yes
Mean:	-0.065	-0.065	-0.0000				
SD:	0.007	0.007	0.0000				
%RSD:	10.50	10.50	126.45				

Sequence No.: 19
Sample ID: 75646-008
Analyst:

Autosampler Location: 19
Date Collected: 11/22/2013 5:26:36 PM
Data Type: Original

Replicate Data: 75646-008

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.058	-0.058	0.0000	0.0004	0.0001	17:27:35	Yes
2	-0.074	-0.074	-0.0001	-0.0008	0.0000	17:28:07	Yes
Mean:	-0.066	-0.066	-0.0000				
SD:	0.011	0.011	0.0001				
%RSD:	17.18	17.18	171.22				

Sequence No.: 20
Sample ID: CCV
Analyst:

Autosampler Location: 9
Date Collected: 11/22/2013 5:28:09 PM
Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	10.05	10.05	0.0607	0.2129	0.0608	17:29:05	Yes
2	9.908	9.908	0.0599	0.2084	0.0600	17:29:37	Yes
Mean:	9.980	9.980	0.0603				
SD:	0.102	0.102	0.0006				
%RSD:	1.018	1.018	1.01				

QC value within limits for Hg 253.7 Recovery = 99.80%
All analyte(s) passed QC.

Sequence No.: 21
Sample ID: CCB
Analyst:

Autosampler Location: 1
Date Collected: 11/22/2013 5:29:38 PM
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.065	-0.065	-0.0000	-0.0008	0.0001	17:30:34	Yes
2	-0.073	-0.073	-0.0001	-0.0010	0.0000	17:31:06	Yes
Mean:	-0.069	-0.069	-0.0001				
SD:	0.006	0.006	0.0000				
%RSD:	8.095	8.095	57.16				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 22
Sample ID: 75646-010
Analyst:

Autosampler Location: 20
Date Collected: 11/22/2013 5:31:07 PM
Data Type: Original

Replicate Data: 75646-010

Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.053	-0.053	0.0000	0.0009	0.0002	17:32:03	Yes

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2	-0.064	-0.064	-0.0000	0.0001	0.0001	17:32:36	Yes
Mean:	-0.059	-0.059	0.0000				
SD:	0.008	0.008	0.0000				
%RSD:	13.19	13.19	>999.9%				

Sequence No.: 23
 Sample ID: 75646-012
 Analyst:

Autosampler Location: 21
 Date Collected: 11/22/2013 5:32:37 PM
 Data Type: Original

Replicate Data: 75646-012

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.061	-0.061	-0.0000	-0.0001	0.0001	17:33:33	Yes
2	-0.064	-0.064	-0.0000	-0.0001	0.0001	17:34:05	Yes
Mean:	-0.062	-0.062	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	3.479	3.479	73.80				

Sequence No.: 24
 Sample ID: 75646-014
 Analyst:

Autosampler Location: 22
 Date Collected: 11/22/2013 5:34:06 PM
 Data Type: Original

Replicate Data: 75646-014

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.067	-0.067	-0.0000	-0.0002	0.0001	17:35:02	Yes
2	-0.054	-0.054	0.0000	0.0008	0.0002	17:35:33	Yes
Mean:	-0.060	-0.060	-0.0000				
SD:	0.009	0.009	0.0001				
%RSD:	14.66	14.66	>999.9%				

Sequence No.: 25
 Sample ID: 75646-016
 Analyst:

Autosampler Location: 23
 Date Collected: 11/22/2013 5:35:35 PM
 Data Type: Original

Replicate Data: 75646-016

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.067	-0.067	-0.0000	-0.0002	0.0001	17:36:30	Yes
2	-0.034	-0.034	0.0002	0.0028	0.0003	17:37:03	Yes
Mean:	-0.051	-0.051	0.0001				
SD:	0.023	0.023	0.0001				
%RSD:	46.07	46.07	268.85				

Sequence No.: 26
 Sample ID: 75646-018
 Analyst:

Autosampler Location: 24
 Date Collected: 11/22/2013 5:37:04 PM
 Data Type: Original

Replicate Data: 75646-018

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.076	-0.076	-0.0001	-0.0013	0.0000	17:37:59	Yes
2	-0.057	-0.057	0.0000	0.0007	0.0001	17:38:32	Yes
Mean:	-0.067	-0.067	-0.0000				
SD:	0.014	0.014	0.0001				
%RSD:	20.36	20.36	189.61				

Sequence No.: 27
 Sample ID: 75646-020
 Analyst:

Autosampler Location: 25
 Date Collected: 11/22/2013 5:38:33 PM
 Data Type: Original

Replicate Data: 75646-020

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.071	-0.071	-0.0001	-0.0004	0.0001	17:39:28	Yes
2	-0.064	-0.064	-0.0000	-0.0002	0.0001	17:40:01	Yes

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Mean: -0.068 -0.068 -0.0000
 SD: 0.005 0.005 0.0000
 %RSD: 7.843 7.843 65.75

Sequence No.: 28
 Sample ID: 75646-022
 Analyst:

Autosampler Location: 26
 Date Collected: 11/22/2013 5:40:02 PM
 Data Type: Original

Replicate Data: 75646-022

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.059	-0.059	0.0000	0.0002	0.0001	17:40:57	Yes
2	-0.051	-0.051	0.0001	0.0002	0.0002	17:41:30	Yes
Mean:	-0.055	-0.055	0.0000				
SD:	0.006	0.006	0.0000				
%RSD:	10.25	10.25	119.21				

Sequence No.: 29
 Sample ID: 75646-024
 Analyst:

Autosampler Location: 27
 Date Collected: 11/22/2013 5:41:31 PM
 Data Type: Original

Replicate Data: 75646-024

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.058	-0.058	0.0000	0.0003	0.0001	17:42:26	Yes
2	-0.048	-0.048	0.0001	0.0013	0.0002	17:42:59	Yes
Mean:	-0.053	-0.053	0.0000				
SD:	0.007	0.007	0.0000				
%RSD:	13.10	13.10	100.38				

Sequence No.: 30
 Sample ID: 75646-026
 Analyst:

Autosampler Location: 28
 Date Collected: 11/22/2013 5:43:00 PM
 Data Type: Original

Replicate Data: 75646-026

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.076	-0.076	-0.0001	-0.0009	0.0000	17:43:58	Yes
2	-0.068	-0.068	-0.0000	-0.0001	0.0001	17:44:30	Yes
Mean:	-0.072	-0.072	-0.0001				
SD:	0.006	0.006	0.0000				
%RSD:	8.269	8.269	47.88				

Sequence No.: 31
 Sample ID: CCV
 Analyst:

Autosampler Location: 9
 Date Collected: 11/22/2013 5:44:32 PM
 Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	9.921	9.921	0.0599	0.2093	0.0601	17:45:28	Yes
2	9.877	9.877	0.0597	0.2073	0.0598	17:46:01	Yes
Mean:	9.899	9.899	0.0598				
SD:	0.031	0.031	0.0002				
%RSD:	0.313	0.313	0.31				

QC value within limits for Hg 253.7 Recovery = 98.99%
 All analyte(s) passed QC.

Sequence No.: 32
 Sample ID: CCB
 Analyst:

Autosampler Location: 1
 Date Collected: 11/22/2013 5:46:02 PM
 Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StndConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.054	-0.054	0.0000	0.0003	0.0002	17:46:57	Yes

Method: HGCV2 SWH2O (7470A)

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2 -0.072 -0.072 -0.0001 -0.0011 0.0001 17:47:30 Yes
 Mean: -0.063 -0.063 -0.0000
 SD: 0.013 0.013 0.0001
 %RSD: 20.74 20.74 394.12

QC value within limits for Hg 253.7 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 33
 Sample ID: 75646-028
 Analyst:

Autosampler Location: 29
 Date Collected: 11/22/2013 5:47:31 PM
 Data Type: Original

Replicate Data: 75646-028

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.052	-0.052	0.0000	0.0007	0.0002	17:48:28	Yes
2	-0.057	-0.057	0.0000	0.0007	0.0001	17:49:01	Yes
Mean:	-0.055	-0.055	0.0000				
SD:	0.004	0.004	0.0000				
%RSD:	6.578	6.578	76.01				

Sequence No.: 34
 Sample ID: 75646-030
 Analyst:

Autosampler Location: 30
 Date Collected: 11/22/2013 5:49:02 PM
 Data Type: Original

Replicate Data: 75646-030

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.054	-0.054	0.0000	0.0009	0.0002	17:49:57	Yes
2	-0.056	-0.056	0.0000	0.0008	0.0001	17:50:30	Yes
Mean:	-0.055	-0.055	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	2.832	2.832	34.45				

Sequence No.: 35
 Sample ID: 75646-032
 Analyst:

Autosampler Location: 31
 Date Collected: 11/22/2013 5:50:31 PM
 Data Type: Original

Replicate Data: 75646-032

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.058	-0.058	0.0000	0.0008	0.0001	17:51:26	Yes
2	-0.058	-0.058	0.0000	0.0003	0.0001	17:51:59	Yes
Mean:	-0.058	-0.058	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	0.255	0.255	7.94				

Sequence No.: 36
 Sample ID: CCV
 Analyst:

Autosampler Location: 9
 Date Collected: 11/22/2013 5:52:00 PM
 Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	9.942	9.942	0.0601	0.2096	0.0602	17:52:57	Yes
2	9.949	9.949	0.0601	0.2074	0.0602	17:53:30	Yes
Mean:	9.946	9.946	0.0601				
SD:	0.005	0.005	0.0000				
%RSD:	0.047	0.047	0.05				

QC value within limits for Hg 253.7 Recovery = 99.46%
 All analyte(s) passed QC.

Sequence No.: 37
 Sample ID: CCB
 Analyst:

Autosampler Location: 1
 Date Collected: 11/22/2013 5:53:31 PM
 Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlankCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.054	-0.054	0.0000	0.0006	0.0002	17:54:27	Yes
2	-0.055	-0.055	0.0000	0.0004	0.0002	17:54:59	Yes
Mean:	-0.055	-0.055	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	2.145	2.145	24.05				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

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 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	DI Water		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-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 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	DI Water		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 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-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-176983



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Hg Intermediate Standard		BatchNumber: B-16567	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: .25 ppm	Checked: Yes	
Expiration Date: 11/19/2013		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-176984



Prepared By: Cousineau, Paul		Department: Metals	ApprovedBy: shiamala	
Description: Hg intermediate Control		BatchNumber: B-16567	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: 1.0 ppm	Checked: Yes	
Expiration Date: 11/19/2013		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-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
8123	DI Water			
	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 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-175281



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS3 - Middle Std		BatchNumber:	ApproveDate: 10/29/13	
Prep Date: 10/23/2013		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 1/22/2014		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	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-175629



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICSA		BatchNumber:	ApproveDate: 10/29/13	
Prep Date: 10/29/2013		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 1/28/2014		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	50 ml	neat neat	
8122	hydrochloric acid	50 ml	neat neat	
8013	ICSA	50 ml	NEAT neat	

Veritech Lot Number: V-175630



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICSAB		BatchNumber:	ApproveDate: 10/29/13	
Prep Date: 10/29/2013		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
8193	DI H2O			
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 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	DI Water		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-175715



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: ICS2- Low Std		BatchNumber:	ApproveDate: 10/29/13	
Prep Date: 10/29/2013		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 1/28/2014		Final Volume: 500 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
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 Lot Number: V-176344



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: gabrielle	
Description: ICS4 - High std		BatchNumber:	ApproveDate: 11/14/13	
Prep Date: 11/7/2013		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 2/6/2014		Final Volume: 500 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	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 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			
8123	nitric acid	5 ml	neat neat	
8122	hydrochloric acid	5 ml	neat neat	
8135	SW846 LL ICV/CCV	1 ml	NEAT neat	

Veritech Lot Number: V-176789



Prepared By: Berls, Sean R.		Department: Metals	ApprovedBy: shiamala	
Description: CCV		BatchNumber:	ApproveDate: 11/15/13	
Prep Date: 11/15/2013		Concentration: MULTI multi	Checked: Yes	
Expiration Date: 2/14/2014		Final Volume: 1000 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	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 Internally Prepared Standard Log

Veritech Lot Number: V-176895



Prepared By: Berls, Sean R.		Department: WetChem	ApprovedBy: shiamala	
Description: LLICV aqueous		BatchNumber:	ApproveDate: 11/19/13	
Prep Date: 11/16/2013		Concentration: VARIOUS pp	Checked: Yes	
Expiration Date: 2/15/2014		Final Volume: 100 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			
8123	nitric acid	5 ml	neat neat	
8122	hydrochloric acid	5 ml	neat neat	
8135	SW846 LL ICV/CCV	1 ml	NEAT neat	

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 Internally Prepared Standard Log

Veritech Lot Number: V-177006



Prepared By: Adelartey, Olufemi		Department: WetChem	ApprovedBy: shiamala	
Description: 3% HCL		BatchNumber:	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		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-177236



Prepared By: Adelartey, Olufemi		Department: Metals	ApprovedBy: shiamala	
Description: SnCl2		BatchNumber:	ApproveDate: 11/22/13	
Prep Date: 11/22/2013		Concentration: reagent I	Checked: Yes	
Expiration Date: 11/22/2013		Final Volume: 2 l		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-177006	3% HCL	2000 ml	3 %	
7994	STANNOUS CHLORIDE	26.4 g	NEAT neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-177025



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ ICV 20 ppb		BatchNumber: B-16569	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: 20 ppb	Checked: Yes	
Expiration Date: 11/19/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176984	Hg intermediate Control	.5 ml	1.0 ppm	
8193	DI H2O			

Veritech Lot Number: V-177026



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ CCV 10 ppb		BatchNumber: B-16569	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: 10 ppb	Checked: Yes	
Expiration Date: 11/19/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176984	Hg intermediate Control	.25 ml	1.0 ppm	
8193	DI H2O			

Veritech Lot Number: V-177027



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard blk		BatchNumber: B-16569	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 11/19/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			

Veritech Lot Number: V-177028



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard .2 ppb		BatchNumber: B-16569	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: .2 ppb	Checked: Yes	
Expiration Date: 11/19/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176983	Hg Intermediate Standard	.02 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-177029



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard .5 ppb		BatchNumber: B-16569	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: .5 ppb	Checked: Yes	
Expiration Date: 11/19/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176983	Hg Intermediate Standard	.05 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-177030



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 1 ppb		BatchNumber: B-16569	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: 1 ppb	Checked: Yes	
Expiration Date: 11/19/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176983	Hg Intermediate Standard	.1 ml	.25 ppm	
8193	DI H2O			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-177031



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 2 ppb		BatchNumber: B-16569	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: 2 ppb	Checked: Yes	
Expiration Date: 11/19/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176983	Hg Intermediate Standard	.2 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-177032



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 5 ppb		BatchNumber: B-16569	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: 5 ppb	Checked: Yes	
Expiration Date: 11/19/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176983	Hg Intermediate Standard	.5 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-177033



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 10 ppb		BatchNumber: B-16569	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: 10 ppb	Checked: Yes	
Expiration Date: 11/19/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176983	Hg Intermediate Standard	1 ml	.25 ppm	
8193	DI H2O			

Veritech Lot Number: V-177034



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 25 ppb		BatchNumber: B-16569	ApproveDate: 11/19/13	
Prep Date: 11/19/2013		Concentration: 25 ppb	Checked: Yes	
Expiration Date: 11/19/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-176983	Hg Intermediate Standard	2.5 ml	.25 ppm	
8193	DI H2O			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-177169



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg Intermediate Standard		BatchNumber: B-16578	ApproveDate: 11/22/13	
Prep Date: 11/21/2013		Concentration: .25 ppm	Checked: Yes	
Expiration Date: 11/21/2013		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-177170



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg intermediate Control		BatchNumber: B-16578	ApproveDate: 11/22/13	
Prep Date: 11/21/2013		Concentration: 1.0 ppm	Checked: Yes	
Expiration Date: 11/21/2013		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-177191



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ ICV 20 ppb		BatchNumber: B-16581	ApproveDate: 11/22/13	
Prep Date: 11/21/2013		Concentration: 20 ppb	Checked: Yes	
Expiration Date: 11/21/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-177170	Hg intermediate Control	.5 ml	1.0 ppm	
8193	DI H2O			

Veritech Lot Number: V-177192



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ CCV 10 ppb		BatchNumber: B-16581	ApproveDate: 11/22/13	
Prep Date: 11/21/2013		Concentration: 10 ppb	Checked: Yes	
Expiration Date: 11/21/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-177170	Hg intermediate Control	.25 ml	1.0 ppm	
8193	DI H2O			

Veritech Lot Number: V-177193



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard blk		BatchNumber: B-16581	ApproveDate: 11/22/13	
Prep Date: 11/21/2013		Concentration: 0 ppb	Checked: Yes	
Expiration Date: 11/21/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
8193	DI H2O			

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-177194



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard .2 ppb		BatchNumber: B-16581	ApproveDate: 11/22/13	
Prep Date: 11/21/2013		Concentration: .2 ppb	Checked: Yes	
Expiration Date: 11/21/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-177169 8193	Hg Intermediate Standard DI H2O	.02 ml	.25 ppm	

Veritech Lot Number: V-177195



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard .5 ppb		BatchNumber: B-16581	ApproveDate: 11/22/13	
Prep Date: 11/21/2013		Concentration: .5 ppb	Checked: Yes	
Expiration Date: 11/21/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-177169 8193	Hg Intermediate Standard DI H2O	.05 ml	.25 ppm	

Veritech Lot Number: V-177196



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 1 ppb		BatchNumber: B-16581	ApproveDate: 11/22/13	
Prep Date: 11/21/2013		Concentration: 1 ppb	Checked: Yes	
Expiration Date: 11/21/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-177169 8193	Hg Intermediate Standard DI H2O	.1 ml	.25 ppm	

Veritech Lot Number: V-177197



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 2 ppb		BatchNumber: B-16581	ApproveDate: 11/22/13	
Prep Date: 11/21/2013		Concentration: 2 ppb	Checked: Yes	
Expiration Date: 11/21/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-177169 8193	Hg Intermediate Standard DI H2O	.2 ml	.25 ppm	

Veritech Lot Number: V-177198



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 5 ppb		BatchNumber: B-16581	ApproveDate: 11/22/13	
Prep Date: 11/21/2013		Concentration: 5 ppb	Checked: Yes	
Expiration Date: 11/21/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-177169 8193	Hg Intermediate Standard DI H2O	.5 ml	.25 ppm	

Veritech Lot Number: V-177199



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 10 ppb		BatchNumber: B-16581	ApproveDate: 11/22/13	
Prep Date: 11/21/2013		Concentration: 10 ppb	Checked: Yes	
Expiration Date: 11/21/2013		Final Volume: 25 ml		
Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-177169 8193	Hg Intermediate Standard DI H2O	1 ml	.25 ppm	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-177200



Prepared By: Ugljesa, Julijana		Department: Metals	ApprovedBy: shiamala	
Description: Hg AQ standard 25 ppb		BatchNumber: B-16581	ApproveDate: 11/22/13	
Prep Date: 11/21/2013		Concentration: 25 ppb	Checked: Yes	
Expiration Date: 11/21/2013		Final Volume: 25 ml		

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-177169	Hg Intermediate Standard	2.5 ml	.25 ppm	
8193	DI H2O			

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 7470									
Description						 ApprovedBy: pcousineau ApproveDate: 11/11/13 Checked: Yes			
Analytes B									
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						 ApprovedBy: shiamala ApproveDate: 02/13/13 Checked: Yes			
MAGNESIUM									
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						 ApprovedBy: shiamala ApproveDate: 02/13/13 Checked: Yes			
IRON									
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						 ApprovedBy: shiamala ApproveDate: 02/13/13 Checked: Yes			
SODIUM									
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						 ApprovedBy: shiamala ApproveDate: 02/13/13 Checked: Yes			
SELENIUM									
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						 ApprovedBy: shiamala ApproveDate: 02/13/13 Checked: Yes			
POTASSIUM									
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						 ApprovedBy: shiamala ApproveDate: 02/13/13 Checked: Yes			
ALUMINUM									
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: 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: 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: 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: 7618											
Description										ApprovedBy: shiamala	
MERCURY										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										ApprovedBy: shiamala	
MERCURY										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										ApprovedBy: shiamala	
POTASSIUM PERSULFATE										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: 7834											
Description										ApprovedBy: gabrielle	
DI H2O										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										ApprovedBy: gabrielle	
POTASSIUM PERMANGANATE										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: 8015											
Description										ApprovedBy: shiamala	
DI Water										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: 8022											
Description										ApprovedBy: gabrielle	
HYDROXYLAMINE HYDROCHLORIDE										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 Standard Receipt Log


Veritech Control/Receipt Number: 7618										
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Description</div> <div style="border: 1px solid black; padding: 2px;">MERCURY</div>							<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApprovedBy: shiamala</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApproveDate: 02/13/13</div> <div style="border: 1px solid black; padding: 2px;">Checked: Yes</div>			
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:	
SPEX	PLHG4-2Y	18-66HGY	01/31/13	01/30/14	Kalin, Gabrielle	2	125m	1000	mg/L	


Veritech Control/Receipt Number: 8123										
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Description</div> <div style="border: 1px solid black; padding: 2px;">nitric acid</div>							<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApprovedBy: gabrielle</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApproveDate: 10/06/13</div> <div style="border: 1px solid black; padding: 2px;">Checked: Yes</div>			
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:	
J.T.Baker	9598-34	50770	09/10/13	06/23/18	Lopez, Jose	16	2.5L	neat	neat	


Veritech Control/Receipt Number: 8193										
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Description</div> <div style="border: 1px solid black; padding: 2px;">DI H2O</div>							<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApprovedBy: gabrielle</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApproveDate: 10/22/13</div> <div style="border: 1px solid black; padding: 2px;">Checked: Yes</div>			
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:	
siemanns	1	1	10/11/13	07/18/14	Berls, Sean R.	1				


Veritech Standard Receipt Log


Veritech Control/Receipt Number: 7632											
Description										ApprovedBy: shiamala	
CALCIUM										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										ApprovedBy: shiamala	
IRON										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										ApprovedBy: shiamala	
ALUMINUM										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										ApprovedBy: shiamala	
MULTI-ELEMENT CALIBRATION STOCK STD.										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										ApprovedBy: gabrielle	
ICV 1 (6020)										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										ApprovedBy: gabrielle	
ICV 2 (6020)										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										ApprovedBy: shiamala	
DIWater										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: 7632											
Description										ApprovedBy: shiamala	
CALCIUM										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										ApprovedBy: shiamala	
IRON										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										ApprovedBy: shiamala	
ALUMINUM										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										ApprovedBy: shiamala	
MULTI-ELEMENT CALIBRATION STOCK STD.										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										ApprovedBy: gabrielle	
ICV 1 (6020)										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										ApprovedBy: gabrielle	
ICV 2 (6020)										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										ApprovedBy: gabrielle	
DI H2O										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 Standard Receipt Log

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: 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: 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: 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: 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 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: 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 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 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:
siemans	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 Standard Receipt Log


Veritech Control/Receipt Number: 7840									
Description						 ApprovedBy: aurora ApproveDate: 05/06/13 Checked: Yes			
Hydrochloric Acid									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9530-33	27002	04/09/13	11/18/17	Lopez, Jose	14	2.5L	neat	neat


Veritech Control/Receipt Number: 8015									
Description						 ApprovedBy: shiamala ApproveDate: 09/09/13 Checked: Yes			
DIWater									
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						 ApprovedBy: shiamala ApproveDate: 08/07/13 Checked: Yes			
INTERFERENTS A									
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						 ApprovedBy: gabrielle ApproveDate: 10/06/13 Checked: Yes			
6020 AQUEOUS LL CCV/ICV STOCK									
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						 ApprovedBy: aurora ApproveDate: 08/22/13 Checked: Yes			
Nitric Acid									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	50770	08/20/13	06/23/18	Lopez, Jose	11	2.5L	neat	neat


Veritech Control/Receipt Number: 8123									
Description						 ApprovedBy: gabrielle ApproveDate: 10/06/13 Checked: Yes			
nitric acid									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9598-34	50770	09/10/13	06/23/18	Lopez, Jose	16	2.5L	neat	neat


Veritech Control/Receipt Number: 8193									
Description						 ApprovedBy: gabrielle ApproveDate: 10/22/13 Checked: Yes			
DI H2O									
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
siemanns	1	1	10/11/13	07/18/14	Berls, Sean R.	1			


Veritech Standard Receipt Log


Veritech Control/Receipt Number: 7994										
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Description</div> <div style="border: 1px solid black; padding: 2px;">STANNOUS CHLORIDE</div>							<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApprovedBy: gabrielle</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApproveDate: 10/06/13</div> <div style="border: 1px solid black; padding: 2px;">Checked: Yes</div>			
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:	
LabChem	P33805	B249-13	07/09/13	07/08/23	Kalin, Gabrielle	1	3kg	NEAT	NEAT	
Veritech Control/Receipt Number: 8122										
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Description</div> <div style="border: 1px solid black; padding: 2px;">hydrochloric acid</div>							<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApprovedBy: gabrielle</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApproveDate: 09/24/13</div> <div style="border: 1px solid black; padding: 2px;">Checked: Yes</div>			
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:	
J.T. Baker	9530-33	44272	09/10/13	03/17/18	Lopez, Jose	12	2.5L	neat	neat	
Veritech Control/Receipt Number: 8193										
<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Description</div> <div style="border: 1px solid black; padding: 2px;">DI H2O</div>							<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApprovedBy: gabrielle</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">ApproveDate: 10/22/13</div> <div style="border: 1px solid black; padding: 2px;">Checked: Yes</div>			
Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:	
siemanns	1	1	10/11/13	07/18/14	Berls, Sean R.	1				


Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8021											
Description										ApprovedBy: shiamala	
INTERFERENTS A										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										ApprovedBy: gabrielle	
6020 AQUEOUS LL CCV/ICV STOCK										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										ApprovedBy: aurora	
Nitric Acid										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										ApprovedBy: gabrielle	
nitric acid										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										ApprovedBy: gabrielle	
DI H2O										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: 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: 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: 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 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	131091	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: 8113



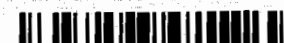
Description

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 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: 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 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

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.: 15726Analyst: SMQC Number: 27441Prep Date: 11/19/13Matrix: 30846Reviewed By: SM

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ul	50ul	10ul	20ul		--	
LCS						--	
LCSD						--	
1. AC75646-001							
MR 75646-001							
MS 75646-005							
MSD 75646-033							
2. 75646-005							
3. 75646-007							
4. 75646-009							
5. 75646-011							
6. 75646-013							
7. 75646-015							
8. 75646-017							
9. 75646-019							
10. 75646-021							
11. 75646-023							
12. 75646-025							
13. 75646-027							
14. 75646-029							
15. 75646-031	✓	✓	✓	✓			
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 93.4°C (90-95°C)

	Volume mL	Lot #
LCS, LCSD	0.5m	V- 8113, 8114
LLCS, LLLCSD		V-
MS, MSD	0.5m	V- 8113, 8114
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- (66179)

Relinquished By SM Date 11/19/13
Received By SM Date 11/19/13

0101

Hampton-Clarke/Veritech

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B (6020) 200.7/200.8 OTHERBatch No.: 15727 Analyst: SMQC Number: 27442 Prep Date: 11/21/13Matrix: SW846 600 Reviewed By: SB

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50ml	50ml	10ml	20ml		--	
LCS	↓	↓				--	
LCSD	↓	↓				--	
1. AC 75646-002	100ml	150ml					
MRAC 75646-002	50ml	50ml					
MSAC 75646-004							
MSDAC 75646-034							
2. AC 75646-006							
3. AC 75646-008							
4. AC 75646-010							
5. AC 75646-012							
6. AC 75646-014							
7. AC 75646-016							
8. AC 75646-018							
9. AC 75646-020							
10. AC 75646-022							
11. AC 75646-024							
12. AC 75646-026							
13. AC 75646-028							
14. AC 75646-030							
15. AC 75646-032	↓	↓	↓	↓			
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 92.6°C (90-95°C)

	Volume mL	Lot #
LCS, LCSD	0.5ml	V- 8113, 8114
LLCS, LLCSD		V-
MS, MSD	0.5ml	V- 8113, 8114
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO ₃	5	V- 8123
HCl		V-
H ₂ O ₂		V-

Acid	Vol mL	Lot#
1:1 HNO ₃		V-
1:1 HCl	5	V- 66779

Relinquished By SM Date 11/21/13Received By SM Date 11/21/13

HG SAMPLE PREPARATION LOG

3110835.0775
Hampton-Liark/VeritechANALYTICAL METHOD: 245.1 7470A 7471A OTHER _____

Batch No.:*

Analyst: JY

QC Number:

Prep Date: 11/19/13.

Matrix:

Review By: JA

LAB ID#	MERCURY		COMMENTS
	INITIAL	FINAL	
Method blank	25ul	25ul	
LCS			
LCSD			
1 AC 75646-001			
MR 75646-001			
MS 75646-003			
MSD 75646-033			
2 75646-005			
3 75646-007			
4 75646-009			
5 75646-011			
6 75646-013			
7 75646-015			
8 75646-017			
9 75646-019			
10 75646-021			
11 75646-023			
12 75646-025			
13 75646-027			
14 75646-029			
15 75646-031	✓	✓	
16 JY -033			
17 JY -035			
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- 172722	H ₂ SO ₄	1.25ul	V- 8131
	Aqua Regia		V-

**Block Temp. 95.5° C
Time In Block: 14:00
Time Out of Block: 16:00
** Required range = 92-98C

Spike Volume & Lot #

☐ LCS V- 176984 0.15g / 0.25 ml

☐ MS V- 176984 0.250 ml

☐ Standards/Control Batch B- 16569
Relinquished By: JY

*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 Veriprogram using the standard batch number and the corresponding V #s.

ANALYTICAL METHOD: 245.1 7470A 7471B OTHER _____Batch No.:* 15727Analyst: JMQC Number: 27442Prep Date: 11/21/13Matrix: SW846 H₂OReview By: JA

LAB ID#	MERCURY		COMMENTS
	INITIAL	FINAL	
Method blank	25ml	25ml	
LCS			
LCSD			
1 AL 75646-002			
MR AL 75646-002			
MS AL 75646-004			
MSD AL 75646-034			
2 AL 75646-006			
3 AL 75646-008			
4 AL 75646-010			
5 AL 75646-012			
6 AL 75646-014			
7 AL 75646-016			
8 AL 75646-018			
9 AL 75646-020			
10 AL 75646-022			
11 AL 75646-024			
12 AL 75646-026			
13 AL 75646-028			
14 AL 75646-030			
15 AL 75646-032	↓	↓	
16			
17			
18			
19			
20			

Lot Numbers	Acid	Volume (mL)	Lot #
KmnO ₄ : V- 173707	HNO ₃	0.625ml	V- 8123
K ₂ S ₂ O ₈ : V- 166616	HCl		V-
NH ₂ OH: V- 172727	H ₂ SO ₄	1.25ml	V- 8131
	Aqua Regia		V-

**Block Temp: 94.1 °C
Time In Block: 17:00
Time Out of Block: 19:00
** Required range = 92-98C

Spike Volume & Lot #

☐ LCS V- 177170 0.15g / 0.25 ml☐ MS V- 177170 0.250 ml☐ Standards/Control Batch B- 16581Relinquished By: JM

*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