



Environment

Prepared for:
Superfund Standby Program
NYSDEC
Albany, NY

Prepared by:
AECOM
Chestnut Ridge, NY
60135736
October 2011

Groundwater Sampling Report
(May 2011 Sampling Event)
Liberty Industrial Finishing Site
Site #1-52-108
Work Assignment No. D004445-14.3

Final



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A handwritten signature in cursive script that reads "Paul Kareth".

Prepared By: Paul Kareth

A handwritten signature in cursive script that reads "Scott Underhill".

Reviewed By: Scott Underhill, P.E.

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1.0 Introduction

AECOM Technical Services Northeast, Inc (AECOM [formerly Earth Tech Northeast, Inc]) has prepared this Groundwater Monitoring Report for the Liberty Industrial Finishing Site in Brentwood, New York (Site No. 1-52-108). This work was performed for the New York State Department of Environmental Conservation (NYSDEC) under Work Assignment D004445-14.3. As part of the long-term monitoring plan for the Site, groundwater samples are collected from selected monitoring wells once every five quarters. This groundwater monitoring report provides the results of the groundwater sampling data collected in May 2011.

Five rounds of groundwater sampling have been conducted to date under this work assignment.

- The first round (Round 1) of sampling was conducted in June 2006.
- The second round (Round 2) of sampling was conducted in August 2007.
- The third round of sampling (Round 3) was conducted in November 2008.
- The fourth round (Round 4) of sampling conducted in March 2010.
- The fifth round of sampling was conducted in May 2011.

This report focuses on the most recent (Round 5) sampling event at the site and includes the data from the earlier rounds.

2.0 Background Information

2.1 Site Description

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

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

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

2.2 Site History

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

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

An inspection conducted by NYSDEC in 1984 identified deficiencies in Site hygiene and waste handling practices. Samples were collected of the liquids in the sanitary leaching pool, the storm water dry well, and a soil sample was collected near the northeast corner of the building. These samples reportedly contained elevated concentrations of 1,1,1-trichloroethane (1,1,1-TCA), cadmium, chromium, and lead. The sanitary system and the storm water dry well were subsequently pumped out and cleaned (July 1985).

A Phase II Site Investigation was performed in 1987. The results of the investigation reported concentrations of chromium in the onsite groundwater at concentrations exceeding the Class GA groundwater criterion (NYSDEC Technical and Operational Guidance Series [TOGS] 1.1.1). The Site was subsequently classified as a Class “2a” site on the Registry of Inactive Hazardous Waste

Disposal Sites on December 12, 1987. Class “2a” was a temporary listing pending further investigation into the effects the site has on health and the environment. The Site was reclassified to Class 2 in January 1994.

A Phase II Supplemental Site Investigation was performed in 1991. Chromium was reported in the on-site groundwater at concentrations ranging from 2,300 µg/l to 5,800 µg/L. Additionally, sediment/soil in the leaching pool contained elevated concentrations of cyanide (11,500 µg/L). An emergency remedial measure removed a total of 45 inches of sediment/soil from the bottom of the leaching pool (1992). As a result of the Phase II supplemental site investigation, the Site was reclassified as a Class “2” site on the Registry of Inactive Hazardous Waste Disposal Sites in February of 1994.

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

In 1997, Liberty Industrial Finishing removed waste materials from the on-site building. Wastes removed and disposed of include:

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

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

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

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

The ROD specified the following remedial goals for the Site:

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

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

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

The United States Environmental Protection Agency (USEPA) conducted an emergency removal action including the removal of waste materials stored in the on-site factory building and the in-place closure of six USTs. Each tank was cleaned and sandblasted, filled to one foot below top with clean soil, and the remaining space (including fill pipes) was plugged with concrete. The tanks were not removed due to the close proximity of the LIRR; however, UST in-place closure was determined to be equally protective of human health and the environment. A non-porous asphalt cap was constructed over the UST area to mitigate infiltration of precipitation into the contaminant source area (Figure 2).

All of the removal and in-place closure measures specified in the ROD were completed in September 2001. The results of these remedial actions were reported in the Final Remediation Report (Dvirka and Bartilucci, July 2002). The remedial actions performed at the site have effectively achieved the goals of the ROD with respect to mitigation of potential impacts to human health and the environment from on-site soils and sediment. These measures excavated and removed impacted soil and sediments to concentrations below applicable cleanup criteria or prevented the infiltration of precipitation through impacted media where excavation was deemed impractical.

In April 2004, NYSDEC issued a declaration that the remedial measures were achieved with respect to soils and sediment. The Site was proposed to be reclassified from Class 2 to Class 4; however the reclassification was never approved (Appendix A). Long-term monitoring of the groundwater would be conducted to demonstrate natural attenuation of the residual dissolved phase contaminants of concern (COCs).

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

2.3 Deviations from the Sampling and Analysis Plan

For the Round 5 sampling event, NYSDEC requested the addition of six monitoring wells to the sampling program. These wells included MW-1, MW-2, MW-3, and MW-4 which were located along the fence line in the southeast corner of the property. Monitoring wells MW-10 and MW-16 were also added. This well cluster is located in the municipal ball fields approximately 100 feet south of the former underground storage tanks.

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

3.0 Field Activities

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

The fifth round of groundwater sampling at the Liberty Industrial Finishing Site occurred on May 23, 24, and 26, 2011. Sampling was conducted in accordance with the Sampling and Analysis Plan (SAP) prepared by Earth Tech Northeast, Inc. (now AECOM), dated June 2007. The SAP is comprised of the Field Sampling Plan (FSP), the Quality Assurance Project Plan (QAPP) and the Safe Work Plan (SWP). All field work was performed in Level D personal protection.

3.1 Water Level Survey

Prior to the start of sampling, water levels were measured in each well to provide a synoptic event. Groundwater level measurements were recorded in the Field Notebook and on the Well Sampling Forms included in Appendix A. NYSDEC Monitoring Well Field Inspection Forms were completed for each well and are included in Appendix B. A summary of groundwater elevation measurements for all sampling events since 2006 is provided in Table 2. Each location was photo-documented and a hand-held global positioning system (GPS) unit was used to record the coordinates. The total depth of each of the eight wells also varies significantly from 49.3 to 265 feet (ft). The groundwater elevation data are shown on Figure 3. As shown on the figure, the water table elevations across the entire study area varied less than 1.0-ft. Groundwater generally flows to the southeast, which is consistent with previous investigations.

A groundwater hydrograph is presented in Figure 4. As shown on the figure, the groundwater elevations are very consistent from sampling event to sampling, generally rising and falling in unison. The one exception to this trend is MW-19. Of the five synoptic measuring events since 2006, two events have placed the elevation at MW-19 as the lowest elevation, while the other three rank as the highest reading for the event. MW-19 is screened in the Magothy Formation at a depth of 248 ft below ground surface (bgs). This fluctuation could be the result of pumping in the nearby Suffolk County Water Authority municipal well.

3.2 May 2011 Groundwater Sampling Event

Eight monitoring wells were identified for long term monitoring at the Site. The selected wells included MW-5, MW-6, MW-12, MW-14, MW-18, MW-19, MW-20, and MW-21. As part of the fifth sampling event, NYSDEC included requested the addition of six monitoring wells in the sampling event: MW-1, MW-2, MW-3, MW-4, and well pair MW-10/MW-16. MW-1 was dry at the time of sampling and could not be included in the Round 5 sampling event. Well locations are shown on Figure

A Grundfos Redi-Flo2 submersible electric pump with polyethylene tubing was used to purge at least three casing volumes of water prior to sampling. Measurements of pH, specific conductance, temperature, dissolved oxygen, oxygen reduction potential, and turbidity were recorded on the Well Sampling Forms periodically during purging. Once the minimum volume of water had been evacuated, a dedicated Teflon bailer was used to collect a groundwater sample. The sample was

transferred into laboratory supplied containers and stored in an ice-filled cooler. During this round, filtered metals samples were also collected. Groundwater samples were filtered in the field using dedicated, disposable 0.45-micron Nalgene filters. Filtered groundwater samples were then poured into laboratory-supplied containers and placed in an ice-filled cooler. The samples were then transported to Spectrum Analytical (formerly Mitkem Laboratory) via laboratory courier. Proper chain-of-custody procedures and requirements were maintained throughout the sampling event in accordance with the QAPP.

4.0 Sampling Results

The samples from monitoring wells MW-2, MW-3, MW-4, MW-5, MW-6, MW-10, MW-12, MW-14, MW-16, MW-18, MW-19, MW-20, and MW-21 were labeled with the L- prefix to denote they were collected from the Liberty site. Groundwater samples were analyzed for target analyte list (TAL) metals using USEPA Method 6010/7470. The analyses were performed by Spectrum Analytical (formerly Mitkem Laboratory) of Warwick, Rhode Island, a NYSDOH ELAP certified laboratory (ELAP certification number 11522). The Mitkem data summary packages are included in Appendix C. A table showing the full data set is also included in Appendix C. A summary of the detections is presented in Table 3. The exceedances are also shown on Figure 5. The data are discussed in Sections 4.1 and 4.2, below.

In accordance with project plans, formal data validation was not performed. However, an AECOM chemist provided a limited review of the data packages. The review of the Round 5 data is presented in Section 4.3.

4.1 Metals Data

Concentrations of nine metals have been detected above the Class GA criterion in monitoring wells at the Site at least once during the five sampling events. These metals include antimony, cadmium, chromium, copper, iron, manganese, lead, sodium and thallium.

Antimony – Class GA criterion of 3 µg/L

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

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

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

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

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

Cadmium – Class GA criterion of 5 µg/L

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

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

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

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

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

Chromium – Class GA criterion of 50 µg/L

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

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

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

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

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

Copper – Class GA criterion of 200 µg/L

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

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

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

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

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

Iron – Class GA criterion of 300 µg/L

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

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

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

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

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

Manganese – Class GA criterion of 300 µg/L

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

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

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

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

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

Lead – Class GA criterion of 25 µg/L

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

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

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

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

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

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

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

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

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

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

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

Thallium – Class GA criterion of 0.50 µg/L

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

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

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

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

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

4.2 Filtered versus Unfiltered Metals Samples

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

The NYSDEC turbidity criterion is 50 nephelometric turbidity units (NTU) or less for well development and groundwater sampling (TAGM 4015; NYSDEC, 1988). At the Liberty Industrial Finishing Site, the turbidity was below 50 NTU at time of sampling in all 13 samples, ranging from 0 to 45 NTU (see the bottom row of Table 4). The turbidity was 20 NTU or less in 12 of the 13 samples, and 45 NTU in the other sample (MW-12).

Table 4 presents a comparison of the total metals and the dissolved metals data for the 13 filtered/unfiltered sample pairs collected at the Liberty Site. The “percent dissolved” shown on the table is the ratio of the filtered sample concentration to the total (unfiltered) sample concentration. In order to calculate a value where a metal was not detected in the filtered sample, a value of “0” is used on the table (rather than “ND”).

The total metals concentrations was expected to be higher in the more turbid samples with only small differences between the total metals and dissolved metals concentrations in samples with low turbidity. As all the Round 5 samples at the Site could be considered ‘low turbidity’ (i.e., all samples met the NYSDEC criterion of 50 NTU or less), it is somewhat difficult to evaluate differences among the samples. In the two samples reported with turbidity values of 0 NTU (MW-16 and MW-20), concentrations of most metals detected at moderate or high, concentrations were similar in the filtered and unfiltered samples. The exceptions were iron (which decreased from 879 µg/L in the unfiltered sample to 72 µg/L in the filtered sample from MW-20, and from 115 µg/L to ND in MW-16; and aluminum, which decreased from 303 µg/L in the unfiltered sample to ND in the filtered sample from MW-10, and from 1,150 µg/L to 586 µg/L in MW-16).

Concentrations of metals that typically exist primarily in the dissolved phase (sodium, potassium, and calcium) were generally similar in the filtered and unfiltered samples. However, the calcium and potassium concentrations were about 20 to 45 percent lower in the filtered sample LMW-12 (the most turbid sample), relative to the unfiltered sample; decreases were lower or nonexistent in most of the other samples. The highest concentrations of iron, aluminum, cadmium, and lead detected at the Site (11,300 µg/L, 12,000 µg/L, 54.8 µg/L, and 230 µg/L, respectively, in LMW-12) were in the sample with the highest turbidity; these metals were either not detected (aluminum and lead), or detected at much lower concentrations in the corresponding filtered sample.

In addition to sodium, calcium, and potassium, dissolved phase concentrations of barium and magnesium were similar to the unfiltered sample concentration in most of the samples. (Exceptions are the high-turbidity sample LMW-12, and to a lesser extent, LMW-4.) Other metals showed consistently large decreases in the filtered samples. Aluminum was detected in 10 of the 13 samples at concentrations from 101 to 12,000 µg/L, but was not detected in nine of the filtered samples, and in the other sample (LMW-16) the dissolved concentration was about 51 percent of the filtered sample concentration. Concentrations of arsenic, lead, mercury, and vanadium also showed a similar pattern (not detected or detected at much lower concentrations in the filtered samples). Iron generally followed this pattern, with the exception of LMW-14 (dissolved concentration only 20 percent less than the total iron concentration). The ratio of dissolved to filtered concentrations was variable for a number of metals, such as cadmium (8.2 to 109 percent), copper (0 to 120 percent), manganese (0 to 104 percent), nickel (0 to 101 percent), and zinc (10.7 to 113 percent).

4.3 Round 5 (May 2011) Data Quality Review

In accordance with the project plans, data generated for this investigation were not subject to formal validation. However, AECOM's quality assurance officer (QAO) reviewed the data for reasonableness and the presence of any anomalies, including issues identified by the laboratory in the case narrative,

and other items noted in review of shipping and handling documentation, inconsistencies with previous data, and review of the laboratory QA forms. The QAO also reviewed the field duplicate data.

Filtered and unfiltered groundwater samples were collected from 13 monitoring wells on May 23, 24, and 26 and received in good condition by the laboratory (Spectrum Analytical [formerly Mitkem], Warwick RI) on May 26 (samples collected May 23 and 24) and May 31, 2011 (samples collected May 26), although the laboratory noted that there were no custody seals on the cooler. The samples collected on May 26 were picked up by a laboratory courier and transported to Spectrum's Agawam MA facility, where they were entered in controlled refrigerated storage on May 27, where they remained over the Memorial Day weekend. Samples were transported from Agawam to Spectrum's Warwick RI laboratory facility on May 31.

Samples were analyzed for target analyte list (TAL) metals as sample delivery groups (SDGs) K0919 (samples collected May 23 and 24) and K0943 (samples collected May 26). One field equipment blank was collected for both the filtered (FB-F) and unfiltered (FB-U) samples. Samples LMW-12F (filtered) and LMW-12U (unfiltered) were designated as the QC samples (spike and duplicate analysis) for the Round 5 sampling event.

Laboratory QC limits were met for initial and continuing calibrations, blanks, laboratory control sample (LCS) recovery, post-digestion spikes, laboratory duplicate precision, and serial dilutions. Laboratory spike recovery criteria were not met for one metal, iron, in SDG K0919, with high recovery (149 percent, exceeding the criterion of 75-125 percent recovery); iron data for all samples in this SDG are flagged "N". All other laboratory QC criteria were met for SDGs K0919 and K0943. No unusual occurrences were noted by the laboratory during the analysis of samples from either SDG.

One filtered/unfiltered site-specific field duplicate groundwater sample pair (LMW-14U and 14F/LMW-64U and 64F) was collected from the Liberty site in Round 5. Precision for the field duplicates (see Table 4) was very good (with one exception). In the unfiltered sample pair (LMW-14U/LMW-64U), relative percent difference (RPD) ranged from 0.2 to 9.8 percent, with a median RPD of 1.5 percent, for the 15 detected metals. Precision was very good in the filtered duplicate pair (14F/64F) for 10 of the 11 detected metals, with RPDs ranging from 0 to less than 3 percent for these 10 detected metals. The field duplicate precision for iron was poor for the filtered sample, with a concentration of 1430 µg/L reported in sample LMW-14F, and a concentration of 32.4 µg/L reported in sample LMW-64F (RPD of 191 percent). Review of the laboratory deliverables did not indicate any obvious reason for the discrepancy (e.g., no transcription error). However, it is the AECOM QAO's judgment that the lower value reported in the duplicate is more likely to be representative of the true dissolved phase concentration in LMW-14F. Iron concentrations are typically primarily associated with the suspended or particulate matter in groundwater samples, and significant reductions between the dissolved phase (filtered sample) and total (unfiltered) results are normally observed. However, the reduction in the iron concentration between the unfiltered sample (about 1,780 µg/L) and the filtered sample (1,430 µg/L) is only about 20 percent in the filtered/unfiltered sample pair (LMW-14U/LMW-14F); in other Liberty site filtered/unfiltered pairs, the reductions ranged from 64 to 100 percent (i.e., detected in the unfiltered sample but not detected in the filtered sample).

Low concentrations (greater than the instrument detection limit but less than the calibrated range of the analysis) of several metals were detected in the unfiltered field blank (FB-U: calcium, manganese, nickel, potassium, sodium, and zinc) and in the filtered field blank (FB-F: calcium, sodium, and zinc). In a few samples, similar concentrations of manganese or zinc were detected in environmental samples; in such samples, the reported low concentrations may be biased high. This does not affect

the usability of the data, as the reported concentrations in the affected environmental samples are well below the applicable criteria for these metals (300 µg/L for manganese, and 2,000 µg/L for zinc).

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 (unfiltered 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, the data may be unusable (flagged “R”, rejected). The only exceedance of the 20 percent threshold was the chromium data from LMW-10 (the filtered sample result [89.3 µg/L] exceeded the unfiltered sample result [72.7 µg/L] by 23 percent; so these values should be considered estimated).

5.0 Summary and Recommendations for Future Site Remediation Activities

5.1 Summary of Groundwater Sampling Data

Based on a review of the data from the five sampling events, concentrations of antimony, cadmium, chromium, copper, iron, lead, manganese, selenium, sodium, and thallium were detected at concentrations above their Class GA criteria. Based on the May 2011 sample results, the following metals exceeded Class GA criteria in unfiltered samples: cadmium (seven wells), chromium (six wells), iron (seven wells), manganese (two wells) and sodium (six wells). The following metals exceeded the Class GA criteria in filtered samples: cadmium (four wells), chromium (two wells), iron (two wells), manganese (two wells) and sodium (six wells).

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

Antimony was not detected in any of the Round 5 (May 2011) samples (including recently added monitoring wells MW-2, MW-3, MW-4, MW-10 and MW-16). Antimony does not appear to be a contaminant of concern at the Site.

Figure 6 shows the cadmium concentrations in each well during the five sampling events. Cadmium was detected in the majority of the samples collected during the five sampling events (36 out of 45 unfiltered samples through five rounds of sampling and in nine of 13 filtered samples in Round 5). However, there were only three exceedances in Round 2, two exceedances in Round 3, two exceedances in Round 4 and seven unfiltered exceedances in Round 5 (four filtered exceedances). There do not appear to be any trends in cadmium concentrations. An isoconcentration map of the cadmium plume is shown on Figure 7. The filtered cadmium concentrations from the May 2011 sampling event (shallow wells) were used to draw the isoconcentration lines. The leading edge of the cadmium plume is near the MW-12/MW-14 well cluster. Based on the slightly higher concentration in deep well MW-14 at this cluster, the cadmium plume appears to be sinking. Further sampling is needed to verify this conclusion.

Figure 8 shows the chromium concentrations in each well during the five sampling events. Chromium has been detected in the majority of samples analyzed from five sampling events (43 of 45 unfiltered samples and 11 of 13 filtered samples). However there were only five exceedances (Class GA criterion of 50 µg/L) during the first four sampling rounds, four of which were in MW-14 with concentrations ranging from 68.6 µg/L to 248 µg/L. During Round 5, unfiltered chromium concentrations exceeded the criterion in four of the five newly added wells (MW-2, MW-3, MW-4 and MW-10) and two filtered samples (MW-4 and MW-10). An anomalously high concentration (251 µg/L during Round 4) was noted at MW-12 which is adjacent to MW-14 but is screened approximately 50 ft higher in the aquifer; the other three chromium concentrations ranged from 2.5 µg/L to 8.9 µg/L. MW-21 is located downgradient of MW-14 and is screened at a similar depth; however, chromium concentrations have been significantly below the criterion during all five sampling events. Chromium exceedances appear to be restricted to the historic contaminated plume area which extended from the former USTs to MW-14. The plume does not appear to be migrating to the southeast (i.e., toward

MW-20/MW-21). An isoconcentration map of the chromium plume is shown on Figure 9. The filtered chromium concentrations from the May 2011 sampling event (shallow monitoring wells only) were used to draw the isoconcentration lines. The leading edge of the chromium plume is between monitoring well cluster MW-10/MW-16 and MW-12/MW-14.

Copper was detected in the majority of samples collected during the five sampling events (32 of 45 unfiltered samples, three of 13 filtered samples). However, the only exceedance was at MW-12 during Round 4. Copper does not appear to be a contaminant of concern at the site.

Lead was detected in 25 of 45 unfiltered samples collected at the Site during the five sampling events. During Round 5, lead was detected in four unfiltered samples and two of these exceeded the criterion; however, lead was not detected in any of the filtered samples collected during Round 5. There have only been seven exceedances of the 25 µg/L criterion, four of which have occurred at MW-12 with concentrations ranging from 106 µg/L to 553 µg/L. Lead concentrations also exceeded the criterion at MW-14 during Rounds 3 and 4 (221 µg/L and 76.5 µg/L). Lead does not appear to be a contaminant of concern at the Site.

Selenium was detected in seven of 45 unfiltered samples collected at the Site during the five sampling events (not detected in any of the 13 Round 5 filtered samples). MW-12 was the only monitoring well where selenium was detected twice (Rounds 1 and 4) and the only monitoring well where the concentration, 13.4 µg/L, exceeded the 10 µg/L criterion. As this appears to be an isolated occurrence, selenium is not considered to be a contaminant of concern at the Site.

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

5.2 Recommendations for Future Work

Cadmium was detected above the Class GA criterion of 5 µg/L in three monitoring well samples during the August 2007 sampling event, two samples during the November 2008 sampling event, three samples during the March 2010 event and seven unfiltered samples during the May 2011 event (four filtered samples). Only one well, MW-12, has had four exceedances during the five sampling events. AECOM recommends continued sampling to verify the concentrations.

Chromium exceeded the Class GA criterion of 50 µg/L in one monitoring well, MW-14, during all five sampling events (51.3 µg/L to 248 µg/L). Chromium concentrations in the adjacent monitoring well MW-12 (screened approximately 50 ft higher in the aquifer) were below the Class GA criterion during the first three sampling events but was anomalously high during Round 4 (251 µg/L). Chromium was also present in four of five newly added monitoring wells (MW-2, MW-3, MW-4 and MW-10). Continued sampling of these wells is recommended to determine if the contamination is migrating downgradient (MW-21) or to the deeper portions of the aquifer (MW-20).

Collect and analyze paired filtered/unfiltered groundwater sample for metals analysis from all wells sampled in the next event. The filtered sample data will be useful to determine if the dissolved metals data is more reproducible over time than the total metals data; and the evaluation of filtered to unfiltered data on another data set will be useful in determining if the observations during Round 5 were anomalous, or are representative of site conditions.

Collect samples for total suspended solids (TSS) and total dissolved solids (TDS) from some or all of the wells during the next event. The TSS data will be useful in evaluating the degree of correlation between sample turbidity and the reduction in metals concentrations in the filtered samples. TDS data will be useful as a cross-check on the total metals concentrations between the total metals and dissolved metals data; and as a check on the representativeness of the filtered and unfiltered samples.

The next scheduled sampling event at the Liberty Site is August 2012.

Tables

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

Well Number	Northing	Easting	Ground Elevation	Top of Riser Elevation	Top of Casing Elevation	Total Depth of Well
MW-1			92.92	92.70	92.92	
MW-2			92.87	92.4	92.87	54.2
MW-3			93.08	92.38	93.08	53.9
MW-4			93.09	92.74	93.09	53.4
MW-5	202,308.86	2,206,350.98	92.19	93.32	93.60	50.0
MW-6	202,306.77	2,206,341.15	92.09	92.71	92.79	265.0
MW-10			91.84	91.53	91.84	50.0
MW-12	201,973.43	2,206,863.98	91.08	89.59	89.79	49.3
MW-14	201,966.33	2,206,866.03	91.12	89.55	89.77	100.0
MW-16			91.97	91.61	91.97	99.2
MW-18	202,101.70	2,206,373.86	93.14	91.55	92.03	150.0
MW-19	202,102.30	2,206,386.65	93.32	91.98	92.19	248.0
MW-20	201,798.92	2,206,946.09	90.27	88.59	89.08	149.5
MW-21	201,798.35	2,206,950.31	90.33	88.66	89.15	110.5

All elevations and depths in feet

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

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

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

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

Well #	Reference Elevation (ft, NGVD)	Total Depth of Well (ft)	Date	Depth To Water (ft)	Water Table Elevation (ft, NGVD)	Comments
MW-1	92.70		5/24/11	dry	NA	No water was observed in the well
MW-2	92.40	54.2	5/24/11	42.91	49.49	
MW-3	92.38	53.9	5/24/11	42.90	49.48	
MW-4	92.74	53.4	5/24/11	43.25	49.49	
MW-5	93.23	50.0	6/12/06	42.24	50.99	
			8/21/07	43.11	50.12	
			11/13/08	45.40	47.83	
			3/10/10	43.37	49.86	
			5/23/11	44.92	48.31	
MW-6	92.71	265.0	6/12/06	42.19	50.52	
			8/21/07	43.15	49.56	
			11/13/08	45.23	47.48	
			3/10/10	43.12	49.59	
			5/23/11	44.76	47.95	
MW-10	91.53	50.0	5/24/11	42.12	49.41	
MW-12	89.59	49.3	6/14/06	39.09	50.50	
			8/24/07	39.95	49.64	
			11/13/08	42.25	47.34	
			12/23/08	41.81	47.78	
			3/10/10	40.07	49.52	
MW-14	89.55	100.0	5/24/11	41.69	47.90	
			6/14/06	39.13	50.42	
			8/24/07	40.00	49.55	
			11/13/08	42.35	47.20	
			12/23/08	41.98	47.57	
MW-16	91.61	99.2	3/10/10	40.18	49.37	
			5/24/11	41.82	47.73	
			5/24/11	42.03	49.58	
			6/22/06	40.76	50.79	
			8/21/07	41.25	50.30	
MW-18	91.55	150.0	11/13/08	43.80	47.75	
			3/10/10	41.82	49.73	
			5/24/11	43.41	48.14	

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

Well #	Reference Elevation (ft, NGVD)	Total Depth of Well (ft)	Date	Depth To Water (ft)	Water Table Elevation (ft, NGVD)	Comments
MW-19	91.98	265.0	6/22/06	41.95	50.03	
			8/21/07	41.60	50.38	
			11/13/08	43.90	48.08	
			3/10/10	42.78	49.20	
			5/24/11	44.39	47.59	
MW-20	88.59	149.5	6/14/06	38.29	50.30	
			8/21/07	39.18	49.41	
			11/13/08	41.20	47.39	
			3/10/10	39.30	49.29	
			5/24/11	40.95	47.64	
MW-21	88.66	110.5	6/14/06	38.30	50.36	
			8/21/07	39.20	49.46	
			11/13/08	41.47	47.19	
			3/10/10	39.31	49.35	
			5/24/11	40.94	47.72	

All measurements were taken from the top of PVC casing

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-2	MW-2	MW-3	MW-3	MW-4	MW-4
Sample ID	Class GA	LMW-2	LMW-2	LMW-3	LMW-3	LMW-4	LMW-4
Laboratory ID	Ground	K0943-11	K0943-12	K0943-13	K0943-14	K0943-15	K0943-16
Sample Date	Water	5/26/11	5/26/11	5/26/11	5/26/11	5/26/11	5/26/11
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	118 B	ND	346	ND	2560	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	4.8 B	ND
Barium	1,000	44.6 B	44.9 B	19.1 B	18.1 B	27.1 B	13.2 B
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	8.5	5.5	6.6	4.6 B	54.2	19.8
Calcium	NC	16,300	16,700	16,900	16,800	14,200	12,300
Chromium	50	51.9	48.2	59.6	32.6	176	142
Cobalt	NC	ND	ND	ND	ND	3.3 B	2.6 B
Copper	200	24 B	ND	45.5	11.7 B	137	43.5
Iron	300	205	ND	462	ND	2,660	109 B
Lead	25	ND	ND	14.1	ND	43.2	ND
Magnesium	35,000	3,180	3,250	2710	2,760	1,710	1,270
Manganese	300	ND	ND	11.8 B	ND	47.1 B	12.3 B
Mercury	0.7	ND	ND	ND	ND	0.036 B	ND
Nickel	100	5.5 B	2.7 B	6.7 B	4.3 B	43.5 B	12.8 B
Potassium	NC	2,720	2,610	1,950	1,770	6,600	6,790
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	21,300	22,400	12,400	13,200	26,100	29,100
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	1.4 B	ND	7 B	1.2 B
Zinc	2,000	29.2 B	24.8 B	54.9	40.4 B	630	109

Notes: All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
BOLD/Italics - Exceeds criterion
E - Estimated value due to interference
N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
Sample ID	Class GA	LMW-5	LMW-5	LMW-5	LMW-5	LMW-5	LMW-5
Laboratory ID	Ground	E0833-01A	F1192-04A	G2136-07A	J0429-01A	K0919-02	K0919-01
Sample Date	Water	6/12/06	8/23/07	11/14/08	3/8/10	5/23/11	5/23/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	238	157 B	ND	87.5 BE	ND	ND
Antimony	3	3.7 B	ND	ND	ND	ND	ND
Arsenic	25	2.2 B	ND	ND	ND	ND	ND
Barium	1,000	49.3 B	50 B	45.7 B	49.4 B	9 B	8.3 B
Beryllium	3	ND	ND	ND	0.089 B	ND	ND
Cadmium	5	0.13 B	0.51 B	ND	ND	ND	ND
Calcium	NC	19,000	15,000	16,900	14,100	6,280	5400
Chromium	50	18.2 B	42.2	7.3 B	29	1.8 B	0.88 B
Cobalt	NC	0.67 B	1.4 B	ND	ND	ND	ND
Copper	200	23.8 B	10.9 B	ND	ND	ND	ND
Iron	300	198 B	122 B	ND	107 BN	151 BN	54.3 BN
Lead	25	1.3 B	3.4 B	ND	ND	ND	ND
Magnesium	35,000	2,040 E	1,870	2,040	1,830	2,370	2,140
Manganese	300	15.1 B	13.7 B	6.8 B	16.5 B	10.4 B	ND
Mercury	0.7	ND	ND	ND	0.056 B	ND	ND
Nickel	100	3.3 B	1.1 B	ND	1.2 B	2.5 B	1.3 B
Potassium	NC	4,330	4,500	4,380	4,740	627 B	613 B
Selenium	10	ND	7.4 B	ND	ND	ND	ND
Silver	50	ND	4 B	ND	ND	ND	ND
Sodium	20,000	4,460	7,800	7,570	6,570	8,000	7,420
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.59 B	ND	ND	ND	ND
Zinc	2,000	29.1 B	18.4 B	13.7 B	15.2 B	27.9 B	24.5 B

Notes: All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
BOLD/Italics - Exceeds criterion
E - Estimated value due to interference
N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

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

Notes: All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
BOLD/Italics - Exceeds criterion
E - Estimated value due to interference
N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-10	MW-10	MW-16	MW-16
Sample ID	Class GA	LMW-10	LMW-10	LMW-16	LMW-16
Laboratory ID	Ground	K0943-03	K0943-04	K0943-09	K0943-10
Sample Date	Water	5/26/11	5/26/11	5/26/11	5/26/11
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	101 B	ND	1,150	586
Antimony	3	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND
Barium	1,000	35 B	32.5 B	299	351
Beryllium	3	ND	ND	2 B	1.8 B
Cadmium	5	10.3	11.3	5.3	4.9 B
Calcium	NC	18,700	18,700	9,240	9,890
Chromium	50	72.7	89.3	11.7 B	8.9 B
Cobalt	NC	ND	ND	ND	ND
Copper	200	ND	ND	9.4 B	11.3 B
Iron	300	245	ND	115 B	ND
Lead	25	ND	ND	ND	ND
Magnesium	35,000	3,700	3,590	2,350	2,570
Manganese	300	16.8 B	ND	597	623
Mercury	0.7	ND	ND	ND	ND
Nickel	100	1.6 B	0.91 B	13.9 B	14.1 B
Potassium	NC	2,380	2,530	4,930	4,880
Selenium	10	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	17,100	19,300	14,700	14,500
Thallium	0.50	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND
Zinc	2,000	27.1 B	21.7 B	67.5	69

Notes: All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
BOLD/Italics - Exceeds criterion
E - Estimated value due to interference
N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12
Sample ID	Class GA	LMW-12	LMW-12	LMW-12	LMW-12	LMW-12	LMW-12
Laboratory ID	Ground	E0833-03A	F1192-05A	G2415-01	J0429-04A	K0919-06	K0919-05
Sample Date	Water	6/14/06	8/24/07	12/23/08	3/9/10	5/24/11	5/24/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	445	9,070	2,260	33,600 E	12,000	ND
Antimony	3	1.8 B	11.2 B	ND	13.9 B	ND	ND
Arsenic	25	ND	3.3 B	ND	14.2 B	5.1 B	ND
Barium	1,000	45.2 B	75.4 B	60.5 B	188 B	88.9 B	28.1 B
Beryllium	3	0.38 B	0.24 B	0.19 B	2.1 B	0.79 B	ND
Cadmium	5	0.52 B	5.6	25.5	205	54.8	4.5 B
Calcium	NC	13,100	26,900	19,700	29,900	23,300	18,700
Chromium	50	2.5 B	37.5	18.9 B	251	72.8	ND
Cobalt	NC	0.63 B	5.5 B	2.6 B	12.8 B	4.1 B	ND
Copper	200	14.9 B	85.3	63.5	377	147	ND
Iron	300	467	10,900	4,080	38,100 N	11,300 N	1,620 N
Lead	25	7.7 B	106	83.7	553	230	ND
Magnesium	35,000	3,710 E	6,830	4,330	10,900	5,760	3,310
Manganese	300	77.3	96.9	82.7	253	77.6	37.3 B
Mercury	0.7	ND	ND	ND	0.54	ND	ND
Nickel	100	3.4 B	12.4 B	14.9 B	57.1	18.5 B	1.9 B
Potassium	NC	2,280	2,700	2,540	3,810	3,670	2,870
Selenium	10	2.6 B	ND	ND	13.4 B	ND	ND
Silver	50	ND	ND	7.6 B	ND	ND	ND
Sodium	20,000	11,700	13,400	27,100	33,600	8,250	7,660
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.77 B	28.8 B	8.6 B	89.7	33 B	1.5 B
Zinc	2,000	26.1 B	246	220	1,280	488	52

Notes: All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
BOLD/Italics - Exceeds criterion
E - Estimated value due to interference
N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

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

Notes: All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
BOLD/Italics - Exceeds criterion
E - Estimated value due to interference
N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

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

Notes: All values in µg/L
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ND - Not Detected
B - Estimated value
BOLD/Italics - Exceeds criterion
E - Estimated value due to interference
N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-19	MW-19	MW-19	MW-19	MW-19	MW-19
Sample ID	Class GA	LMW-19	LMW-19	LMW-19	LMW-19	LMW-19	LMW-19
Laboratory ID	Ground	E0868-15A	F1192-07A	G2136-01A	J0429-07A	K0919-12	K0919-11
Sample Date	Water	6/22/06	8/24/07	11/13/08	3/10/10	5/24/11	5/24/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	53.4 B	74.9 B	ND	69.9 BE	ND	ND
Antimony	3	ND	6.7 B	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	14.2 B	21.5 B	20 B	18.7 B	13 B	12.6 B
Beryllium	3	ND	ND	ND	0.046 B	ND	ND
Cadmium	5	1.1 B	8	ND	2.7 B	ND	2.4 B
Calcium	NC	9,900	13,000	9,700	11,500	11,600	11,700
Chromium	50	1 B	2 B	ND	1.8 B	0.94 B	ND
Cobalt	NC	ND	1.2 B	ND	ND	ND	ND
Copper	200	ND	11.7 B	ND	ND	ND	ND
Iron	300	54.2 B	221	ND	234 N	40.1 BN	ND
Lead	25	ND	4.1 B	ND	ND	ND	ND
Magnesium	35,000	3,180	4,600	3,970	4,350	4,460	4,480
Manganese	300	3.5 B	9.3 B	14.9 B	8 B	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	ND	2.9 B	ND	0.96 B	ND	ND
Potassium	NC	816 B	949 B	947 B	1,070	993 B	1,120
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.3 B	1.1 B	ND	ND	ND
Sodium	20,000	10,200	14,400	13,400	14,900	14,600	14,600
Thallium	0.50	ND	2.9 B	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	42.8 B	48.1 B	30.5 B	47 B	28 B	28.2 B

Notes: All values in µg/L
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ND - Not Detected
B - Estimated value
BOLD/Italics - Exceeds criterion
E - Estimated value due to interference
N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20
Sample ID	Class GA	LMW-20	LMW-20	LMW-20	LMW-20	LMW-20	LMW-20
Laboratory ID	Ground	E0833-05A	F1192-03A	G2136-04A	J0429-08A	K0943-05	K0943-06
Sample Date	Water	6/14/06	8/22/07	11/13/08	3/9/10	5/26/11	5/26/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	223	299	81.6 B	404 E	303	ND
Antimony	3	1.7 B	9.5 B	ND	4.4 B	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	38.9 B	57.8 B	48.8 B	35 B	27 B	25.4 B
Beryllium	3	ND	ND	ND	0.057 B	ND	ND
Cadmium	5	1 B	0.45 B	0.74 B	ND	ND	ND
Calcium	NC	13,200	20,600	4,420	9,050	7,700	7,870
Chromium	50	4.6 B	3.1 B	2.1 B	5.1 B	5.1 B	1.1 B
Cobalt	NC	0.92 B	2.5 B	ND	1.1 B	1.2 B	0.93 B
Copper	200	13.6 B	8.7 B	ND	5.7 B	6 B	ND
Iron	300	1,710	624	164 B	1,370 N	879	72 B
Lead	25	1.5 B	3.7 B	ND	4.9 B	ND	ND
Magnesium	35,000	6,050 E	9,820	3,400	4,400	3,790	3,870
Manganese	300	27.8 B	60.5	35 B	27.1 B	17.5 B	ND
Mercury	0.7	ND	ND	ND	0.064 B	ND	ND
Nickel	100	4.6 B	2.4 B	1.8 B	3.5 B	1.8 B	ND
Potassium	NC	2,050	2,220	8,190	1,970	2,430	2,060
Selenium	10	1.1 B	ND	ND	ND	ND	ND
Silver	50	ND	5.2 B	0.6 B	ND	ND	ND
Sodium	20,000	21,800	31,100	29,700	39,600	38,400	40,300
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.48 B	1.6 B	ND	1.2 B	ND	ND
Zinc	2,000	48.7 B	32.8 B	28.5 B	187	52.5	29.7 B

Notes: All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
BOLD/Italics - Exceeds criterion
E - Estimated value due to interference
N - Spike recovery outside control limits

TABLE 3
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
JUNE 2006 THROUGH MAY 2011 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21
Sample ID	Class GA	LMW-21	LMW-21	LMW-21	LMW-21	LMW-21	LMW-21
Laboratory ID	Ground	E0833-06A	F1192-01A	G2136-05A	J0429-09A	K0943-07	K0943-08
Sample Date	Water	6/14/06	8/22/07	11/14/08	3/9/10	5/26/11	5/26/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc.	conc. Q
Aluminum	NC	ND	197 B	457	793 E	319	ND
Antimony	3	1.9 B	6.7 B	ND	ND	ND	ND
Arsenic	25	2.2 B	ND	ND	ND	4.3 B	ND
Barium	1,000	79.3 B	60.9 B	58.2 B	119 B	78.8 B	76.2 B
Beryllium	3	ND	ND	ND	0.16 B	ND	ND
Cadmium	5	ND	1.5 B	4.8 B	1.1 B	1.2 B	ND
Calcium	NC	7,520	5,190	11,900	12,600	17,000	16,900
Chromium	50	0.94 B	3 B	2.3 B	9 B	6.2 B	3.3 B
Cobalt	NC	0.48 B	1.5 B	ND	1.5 B	ND	ND
Copper	200	ND	13.7 B	6.6 B	8.2 B	8.5 B	ND
Iron	300	31.4 B	503	198 B	1,840 N	694	32 B
Lead	25	ND	4.5 B	2.6 B	8.2 B	ND	ND
Magnesium	35,000	5,440 E	3,320	2,960	8,380	6,960	7,240
Manganese	300	26.4 B	51.8	627	57.7	36.1 B	19.7 B
Mercury	0.7	ND	ND	ND	0.058 B	ND	ND
Nickel	100	1.9 B	2.4 B	6.9 B	4.9 B	3.3 B	1.3 B
Potassium	NC	5,670	6,350	6,250	12,700	12,500	9,270
Selenium	10	4.1 B	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	24,500	27,200	19,200	31,800	24,300	21,700
Thallium	0.50	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.063 B	ND	2.1 B	1.5 B	ND
Zinc	2,000	14.2 B	40.5 B	69.1	67.6	65.1	30.5 B

Notes: All values in µg/L
NC - No NYSDEC criterion
ND - Not Detected
B - Estimated value
BOLD/Italics - Exceeds criterion
E - Estimated value due to interference
N - Spike recovery outside control limits

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
MAY 2011 SAMPLING EVENT

COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-2	MW-2	MW-2	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4
Sample ID	Class GA	LMW-2	LMW-2	LMW-2	LMW-3	LMW-3	LMW-3	LMW-4	LMW-4	LMW-4
Laboratory ID	Ground	K0943-11	K0943-12	K0943-12	K0943-13	K0943-14	K0943-14	K0943-15	K0943-16	K0943-16
Sample Date	Water	5/26/11	5/26/11	5/26/11	5/26/11	5/26/11	5/26/11	5/26/11	5/26/11	5/26/11
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent
		conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved	conc.	conc. Q	Dissolved
Aluminum	NC	118 B	0	0.0%	346	0	0.0%	2560	0	0.0%
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	4.8 B	0	0.0%
Barium	1,000	44.6 B	44.9 B	100.7%	19.1 B	18.1 B	94.8%	27.1 B	13.2 B	48.7%
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	8.5	5.5	64.7%	6.6	4.6 B	69.7%	54.2	19.8	36.5%
Calcium	NC	16,300	16,700	102.5%	16,900	16,800	99.4%	14,200	12,300	86.6%
Chromium	50	51.9	48.2	92.9%	59.6	32.6	54.7%	176	142	80.7%
Cobalt	NC	ND	ND	NC	ND	ND	NC	3.3 B	2.6 B	78.8%
Copper	200	24 B	0	0.0%	45.5	11.7 B	25.7%	137	43.5	31.8%
Iron	300	205	0	0.0%	462	0	0.0%	2,660	109 B	4.1%
Lead	25	ND	ND	NC	14.1	0	0.0%	43.2	0	0.0%
Magnesium	35,000	3,180	3,250	102.2%	2,710	2,760	101.8%	1,710	1,270	74.3%
Manganese	300	ND	ND	NC	11.8 B	0	0.0%	47.1 B	12.3 B	26.1%
Mercury	0.7	ND	ND	NC	ND	ND	NC	0.036 B	0	0.0%
Nickel	100	5.5 B	2.7 B	49.1%	6.7 B	4.3 B	64.2%	43.5 B	12.8 B	29.4%
Potassium	NC	2,720	2,610	96.0%	1,950	1,770	90.8%	6,600	6,790	102.9%
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	21,300	22,400	105.2%	12,400	13,200	106.5%	26,100	29,100	111.5%
Thallium	0.50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	1.4 B	0	0.0%	7 B	1.2 B	17.1%
Zinc	2,000	29.2 B	24.8 B	84.9%	54.9	40.4 B	73.6%	630	109	17.3%
Turbidity (NTU)		10			10			9.3		

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

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

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
MAY 2011 SAMPLING EVENT

COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-5	MW-5	MW-5	MW-6	MW-6	MW-6	MW-10	MW-10	MW-10
Sample ID	Class GA	LMW-5	LMW-5	LMW-5	LMW-6	LMW-6	LMW-6	LMW-10	LMW-10	LMW-10
Laboratory ID	Ground	K0919-02	K0919-01	K0919-01	K0919-04	K0919-03	K0919-03	K0943-03	K0943-04	K0943-04
Sample Date	Water	5/23/11	5/23/11	5/23/11	5/23/11	5/23/11	5/23/11	5/26/11	5/26/11	5/26/11
Filtered/Unfiltered	Criteria	Unfiltered conc.	Filtered conc. Q	Percent Dissolved	Unfiltered conc.	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved
Aluminum	NC	ND	ND	NC	ND	ND	NC	101 B	0	0.0%
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	9 B	8.3 B	92.2%	34.4 B	33.9 B	98.5%	35 B	32.5 B	92.9%
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC	10.3	11.3	NC
Calcium	NC	6,280	5,400	86.0%	19,500	20,000	102.6%	18,700	18,700	100.0%
Chromium	50	1.8 B	0.88 B	48.9%	15.7 B	14.7 B	93.6%	72.7	89.3	122.8%
Cobalt	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC	ND	ND	NC
Iron	300	151 BN	54 BN	NC	ND	ND	NC	245	0	0.0%
Lead	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Magnesium	35,000	2,370	2,140	90.3%	2,190	2,240	102.3%	3,700	3,590	97.0%
Manganese	300	10.4 B	ND	NC	ND	ND	NC	16.8 B	0	0.0%
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	2.5 B	1.3 B	NC	ND	ND	NC	1.6 B	0.91 B	56.9%
Potassium	NC	627 B	613 B	97.8%	3,500	3,530	100.9%	2,380	2,530	106.3%
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	8,000	7,420	92.8%	7,760	7,890	101.7%	17,100	19,300	112.9%
Thallium	0.50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	27.9 B	24.5 B	87.8%	16.6 B	18.8 B	113.3%	27.1 B	21.7 B	80.1%
Turbidity (NTU)		10			11			10		

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

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

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
MAY 2011 SAMPLING EVENT

COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-12	MW-12	MW-12	MW-14	MW-14	MW-14	MW-16	MW-16	MW-16
Sample ID	Class GA	LMW-12	LMW-12	LMW-12	LMW-14	LMW-14	LMW-14	LMW-16	LMW-16	LMW-16
Laboratory ID	Ground	K0919-06	K0919-05	K0919-05	K0919-08	K0919-07	K0919-07	K0943-09	K0943-10	K0943-10
Sample Date	Water	5/23/11	5/23/11	5/23/11	5/23/11	5/23/11	5/23/11	5/26/11	5/26/11	5/26/11
Filtered/Unfiltered	Criteria	Unfiltered conc.	Filtered conc. Q	Percent Dissolved	Unfiltered conc.	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved
Aluminum	NC	12000	0	0.0%	652	0	0.0%	1150	586	51.0%
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	5.1 B	0	0.0%	5.6 B	0	0.0%	ND	ND	NC
Barium	1,000	88.9 B	28.1 B	31.6%	57.1 B	50.4 B	88.3%	299	351	117.4%
Beryllium	3	0.79 B	0	0.0%	ND	ND	NC	2 B	1.8 B	90.0%
Cadmium	5	54.8	4.5 B	NC	9.2	7.6	NC	5.3	4.9 B	NC
Calcium	NC	23,300	18,700	80.3%	18,300	18,400	100.5%	9,240	9,890	107.0%
Chromium	50	72.8	0	0.0%	51.3	29.6	57.7%	11.7 B	8.9 B	76.1%
Cobalt	NC	4.1 B	0	0.0%	0.72 B	0	0.0%	ND	ND	NC
Copper	200	147	0	0.0%	13.6 B	0	0.0%	9.4 B	11.3 B	120.2%
Iron	300	11,300 N	1,620 N	14.3%	1,780 N	1,430 N	80.3%	115 B	0	0.0%
Lead	25	230	ND	0.0%	18.8	0	0.0%	ND	ND	0.0%
Magnesium	35,000	5,760	3,310	57.5%	3,840	3,700	96.4%	2,350	2,570	109.4%
Manganese	300	77.6	37.3 B	48.1%	260	235	90.4%	597	623	104.4%
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	18.5 B	1.9 B	10.3%	11.8 B	8.7 B	73.7%	13.9 B	14.1 B	101.4%
Potassium	NC	3,670	2,870	78.2%	4,430	4,570	103.2%	4,930	4,880	99.0%
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	8,250	7,660	92.8%	20,400	20,300	99.5%	14,700	14,500	98.6%
Thallium	0.50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	33 B	1.5 B	4.5%	2.4 B	0	0.0%	ND	ND	NC
Zinc	2,000	488	52.1	10.7%	99.1	70.1	70.7%	67.5	69	102.2%
Turbidity (NTU)		45			20			0		

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

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

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
MAY 2011 SAMPLING EVENT

COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-18	MW-18	MW-18	MW-19	MW-19	MW-19
Sample ID	Class GA	LMW-18	LMW-18	LMW-18	LMW-19	LMW-19	LMW-19
Laboratory ID	Ground	K0919-10	K0919-09	K0919-09	K0919-12	K0919-11	K0919-11
Sample Date	Water	5/23/11	5/23/11	5/23/11	5/23/11	5/23/11	5/23/11
Filtered/Unfiltered	Criteria	Unfiltered conc.	Filtered conc. Q	Percent Dissolved	Unfiltered conc.	Filtered conc. Q	Percent Dissolved
Aluminum	NC	193 B	0	0.0%	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC
Barium	1,000	101 B	104 B	103.0%	13 B	12.6 B	96.9%
Beryllium	3	ND	ND	NC	ND	ND	NC
Cadmium	5	3 B	2.9 B	NC	ND	2.4 B	NC
Calcium	NC	21,100	21,900	103.8%	11,600	11,700	100.9%
Chromium	50	3.1 B	2.3 B	74.2%	0.94 B	0	0.0%
Cobalt	NC	ND	ND	NC	ND	ND	NC
Copper	200	6.9 B	0	0.0%	ND	ND	NC
Iron	300	327 N	0	0.0%	40 BN	ND N	NC
Lead	25	ND	ND	NC	ND	ND	NC
Magnesium	35,000	4,380	4,560	104.1%	4,460	4,480	100.4%
Manganese	300	521	421	80.8%	ND	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC
Nickel	100	3.4 B	2.4 B	70.6%	ND	ND	NC
Potassium	NC	11,500	12,500	108.7%	993 B	1,120	112.8%
Selenium	10	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC
Sodium	20,000	28,400	30,200	106.3%	14,600	14,600	100.0%
Thallium	0.50	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	37.2 B	33.8 B	90.9%	28 B	28.2 B	100.7%
Turbidity (NTU)		8			8		

Notes:

E - Estimated value due to interference

B - Estimated value

ND - Not Detected

BOLD/Italics - Exceeds criterion

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

% Dissolved = filtered conc. / unfiltered conc.

NC - No NYSDEC criterion or Not Calculable

TABLE 4
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
MAY 2011 SAMPLING EVENT

COMPARISON OF FILTERED AND UNFILTERED METALS DATA IN GROUNDWATER

Sample Location	NYSDEC	MW-20	MW-20	MW-20	MW-21	MW-21	MW-21
Sample ID	Class GA	LMW-20	LMW-20	LMW-20	LMW-21	LMW-21	LMW-21
Laboratory ID	Ground	K0943-05	K0943-06	K0943-06	K0943-07	K0943-08	K0943-08
Sample Date	Water	5/26/11	5/26/11	5/26/11	5/26/11	5/26/11	5/26/11
Filtered/Unfiltered	Criteria	Unfiltered conc.	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved
Aluminum	NC	303	0	0.0%	319	0	0.0%
Antimony	3	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	4.3 B	0	0.0%
Barium	1,000	27 B	25.4 B	94.1%	78.8 B	76.2 B	96.7%
Beryllium	3	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	1.2 B	0	NC
Calcium	NC	7,700	7,870	102.2%	17,000	16,900	99.4%
Chromium	50	5.1 B	1.1 B	21.6%	6.2 B	3.3 B	53.2%
Cobalt	NC	1.2 B	0.93 B	77.5%	ND	ND	NC
Copper	200	6 B	0	0.0%	8.5 B	0	0.0%
Iron	300	879	72 B	8.2%	694	32 B	4.7%
Lead	25	ND	ND	0.0%	ND	ND	0.0%
Magnesium	35,000	3,790	3,870	102.1%	6,960	7,240	104.0%
Manganese	300	17.5 B	0	0.0%	36.1 B	19.7 B	54.6%
Mercury	0.7	ND	ND	NC	ND	ND	NC
Nickel	100	1.8 B	0	0.0%	3.3 B	1.3 B	39.4%
Potassium	NC	2,430	2,060	84.8%	12,500	9,270	74.2%
Selenium	10	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC
Sodium	20,000	38,400	40,300	104.9%	24,300	21,700	89.3%
Thallium	0.50	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	1.5 B	0	0.0%
Zinc	2,000	52.5	29.7 B	56.6%	65.1	30.5 B	46.9%
Turbidity (NTU)		0			10		

Notes:

E - Estimated value due to interference

B - Estimated value

ND - Not Detected

BOLD/Italics - Exceeds criterion

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

% Dissolved = filtered conc. / unfiltered conc.

NC - No NYSDEC criterion or Not Calculable

TABLE 5
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)
MAY 2011 (ROUND 5) SAMPLING EVENT
FIELD DUPLICATE DATA - TAL METALS IN GROUNDWATER

Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered Metal	MW-14 LMW-14 K0919-08 5/23/11 Unfiltered conc. Q	MW-14 Dup LMW-64U K0919-14 5/24/11 Unfiltered conc. Q	Precision as Relative Percent Difference (RPD)
Aluminum	652	718	9.6%
Antimony	ND	ND	NC
Arsenic	5.6 B	ND	NC
Barium	57.1 B	57.8 B	1.2%
Beryllium	ND	ND	NC
Cadmium	9.2	9.4	2.2%
Calcium	18,300	18,200	0.5%
Chromium	51.3	51.8	1.0%
Cobalt	0.72 B	ND	NC
Copper	13.6 B	14 B	1.5%
Iron	1,780 N	1,750 N	1.7%
Lead	18.8	20.0	6.2%
Magnesium	3,840	3,850	0.3%
Manganese	260	262	0.8%
Mercury	ND	ND	NC
Nickel	11.8 B	10.7 B	9.8%
Potassium	4,430	4,440	0.2%
Selenium	ND	ND	NC
Silver	ND	ND	NC
Sodium	20,400	20,000	2.0%
Thallium	ND	ND	NC
Vanadium	2.4 B	2.3 B	4.3%
Zinc	99.1	98.9	0.2%

MW-14 LMW-14 K0919-07 5/23/11 Filtered conc. Q	MW-14 Dup LMW-64F K0919-13 5/24/11 Filtered conc. Q	Precision as Relative Percent Difference (RPD)
ND	ND	NC
ND	ND	NC
ND	ND	NC
50.4 B	49.4 B	2.0%
ND	ND	NC
7.6	7.8	2.6%
18,400	18,400	0.0%
29.6	29.7	0.3%
ND	ND	NC
ND	ND	NC
1,430 N	32.8 BN	191.0%
ND	ND	NC
3,700	3,750	1.3%
235	230	2.2%
ND	ND	NC
8.7 B	8.5 B	2.3%
4,570	4,440	2.9%
ND	ND	NC
ND	ND	NC
20,300	20,500	1.0%
ND	ND	NC
ND	ND	NC
70.1	69.4	1.0%

Notes:

All values in µg/L

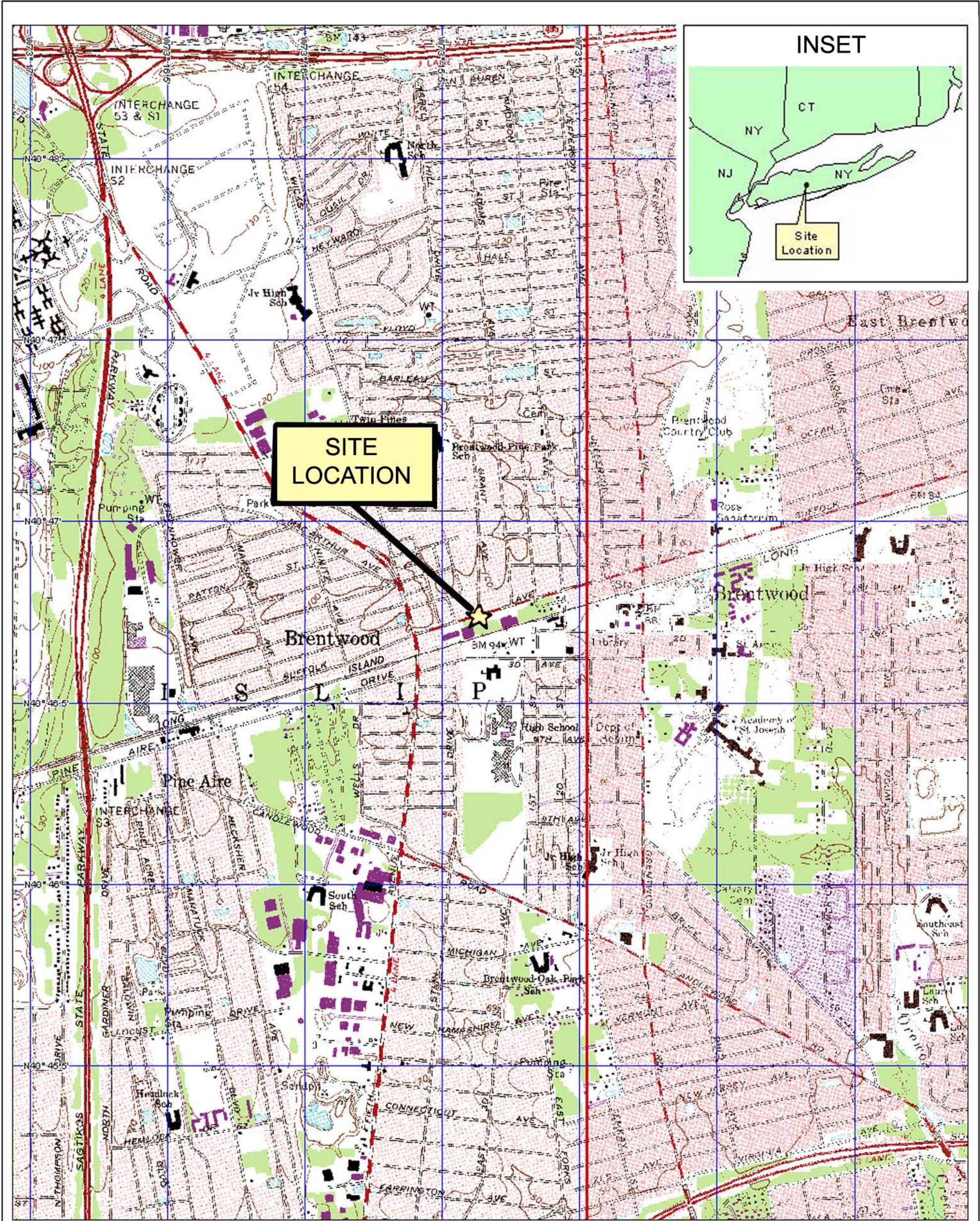
NC - Not Calculable (analyte not detected in one or both analyses)

ND - Not Detected

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

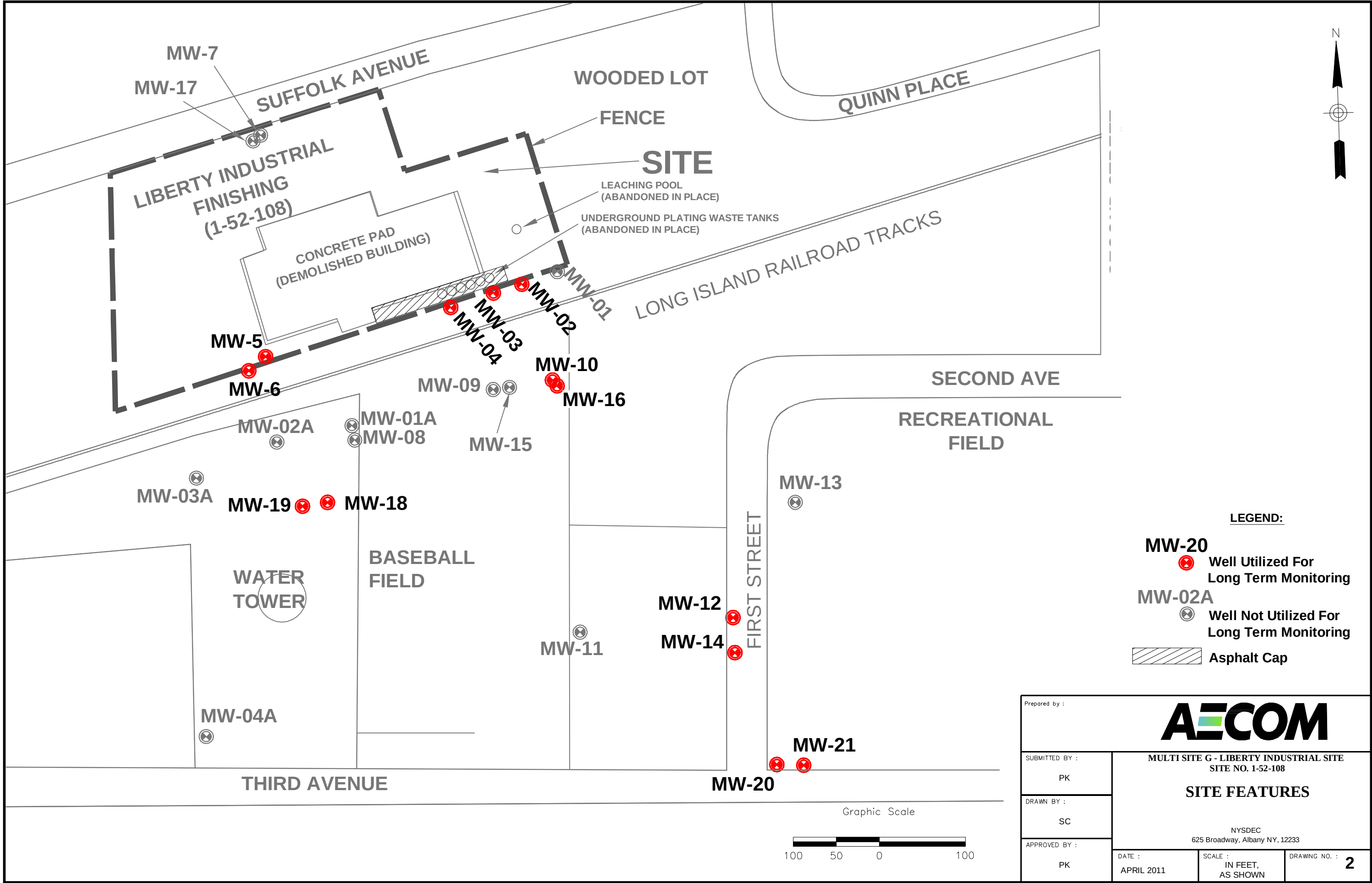
E - Estimated concentration due to interference based on serial dilution.

Figures



Scale 1:25,000 750 FT N	Figure 1 - Site Location.
SOURCE: Delorme 3-D TopoQuads Greenlawn, NY New York 7.5 Minute Series, 1979	LIBERTY INDUSTRIAL FINISHING SITE #1-52-108 MULTI SITE G 500 SUFFOLK AVE BRENTWOOD, NY

Piscataway on uspsw2vfp001\\Data_uspsw2vfp001\\Environment\\(J)
File: J:\\Cadfiles\\CADD\\60135736\\liberty prr Figures_2011-09-20.dwg Layout: Site Features Fig 2 User: vershomb Plotted: Oct 04, 2011 - 11:34am



Piscataway on uspsw2vp001\Data_uspsw2vp001\Environment(J)
File: J:\Cadfiles\CADD\60135736\liberty prr Figures_2011-09-20.dwg Layout: GW Ele Fig 3 User: vershomb Plotted: Oct 04, 2011 - 11:35am

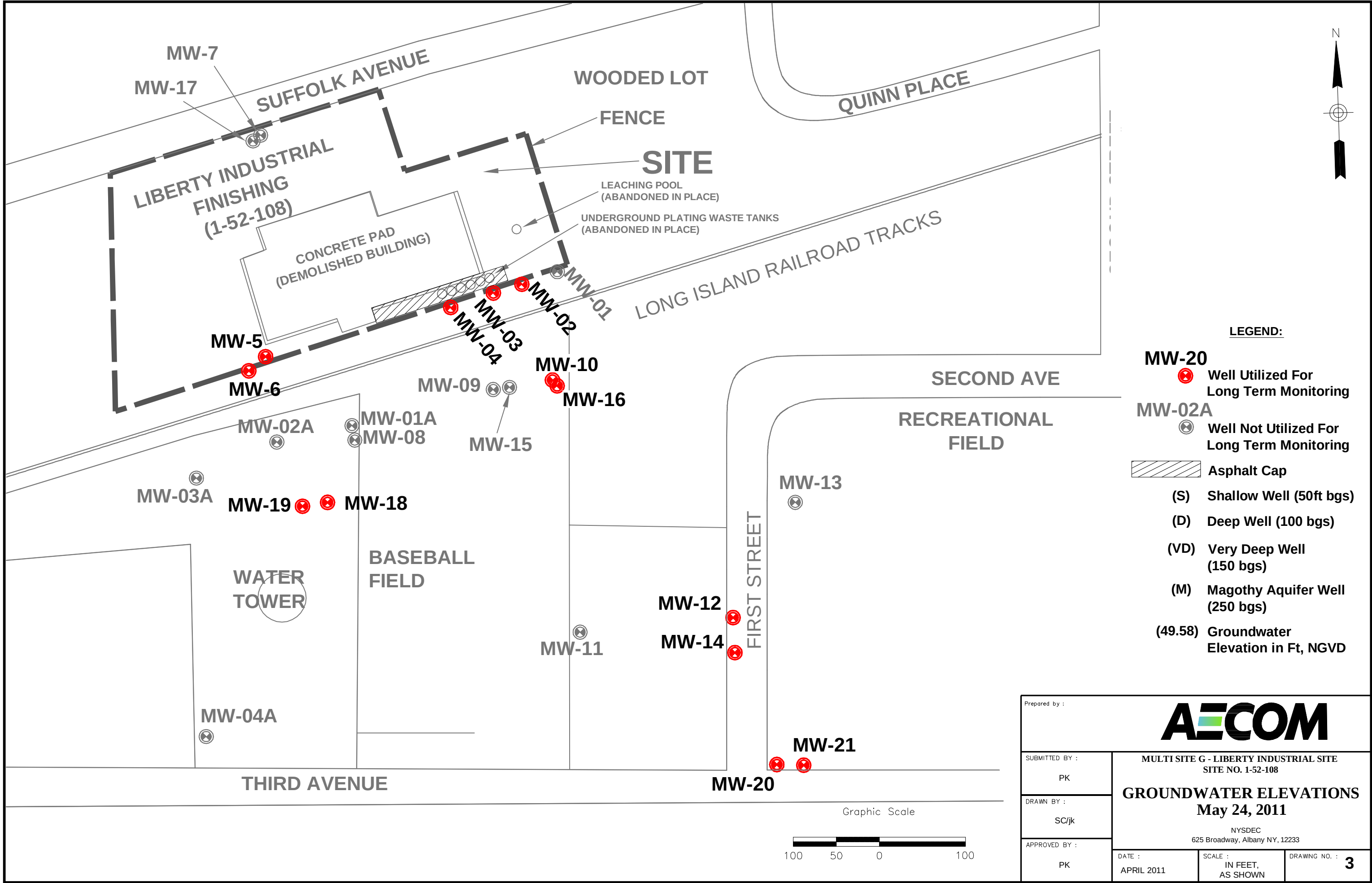
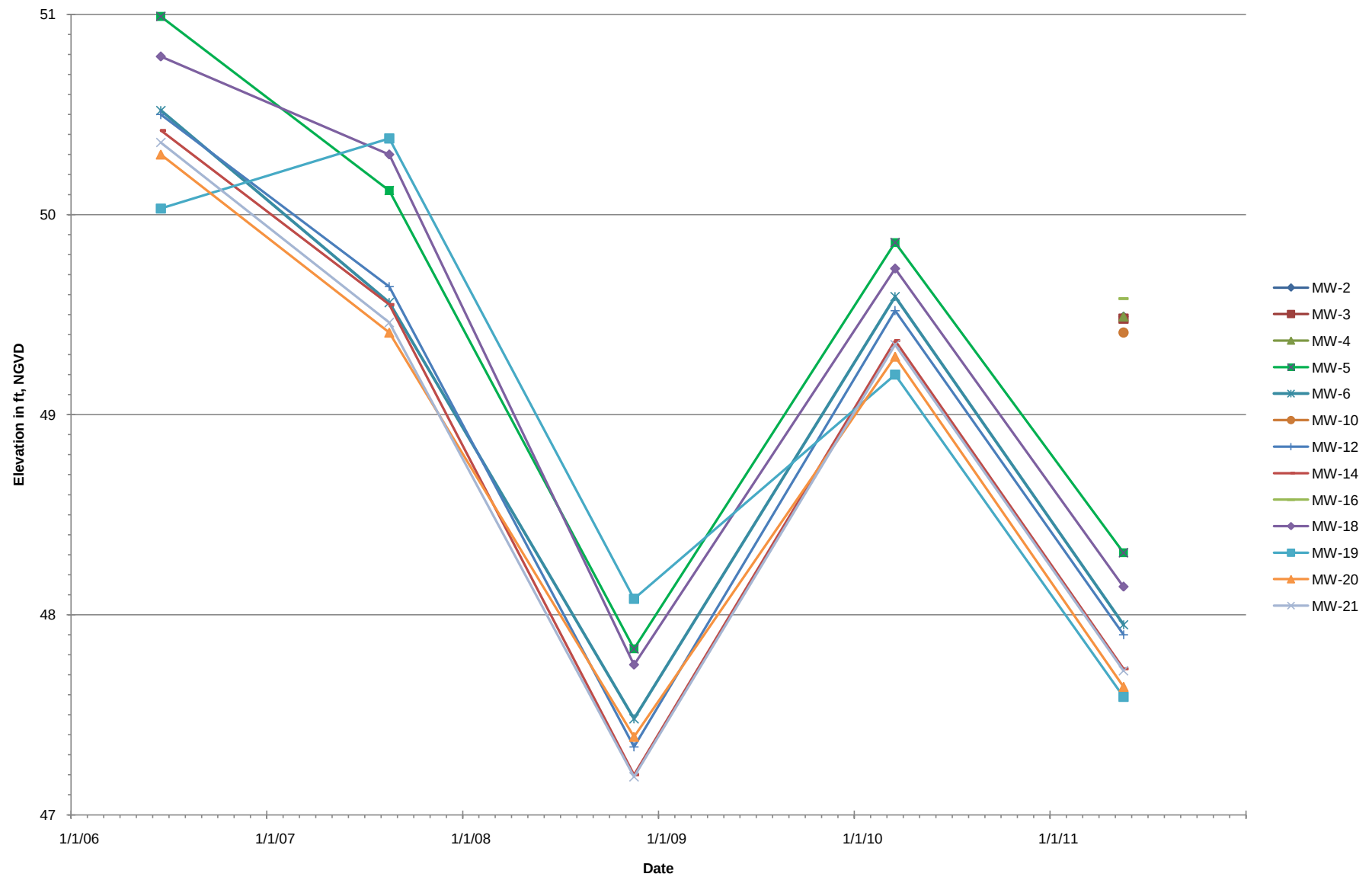


FIGURE 4
LIBERTY INDUSTRIAL FINISHING (1-52-108)
GROUNDWATER HYDROGRAPH



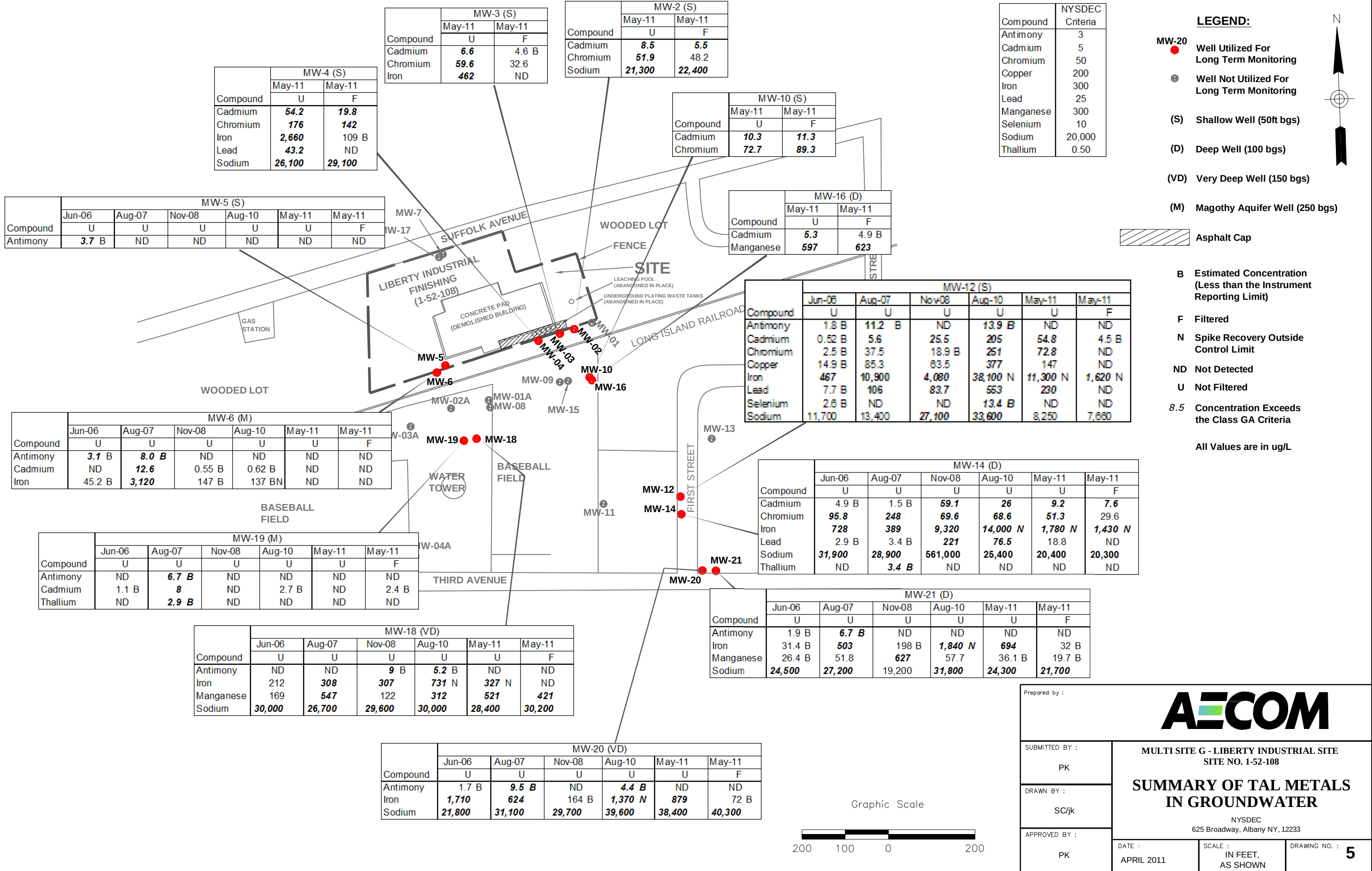
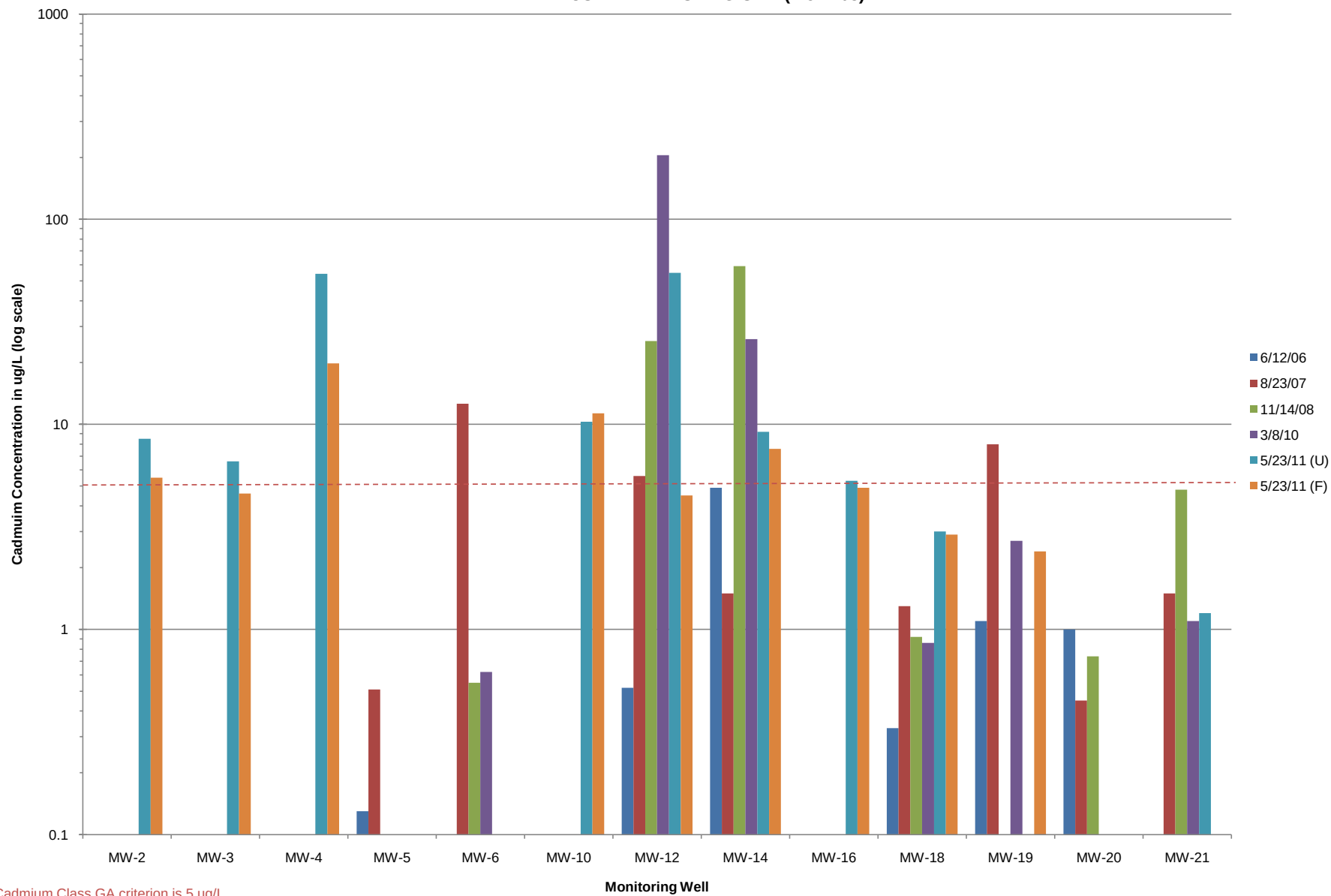
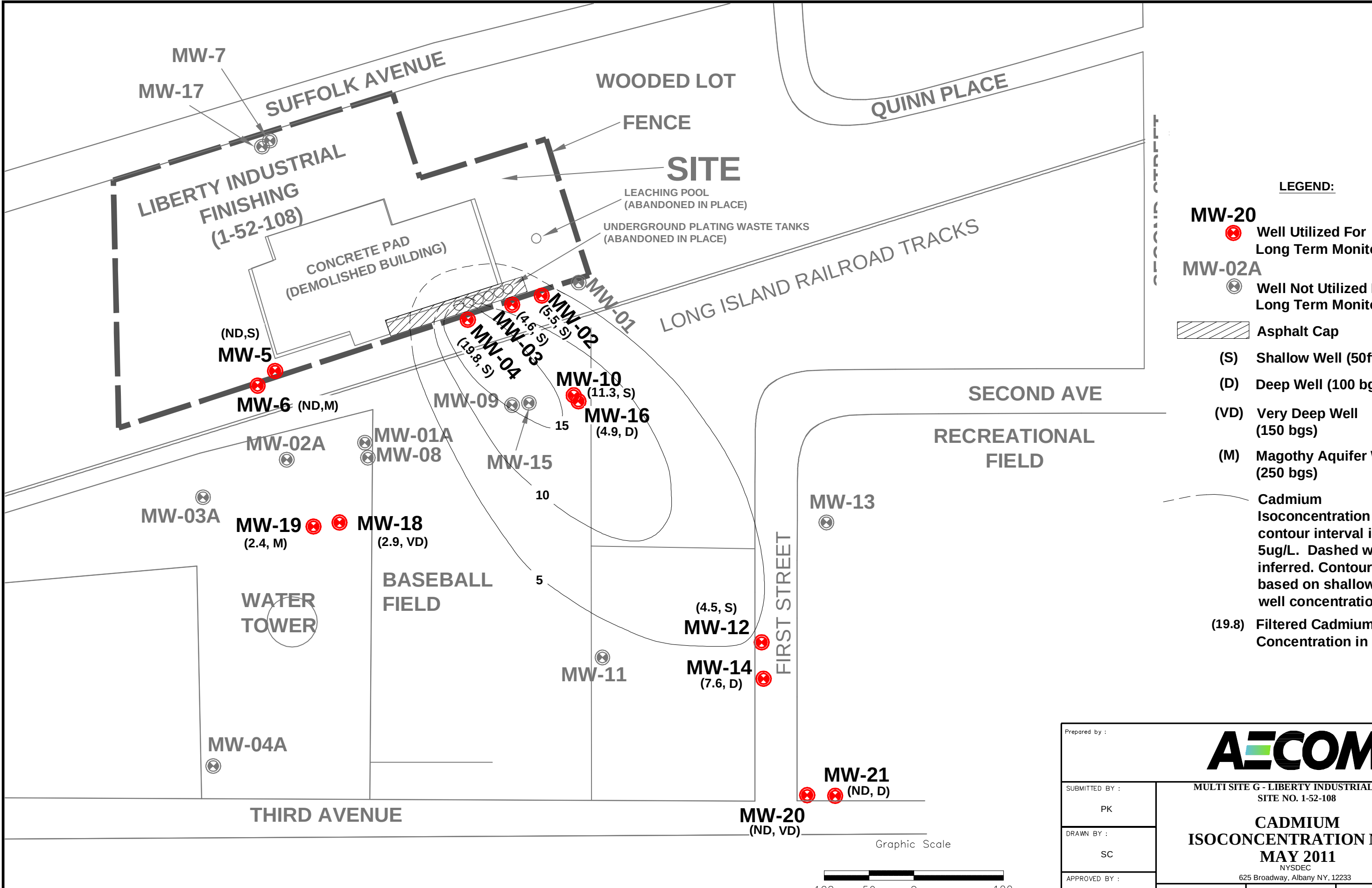


FIGURE 6
CADMIUM CONCENTRATIONS IN SELECTED MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING SITE (1-52-108)



Piscataway on uspsw2vp001\Data_uspsw2vp001\Environment(1)
File: J:\Cadfiles\CADD\60135736\liberty prr Figures_2011-09-20.dwg Layout: Cadmium Iso Fig 7 User: vershonb Plotted: Oct 04, 2011 - 11:37am



LEGEND:

MW-20
Well Utilized For Long Term Monitoring

MW-02A
Well Not Utilized For Long Term Monitoring

Asphalt Cap

(S) Shallow Well (50ft bgs)

(D) Deep Well (100 bgs)

(VD) Very Deep Well (150 bgs)

(M) Magothy Aquifer Well (250 bgs)

Cadmium Isoconcentration line, contour interval is 5ug/L. Dashed where inferred. Contours based on shallow (S) well concentrations

(19.8) Filtered Cadmium Concentration in ug/L

Prepared by :

AECOM

SUBMITTED BY :

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

PK

DRAWN BY :

SC

APPROVED BY :

PK

CADMIUM
ISOCONCENTRATION MAP
MAY 2011

NYSDEC
625 Broadway, Albany NY, 12233

DATE :
MAY 2011

SCALE :
IN FEET,
AS SHOWN

DRAWING NO. : **7**

Graphic Scale

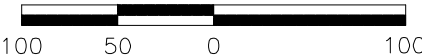
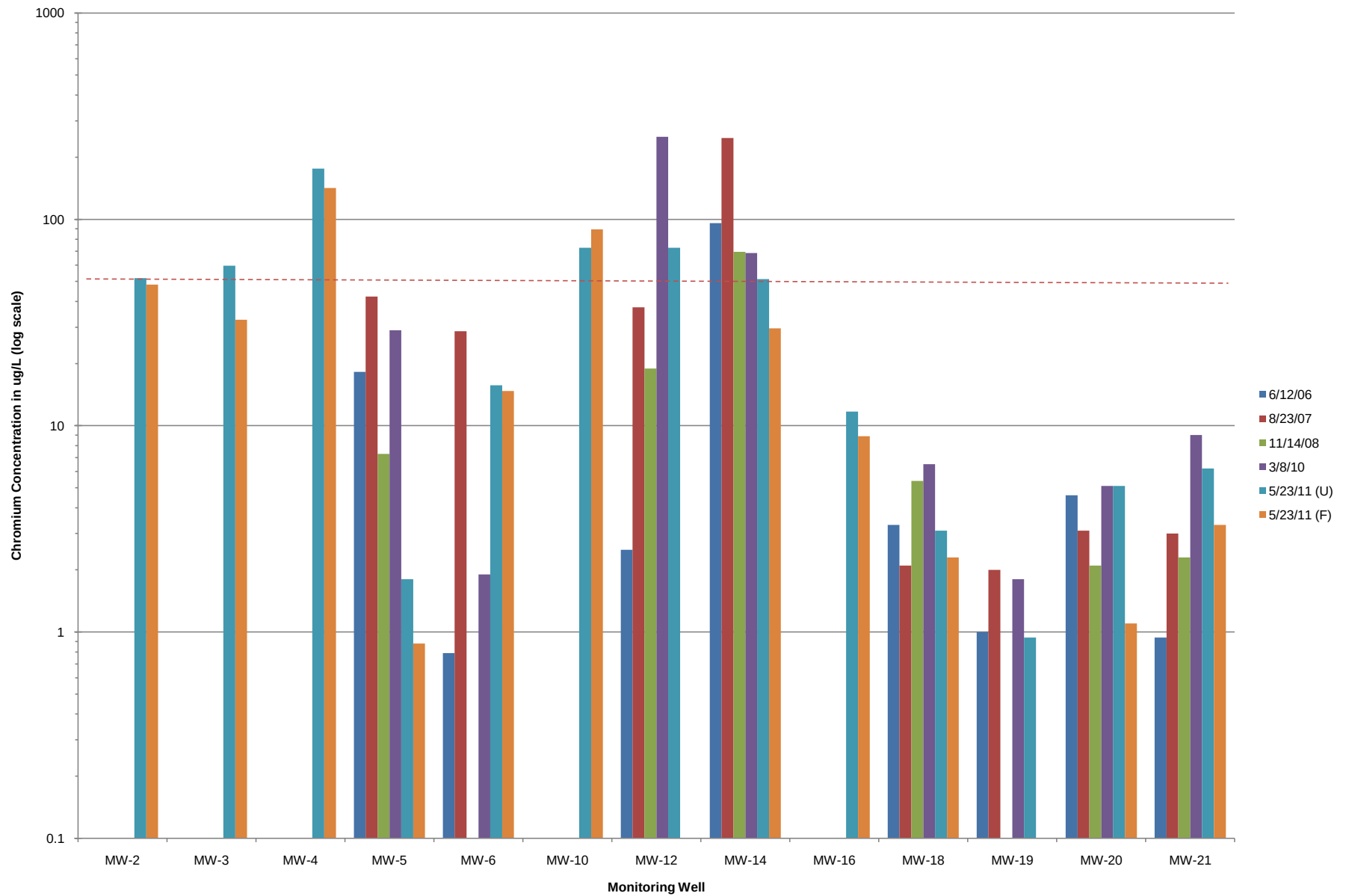
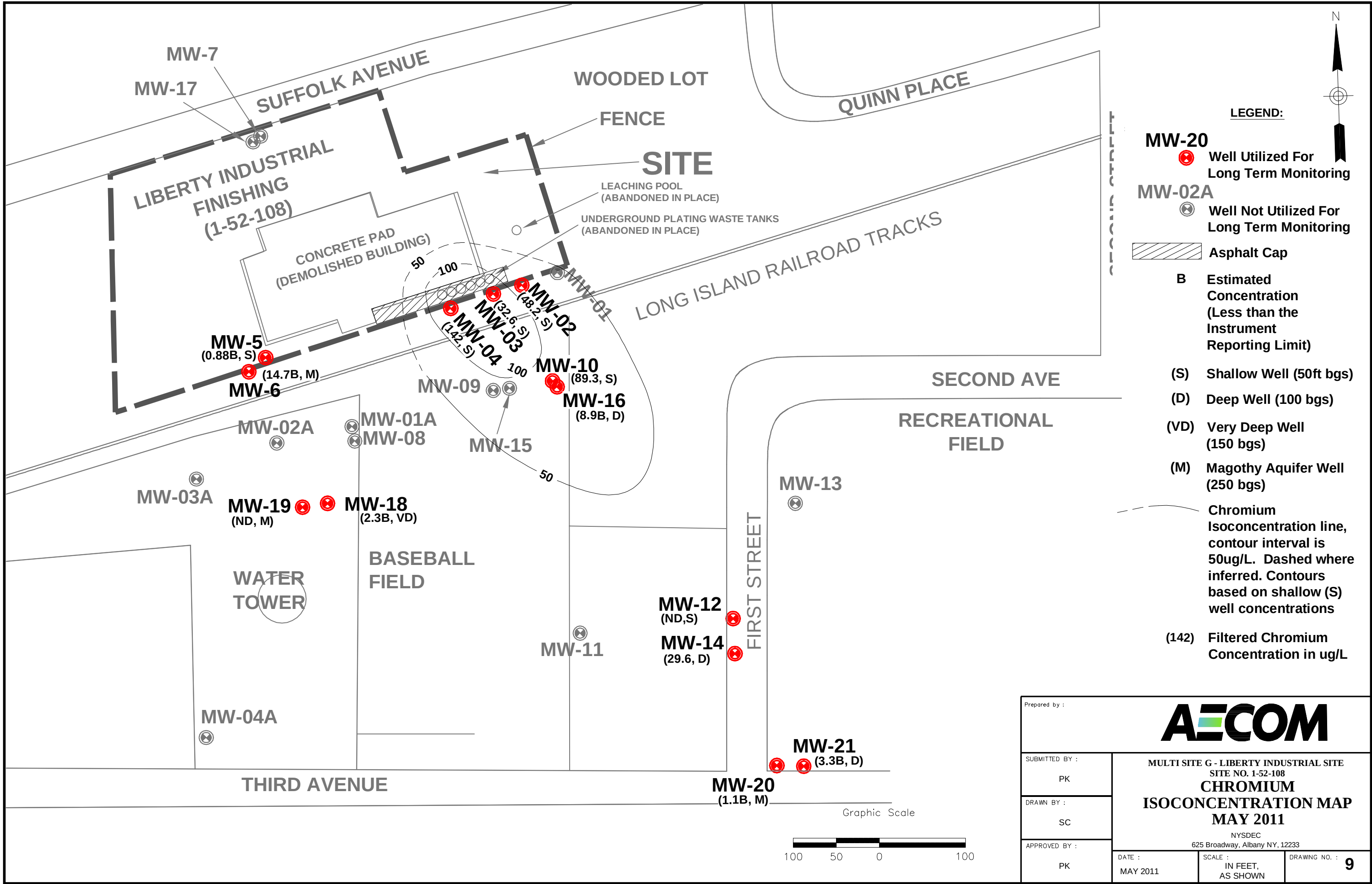


FIGURE 8
CHROMIUM CONCENTRATIONS IN SELECTED MONITORING WELLS
LIBERTY INDUSTRIAL FINISHING (1-52-108)



Chromium Class GA criterion is 50 ug/L

Piscataway on uspsw2vfp001\\Data_uspsw2vfp001\\Environment\\(J)
File: J:\\Caddfiles\\CADD\\60135736\\liberty prr Figures_2011-09-20.dwg Layout: Chromium Iso Fig 9 User: vershonb Plotted: Oct 04, 2011 - 11:37am



Appendix A

Monitoring Well Sampling Forms



WELL NO. MW- 2

[illegible]



WELL NO. MW- 3

[illegible]



WELL NO. MW-4

[illegible]



WELL NO. MW-5

[illegible]



WELL NO. MW- 6

[illegible]



WELL NO. MW-10

[illegible]



WELL NO. MW- 12

[illegible]



WELL NO. MW- 14

[illegible]



WELL NO. MW-16

[illegible]



WELL NO. MW- 18

[illegible]



WELL NO. MW- 19

[illegible]



WELL NO. MW-20

[illegible]



WELL NO. MW-21

[illegible]

Appendix B

NYSDEC Monitoring Well Field Inspection Logs

SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/24/2011 0800

WELL ID.: LMW-1

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? Latitude: 40° 77.87 Longitude: 73° 25.35

See Report

PDOP Reading from Trimble pathfinder: _____ Satellites: _____

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

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

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

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PID

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

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

8

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

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

WELL MEASURING POINT VISIBLE?

YES	NO
X	
	X
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

43

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

NA - dry

MEASURE WELL DIAMETER (Inches):

4

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

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

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

CLOSE

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

overhead lines, close to fence

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

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

within site fence, surrounded by overgrown vegetation

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

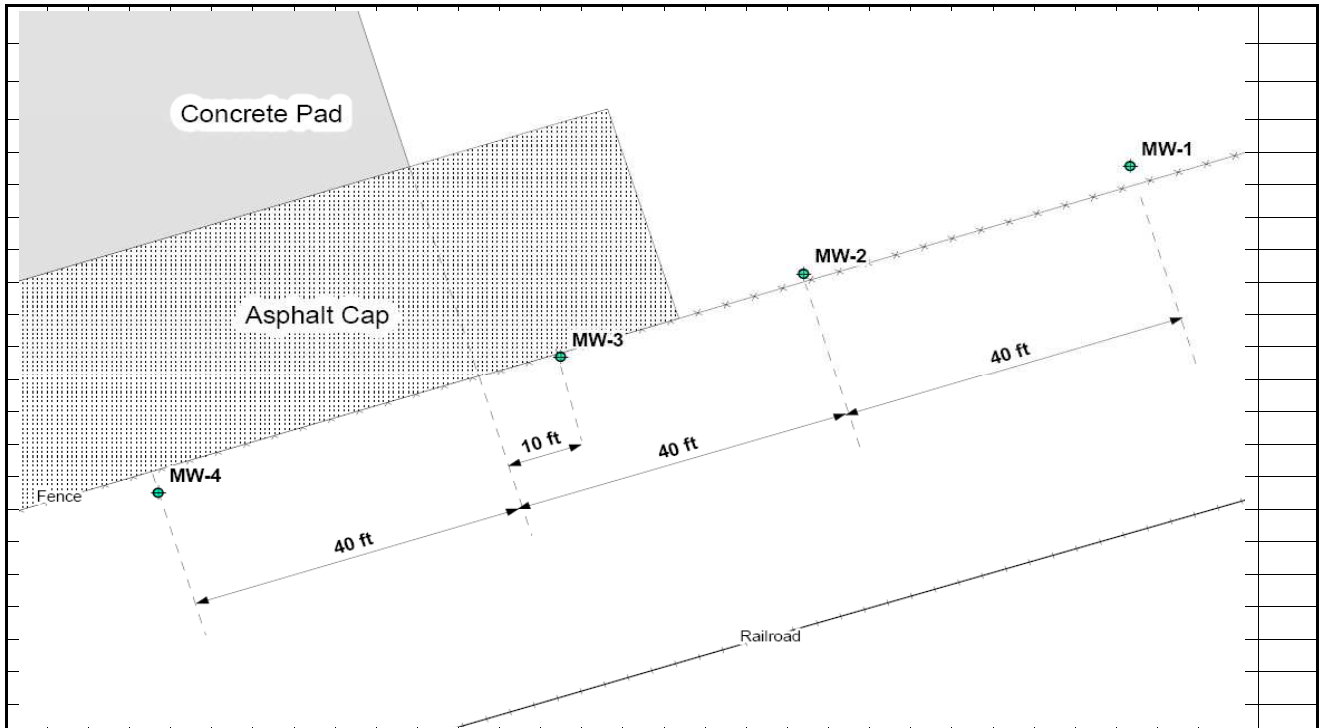
(e.g. Gas station, salt pile, etc.):

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

REMARKS:

MONITORING WELL INSPECTION LOG

SKETCH



looking towards well from west



looking towards well from west



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/24/2011 0810

WELL ID.: LMW-2

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? Latitude: 40° 77.87 Longitude: 73° 25.36

See Report

PDOP Reading from Trimble pathfinder: _____ Satellites: _____

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

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

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

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PIF

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

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

8

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

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

WELL MEASURING POINT VISIBLE?

YES	NO
X	
	X
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

54.2

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

42.91

MEASURE WELL DIAMETER (Inches):

4

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

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

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

CLOSE

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

overhead lines, close to fence

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

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

within site fence, surrounded by overgrown vegetation

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

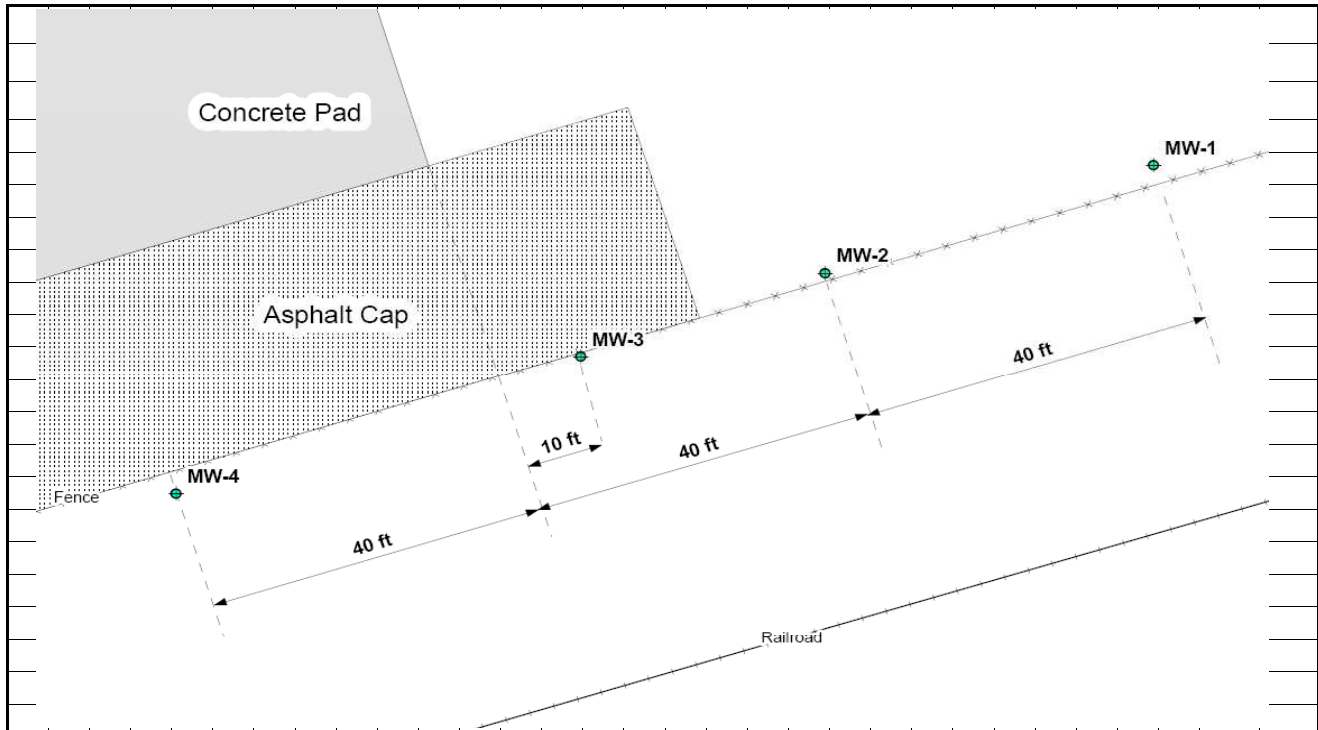
Capped area on-site. Gas station to the east of the Site.

REMARKS:

New bolts needed

MONITORING WELL INSPECTION LOG

SKETCH



looking towards well from west



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108
INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/24/2011 0820
WELL ID.: LMW-3

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? Latitude: 40° 77.86 Longitude: 73° 25.37 See Report
PDOP Reading from Trimble pathfinder: _____ Satellites: _____
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:

YES	NO
X	

SURFACE SEAL PRESENT?

X	

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

X	

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

X	

HEADSPACE READING (ppm) AND INSTRUMENT USED 0.0 PIF
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 8

LOCK PRESENT?

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): 53.9
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 42.90
MEASURE WELL DIAMETER (Inches): 4
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES CLOSE

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

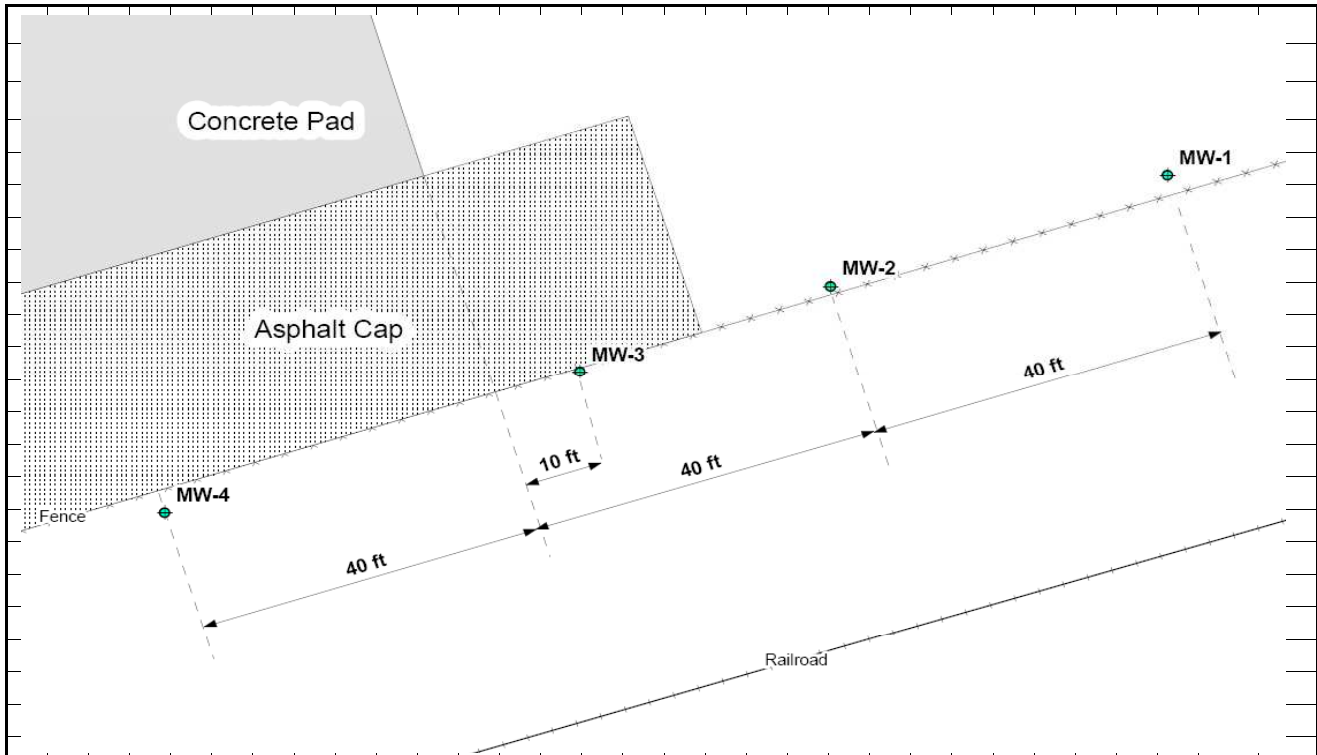
DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.)
AND ASSESS THE TYPE OF RESTORATION REQUIRED.
outside site fence, surrounded by overgrown vegetation

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

REMARKS:
New bolts needed

MONITORING WELL INSPECTION LOG

SKETCH



looking towards well from west



looking towards well from northeast



looking at well from outside site fence



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/24/2011 0830

WELL ID.: LMW-4

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? Latitude: 40° 77.86 Longitude: 73° 25.39

See Report

PDOP Reading from Trimble pathfinder: _____ Satellites: _____

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

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

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

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PIF

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

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

8

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

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

WELL MEASURING POINT VISIBLE?

YES	NO
X	
	X
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

53.4

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

43.25

MEASURE WELL DIAMETER (Inches):

4

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

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

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

CLOSE

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

overhead lines, close to fence, railroad tracks

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

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

outside site fence, surrounded by overgrown vegetation

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

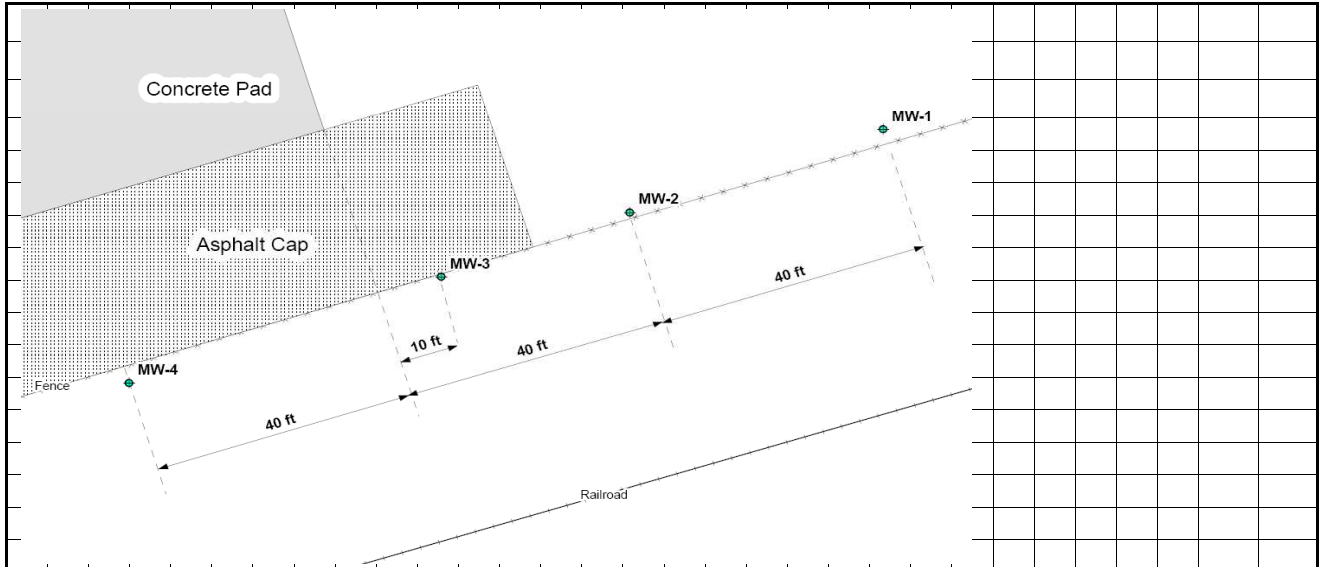
Capped area on-site. Gas station to the east of the Site.

REMARKS:

New bolts needed

MONITORING WELL INSPECTION LOG

SKETCH



looking towards well from west



looking at well from outside site fence



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/23/2011 1208

WELL ID.: LMW-5

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 77.85 Longitude: 73° 25.45 See Report

PDOP Reading from Trimble pathfinder: Satellites:

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X
X	

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

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

YES	NO
X	
X	
	X

SURFACE SEAL PRESENT?

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PID

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

2 FT

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

8

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

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

WELL MEASURING POINT VISIBLE?

YES	NO
	X
	X
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

50

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

44.92

MEASURE WELL DIAMETER (Inches):

4

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

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

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

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

Overgrown vegetation, accessible by truck mounted rig.

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

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

located in a field surrounded by overgrown vegetation

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

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

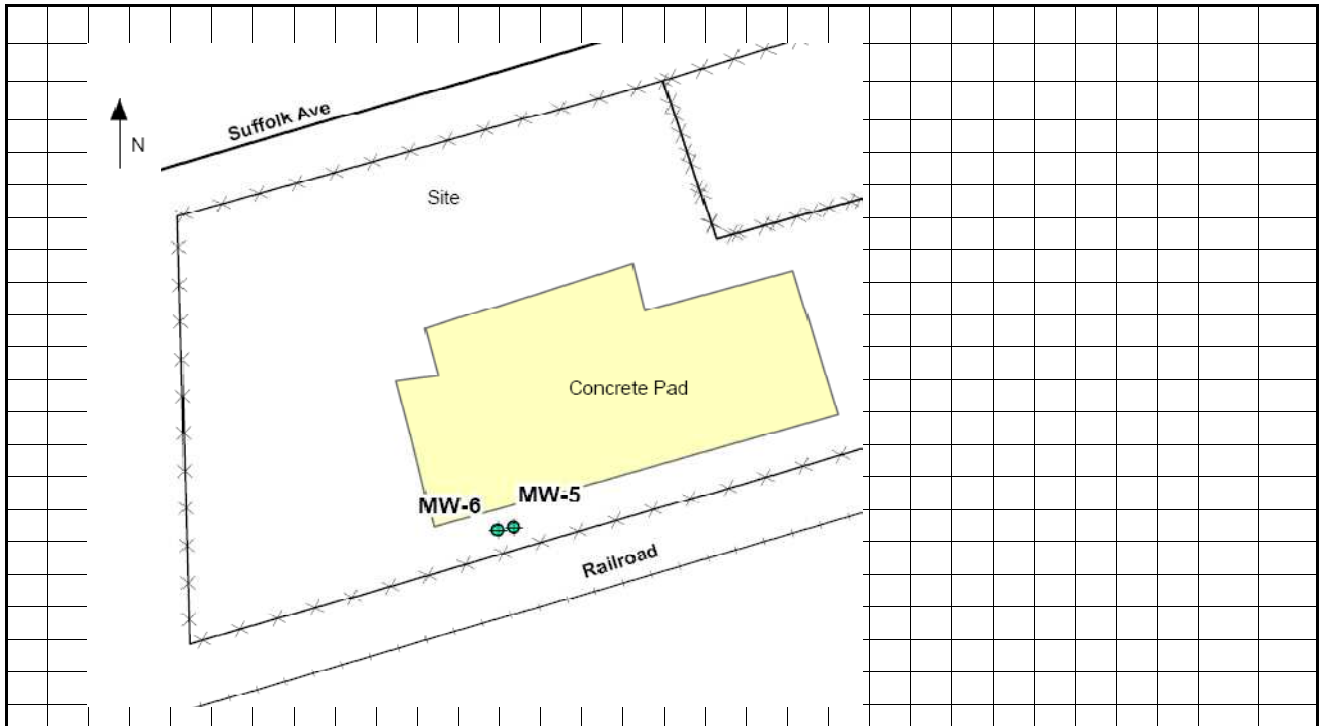
REMARKS:

Needs lock, protective casing lid needs to be fixed, should get a new well cap

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

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/23/2011 1207

WELL ID.: LMW-6

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 77.85 Longitude: 73° 25.45 See Report

PDOP Reading from Trimble pathfinder: Satellites:

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X
X	

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

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

YES	NO
	X
	X
X	

SURFACE SEAL PRESENT?

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PID

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

8"

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

8

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

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

WELL MEASURING POINT VISIBLE?

YES	NO
	X
	X
	X
X	
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

265

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

44.8

MEASURE WELL DIAMETER (Inches):

4

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

Average

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

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

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

Overgrown vegetation, accessible by truck mounted rig.

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

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

located in a field surrounded by overgrown vegetation

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

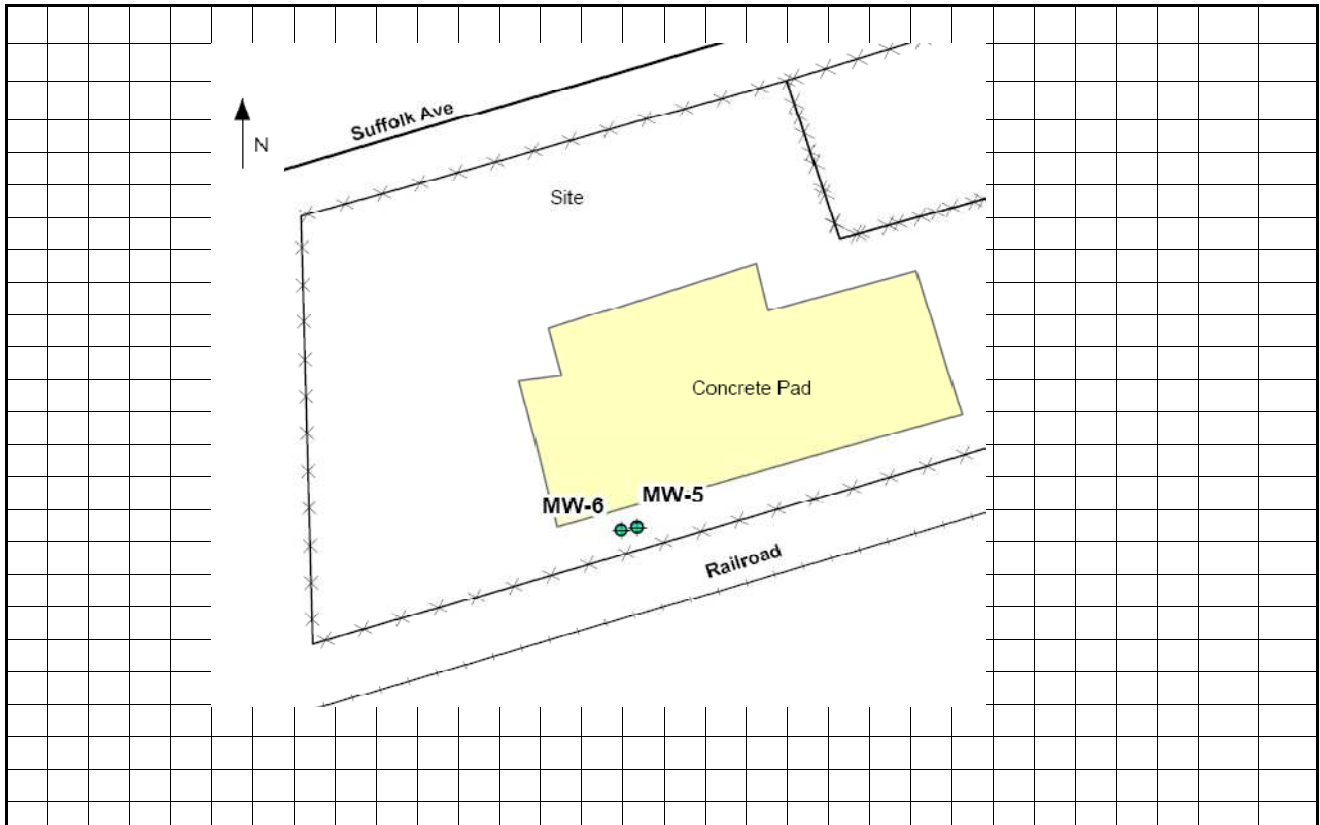
Capped area on-site. Gas station to the east of the Site.

REMARKS:

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

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/24/2011 1630

WELL ID.: LMW-10

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 77.83 Longitude: 73° 25.36 See Report

PDOP Reading from Trimble pathfinder: _____ Satellites: _____

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:

YES	NO
X	

SURFACE SEAL PRESENT?

YES	NO
X	

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

X	

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

X	

HEADSPACE READING (ppm) AND INSTRUMENT USED 0.0 PIF

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

PROTECTIVE CASING MATERIAL TYPE: SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 8

LOCK PRESENT?

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): 50

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 42.12

MEASURE WELL DIAMETER (Inches): 4

WELL CASING MATERIAL: PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: RUSTY

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

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES -

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

Accessible by truck mounted rig

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

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

baseball field

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

Recharge Basin

REMARKS:

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/24/2011 1430

WELL ID.: LMW-12

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 77.76 Longitude: 73° 25.27 See Report

PDOP Reading from Trimble pathfinder: _____ Satellites: _____

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:

YES	NO
X	

SURFACE SEAL PRESENT?

YES	NO
X	

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

X	

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

X	

HEADSPACE READING (ppm) AND INSTRUMENT USED 0.0 PID

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

PROTECTIVE CASING MATERIAL TYPE: SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 8

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): 49.30

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 41.69

MEASURE WELL DIAMETER (Inches): 2

WELL CASING MATERIAL: PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD

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

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES -

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

Accessible by truck mounted rig

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

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

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

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

Recharge basin across First St

REMARKS:

New bolts needed

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108
INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/24/2011 1435
WELL ID.: LMW-14

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 77.76 Longitude: 73° 25.27 See Report
PDOP Reading from Trimble pathfinder: _____ Satellites: _____
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:

YES	NO
X	

SURFACE SEAL PRESENT?

X	

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

X	

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

X	

HEADSPACE READING (ppm) AND INSTRUMENT USED 0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 8

LOCK PRESENT?

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): 100
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 41.82
MEASURE WELL DIAMETER (Inches): 2
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: Cracked
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES -

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

Accessible by truck mounted rig

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

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

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

Recharge basin across First St

REMARKS:

PVC cracked and new bolts needed

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108
INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/24/2011 1645
WELL ID.: LMW-16

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 77.83 Longitude: 73° 25.36 See Report
PDOP Reading from Trimble pathfinder: _____ Satellites: _____
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)

YES	NO
X	

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

YES	NO
X	

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 0.0 PIF
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) NA
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 8

LOCK PRESENT?

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): 99.2
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 42.03
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.

baseball field

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

Recharge Basin

REMARKS:

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/24/2011 0917

WELL ID.: LMW-18

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 77.79 Longitude: 73° 25.44 See Report

PDOP Reading from Trimble pathfinder: Satellites:

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

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

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

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PID

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

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

8

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

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

WELL MEASURING POINT VISIBLE?

YES	NO
X	
	X
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

150

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

41.43

MEASURE WELL DIAMETER (Inches):

2

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

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

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

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

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

Accessed through second gate.

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

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

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

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

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

Recharge Basin

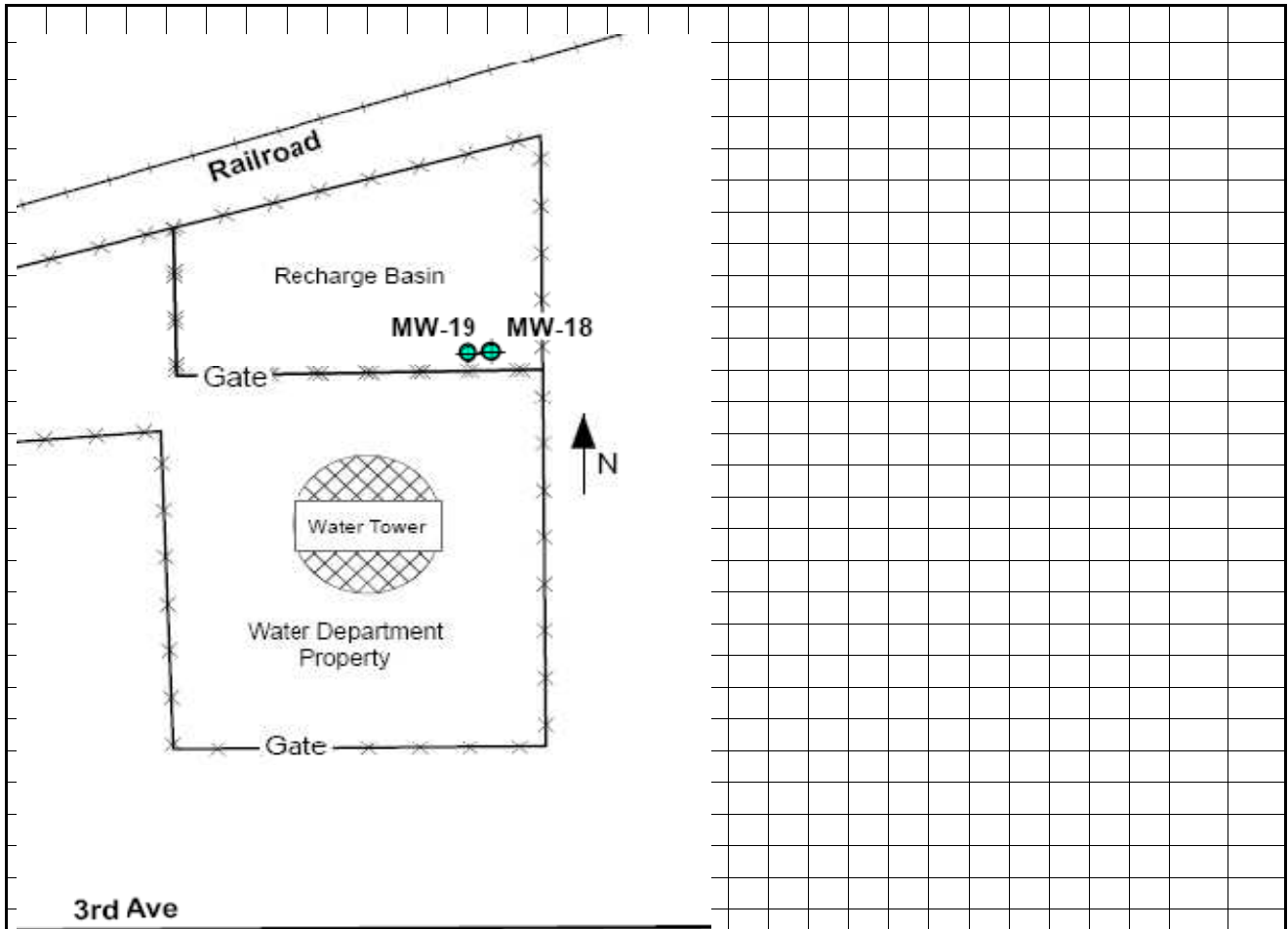
REMARKS:

Location shown in workplan has MW-19 and MW-18 reversed. Corrected in sketch below.

Coordinates above corrected.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/24/2011 0915

WELL ID.: LMW-19

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 77.79 Longitude: 73° 25.44 See Report

PDOP Reading from Trimble pathfinder: Satellites:

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X
X	

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

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

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PID

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

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

12

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):

265

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

44.39

MEASURE WELL DIAMETER (Inches):

2

WELL CASING MATERIAL:

PVC

PHYSICAL CONDITION OF VISIBLE WELL CASING:

GOOD

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

-

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

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

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

Accessed through second gate.

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

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

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

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

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

Recharge Basin

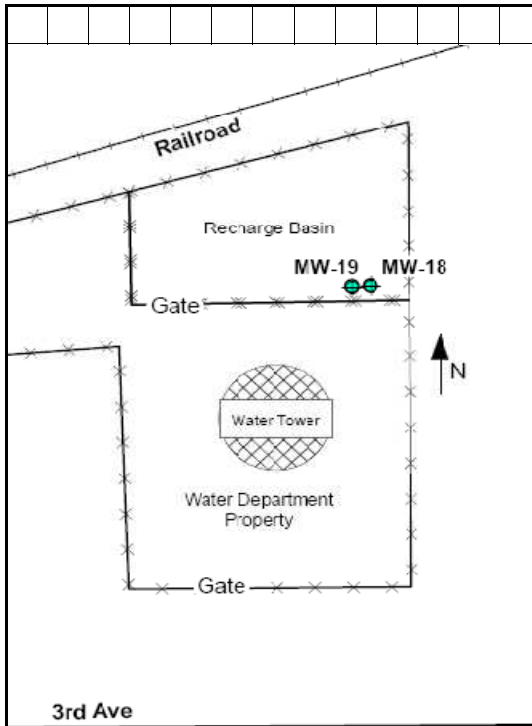
REMARKS:

Location shown in workplan has MW-19 and MW-18 reversed. Corrected in sketch below.

Coordinates above corrected.

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/26/2011 1310

WELL ID.: LMW-20

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 77.71 Longitude: 73° 25.24 See Report

PDOP Reading from Trimble pathfinder: Satellites:

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X
X	

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

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

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED

0.0 PIF

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

NA

PROTECTIVE CASING MATERIAL TYPE:

SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

8

LOCK PRESENT?

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):

150

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

40.95

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 in between trees

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

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Grassy area in right of way along 3rd Ave

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

Recharge Basin

REMARKS:

New bolts needed

MONITORING WELL INSPECTION LOG

SKETCH



SITE NAME: Liberty Industrial Finishing

SITE ID.: 1-52-108

INSPECTOR: CF/SW

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 05/26/2011 1305

WELL ID.: LMW-21

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? Latitude: 40° 77.71 Longitude: 73° 25.24 See Report

PDOP Reading from Trimble pathfinder: _____ Satellites: _____

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)

YES	NO
X	

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

YES	NO
X	

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 0.0 PIF

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

PROTECTIVE CASING MATERIAL TYPE: SS

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 8

LOCK PRESENT?

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): 110

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 40.92

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 in between trees

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

AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Grassy area in right of way along 3rd Ave

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

Recharge Basin

REMARKS:

New bolts needed

MONITORING WELL INSPECTION LOG

SKETCH



Appendix C

Laboratory Data Summary Packages (Form 1s)

Report Date:
15-Jun-11 13:48



- ☒ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

AECOM Environment
100 Red Schoolhouse Road Suite B-1
Chestnut Ridge, NY 10977

Work Order: K0919
Project : Multi Site G
Project #: LIBERTY

Attn: Paul Kareth

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
K0919-01	LMW-06U	Aqueous	23-May-11 16:50	26-May-11 10:08
K0919-02	LMW-06F	Aqueous	23-May-11 16:50	26-May-11 10:08
K0919-03	LMW-05U	Aqueous	23-May-11 17:05	26-May-11 10:08
K0919-04	LMW-05F	Aqueous	23-May-11 17:05	26-May-11 10:08
K0919-05	LMW-18U	Aqueous	24-May-11 11:45	26-May-11 10:08
K0919-06	LMW-18F	Aqueous	24-May-11 11:45	26-May-11 10:08
K0919-07	LMW-19U	Aqueous	24-May-11 14:10	26-May-11 10:08
K0919-08	LMW-19F	Aqueous	24-May-11 14:10	26-May-11 10:08
K0919-09	LMW-12U	Aqueous	24-May-11 15:35	26-May-11 10:08
K0919-10	LMW-12F	Aqueous	24-May-11 15:35	26-May-11 10:08
K0919-11	LMW-14U	Aqueous	24-May-11 16:10	26-May-11 10:08
K0919-12	LMW-14F	Aqueous	24-May-11 16:10	26-May-11 10:08
K0919-13	LMW-64U	Aqueous	24-May-11 16:13	26-May-11 10:08
K0919-14	LMW-64F	Aqueous	24-May-11 16:13	26-May-11 10:08

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the sample(s) as received. This report may not be reproduced, except in full, without written approval from Mitkem Laboratories.

All applicable NELAP or USEPA CLP requirements have been met.

Mitkem Laboratories is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.mitkem.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
Texas	T104704422-08-TX
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-05-030



Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Identification and Analytical Requirements Summary

Project Name : Multi Site G -- Liberty

SDG : K0919

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
LMW-06U	K0919-01				SW6010_W	
LMW-06U	K0919-01				SW7470	
LMW-06F	K0919-02				SW6010_W	
LMW-06F	K0919-02				SW7470	
LMW-05U	K0919-03				SW6010_W	
LMW-05U	K0919-03				SW7470	
LMW-05F	K0919-04				SW6010_W	
LMW-05F	K0919-04				SW7470	
LMW-18U	K0919-05				SW6010_W	
LMW-18U	K0919-05				SW7470	
LMW-18F	K0919-06				SW6010_W	
LMW-18F	K0919-06				SW7470	
LMW-19U	K0919-07				SW6010_W	
LMW-19U	K0919-07				SW7470	
LMW-19F	K0919-08				SW6010_W	
LMW-19F	K0919-08				SW7470	
LMW-12U	K0919-09				SW6010_W	
LMW-12U	K0919-09				SW7470	
LMW-12F	K0919-10				SW6010_W	
LMW-12F	K0919-10				SW7470	
LMW-14U	K0919-11				SW6010_W	
LMW-14U	K0919-11				SW7470	
LMW-14F	K0919-12				SW6010_W	
LMW-14F	K0919-12				SW7470	
LMW-64U	K0919-13				SW6010_W	
LMW-64U	K0919-13				SW7470	
LMW-64F	K0919-14				SW6010_W	
LMW-64F	K0919-14				SW7470	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary ME

Project Name : Multi Site G -- Liberty

SDG : K0919

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
K0919-01A	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-02A	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-03A	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-04A	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-05A	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-06A	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-07A	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-08A	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-09A	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-09ADUP	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-09AMS	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-10A	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-10ADUP	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-10AMS	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-11A	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-12A	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-13A	AQ	SW6010_W	5/26/2011	6/9/2011
K0919-14A	AQ	SW6010_W	5/26/2011	6/9/2011
SW7470				
K0919-01A	AQ	SW7470	5/26/2011	6/8/2011
K0919-02A	AQ	SW7470	5/26/2011	6/8/2011
K0919-03A	AQ	SW7470	5/26/2011	6/8/2011
K0919-04A	AQ	SW7470	5/26/2011	6/8/2011
K0919-05A	AQ	SW7470	5/26/2011	6/8/2011
K0919-06A	AQ	SW7470	5/26/2011	6/8/2011
K0919-07A	AQ	SW7470	5/26/2011	6/8/2011
K0919-08A	AQ	SW7470	5/26/2011	6/8/2011
K0919-09A	AQ	SW7470	5/26/2011	6/8/2011
K0919-09ADUP	AQ	SW7470	5/26/2011	6/8/2011
K0919-09AMS	AQ	SW7470	5/26/2011	6/8/2011
K0919-10A	AQ	SW7470	5/26/2011	6/8/2011
K0919-10ADUP	AQ	SW7470	5/26/2011	6/8/2011
K0919-10AMS	AQ	SW7470	5/26/2011	6/8/2011
K0919-11A	AQ	SW7470	5/26/2011	6/8/2011
K0919-12A	AQ	SW7470	5/26/2011	6/8/2011
K0919-13A	AQ	SW7470	5/26/2011	6/8/2011
K0919-14A	AQ	SW7470	5/26/2011	6/8/2011

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K0919

Client ID: AECOM_CHSNTRDG

Project: Multi Site G

W/O Name: Multi Site G

Location: MULTI_SITE, LIBERTY

Comments: send invoice to Paul according to e-mail on 5/28/08

Case:

SDG:

PO: 95900-04

HC Due: 06/16/11

Fax Due:

Fax Report: ☐

Report Level: ASP-B

Special Program:

EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K0919-01A	LMW-06U	05/23/2011 16:50	05/26/2011	Aqueous	SW6010_W	/ TAL				Y	M3
K0919-01A	LMW-06U	05/23/2011 16:50	05/26/2011	Aqueous	SW7470	/ TAL					M3
K0919-02A	LMW-06F	05/23/2011 16:50	05/26/2011	Aqueous	SW6010_W	/ TAL				Y	M3
K0919-02A	LMW-06F	05/23/2011 16:50	05/26/2011	Aqueous	SW7470	/ TAL					M3
K0919-03A	LMW-05U	05/23/2011 17:05	05/26/2011	Aqueous	SW6010_W	/ TAL				Y	M3
K0919-03A	LMW-05U	05/23/2011 17:05	05/26/2011	Aqueous	SW7470	/ TAL					M3
K0919-04A	LMW-05F	05/23/2011 17:05	05/26/2011	Aqueous	SW6010_W	/ TAL				Y	M3
K0919-04A	LMW-05F	05/23/2011 17:05	05/26/2011	Aqueous	SW7470	/ TAL					M3
K0919-05A	LMW-18U	05/24/2011 11:45	05/26/2011	Aqueous	SW6010_W	/ TAL				Y	M3
K0919-05A	LMW-18U	05/24/2011 11:45	05/26/2011	Aqueous	SW7470	/ TAL					M3
K0919-06A	LMW-18F	05/24/2011 11:45	05/26/2011	Aqueous	SW6010_W	/ TAL				Y	M3
K0919-06A	LMW-18F	05/24/2011 11:45	05/26/2011	Aqueous	SW7470	/ TAL					M3
K0919-07A	LMW-19U	05/24/2011 14:10	05/26/2011	Aqueous	SW6010_W	/ TAL				Y	M3
K0919-07A	LMW-19U	05/24/2011 14:10	05/26/2011	Aqueous	SW7470	/ TAL					M3
K0919-08A	LMW-19F	05/24/2011 14:10	05/26/2011	Aqueous	SW6010_W	/ TAL				Y	M3
K0919-08A	LMW-19F	05/24/2011 14:10	05/26/2011	Aqueous	SW7470	/ TAL					M3
K0919-09A	LMW-12U	05/24/2011 15:35	05/26/2011	Aqueous	SW6010_W	/ TAL			Y	Y	M3
K0919-09A	LMW-12U	05/24/2011 15:35	05/26/2011	Aqueous	SW7470	/ TAL			Y		M3
K0919-10A	LMW-12F	05/24/2011 15:35	05/26/2011	Aqueous	SW6010_W	/ TAL			Y	Y	M3
K0919-10A	LMW-12F	05/24/2011 15:35	05/26/2011	Aqueous	SW7470	/ TAL			Y		M3
K0919-11A	LMW-14U	05/24/2011 16:10	05/26/2011	Aqueous	SW6010_W	/ TAL				Y	M3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K0919

Client ID: AECOM_CHSNTRDG

Project: Multi Site G

W/O Name: Multi Site G

Location: MULTI_SITE, LIBERTY

Comments: send invoice to Paul according to e-mail on 5/28/08

Case:

SDG:

PO: 95900-04

HC Due: 06/16/11

Fax Due:

Fax Report: ☐

Report Level: ASP-B

Special Program:

EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K0919-11A	LMW-14U	05/24/2011 16:10	05/26/2011	Aqueous	SW7470	/ TAL					M3
K0919-12A	LMW-14F	05/24/2011 16:10	05/26/2011	Aqueous	SW6010_W	/ TAL				Y	M3
K0919-12A	LMW-14F	05/24/2011 16:10	05/26/2011	Aqueous	SW7470	/ TAL					M3
K0919-13A	LMW-64U	05/24/2011 16:13	05/26/2011	Aqueous	SW6010_W	/ TAL				Y	M3
K0919-13A	LMW-64U	05/24/2011 16:13	05/26/2011	Aqueous	SW7470	/ TAL					M3
K0919-14A	LMW-64F	05/24/2011 16:13	05/26/2011	Aqueous	SW6010_W	/ TAL				Y	M3
K0919-14A	LMW-64F	05/24/2011 16:13	05/26/2011	Aqueous	SW7470	/ TAL					M3

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Sample Transmittal Documentation

MITKEM LABORATORIES

Sample Condition Form

Page 1 of 1

Received By: <u>Daniel McKern</u>		Reviewed By: <u>[Signature]</u>		Date: <u>5-26-11</u>		Mitkem Work Order #: <u>K0919</u>				
Client Project: <u>Liberty</u>				Client: <u>Accom</u>						
		Lab Sample ID		Preservation (pH)					VOA Matrix	Soil Headspace or Air Bubble ≥ 1/4"
				HNO ₃	H ₂ SO ₄	HCl	NaOH	H ₃ PO ₄		
1) Cooler Sealed	<u>Yes</u> / No	<u>K0919</u>	<u>01</u>	<u>C2</u>						
			<u>02</u>							
2) Custody Seal(s)	<u>Present</u> / Absent		<u>03</u>							
	<u>Coolers</u> / Bottles		<u>04</u>							
	<u>Intact</u> / Broken		<u>05</u>							
			<u>06</u>							
3) Custody Seal Number(s)	<u>N/A</u>		<u>07</u>							
			<u>08</u>							
			<u>09</u>							
			<u>10</u>							
			<u>11</u>							
4) Chain-of-Custody	<u>Present</u> / Absent		<u>12</u>							
			<u>13</u>							
5) Cooler Temperature	<u>2°C</u>	<u>K0919</u>	<u>14</u>	<u>C2</u>						
IR Temp Gun ID	<u>M-1</u>									
Coolant Condition	<u>iced</u>									
6) Airbill(s)	<u>Present</u> / Absent									
Airbill Number(s)	<u>Courier</u>									
7) Samples Bottles	<u>Intact</u> / Broken / Leaking									
8) Date Received	<u>5-26-11</u>									
9) Time Received	<u>10:08</u>									
Preservative Name/Lot No.:										

VOA Matrix Key:

US = Unpreserved Soil	A = Air
UA = Unpreserved Aqueous	H = HCl
M = MeOH	E = Encore
N = NaHSO ₄	F = Freeze

See Sample Condition Notification/Corrective Action Form yes / no

Form ID: QAF.0006

Rad OK yes / no



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** Metals ***

REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Environment

Project: Multi Site G

Laboratory Workorder / SDG #: K0919

SW846 6010C, SW846 7470A

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code:
SW846 6010C, SW846 7470A

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3005A
Aqueous Samples were prepared following procedures in laboratory test code: SW7470A

V. INSTRUMENTATION

The following instrumentation was used to perform

Instrument Code: FIMS1
Instrument Type: CVAA
Description: FIMS
Manufacturer: Perkin-Elmer
Model: FIMS

Instrument Code: OPTIMA3
Instrument Type: ICP
Description: Optima ICP-OES
Manufacturer: Perkin-Elmer
Model: 4300 DV

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for laboratory control samples were within the QC limits.

2. Matrix spike (MS):

Matrix spikes were performed on samples: LMW-12F (K0919-10AMS) and LMW-12U (K0919-09AMS).

Percent recoveries were within the QC limits with the following exceptions:

LMW-12U (K0919-09AMS), Spike sample recovery is above criteria for Iron at 149% with criteria of (75-125).

D. Post Digestion Spike (PDS):

Post-digestion spike analysis was performed on sample: LMW-12U (K0919-09APDS).

LMW-12U (K0919-09APDS) for Iron due to recovery of this element outside of QC limits in the matrix spike.

E. Duplicate sample:

Duplicate analyses were performed on samples: LMW-12F (K0919-10ADUP) and LMW-12U (K0919-09ADUP).

Relative percent differences were within the QC limits.

F. Serial Dilution (SD):

Serial Dilution analyses were performed on samples: LMW-12F (K0919-10ASD) and LMW-12U (K0919-09ASD).

Percent differences were within the QC limits.

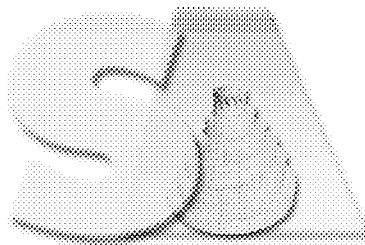
G. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Mitkem, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: 

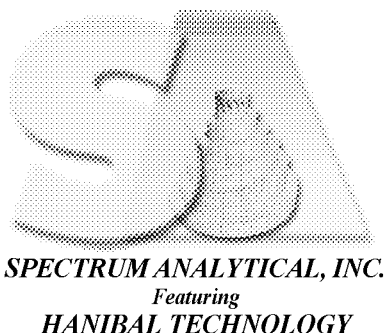
Date: 06/16/11



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Data Flag/Qualifiers:

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
 - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- * For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

- DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS Matrix Spike.
- MSD Matrix Spike Duplicate
- DUP Duplicate analysis
- SD Serial Dilution
- PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

U.S.EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

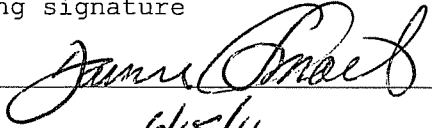
Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SK0919
SOW No.: SW846

EPA Sample No.	Lab Sample ID
<u>LMW-05F</u>	<u>K0919-04</u>
<u>LMW-05U</u>	<u>K0919-03</u>
<u>LMW-06F</u>	<u>K0919-02</u>
<u>LMW-06U</u>	<u>K0919-01</u>
<u>LMW-12F</u>	<u>K0919-10</u>
<u>LMW-12FD</u>	<u>K0919-10DUP</u>
<u>LMW-12FS</u>	<u>K0919-10MS</u>
<u>LMW-12U</u>	<u>K0919-09</u>
<u>LMW-12UD</u>	<u>K0919-09DUP</u>
<u>LMW-12US</u>	<u>K0919-09MS</u>
<u>LMW-14F</u>	<u>K0919-12</u>
<u>LMW-14U</u>	<u>K0919-11</u>
<u>LMW-18F</u>	<u>K0919-06</u>
<u>LMW-18U</u>	<u>K0919-05</u>
<u>LMW-19F</u>	<u>K0919-08</u>
<u>LMW-19U</u>	<u>K0919-07</u>
<u>LMW-64F</u>	<u>K0919-14</u>
<u>LMW-64U</u>	<u>K0919-13</u>

Were ICP interelement corrections applied? Yes/No Yes
Were background corrections applied? Yes/No Yes
If yes-were raw data generated before application of background corrections? Yes/No No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature

Signature: 
Date: 6/15/11

Name: Dawn E. Smart
Title: CLP Project Manager

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-05F

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-04Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	8.3	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	5400			P
7440-47-3	Chromium	0.88	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	54.3	B	N	P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	2140			P
7439-96-5	Manganese	10.0	U		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	1.3	B		P
7440-09-7	Potassium	613	B		P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	7420			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	24.5	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-05U

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-03Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	9.0	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	6280			P
7440-47-3	Chromium	1.8	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	151	B	N	P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	2370			P
7439-96-5	Manganese	10.4	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	2.5	B		P
7440-09-7	Potassium	627	B		P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	8000			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	27.9	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-06F

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-02Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	33.9	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	20000			P
7440-47-3	Chromium	14.7	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	31.0	U	N	P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	2240			P
7439-96-5	Manganese	10.0	U		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	0.85	U		P
7440-09-7	Potassium	3530			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	7890			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	18.8	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-06U

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-01Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	34.4	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	19500			P
7440-47-3	Chromium	15.7	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	31.0	U	N	P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	2190			P
7439-96-5	Manganese	10.0	U		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	0.85	U		P
7440-09-7	Potassium	3500			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	7760			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	16.6	B		P

Comments:

U.S. EPA - CLP

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-12F

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-10Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	28.1	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	4.5	B		P
7440-70-2	Calcium	18700			P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	1620		N	P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3310			P
7439-96-5	Manganese	37.3	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	1.9	B		P
7440-09-7	Potassium	2870			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	7660			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.5	B		P
7440-66-6	Zinc	52.1			P

Comments:

U.S. EPA - CLP

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-12U

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-09Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12000			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	5.1	B		P
7440-39-3	Barium	88.9	B		P
7440-41-7	Beryllium	0.79	B		P
7440-43-9	Cadmium	54.8			P
7440-70-2	Calcium	23300			P
7440-47-3	Chromium	72.8			P
7440-48-4	Cobalt	4.1	B		P
7440-50-8	Copper	147			P
7439-89-6	Iron	11300		N	P
7439-92-1	Lead	230			P
7439-95-4	Magnesium	5760			P
7439-96-5	Manganese	77.6			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	18.5	B		P
7440-09-7	Potassium	3670			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	8250			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	33.0	B		P
7440-66-6	Zinc	488			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-14F

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-12Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	50.4	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	7.6			P
7440-70-2	Calcium	18400			P
7440-47-3	Chromium	29.6			P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	1430		N	P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3700			P
7439-96-5	Manganese	235			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	8.7	B		P
7440-09-7	Potassium	4570			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	20300			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	70.1			P

Comments:

U.S. EPA - CLP

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-14U

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-11Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	652			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	5.6	B		P
7440-39-3	Barium	57.1	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	9.2			P
7440-70-2	Calcium	18300			P
7440-47-3	Chromium	51.3			P
7440-48-4	Cobalt	0.72	B		P
7440-50-8	Copper	13.6	B		P
7439-89-6	Iron	1780		N	P
7439-92-1	Lead	18.8			P
7439-95-4	Magnesium	3840			P
7439-96-5	Manganese	260			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	11.8	B		P
7440-09-7	Potassium	4430			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	20400			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	2.4	B		P
7440-66-6	Zinc	99.1			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-18F

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-06Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	104	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	2.9	B		P
7440-70-2	Calcium	21900			P
7440-47-3	Chromium	2.3	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	31.0	U	N	P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	4560			P
7439-96-5	Manganese	421			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	2.4	B		P
7440-09-7	Potassium	12500			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	30200			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	33.8	B		P

Comments:

U.S. EPA - CLP

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-18U

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-05Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	193	B		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	101	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	3.0	B		P
7440-70-2	Calcium	21100			P
7440-47-3	Chromium	3.1	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	6.9	B		P
7439-89-6	Iron	327		N	P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	4380			P
7439-96-5	Manganese	521			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	3.4	B		P
7440-09-7	Potassium	11500			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	28400			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	37.2	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-19F

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-08Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	12.6	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	2.4	B		P
7440-70-2	Calcium	11700			P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	31.0	U	N	P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	4480			P
7439-96-5	Manganese	10.0	U		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	0.85	U		P
7440-09-7	Potassium	1120			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	14600			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	28.2	B		P

Comments:

U.S. EPA - CLP

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-19U

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-07Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	13.0	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	11600			P
7440-47-3	Chromium	0.94	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	40.1	B	N	P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	4460			P
7439-96-5	Manganese	10.0	U		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	0.85	U		P
7440-09-7	Potassium	993	B		P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	14600			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	28.0	B		P

Comments:

U.S. EPA - CLP

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-64F

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-14Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	49.4	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	7.8			P
7440-70-2	Calcium	18400			P
7440-47-3	Chromium	29.7			P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	32.8	B	N	P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3750			P
7439-96-5	Manganese	230			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	8.5	B		P
7440-09-7	Potassium	4440			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	20500			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	69.4			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-64U

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLab Sample ID: K0919-13Level (low/med): MEDDate Received: 05/26/2011% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	718			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	57.8	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	9.4			P
7440-70-2	Calcium	18200			P
7440-47-3	Chromium	51.8			P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	13.8	B		P
7439-89-6	Iron	1750		N	P
7439-92-1	Lead	20.0			P
7439-95-4	Magnesium	3850			P
7439-96-5	Manganese	262			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	10.7	B		P
7440-09-7	Potassium	4440			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	20000			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	2.3	B		P
7440-66-6	Zinc	98.9			P

Comments:

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SK0919

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum	10000.0	10081.55	100.8	10000.0	10159.88	101.6	10291.65	102.9	P
Antimony	500.0	512.83	102.6	500.0	504.03	100.8	511.99	102.4	P
Arsenic	500.0	486.53	97.3	500.0	494.48	98.9	501.26	100.3	P
Barium	10000.0	10264.79	102.6	10000.0	10423.84	104.2	10488.00	104.9	P
Beryllium	250.0	251.05	100.4	250.0	252.44	101.0	254.28	101.7	P
Cadmium	250.0	248.50	99.4	250.0	247.55	99.0	253.53	101.4	P
Calcium	25000.0	25766.81	103.1	25000.0	26144.31	104.6	26389.27	105.6	P
Chromium	1000.0	1024.31	102.4	1000.0	1026.46	102.6	1044.41	104.4	P
Cobalt	2500.0	2618.25	104.7	2500.0	2626.91	105.1	2675.30	107.0	P
Copper	1250.0	1253.46	100.3	1250.0	1254.75	100.4	1278.49	102.3	P
Iron	5000.0	5178.40	103.6	5000.0	5238.84	104.8	5334.78	106.7	P
Lead	500.0	502.62	100.5	500.0	510.49	102.1	515.06	103.0	P
Magnesium	25000.0	25076.73	100.3	25000.0	25107.40	100.4	25556.91	102.2	P
Manganese	2500.0	2547.55	101.9	2500.0	2595.88	103.8	2596.11	103.8	P
Nickel	2500.0	2560.73	102.4	2500.0	2561.84	102.5	2613.13	104.5	P
Selenium	500.0	487.45	97.5	500.0	493.12	98.6	501.73	100.3	P
Silver	1250.0	1298.81	103.9	1250.0	1303.57	104.3	1323.65	105.9	P
Thallium	500.0	506.82	101.4	500.0	514.97	103.0	519.87	104.0	P
Vanadium	2500.0	2496.82	99.9	2500.0	2506.67	100.3	2549.55	102.0	P
Zinc	2500.0	2568.50	102.7	2500.0	2553.75	102.2	2617.28	104.7	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SK0919

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	10413.36	104.1	10285.28	102.9	P
Antimony				500.0	511.43	102.3	512.22	102.4	P
Arsenic				500.0	502.02	100.4	499.47	99.9	P
Barium				10000.0	10532.75	105.3	10392.70	103.9	P
Beryllium				250.0	255.55	102.2	255.32	102.1	P
Cadmium				250.0	254.09	101.6	250.03	100.0	P
Calcium				25000.0	26533.35	106.1	26449.72	105.8	P
Chromium				1000.0	1055.77	105.6	1050.64	105.1	P
Cobalt				2500.0	2696.75	107.9	2665.88	106.6	P
Copper				1250.0	1300.99	104.1	1251.57	100.1	P
Iron				5000.0	5354.04	107.1	5279.28	105.6	P
Lead				500.0	517.57	103.5	512.72	102.5	P
Magnesium				25000.0	26114.28	104.5	25440.09	101.8	P
Manganese				2500.0	2600.31	104.0	2589.96	103.6	P
Nickel				2500.0	2643.35	105.7	2619.30	104.8	P
Selenium				500.0	500.44	100.1	494.89	99.0	P
Silver				1250.0	1355.67	108.5	1330.51	106.4	P
Thallium				500.0	525.40	105.1	523.88	104.8	P
Vanadium				2500.0	2610.44	104.4	2554.38	102.2	P
Zinc				2500.0	2623.85	105.0	2580.04	103.2	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: _____

SK0919

Initial Calibration Source: _____

Continuing Calibration Source: _____

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	10454.85	104.5	10387.66	103.9	P
Antimony				500.0	513.51	102.7	507.95	101.6	P
Arsenic				500.0	506.73	101.3	495.45	99.1	P
Barium				10000.0	10584.19	105.8	10399.49	104.0	P
Beryllium				250.0	258.35	103.3	254.94	102.0	P
Cadmium				250.0	254.75	101.9	252.58	101.0	P
Calcium				25000.0	26836.68	107.3	26288.20	105.2	P
Chromium				1000.0	1066.50	106.6	1064.56	106.5	P
Cobalt				2500.0	2716.36	108.7	2704.81	108.2	P
Copper				1250.0	1279.79	102.4	1263.56	101.1	P
Iron				5000.0	5367.93	107.4	5346.90	106.9	P
Lead				500.0	519.37	103.9	509.66	101.9	P
Magnesium				25000.0	25868.91	103.5	25789.05	103.2	P
Manganese				2500.0	2631.38	105.3	2588.20	103.5	P
Nickel				2500.0	2660.35	106.4	2660.45	106.4	P
Selenium				500.0	504.74	100.9	496.77	99.4	P
Silver				1250.0	1345.63	107.7	1344.28	107.5	P
Thallium				500.0	529.60	105.9	517.79	103.6	P
Vanadium				2500.0	2591.95	103.7	2586.87	103.5	P
Zinc				2500.0	2635.36	105.4	2613.49	104.5	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: _____

SK0919

Initial Calibration Source: _____

Continuing Calibration Source: _____

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	10456.01	104.6			P
Antimony				500.0	511.36	102.3			P
Arsenic				500.0	501.04	100.2			P
Barium				10000.0	10349.03	103.5			P
Beryllium				250.0	256.95	102.8			P
Cadmium				250.0	250.80	100.3			P
Calcium				25000.0	26778.55	107.1			P
Chromium				1000.0	1071.10	107.1			P
Cobalt				2500.0	2706.15	108.2			P
Copper				1250.0	1253.43	100.3			P
Iron				5000.0	5366.21	107.3			P
Lead				500.0	515.62	103.1			P
Magnesium				25000.0	25860.73	103.4			P
Manganese				2500.0	2596.73	103.9			P
Nickel				2500.0	2661.31	106.5			P
Selenium				500.0	501.15	100.2			P
Silver				1250.0	1348.65	107.9			P
Thallium				500.0	526.17	105.2			P
Vanadium				2500.0	2591.65	103.7			P
Zinc				2500.0	2599.15	104.0			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

2A

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919

Initial Calibration Source:

Continuing Calibration Source:

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Potassium	25000.0	24197.93	96.8	25000.0	25665.77	102.7	26120.93	104.5	P
Sodium	25000.0	25016.29	100.1	25000.0	26173.23	104.7	26683.14	106.7	P

ilm11.06.02.B

2A

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919

Initial Calibration Source:

Continuing Calibration Source:

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Potassium				25000.0	26065.33	104.3	26277.78	105.1	P
Sodium				25000.0	26600.80	106.4	26871.45	107.5	P

ilm11.06.02.B

2A

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919

Initial Calibration Source:

Continuing Calibration Source:

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Potassium				25000.0	26418.99	105.7			P
Sodium				25000.0	26966.48	107.9			P

ilm11.06.02.B

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919Preparation Blank Matrix (soil/water): WATER Method Blank ID:Preparation Blank Concentration Units (ug/L or mg/kg): UG/L **MB-59654****FIMS1_110608C**

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Mercury	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U	CV

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

FIMS1_110608C

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	1	C	2	C	3	C		C	M
Mercury			0.028	U	0.028	U					CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

MB-59617

OPTIMA3_110609A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	66.0	U	66.0	U	66.0	U	66.0	U	66.000	U	P
Antimony	9.3	U	9.3	U	9.3	U	9.3	U	9.300	U	P
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Barium	1.2	B	1.1	U	1.3	B	1.1	U	1.100	U	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.260	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.890	U	P
Calcium	110.0	U	-115.5	B	110.0	U	110.0	U	110.000	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.640	U	P
Cobalt	0.7	U	0.7	U	0.7	U	0.7	U	0.670	U	P
Copper	3.6	U	3.6	U	3.6	U	3.6	U	3.600	U	P
Iron	31.0	U	31.0	U	31.0	U	31.0	U	31.000	U	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Magnesium	76.0	U	76.0	U	76.0	U	76.0	U	76.000	U	P
Manganese	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	P
Nickel	0.9	U	0.8	U	0.8	U	0.8	U	0.850	U	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	12.000	U	P
Silver	10.4	B	6.9	U	6.9	U	6.9	U	6.900	U	P
Thallium	6.2	U	6.2	U	6.2	U	6.2	U	6.200	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	1.100	U	P
Zinc	4.9	U	4.9	U	4.9	U	4.9	U	4.900	U	P

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919

Preparation Blank Matrix (soil/water): WATER Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L MB-59617

OPTIMA3_110609B

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Potassium	76.0	U	76.0	U	76.0	U	76.0	U	76.000	U	P
Sodium	29.0	U	29.0	U	29.0	U	29.0	U	29.000	U	P

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

OPTIMA3_110609B

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	1	C	2	C	3	C		C	M
Potassium			127.1	B	131.7	B					P
Sodium			-49.3	B	29.0	U					P

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: _____

SK0919

ICP ID Number: _____

OPTIMA3

ICS Source: _____

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found			
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	500000	500000	497981	504269.6	100.9				
Antimony	0	600	-16	610.2	101.7				
Arsenic	0	100	-6	100.5	100.5				
Barium	0	500	5	525.6	105.1				
Beryllium	0	500	0	509.3	101.9				
Cadmium	0	1000	-8	971.2	97.1				
Calcium	500000	500000	545126	546062.2	109.2				
Chromium	0	500	1	505.7	101.1				
Cobalt	0	500	-3	490.4	98.1				
Copper	0	500	-16	520.7	104.1				
Iron	200000	200000	197092	200004	100.0				
Lead	0	500	3	492.7	98.5				
Magnesium	500000	500000	501876	506640.4	101.3				
Manganese	0	500	-17	491.7	98.3				
Nickel	0	1000	-5	963.1	96.3				
Selenium	0	500	-4	493.8	98.8				
Silver	0	200	-2	226.4	113.2				
Thallium	0	100	-12	84.7	84.7				
Vanadium	0	500	2	518.6	103.7				
Zinc	0	1000	3	995.1	99.5				

U.S. EPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919

ICP ID Number: OPTIMA3 ICS Source:

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found			
	Sol.	Sol.	Sol.	Sol.		Sol.	Sol.		
	A	AB	A	AB	%R	A	%R	AB	%R
Potassium	0	25000	134	29621.1	118.5				
Sodium	0	25000	91	27892.9	111.6				

U.S. EPA - CLP

5A

EPA SAMPLE NO.

SPIKE SAMPLE RECOVERY

LMW-12FS

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLevel (low/med): MED% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	9760	66.0 U	9100	107		P
Antimony	75-125	500	9.3 U	456	110		P
Arsenic	75-125	508	4.3 U	456	112		P
Barium	75-125	9790	28.1 B	9100	107		P
Beryllium	75-125	241	0.26 U	227	106		P
Cadmium	75-125	248	4.5 B	227	107		P
Chromium	75-125	973	0.64 U	910	107		P
Cobalt	75-125	2510	0.67 U	2270	111		P
Copper	75-125	1200	3.6 U	1130	106		P
Iron	75-125	6640	1620	4550	110		P
Lead	75-125	503	4.2 U	455	110		P
Manganese	75-125	2470	37.3 B	2270	107		P
Nickel	75-125	2480	1.9 B	2270	109		P
Selenium	75-125	489	12.0 U	455	108		P
Silver	75-125	1280	6.9 U	1130	113		P
Thallium	75-125	502	6.2 U	455	110		P
Vanadium	75-125	2430	1.5 B	2270	107		P
Zinc	75-125	2480	52.1	2270	107		P
Mercury	75-125	4.3	0.028 U	4.6	95		CV

Comments:

U.S. EPA - CLP

5A

EPA SAMPLE NO.

SPIKE SAMPLE RECOVERY

LMW-12US

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLevel (low/med): MED% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	23100	12000	9100	121		P
Antimony	75-125	464	9.3	456	102		P
Arsenic	75-125	496	5.1	456	108		P
Barium	75-125	9600	88.9	9100	105		P
Beryllium	75-125	238	0.79	227	105		P
Cadmium	75-125	293	54.8	227	105		P
Chromium	75-125	1030	72.8	910	106		P
Cobalt	75-125	2460	4.1	2270	108		P
Copper	75-125	1290	147	1130	102		P
Iron	75-125	18000	11300	4550	149	N	P
Lead	75-125	717	230	455	107		P
Manganese	75-125	2460	77.6	2270	105		P
Nickel	75-125	2440	18.5	2270	107		P
Selenium	75-125	472	12.0	455	104		P
Silver	75-125	1240	6.9	1130	110		P
Thallium	75-125	489	6.2	455	108		P
Vanadium	75-125	2380	33.0	2270	104		P
Zinc	75-125	2860	488	2270	105		P
Mercury	75-125	4.4	0.028	4.6	96		CV

Comments:

U.S. EPA - CLP

5B

EPA SAMPLE NO.

POST DIGEST SPIKE SAMPLE RECOVERY

LMW-12UA

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLevel (low/med): MED

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit %R	Spike Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Iron		15296.79	11275.24	4550.0	88		P

Comments:

U.S. EPA - CLP

6

EPA SAMPLE NO.

DUPLICATES

LMW-12UD

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLevel (low/med): MED% Solids for Sample: 0.0% Solids for Duplicate: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		12017.3188		13494.2251		11.6		P
Antimony		9.3000	U	9.3000	U			P
Arsenic		5.0968	B	6.1982	B	19.5		P
Barium		88.9454	B	94.4757	B	6		P
Beryllium		0.7939	B	0.8787	B	10.1		P
Cadmium		54.7625		55.5092		1.4		P
Calcium		23262.3706		23741.3916		2		P
Chromium	20.0	72.7956		80.8820		10.5		P
Cobalt		4.1281	B	4.7087	B	13.1		P
Copper	30.0	146.5661		150.5853		2.7		P
Iron		11275.2409		12708.7579		12		P
Lead		230.2541		238.5044		3.5		P
Magnesium		5764.0701		5996.3680		4		P
Manganese	50.0	77.6417		84.8155		8.8		P
Nickel		18.5054	B	20.2083	B	8.8		P
Potassium	1000.0	3670.6768		3837.7109		4.4		P
Selenium		12.0000	U	12.0000	U			P
Silver		6.9000	U	6.9000	U			P
Sodium		8249.5374		8444.9277		2.3		P
Thallium		6.2000	U	6.2000	U			P
Vanadium		32.9588	B	36.9544	B	11.4		P
Zinc		487.5494		503.7360		3.3		P
Mercury		0.0280	U	0.0280	U			CV

U.S. EPA - CLP

6

EPA SAMPLE NO.

DUPLICATES

LMW-12FD

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLevel (low/med): MED% Solids for Sample: 0.0% Solids for Duplicate: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		66.0000	U	66.0000	U			P
Antimony		9.3000	U	9.3000	U			P
Arsenic		4.3000	U	4.3000	U			P
Barium		28.1266	B	28.3820	B	0.9		P
Beryllium		0.2600	U	0.2600	U			P
Cadmium		4.5045	B	4.5912	B	1.9		P
Calcium		18740.1506		18959.9722		1.2		P
Chromium		0.6400	U	0.6400	U			P
Cobalt		0.6700	U	0.6700	U			P
Copper		3.6000	U	3.6000	U			P
Iron		1620.3781		1652.4422		2		P
Lead		4.2000	U	4.2000	U			P
Magnesium		3310.9779		3365.3290		1.6		P
Manganese		37.3331	B	37.8113	B	1.3		P
Nickel		1.9116	B	1.8957	B	0.8		P
Potassium	1000.0	2872.6087		2853.0549		0.7		P
Selenium		12.0000	U	12.0000	U			P
Silver		6.9000	U	6.9000	U			P
Sodium		7660.1670		7586.5286		1		P
Thallium		6.2000	U	6.2000	U			P
Vanadium		1.4990	B	1.2463	B	18.4		P
Zinc	50.0	52.1022		49.3972	B	5.3		P
Mercury		0.0280	U	0.0280	U			CV

U.S. EPA - CLP

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: _____

SK0919

Solid LCS Source: _____

LCS(D) ID:

Aqueous LCS Source: _____

LCS-59617

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	9423.16	103.6						
Antimony	455.0	493.60	108.5						
Arsenic	455.0	489.29	107.5						
Barium	9100.0	9499.96	104.4						
Beryllium	227.0	235.41	103.7						
Cadmium	227.0	236.68	104.3						
Calcium	22700.0	23930.26	105.4						
Chromium	910.0	947.48	104.1						
Cobalt	2270.0	2424.71	106.8						
Copper	1130.0	1137.50	100.7						
Iron	4550.0	4865.19	106.9						
Lead	455.0	486.34	106.9						
Magnesium	22700.0	23340.44	102.8						
Manganese	2270.0	2376.47	104.7						
Nickel	2270.0	2406.02	106.0						
Potassium	22700.0	23969.91	105.6						
Selenium	455.0	477.20	104.9						
Silver	1130.0	1231.65	109.0						
Sodium	22700.0	24799.18	109.2						
Thallium	455.0	485.93	106.8						
Vanadium	2270.0	2328.87	102.6						
Zinc	2270.0	2348.50	103.5						

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7
LABORATORY CONTROL SAMPLE

Lab Name:	Spectrum Analytical, Inc.	Contract:	95900-04				
Lab Code:	MITKEM	Case No.:		SAS No.:		SDG No.:	SK0919
Solid LCS Source:		LCS(D) ID:					
Aqueous LCS Source:		LCS-59654					

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte	True	Found	%R	True	Found	C	Limits	%R	
Mercury	4.6	4.59	99.8						

U.S. EPA - CLP

9

EPA SAMPLE NO.

ICP SERIAL DILUTIONS

LMW-12U

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLevel (low/med): MED

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	12017.32		12860.13		7		P
Antimony	9.30	U	46.50	U			P
Arsenic	5.10	B	36.56		617		P
Barium	88.95	B	95.12	B	7		P
Beryllium	0.79	B	1.30	U	100		P
Cadmium	54.76		56.87		4		P
Calcium	23262.37		24029.80		3		P
Chromium	72.80		75.50		4		P
Cobalt	4.13	B	5.06	B	23		P
Copper	146.57		149.65		2		P
Iron	11275.24		11900.50		6		P
Lead	230.25		243.33		6		P
Magnesium	5764.07		6126.83		6		P
Manganese	77.64		82.51		6		P
Nickel	18.51	B	20.07	B	8		P
Potassium	3670.68		4306.24		17		P
Selenium	12.00	U	60.00	U			P
Silver	6.90	U	34.50	U			P
Sodium	8249.54		8150.11		1		P
Thallium	6.20	U	31.00	U			P
Vanadium	32.96	B	32.94	B	0		P
Zinc	487.55		499.71		3		P

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9

EPA SAMPLE NO.

ICP SERIAL DILUTIONS

LMW-12F

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: SK0919Matrix (soil/water): WATERLevel (low/med): MED

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	66.00	U	330.00	U			P
Antimony	9.30	U	46.50	U			P
Arsenic	4.30	U	25.34				P
Barium	28.13	B	31.89	B	13		P
Beryllium	0.26	U	1.30	U			P
Cadmium	4.50	B	4.45	U	100		P
Calcium	18740.15		19524.35		4		P
Chromium	0.64	U	3.20	U			P
Cobalt	0.67	U	3.35	U			P
Copper	3.60	U	18.00	U			P
Iron	1620.38		1736.53		7		P
Lead	4.20	U	21.00	U			P
Magnesium	3310.98		3580.16		8		P
Manganese	37.33	B	50.00	U	100		P
Nickel	1.91	B	4.25	U	100		P
Potassium	2872.61		2765.32		4		P
Selenium	12.00	U	60.00	U			P
Silver	6.90	U	34.50	U			P
Sodium	7660.17		7524.03		2		P
Thallium	6.20	U	31.00	U			P
Vanadium	1.50	B	5.50	U	100		P
Zinc	52.10		56.70		9		P

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10

METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919Instrument Type: CV InstrumentID: FIMS1 Date: 03/04/2010Preparation Method: 7470AConcentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRDL	MDL
Mercury	253.70	0.2	0.028

Comments:

U.S. EPA - CLP

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919

Instrument Type: P InstrumentID: OPTIMA3 Date: 03/03/2010

Preparation Method: 3005A

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRDL	MDL
Aluminum	308.21	200	66.0
Antimony	206.83	20	9.3
Arsenic	188.98	20	4.3
Barium	233.53	200	1.1
Beryllium	313.11	5.0	0.26
Cadmium	226.50	5.0	0.89
Calcium	227.54	800	110
Chromium	267.72	20	0.64
Cobalt	228.62	50	0.67
Copper	324.75	30	3.6
Iron	273.96	200	31.0
Lead	220.35	10	4.2
Magnesium	279.08	500	76.0
Manganese	257.61	50	10.0
Nickel	231.60	50	0.85
Potassium	766.49	1000	76.0
Selenium	196.03	30	12.0
Silver	328.07	30	6.9
Sodium	589.59	1000	29.0
Thallium	190.80	20	6.2
Vanadium	292.40	50	1.1
Zinc	206.20	50	4.9

Comments:

U.S. EPA - CLP

11A

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SK0919

ICP ID Number:

OPTIMA3

Date:

03/17/2011

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Cr
Aluminum	308.21		0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.83	0.0548458	0.0019692	0.0402283	0.0119694	18.0976000
Arsenic	188.97	0.0241052	-0.0179703	-0.0502240	-0.0108453	-5.3626600
Barium	233.52	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.10	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.1165300	0.0000000	0.0000000
Calcium	227.54	-0.3951530		-53.4983000	0.1370440	-2.4637200
Chromium	267.71	0.0000000	0.0000000	0.0000000	0.0044220	
Cobalt	228.61	0.0000000	0.0000000	0.0342838	0.0000000	-0.0770625
Copper	324.75	0.0000000	0.0000000	-0.0466325	0.0029665	-0.0749057
Iron	273.95	0.0000000	0.0000000		0.0000000	-4.2926900
Lead	220.35	-0.0376433	-0.0020174	0.0000000	0.0000000	0.0000000
Magnesium	279.07	0.0000000	0.0000000	0.0000000		0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0060664	0.0303744	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0068563	0.0029325	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0230022	0.0344876	-0.3266930	-0.0115824	-0.1016280
Silver	328.06	0.0000000	0.0000000	-0.0195341	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	-0.0035055	-0.0281063	-0.0065002	0.2697230
Titanium	334.94	0.0000000	-0.0127604	0.0000000	0.0155639	0.1077440
Vanadium	292.40	0.0000000	0.0000000	-0.0646350	0.0000000	-1.5918000
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	-2.7465900

Comments:

U.S. EPA - CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SK0919

ICP ID Number:

OPTIMA3

Date:

03/17/2011

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cu	Mn	Ni	Tl	Ti
Aluminum	308.21	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.83	0.2323840	0.0000000	0.0219824	0.0879220	1.1106900
Arsenic	188.97	-0.1211030	-0.0818075	-0.0385500	0.0000000	-0.7705050
Barium	233.52	0.0000000	0.0000000	0.0338339	0.0000000	0.0000000
Beryllium	313.10	0.0000000	0.0000000	0.0000000	0.0000000	-1.9571600
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.1051920
Calcium	227.54	5.8225100	0.0000000	28.4899000	3.5969000	5.3831000
Chromium	267.71	0.0000000	0.1940960	0.0000000	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.2228410	0.0000000	1.2071700
Copper	324.75		0.0000000	0.0000000	0.0000000	0.0000000
Iron	273.95	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.3749550	0.1018340	-0.1299870	-0.0630506	-0.5488580
Magnesium	279.07	0.0000000	-4.8641600	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000		0.0420350	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000		0.2792550	0.4816400
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0422333	0.5763650	0.0000000	-0.1188130	0.2916260
Silver	328.06	0.0422486	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	-0.0495957		-7.3156200
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.1659360	
Vanadium	292.40	0.2183960	-0.0806874	0.0000000	0.0000000	0.8845330
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

U.S. EPA - CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc.Contract: 95900-04Lab Code: MITKEM

Case No.: _____

SAS No.: _____

SDG No.: _____

SK0919

ICP ID Number: _____

OPTIMA3Date: 03/17/2011

Analyte	Wave-length (nm)	Interelement Correction Factors for:			
		V	_____	_____	_____
Aluminum	308.21	12.0696000			
Antimony	206.83	-2.5893500			
Arsenic	188.97	0.0000000			
Barium	233.52	-1.1190600			
Beryllium	313.10	-0.0336399			
Cadmium	226.50	0.0000000			
Calcium	227.54	30.3214000			
Chromium	267.71	-0.3004160			
Cobalt	228.61	0.0000000			
Copper	324.75	-0.1475070			
Iron	273.95	-30.2263000			
Lead	220.35	-0.0588981			
Magnesium	279.07	0.0000000			
Manganese	257.61	0.0000000			
Nickel	231.60	0.0000000			
Potassium	766.49	0.0000000			
Selenium	196.02	-0.1688320			
Silver	328.06	-0.8565220			
Sodium	589.59	0.0000000			
Thallium	190.80	-0.8892970			
Titanium	334.94	0.0299746			
Vanadium	292.40				
Zinc	206.20	0.0000000			

Comments:

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ICP LINEAR RANGES (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919
ICP ID Number: OPTIMA3 Date: 03/17/2011

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	0.20	500000	P
Antimony	0.20	50000	P
Arsenic	0.20	50000	P
Barium	0.20	50000	P
Beryllium	0.20	1000	P
Cadmium	0.20	10000	P
Calcium	0.20	500000	P
Chromium	0.20	25000	P
Cobalt	0.20	100000	P
Copper	0.20	50000	P
Iron	0.20	500000	P
Lead	0.20	100000	P
Magnesium	0.20	500000	P
Manganese	0.20	25000	P
Nickel	0.20	100000	P
Potassium	0.20	400000	P
Selenium	0.20	25000	P
Silver	0.20	2500	P
Sodium	0.20	400000	P
Thallium	0.20	25000	P
Vanadium	0.20	50000	P
Zinc	0.20	25000	P

Comments:

U.S. EPA - CLP
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PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919
Preparation Method: 3005A Batch ID: 59617

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	06/07/2011		50
LMW-05F	06/07/2011		50
LMW-05U	06/07/2011		50
LMW-06F	06/07/2011		50
LMW-06U	06/07/2011		50
LMW-12F	06/07/2011		50
LMW-12FD	06/07/2011		50
LMW-12FS	06/07/2011		50
LMW-12U	06/07/2011		50
LMW-12UD	06/07/2011		50
LMW-12US	06/07/2011		50
LMW-14F	06/07/2011		50
LMW-14U	06/07/2011		50
LMW-18F	06/07/2011		50
LMW-18U	06/07/2011		50
LMW-19F	06/07/2011		50
LMW-19U	06/07/2011		50
LMW-64F	06/07/2011		50
LMW-64U	06/07/2011		50
PBW	06/07/2011		50

Comments:

U.S. EPA - CLP
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PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919
Preparation Method: 7470A Batch ID: 59653

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB	06/08/2011		100
CCV	06/08/2011		100
ICB	06/08/2011		100
ICV	06/08/2011		100
S0	06/08/2011		100
S0.2	06/08/2011		100
S1.0	06/08/2011		100
S10.0	06/08/2011		100
S2.0	06/08/2011		100
S5.0	06/08/2011		100

Comments:

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PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919
Preparation Method: 7470A Batch ID: 59654

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	06/08/2011		100
LMW-05F	06/08/2011		100
LMW-05U	06/08/2011		100
LMW-06F	06/08/2011		100
LMW-06U	06/08/2011		100
LMW-12F	06/08/2011		100
LMW-12FD	06/08/2011		100
LMW-12FS	06/08/2011		100
LMW-12U	06/08/2011		100
LMW-12UD	06/08/2011		100
LMW-12US	06/08/2011		100
LMW-14F	06/08/2011		100
LMW-14U	06/08/2011		100
LMW-18F	06/08/2011		100
LMW-18U	06/08/2011		100
LMW-19F	06/08/2011		100
LMW-19U	06/08/2011		100
LMW-64F	06/08/2011		100
LMW-64U	06/08/2011		100
PBW	06/08/2011		100

Comments:

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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
 Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SK0919
 Instrument ID Number: FIMS1 Method: CV
 Start Date: 06/08/2011 End Date: 06/08/2011

FIMS1_110608C

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
S0	1.0	1510															X												
S0.2	1.0	1511															X												
S1.0	1.0	1513															X												
S2.0	1.0	1514															X												
S5.0	1.0	1516															X												
S10.0	1.0	1517															X												
ICV	1.0	1519															X												
ICB	1.0	1520															X												
ZZZZZZ	1.0	1522																											
ZZZZZZ	1.0	1523																											
ZZZZZZ	1.0	1525																											
ZZZZZZ	1.0	1526																											
ZZZZZZ	1.0	1528																											
ZZZZZZ	1.0	1529																											
ZZZZZZ	1.0	1531																											
ZZZZZZ	1.0	1532																											
ZZZZZZ	1.0	1534																											
CCV	1.0	1537															X												
CCB	1.0	1538															X												
ZZZZZZ	1.0	1540																											
ZZZZZZ	1.0	1541																											
ZZZZZZ	1.0	1543																											
ZZZZZZ	1.0	1544																											
ZZZZZZ	1.0	1545																											
ZZZZZZ	1.0	1547																											
ZZZZZZ	1.0	1548																											
ZZZZZZ	1.0	1550																											
ZZZZZZ	1.0	1551																											
ZZZZZZ	1.0	1553																											
CCV	1.0	1554															X												
CCB	1.0	1556															X												
ZZZZZZ	1.0	1557																											

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919
 Instrument ID Number: FIMS1 Method: CV
 Start Date: 06/08/2011 End Date: 06/08/2011

FIMS1_110608C

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
PBW	1.0	1559															X														
LCSW	1.0	1601															X														
ZZZZZZ	1.0	1602																													
LMW-06U	1.0	1604															X														
LMW-06F	1.0	1605															X														
LMW-05U	1.0	1607															X														
LMW-05F	1.0	1608															X														
LMW-18U	1.0	1609															X														
LMW-18F	1.0	1611															X														
CCV	1.0	1613															X														
CCB	1.0	1614															X														
LMW-19U	1.0	1616															X														
LMW-19F	1.0	1617															X														
LMW-12U	1.0	1619															X														
LMW-12UD	1.0	1620															X														
LMW-12US	1.0	1622															X														
LMW-12F	1.0	1623															X														
LMW-12FD	1.0	1624															X														
LMW-12FS	1.0	1626															X														
LMW-14U	1.0	1627															X														
LMW-14F	1.0	1629															X														
CCV	1.0	1630															X														
CCB	1.0	1632															X														
LMW-64U	1.0	1633															X														
LMW-64F	1.0	1635															X														
ZZZZZZ	1.0	1636																													
ZZZZZZ	1.0	1638																													
ZZZZZZ	1.0	1639																													
CCV	1.0	1641															X														
CCB	1.0	1642															X														

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
 Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SK0919
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 06/09/2011 End Date: 06/09/2011

OPTIMA3_110609A

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
S0	1.0	0952		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X					
S1	1.0	0956		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X					
S2	1.0	0959		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X					
S3	1.0	1003		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X					
ICV	1.0	1007		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X					
ICB	1.0	1010		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X					
ZZZZZZ	1.0	1014																													
ZZZZZZ	1.0	1019																													
ICSA	1.0	1023		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X					
ICSAB	1.0	1027		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X					
ZZZZZZ	1.0	1030																													
ZZZZZZ	1.0	1036																													
ZZZZZZ	1.0	1040																													
ZZZZZZ	1.0	1044																													
ZZZZZZ	1.0	1048																													
ZZZZZZ	1.0	1052																													
ZZZZZZ	1.0	1056																													
CCV	1.0	1100		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X					
CCB	1.0	1104		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X					
ZZZZZZ	1.0	1107																													
ZZZZZZ	1.0	1111																													
ZZZZZZ	1.0	1115																													
ZZZZZZ	1.0	1119																													
CCV	1.0	1122		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X					
CCB	1.0	1126		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X					
ZZZZZZ	1.0	1130																													
ZZZZZZ	1.0	1134																													
ZZZZZZ	1.0	1137																													
ZZZZZZ	5.0	1141																													
ZZZZZZ	1.0	1145																													
ZZZZZZ	1.0	1149																													
ZZZZZZ	20.0	1152																													

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 06/09/2011 End Date: 06/09/2011

OPTIMA3_110609A

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
ZZZZZZ	20.0	1156																													
CCV	1.0	1200		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
CCB	1.0	1203		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
ZZZZZZ	20.0	1207																													
ZZZZZZ	20.0	1211																													
ZZZZZZ	20.0	1214																													
ZZZZZZ	100.0	1218																													
CCV	1.0	1222		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
CCB	1.0	1225		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
PBW	1.0	1229		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LCSW	1.0	1233		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-06U	1.0	1236		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-06F	1.0	1240		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-05U	1.0	1244		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-05F	1.0	1248		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-18U	1.0	1251		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-18F	1.0	1255		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
CCV	1.0	1259		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
CCB	1.0	1302		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-19U	1.0	1306		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-19F	1.0	1309		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-12U	1.0	1313		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-12UD	1.0	1317		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-12US	1.0	1321		X	X	X	X	X		X	X	X	X	X		X		X		X	X		X	X	X						
LMW-12UL	5.0	1324		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-12UA	1.0	1328		X									X																		
CCV	1.0	1332		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
CCB	1.0	1336		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-12F	1.0	1339		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-12FD	1.0	1343		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						
LMW-12FS	1.0	1347		X	X	X	X	X	X		X	X	X	X	X		X		X		X	X		X	X	X					
LMW-12FL	5.0	1350		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X						

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 06/09/2011 End Date: 06/09/2011

OPTIMA3_110609A

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
ZZZZZZ	1.0	1354																											
LMW-14U	1.0	1358		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X				
LMW-14F	1.0	1401		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X				
LMW-64U	1.0	1405		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X				
LMW-64F	1.0	1409		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X				
CCV	1.0	1412		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X				
CCB	1.0	1416		X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X				

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
 Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SK0919
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 06/09/2011 End Date: 06/09/2011

OPTIMA3_110609B

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
S0	1.0	1509																	X			X							
S1	1.0	1511																	X			X							
S2	1.0	1513																	X			X							
S3	1.0	1516																	X			X							
ICV	1.0	1518																	X			X							
ICB	1.0	1520																	X			X							
ZZZZZZ	1.0	1523																											
ICSA	1.0	1525																	X			X							
ICSAB	1.0	1528																	X			X							
ZZZZZZ	1.0	1530																											
ZZZZZZ	1.0	1532																											
ZZZZZZ	1.0	1535																											
ZZZZZZ	1.0	1537																											
ZZZZZZ	1.0	1539																											
ZZZZZZ	1.0	1542																											
CCV	1.0	1544																	X			X							
CCB	1.0	1547																	X			X							
ZZZZZZ	1.0	1549																											
ZZZZZZ	1.0	1551																											
ZZZZZZ	1.0	1554																											
ZZZZZZ	1.0	1556																											
ZZZZZZ	1.0	1558																											
ZZZZZZ	1.0	1601																											
ZZZZZZ	5.0	1603																											
ZZZZZZ	1.0	1606																											
CCV	1.0	1608																	X			X							
CCB	1.0	1610																	X			X							
PBW	1.0	1613																	X			X							
LCSW	1.0	1615																	X			X							
LMW-06U	1.0	1617																	X			X							
LMW-06F	1.0	1620																	X			X							
LMW-05U	1.0	1622																	X			X							

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0919
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 06/09/2011 End Date: 06/09/2011

OPTIMA3_110609B

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
LMW-05F	1.0	1624																	X			X							
LMW-18U	1.0	1627																	X			X							
LMW-18F	1.0	1629																	X			X							
CCV	1.0	1632																	X			X							
CCB	1.0	1634																	X			X							
LMW-19U	1.0	1636																	X			X							
LMW-19F	1.0	1639																	X			X							
LMW-12U	1.0	1641																	X			X							
LMW-12UD	1.0	1643																	X			X							
LMW-12UL	5.0	1646																	X			X							
CCV	1.0	1648																	X			X							
CCB	1.0	1651																	X			X							
LMW-12F	1.0	1653																	X			X							
LMW-12FD	1.0	1655																	X			X							
LMW-12FL	5.0	1658																	X			X							
LMW-14U	1.0	1700																	X			X							
LMW-14F	1.0	1703																	X			X							
LMW-64U	1.0	1705																	X			X							
LMW-64F	1.0	1707																	X			X							
CCV	1.0	1710																	X			X							
CCB	1.0	1712																	X			X							

Instrument Raw Data

☒ ICP

☒ Mercury

☐ Cyanide

=====

Reprocessing Begun

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Results Data Set (original): B11060901

Results Library (original): C:\pe\Administrator\Results\Results.mdb

Results Data Set (reprocessed): B11060901A

Results Library (reprocessed): C:\pe\Administrator\Results\Results.mdb

=====

Sequence No.: 1

Autosampler Location: 1

Sample ID: S0

Date Collected: 6/9/2011 9:52:30 AM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:27:26 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S0

Analyte	Mean Corrected		Std.Dev.	RSD	Calib	
	Intensity				Conc.	Units
Y 360.073	1008163.0		6821.02	0.68%	100.00	%
Lu 261.542	955949.9		5729.91	0.60%	100.0	%
Ag 328.068†	-1872.2		20.93	1.12%	[0.00]	mg/L
Al 308.215†	6748.0		107.14	1.59%	[0.00]	mg/L
As 188.979†	2.9		3.75	129.36%	[0.00]	mg/L
Ba 233.527†	-60.8		3.57	5.87%	[0.00]	mg/L
Be 313.107†	-383.0		8.15	2.13%	[0.00]	mg/L
Co 228.616†	17.7		2.84	16.07%	[0.00]	mg/L
Cr 267.716†	-3.2		1.23	38.52%	[0.00]	mg/L
Cu 324.752†	-180.1		74.23	41.21%	[0.00]	mg/L
Fe 273.955†	310.6		9.54	3.07%	[0.00]	mg/L
Mg 279.077†	-239.1		74.65	31.22%	[0.00]	mg/L
Mn 257.610†	-26.5		12.49	47.16%	[0.00]	mg/L
Ni 231.604†	-77.6		6.19	7.98%	[0.00]	mg/L
Pb 220.353†	14.6		4.06	27.78%	[0.00]	mg/L
Sb 206.836†	1.6		2.43	155.34%	[0.00]	mg/L
Se 196.026†	6.5		3.76	57.79%	[0.00]	mg/L
Tl 190.801†	-18.1		0.78	4.31%	[0.00]	mg/L
V 292.402†	-41.7		10.78	25.86%	[0.00]	mg/L
Zn 206.200†	114.9		5.41	4.70%	[0.00]	mg/L
Cd 226.502†	-45.5		8.45	18.58%	[0.00]	mg/L
Ti 334.940†	-433.1		35.36	8.16%	[0.00]	mg/L
Ca 227.546†	240.4		7.65	3.18%	[0.00]	mg/L

=====

Sequence No.: 2

Autosampler Location: 9

Sample ID: S1

Date Collected: 6/9/2011 9:56:10 AM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:27:34 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S1

Analyte	Mean Corrected		Std.Dev.	RSD	Calib	
	Intensity				Conc.	Units
Y 360.073	964500.5		10644.75	1.10%	95.669	%
Lu 261.542	940576.8		9264.65	0.98%	98.39	%
Ag 328.068†	238753.6		7181.32	3.01%	[2.5]	mg/L
Al 308.215†	365330.8		551.53	0.15%	[20]	mg/L
As 188.979†	1421.1		18.30	1.29%	[1]	mg/L
Ba 233.527†	726414.4		4226.52	0.58%	[20]	mg/L
Be 313.107†	664673.5		1786.57	0.27%	[0.5]	mg/L
Co 228.616†	119060.8		995.89	0.84%	[5]	mg/L
Cr 267.716†	83072.4		903.55	1.09%	[2]	mg/L
Cu 324.752†	258436.2		531.17	0.21%	[2.5]	mg/L
Fe 273.955†	207856.7		1806.43	0.87%	[10]	mg/L
Mg 279.077†	849762.1		1286.93	0.15%	[50]	mg/L
Mn 257.610†	1689191.7		4139.86	0.25%	[5]	mg/L

Ni 231.604†	101588.8	1214.18	1.20%	[5] mg/L
Pb 220.353†	5103.4	43.35	0.85%	[1] mg/L
Sb 206.836†	1761.6	25.05	1.42%	[1] mg/L
Se 196.026†	1021.7	8.49	0.83%	[1] mg/L
Tl 190.801†	1693.3	10.12	0.60%	[1] mg/L
V 292.402†	345360.1	469.76	0.14%	[5] mg/L
Zn 206.200†	134344.9	589.07	0.44%	[5] mg/L
Cd 226.502†	19710.8	53.39	0.27%	[0.5] mg/L
Ti 334.940†	399351.4	363.07	0.09%	[1] mg/L
Ca 227.546†	8817.4	99.45	1.13%	[50] mg/L

Sequence No.: 3

Sample ID: S2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 6/9/2011 9:59:53 AM

Data Type: Reprocessed on 6/9/2011 2:27:35 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	983703.0	4437.70	0.45%	97.574	%
Lu 261.542	954420.2	9420.79	0.99%	99.84	%
Ag 328.068†	122244.3	5574.28	4.56%	[1.25]	mg/L
Al 308.215†	181956.3	4927.29	2.71%	[10]	mg/L
As 188.979†	703.2	11.37	1.62%	[0.5]	mg/L
Ba 233.527†	369171.3	999.37	0.27%	[10]	mg/L
Be 313.107†	332976.5	584.57	0.18%	[0.25]	mg/L
Co 228.616†	60017.9	1849.73	3.08%	[2.5]	mg/L
Cr 267.716†	41429.5	1073.37	2.59%	[1]	mg/L
Cu 324.752†	125057.3	3909.40	3.13%	[1.25]	mg/L
Fe 273.955†	104744.7	3279.31	3.13%	[5]	mg/L
Mg 279.077†	420106.5	13314.14	3.17%	[25]	mg/L
Mn 257.610†	858505.4	1030.15	0.12%	[2.5]	mg/L
Ni 231.604†	51148.3	1475.12	2.88%	[2.5]	mg/L
Pb 220.353†	2572.6	37.13	1.44%	[0.5]	mg/L
Sb 206.836†	880.3	8.63	0.98%	[0.5]	mg/L
Se 196.026†	513.6	9.23	1.80%	[0.5]	mg/L
Tl 190.801†	855.3	7.14	0.84%	[0.5]	mg/L
V 292.402†	168614.4	4503.57	2.67%	[2.5]	mg/L
Zn 206.200†	68045.6	2410.91	3.54%	[2.5]	mg/L
Cd 226.502†	9872.3	338.87	3.43%	[0.25]	mg/L
Ti 334.940†	193249.0	5424.35	2.81%	[0.5]	mg/L
Ca 227.546†	4397.4	55.68	1.27%	[25]	mg/L

Sequence No.: 4

Sample ID: S3

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 6/9/2011 10:03:36 AM

Data Type: Reprocessed on 6/9/2011 2:27:36 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1002343.3	3291.58	0.33%	99.423	%
Lu 261.542	956102.5	6384.90	0.67%	100.0	%
Ag 328.068†	3686.9	35.76	0.97%	[0.025]	mg/L
Al 308.215†	3515.1	118.43	3.37%	[0.2]	mg/L
As 188.979†	17.2	2.69	15.60%	[0.01]	mg/L
Ba 233.527†	7719.5	75.73	0.98%	[0.2]	mg/L
Be 313.107†	6593.0	148.08	2.25%	[0.005]	mg/L
Co 228.616†	1241.3	12.70	1.02%	[0.05]	mg/L
Cr 267.716†	843.4	5.21	0.62%	[0.02]	mg/L
Cu 324.752†	2604.5	69.51	2.67%	[0.025]	mg/L
Fe 273.955†	2142.5	8.75	0.41%	[0.1]	mg/L
Mg 279.077†	9235.6	139.67	1.51%	[0.5]	mg/L

Mn 257.610†	18232.1	275.21	1.51%	[0.05]	mg/L
Ni 231.604†	1049.7	9.47	0.90%	[0.05]	mg/L
Pb 220.353†	53.0	7.89	14.88%	[0.01]	mg/L
Sb 206.836†	27.4	6.74	24.62%	[0.01]	mg/L
Se 196.026†	5.6	6.15	109.13%	[0.01]	mg/L
Tl 190.801†	19.4	3.17	16.33%	[0.01]	mg/L
V 292.402†	3421.0	43.11	1.26%	[0.05]	mg/L
Zn 206.200†	1392.4	7.95	0.57%	[0.05]	mg/L
Cd 226.502†	202.2	2.54	1.26%	[0.005]	mg/L
Ti 334.940†	4078.6	77.45	1.90%	[0.01]	mg/L
Ca 227.546†	91.3	8.65	9.48%	[0.5]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	95960	0.00000	0.999943	
Al 308.215	3	Lin Thru 0	0.0	18250	0.00000	0.999999	
As 188.979	3	Lin Thru 0	0.0	1418	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	36440	0.00000	0.999978	
Be 313.107	3	Lin Thru 0	0.0	1330000	0.00000	1.000000	
Co 228.616	3	Lin Thru 0	0.0	23850	0.00000	0.999995	
Cr 267.716	3	Lin Thru 0	0.0	41510	0.00000	0.999999	
Cu 324.752	3	Lin Thru 0	0.0	102700	0.00000	0.999916	
Fe 273.955	3	Lin Thru 0	0.0	20820	0.00000	0.999995	
Mg 279.077	3	Lin Thru 0	0.0	16960	0.00000	0.999990	
Mn 257.610	3	Lin Thru 0	0.0	339000	0.00000	0.999978	
Ni 231.604	3	Lin Thru 0	0.0	20350	0.00000	0.999996	
Pb 220.353	3	Lin Thru 0	0.0	5112	0.00000	0.999995	
Sb 206.836	3	Lin Thru 0	0.0	1761	0.00000	0.999988	
Se 196.026	3	Lin Thru 0	0.0	1023	0.00000	0.999990	
Tl 190.801	3	Lin Thru 0	0.0	1697	0.00000	0.999991	
V 292.402	3	Lin Thru 0	0.0	68750	0.00000	0.999955	
Zn 206.200	3	Lin Thru 0	0.0	26940	0.00000	0.999987	
Cd 226.502	3	Lin Thru 0	0.0	39440	0.00000	1.000000	
Ti 334.940	3	Lin Thru 0	0.0	396800	0.00000	0.999916	
Ca 227.546	3	Lin Thru 0	0.0	176.3	0.00000	0.999999	
Na 589.592	3	Lin Thru 0	0.0	2353	0.00000	0.999926	
K 766.490	3	Lin Thru 0	0.0	557.6	0.00000	0.999739	

Sequence No.: 5

Sample ID: ICV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/9/2011 10:07:17 AM

Data Type: Reprocessed on 6/9/2011 2:27:36 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	978431.4	97.051 %		0.3428			0.35%
Lu 261.542	949961.3	99.37 %		0.732			0.74%
Ag 328.068†	124439.3	1.2988 mg/L		0.02212	1.2988 mg/L	0.02212	1.70%
QC value within limits for Ag 328.068 Recovery = 103.90%							
Al 308.215†	184561.3	10.082 mg/L		0.1371	10.082 mg/L	0.1371	1.36%
QC value within limits for Al 308.215 Recovery = 100.82%							
As 188.979†	679.8	0.48653 mg/L		0.008027	0.48653 mg/L	0.008027	1.65%
QC value within limits for As 188.979 Recovery = 97.31%							
Ba 233.527†	373952.3	10.265 mg/L		0.0442	10.265 mg/L	0.0442	0.43%
QC value within limits for Ba 233.527 Recovery = 102.65%							
Be 313.107†	332396.1	0.25105 mg/L		0.000158	0.25105 mg/L	0.000158	0.06%
QC value within limits for Be 313.107 Recovery = 100.42%							
Co 228.616†	62479.4	2.6183 mg/L		0.03398	2.6183 mg/L	0.03398	1.30%
QC value within limits for Co 228.616 Recovery = 104.73%							
Cr 267.716†	42518.2	1.0243 mg/L		0.01755	1.0243 mg/L	0.01755	1.71%
QC value within limits for Cr 267.716 Recovery = 102.43%							
Cu 324.752†	128679.5	1.2535 mg/L		0.00903	1.2535 mg/L	0.00903	0.72%
QC value within limits for Cu 324.752 Recovery = 100.28%							
Fe 273.955†	106144.0	5.1784 mg/L		0.07400	5.1784 mg/L	0.07400	1.43%

QC value within limits for Fe 273.955 Recovery = 103.57%
Mg 279.077† 425020.1 25.077 mg/L 0.3390 25.077 mg/L 0.3390 1.35%
QC value within limits for Mg 279.077 Recovery = 100.31%
Mn 257.610† 863806.0 2.5476 mg/L 0.00197 2.5476 mg/L 0.00197 0.08%
QC value within limits for Mn 257.610 Recovery = 101.90%
Ni 231.604† 52111.1 2.5607 mg/L 0.04220 2.5607 mg/L 0.04220 1.65%
QC value within limits for Ni 231.604 Recovery = 102.43%
Pb 220.353† 2561.3 0.50262 mg/L 0.009437 0.50262 mg/L 0.009437 1.88%
QC value within limits for Pb 220.353 Recovery = 100.52%
Sb 206.836† 926.5 0.51283 mg/L 0.008950 0.51283 mg/L 0.008950 1.75%
QC value within limits for Sb 206.836 Recovery = 102.57%
Se 196.026† 497.9 0.48745 mg/L 0.011277 0.48745 mg/L 0.011277 2.31%
QC value within limits for Se 196.026 Recovery = 97.49%
Tl 190.801† 849.3 0.50682 mg/L 0.004141 0.50682 mg/L 0.004141 0.82%
QC value within limits for Tl 190.801 Recovery = 101.36%
V 292.402† 171549.4 2.4968 mg/L 0.03581 2.4968 mg/L 0.03581 1.43%
QC value within limits for V 292.402 Recovery = 99.87%
Zn 206.200† 69116.7 2.5685 mg/L 0.02880 2.5685 mg/L 0.02880 1.12%
QC value within limits for Zn 206.200 Recovery = 102.74%
Cd 226.502† 9815.9 0.24850 mg/L 0.002911 0.24850 mg/L 0.002911 1.17%
QC value within limits for Cd 226.502 Recovery = 99.40%
Ti 334.940† 205340.4 0.51718 mg/L 0.004570 0.51718 mg/L 0.004570 0.88%
QC value within limits for Ti 334.940 Recovery = Not calculated
Ca 227.546† 4521.3 25.767 mg/L 0.4009 25.767 mg/L 0.4009 1.56%
QC value within limits for Ca 227.546 Recovery = 103.07%
All analyte(s) passed QC.

Sequence No.: 6

Sample ID: ICB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 6/9/2011 10:10:59 AM

Data Type: Reprocessed on 6/9/2011 2:27:38 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	997580.7	98.950	%	0.6534			0.66%
Lu 261.542	946390.1	99.00	%	0.339			0.34%
Ag 328.068†	1000.6	0.01043	mg/L	0.000220	0.01043 mg/L	0.000220	2.11%
Al 308.215†	-92.3	-0.00506	mg/L	0.004966	-0.00506 mg/L	0.004966	98.12%
As 188.979†	5.1	0.00359	mg/L	0.002850	0.00359 mg/L	0.002850	79.41%
Ba 233.527†	42.7	0.00117	mg/L	0.000469	0.00117 mg/L	0.000469	40.02%
Be 313.107†	23.2	0.00002	mg/L	0.000026	0.00002 mg/L	0.000026	140.28%
Co 228.616†	-0.1	-0.00001	mg/L	0.000261	-0.00001 mg/L	0.000261	>999.9%
Cr 267.716†	16.7	0.00040	mg/L	0.000245	0.00040 mg/L	0.000245	61.07%
Cu 324.752†	53.1	0.00052	mg/L	0.000398	0.00052 mg/L	0.000398	76.83%
Fe 273.955†	46.0	0.00223	mg/L	0.000781	0.00223 mg/L	0.000781	35.10%
Mg 279.077†	61.9	0.00365	mg/L	0.009604	0.00365 mg/L	0.009604	263.08%
Mn 257.610†	114.7	0.00034	mg/L	0.000104	0.00034 mg/L	0.000104	30.62%
Ni 231.604†	4.9	0.00024	mg/L	0.000176	0.00024 mg/L	0.000176	73.74%
Pb 220.353†	-0.2	-0.00004	mg/L	0.002058	-0.00004 mg/L	0.002058	>999.9%
Sb 206.836†	9.5	0.00540	mg/L	0.001835	0.00540 mg/L	0.001835	34.01%
Se 196.026†	-6.4	-0.00624	mg/L	0.002016	-0.00624 mg/L	0.002016	32.33%
Tl 190.801†	1.5	0.00091	mg/L	0.001954	0.00091 mg/L	0.001954	214.33%
V 292.402†	32.3	0.00047	mg/L	0.000487	0.00047 mg/L	0.000487	103.51%
Zn 206.200†	38.7	0.00144	mg/L	0.000119	0.00144 mg/L	0.000119	8.25%
Cd 226.502†	3.5	0.00009	mg/L	0.000062	0.00009 mg/L	0.000062	69.44%
Ti 334.940†	194.8	0.00049	mg/L	0.000020	0.00049 mg/L	0.000020	4.15%
Ca 227.546†	-9.0	-0.05102	mg/L	0.068494	-0.05102 mg/L	0.068494	134.26%

Sequence No.: 7

Sample ID: LLICV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 6/9/2011 10:14:41 AM

Data Type: Reprocessed on 6/9/2011 2:27:38 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1006990.1	99.884 %	0.0657			0.07%
Lu 261.542	968084.6	101.3 %	0.25			0.25%
Ag 328.068†	4017.7	0.04191 mg/L	0.000273	0.04191 mg/L	0.000273	0.65%
QC value greater than the upper limit for Ag 328.068 Recovery = 139.71%						
Al 308.215†	3728.8	0.20361 mg/L	0.001459	0.20361 mg/L	0.001459	0.72%
QC value within limits for Al 308.215 Recovery = 101.80%						
As 188.979†	32.7	0.02324 mg/L	0.000277	0.02324 mg/L	0.000277	1.19%
QC value within limits for As 188.979 Recovery = 116.22%						
Ba 233.527†	8446.2	0.23184 mg/L	0.002298	0.23184 mg/L	0.002298	0.99%
QC value within limits for Ba 233.527 Recovery = 115.92%						
Be 313.107†	7280.6	0.00552 mg/L	0.000109	0.00552 mg/L	0.000109	1.98%
QC value within limits for Be 313.107 Recovery = 110.40%						
Co 228.616†	1486.2	0.06227 mg/L	0.000554	0.06227 mg/L	0.000554	0.89%
QC value within limits for Co 228.616 Recovery = 124.53%						
Cr 267.716†	920.6	0.02218 mg/L	0.000118	0.02218 mg/L	0.000118	0.53%
QC value within limits for Cr 267.716 Recovery = 110.89%						
Cu 324.752†	3362.9	0.03276 mg/L	0.000151	0.03276 mg/L	0.000151	0.46%
QC value within limits for Cu 324.752 Recovery = 109.20%						
Fe 273.955†	4722.6	0.22866 mg/L	0.000588	0.22866 mg/L	0.000588	0.26%
QC value within limits for Fe 273.955 Recovery = 114.33%						
Mg 279.077†	10498.1	0.61939 mg/L	0.009874	0.61939 mg/L	0.009874	1.59%
QC value within limits for Mg 279.077 Recovery = 123.88%						
Mn 257.610†	20752.7	0.06120 mg/L	0.000845	0.06120 mg/L	0.000845	1.38%
QC value within limits for Mn 257.610 Recovery = 122.41%						
Ni 231.604†	1232.2	0.06054 mg/L	0.000391	0.06054 mg/L	0.000391	0.65%
QC value within limits for Ni 231.604 Recovery = 121.08%						
Pb 220.353†	46.6	0.00917 mg/L	0.000938	0.00917 mg/L	0.000938	10.23%
QC value within limits for Pb 220.353 Recovery = 91.67%						
Sb 206.836†	40.1	0.02245 mg/L	0.000564	0.02245 mg/L	0.000564	2.51%
QC value within limits for Sb 206.836 Recovery = 112.23%						
Se 196.026†	26.4	0.02582 mg/L	0.001201	0.02582 mg/L	0.001201	4.65%
QC value within limits for Se 196.026 Recovery = 86.07%						
Tl 190.801†	36.9	0.02199 mg/L	0.000318	0.02199 mg/L	0.000318	1.45%
QC value within limits for Tl 190.801 Recovery = 109.94%						
V 292.402†	3912.3	0.05694 mg/L	0.000575	0.05694 mg/L	0.000575	1.01%
QC value within limits for V 292.402 Recovery = 113.88%						
Zn 206.200†	1627.1	0.06046 mg/L	0.000663	0.06046 mg/L	0.000663	1.10%
QC value within limits for Zn 206.200 Recovery = 120.92%						
Cd 226.502†	228.9	0.00579 mg/L	0.000107	0.00579 mg/L	0.000107	1.84%
QC value within limits for Cd 226.502 Recovery = 115.72%						
Ti 334.940†	8775.7	0.02211 mg/L	0.000205	0.02211 mg/L	0.000205	0.93%
QC value within limits for Ti 334.940 Recovery = 110.55%						
Ca 227.546†	139.6	0.80054 mg/L	0.092162	0.80054 mg/L	0.092162	11.51%
QC value within limits for Ca 227.546 Recovery = 100.07%						
QC Failed. Continue with analysis.						

=====

Sequence No.: 8

Autosampler Location: 2

Sample ID: LLICV

Date Collected: 6/9/2011 10:19:40 AM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:27:39 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1002782.9	99.466 %	0.4222			0.42%
Lu 261.542	961745.5	100.6 %	0.52			0.51%
Ag 328.068†	3559.4	0.03714 mg/L	0.000815	0.03714 mg/L	0.000815	2.20%
QC value within limits for Ag 328.068 Recovery = 123.80%						
Al 308.215†	3871.3	0.21140 mg/L	0.006753	0.21140 mg/L	0.006753	3.19%
QC value within limits for Al 308.215 Recovery = 105.70%						
As 188.979†	29.0	0.02064 mg/L	0.000697	0.02064 mg/L	0.000697	3.38%
QC value within limits for As 188.979 Recovery = 103.18%						
Ba 233.527†	8575.3	0.23539 mg/L	0.003738	0.23539 mg/L	0.003738	1.59%

QC value within limits for Ba 233.527 Recovery = 117.69%
 Be 313.107† 7443.1 0.00564 mg/L 0.000083 0.00564 mg/L 0.000083 1.46%
 QC value within limits for Be 313.107 Recovery = 112.86%
 Co 228.616† 1478.2 0.06193 mg/L 0.000371 0.06193 mg/L 0.000371 0.60%
 QC value within limits for Co 228.616 Recovery = 123.86%
 Cr 267.716† 927.3 0.02234 mg/L 0.000246 0.02234 mg/L 0.000246 1.10%
 QC value within limits for Cr 267.716 Recovery = 111.70%
 Cu 324.752† 3445.1 0.03356 mg/L 0.000114 0.03356 mg/L 0.000114 0.34%
 QC value within limits for Cu 324.752 Recovery = 111.87%
 Fe 273.955† 4825.3 0.23363 mg/L 0.004731 0.23363 mg/L 0.004731 2.03%
 QC value within limits for Fe 273.955 Recovery = 116.82%
 Mg 279.077† 10755.7 0.63459 mg/L 0.011572 0.63459 mg/L 0.011572 1.82%
 QC value within limits for Mg 279.077 Recovery = 126.92%
 Mn 257.610† 21064.8 0.06212 mg/L 0.000880 0.06212 mg/L 0.000880 1.42%
 QC value within limits for Mn 257.610 Recovery = 124.25%
 Ni 231.604† 1238.6 0.06086 mg/L 0.001282 0.06086 mg/L 0.001282 2.11%
 QC value within limits for Ni 231.604 Recovery = 121.71%
 Pb 220.353† 55.4 0.01089 mg/L 0.000843 0.01089 mg/L 0.000843 7.74%
 QC value within limits for Pb 220.353 Recovery = 108.88%
 Sb 206.836† 34.5 0.01929 mg/L 0.002566 0.01929 mg/L 0.002566 13.31%
 QC value within limits for Sb 206.836 Recovery = 96.43%
 Se 196.026† 25.6 0.02509 mg/L 0.006503 0.02509 mg/L 0.006503 25.91%
 QC value within limits for Se 196.026 Recovery = 83.64%
 Tl 190.801† 39.3 0.02340 mg/L 0.003153 0.02340 mg/L 0.003153 13.47%
 QC value within limits for Tl 190.801 Recovery = 117.00%
 V 292.402† 3987.5 0.05803 mg/L 0.001290 0.05803 mg/L 0.001290 2.22%
 QC value within limits for V 292.402 Recovery = 116.06%
 Zn 206.200† 1610.5 0.05985 mg/L 0.000811 0.05985 mg/L 0.000811 1.36%
 QC value within limits for Zn 206.200 Recovery = 119.69%
 Cd 226.502† 227.2 0.00574 mg/L 0.000145 0.00574 mg/L 0.000145 2.53%
 QC value within limits for Cd 226.502 Recovery = 114.87%
 Ti 334.940† 8907.1 0.02244 mg/L 0.000188 0.02244 mg/L 0.000188 0.84%
 QC value within limits for Ti 334.940 Recovery = 112.21%
 Ca 227.546† 150.2 0.86063 mg/L 0.064445 0.86063 mg/L 0.064445 7.49%
 QC value within limits for Ca 227.546 Recovery = 107.58%
 All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSEA

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 6/9/2011 10:23:20 AM

Data Type: Reprocessed on 6/9/2011 2:27:40 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSEA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	898286.9	89.101 %	0.5929			0.67%
Lu 261.542	876867.0	91.73 %	0.417			0.45%
Ag 328.068†	-174.1	-0.00182 mg/L	0.000481	-0.00182 mg/L	0.000481	26.39%
QC value within limits for Ag 328.068		Recovery =	Not calculated			
Al 308.215†	9089305.8	497.98 mg/L	4.896	497.98 mg/L	4.896	0.98%
QC value within limits for Al 308.215		Recovery =	99.60%			
As 188.979†	-30.7	-0.00554 mg/L	0.004432	-0.00554 mg/L	0.004432	79.99%
QC value within limits for As 188.979		Recovery =	Not calculated			
Ba 233.527†	198.7	0.00544 mg/L	0.000367	0.00544 mg/L	0.000367	6.75%
QC value within limits for Ba 233.527		Recovery =	Not calculated			
Be 313.107†	-64.4	-0.00007 mg/L	0.000026	-0.00007 mg/L	0.000026	38.90%
QC value within limits for Be 313.107		Recovery =	Not calculated			
Co 228.616†	89.5	-0.00299 mg/L	0.000009	-0.00299 mg/L	0.000009	0.31%
QC value within limits for Co 228.616		Recovery =	Not calculated			
Cr 267.716†	135.7	0.00105 mg/L	0.000519	0.00105 mg/L	0.000519	49.66%
QC value within limits for Cr 267.716		Recovery =	Not calculated			
Cu 324.752†	-2387.7	-0.01555 mg/L	0.000164	-0.01555 mg/L	0.000164	1.06%
QC value within limits for Cu 324.752		Recovery =	Not calculated			
Fe 273.955†	4103151.0	197.09 mg/L	2.530	197.09 mg/L	2.530	1.28%
QC value within limits for Fe 273.955		Recovery =	98.55%			
Mg 279.077†	8510397.2	501.88 mg/L	6.844	501.88 mg/L	6.844	1.36%
QC value within limits for Mg 279.077		Recovery =	100.38%			

Mn 257.610†	-24.4	-0.01651 mg/L	0.000274	-0.01651 mg/L	0.000274	1.66%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Ni 231.604†	-38.3	-0.00469 mg/L	0.000319	-0.00469 mg/L	0.000319	6.80%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-207.4	0.00285 mg/L	0.002698	0.00285 mg/L	0.002698	94.71%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	-19.4	-0.01607 mg/L	0.004689	-0.01607 mg/L	0.004689	29.18%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-76.5	-0.00388 mg/L	0.001905	-0.00388 mg/L	0.001905	49.08%
QC value within limits for Se 196.026 Recovery = Not calculated						
Tl 190.801†	-43.2	-0.01205 mg/L	0.006428	-0.01205 mg/L	0.006428	53.35%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	-745.7	0.00191 mg/L	0.000138	0.00191 mg/L	0.000138	7.24%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	79.1	0.00295 mg/L	0.000153	0.00295 mg/L	0.000153	5.19%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Cd 226.502†	233.7	-0.00787 mg/L	0.000212	-0.00787 mg/L	0.000212	2.70%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Ti 334.940†	-3914.3	-0.01085 mg/L	0.000153	-0.01085 mg/L	0.000153	1.41%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	94201.3	545.13 mg/L	0.552	545.13 mg/L	0.552	0.10%
QC value within limits for Ca 227.546 Recovery = 109.03%						

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: ICSAB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 6/9/2011 10:27:08 AM

Data Type: Reprocessed on 6/9/2011 2:27:41 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	898121.1	89.085 %	1.6187			1.82%
Lu 261.542	876103.5	91.65 %	1.498			1.64%
Ag 328.068†	21685.2	0.22638 mg/L	0.001156	0.22638 mg/L	0.001156	0.51%
QC value within limits for Ag 328.068 Recovery = 113.19%						
Al 308.215†	9204194.3	504.27 mg/L	8.615	504.27 mg/L	8.615	1.71%
QC value within limits for Al 308.215 Recovery = 100.85%						
As 188.979†	115.6	0.10054 mg/L	0.001645	0.10054 mg/L	0.001645	1.64%
QC value within limits for As 188.979 Recovery = 100.54%						
Ba 233.527†	19132.6	0.52557 mg/L	0.003018	0.52557 mg/L	0.003018	0.57%
QC value within limits for Ba 233.527 Recovery = 105.11%						
Be 313.107†	677281.5	0.50929 mg/L	0.002611	0.50929 mg/L	0.002611	0.51%
QC value within limits for Be 313.107 Recovery = 101.86%						
Co 228.616†	11864.6	0.49042 mg/L	0.005678	0.49042 mg/L	0.005678	1.16%
QC value within limits for Co 228.616 Recovery = 98.08%						
Cr 267.716†	21086.8	0.50575 mg/L	0.002268	0.50575 mg/L	0.002268	0.45%
QC value within limits for Cr 267.716 Recovery = 101.15%						
Cu 324.752†	52666.0	0.52071 mg/L	0.003730	0.52071 mg/L	0.003730	0.72%
QC value within limits for Cu 324.752 Recovery = 104.14%						
Fe 273.955†	4163394.4	200.00 mg/L	3.402	200.00 mg/L	3.402	1.70%
QC value within limits for Fe 273.955 Recovery = 100.00%						
Mg 279.077†	8591143.1	506.64 mg/L	8.607	506.64 mg/L	8.607	1.70%
QC value within limits for Mg 279.077 Recovery = 101.33%						
Mn 257.610†	172288.0	0.49165 mg/L	0.002689	0.49165 mg/L	0.002689	0.55%
QC value within limits for Mn 257.610 Recovery = 98.33%						
Ni 231.604†	19654.1	0.96312 mg/L	0.013295	0.96312 mg/L	0.013295	1.38%
QC value within limits for Ni 231.604 Recovery = 96.31%						
Pb 220.353†	2295.1	0.49272 mg/L	0.003287	0.49272 mg/L	0.003287	0.67%
QC value within limits for Pb 220.353 Recovery = 98.54%						
Sb 206.836†	1097.9	0.61024 mg/L	0.004949	0.61024 mg/L	0.004949	0.81%
QC value within limits for Sb 206.836 Recovery = 101.71%						
Se 196.026†	431.4	0.49380 mg/L	0.011287	0.49380 mg/L	0.011287	2.29%
QC value within limits for Se 196.026 Recovery = 98.76%						
Tl 190.801†	120.1	0.08467 mg/L	0.003020	0.08467 mg/L	0.003020	3.57%
QC value within limits for Tl 190.801 Recovery = 84.67%						
V 292.402†	34713.4	0.51862 mg/L	0.003113	0.51862 mg/L	0.003113	0.60%

QC value within limits for V 292.402 Recovery = 103.72%
 Zn 206.200† 26769.5 0.99510 mg/L 0.005617 0.99510 mg/L 0.005617 0.56%
 QC value within limits for Zn 206.200 Recovery = 99.51%
 Cd 226.502† 38851.8 0.97121 mg/L 0.009283 0.97121 mg/L 0.009283 0.96%
 QC value within limits for Cd 226.502 Recovery = 97.12%
 Ti 334.940† -3802.3 -0.01072 mg/L 0.000104 -0.01072 mg/L 0.000104 0.97%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 94346.7 546.06 mg/L 4.349 546.06 mg/L 4.349 0.80%
 QC value within limits for Ca 227.546 Recovery = 109.21%
 All analyte(s) passed QC.

Sequence No.: 11

Autosampler Location: 38

Sample ID: MB-59623~PBS

Date Collected: 6/9/2011 10:30:55 AM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:27:41 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: MB-59623~PBS

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1010053.7	100.19	%	1.082			1.08%
Lu 261.542	971082.9	101.6	%	0.87			0.86%
Ag 328.068†	3.4	0.00004	mg/L	0.000813	0.00004 mg/L	0.000813	>999.9%
Al 308.215†	-54.4	-0.00299	mg/L	0.012436	-0.00299 mg/L	0.012436	416.26%
As 188.979†	-0.1	0.00127	mg/L	0.001720	0.00127 mg/L	0.001720	135.67%
Ba 233.527†	12.2	0.00033	mg/L	0.000146	0.00033 mg/L	0.000146	43.68%
Be 313.107†	43.3	0.00003	mg/L	0.000034	0.00003 mg/L	0.000034	99.46%
Co 228.616†	6.3	0.00022	mg/L	0.000145	0.00022 mg/L	0.000145	66.35%
Cr 267.716†	9752.4	0.23491	mg/L	0.011938	0.23491 mg/L	0.011938	5.08%
Cu 324.752†	89.9	0.00098	mg/L	0.000206	0.00098 mg/L	0.000206	21.03%
Fe 273.955†	38322.1	1.8418	mg/L	0.10520	1.8418 mg/L	0.10520	5.71%
Mg 279.077†	435.7	0.02584	mg/L	0.012542	0.02584 mg/L	0.012542	48.54%
Mn 257.610†	9987.4	0.02945	mg/L	0.001733	0.02945 mg/L	0.001733	5.88%
Ni 231.604†	66.0	0.00323	mg/L	0.000388	0.00323 mg/L	0.000388	12.00%
Pb 220.353†	1.7	0.00036	mg/L	0.001159	0.00036 mg/L	0.001159	323.88%
Sb 206.836†	13.5	0.00341	mg/L	0.002320	0.00341 mg/L	0.002320	68.13%
Se 196.026†	-10.5	-0.00959	mg/L	0.003807	-0.00959 mg/L	0.003807	39.70%
Tl 190.801†	-0.9	-0.00048	mg/L	0.006018	-0.00048 mg/L	0.006018	>999.9%
V 292.402†	35.4	0.00101	mg/L	0.000255	0.00101 mg/L	0.000255	25.26%
Zn 206.200†	16.3	0.00125	mg/L	0.000027	0.00125 mg/L	0.000027	2.16%
Cd 226.502†	0.8	-0.00011	mg/L	0.000134	-0.00011 mg/L	0.000134	125.10%
Ti 334.940†	339.6	0.00083	mg/L	0.000070	0.00083 mg/L	0.000070	8.45%
Ca 227.546†	-12.9	0.02590	mg/L	0.029880	0.02590 mg/L	0.029880	115.36%

Sequence No.: 12

Autosampler Location: 38

Sample ID: MB-59623~PBS

Date Collected: 6/9/2011 10:36:53 AM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:27:42 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: MB-59623~PBS

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	978001.5	97.008	%	1.1671			1.20%
Lu 261.542	950652.5	99.45	%	1.120			1.13%
Ag 328.068†	38.2	0.00040	mg/L	0.000242	0.00040 mg/L	0.000242	61.04%
Al 308.215†	-488.5	-0.02676	mg/L	0.003037	-0.02676 mg/L	0.003037	11.35%
As 188.979†	0.8	0.00059	mg/L	0.001645	0.00059 mg/L	0.001645	276.79%
Ba 233.527†	7.9	0.00022	mg/L	0.000234	0.00022 mg/L	0.000234	108.41%
Be 313.107†	0.7	0.00000	mg/L	0.000030	0.00000 mg/L	0.000030	>999.9%
Co 228.616†	-3.1	-0.00013	mg/L	0.000064	-0.00013 mg/L	0.000064	48.00%
Cr 267.716†	38.6	0.00093	mg/L	0.000178	0.00093 mg/L	0.000178	19.08%
Cu 324.752†	106.7	0.00104	mg/L	0.000407	0.00104 mg/L	0.000407	39.12%
Fe 273.955†	321.1	0.01542	mg/L	0.001183	0.01542 mg/L	0.001183	7.68%
Mg 279.077†	-4.0	-0.00023	mg/L	0.003048	-0.00023 mg/L	0.003048	>999.9%

Mn 257.610†	494.9	0.00146 mg/L	0.000018	0.00146 mg/L	0.000018	1.22%
Ni 231.604†	-5.7	-0.00028 mg/L	0.000079	-0.00028 mg/L	0.000079	28.04%
Pb 220.353†	-11.0	-0.00215 mg/L	0.000397	-0.00215 mg/L	0.000397	18.46%
Sb 206.836†	4.7	0.00264 mg/L	0.001927	0.00264 mg/L	0.001927	73.06%
Se 196.026†	-3.9	-0.00379 mg/L	0.003062	-0.00379 mg/L	0.003062	80.86%
Tl 190.801†	-2.6	-0.00152 mg/L	0.002960	-0.00152 mg/L	0.002960	195.01%
V 292.402†	-30.4	-0.00044 mg/L	0.000469	-0.00044 mg/L	0.000469	106.59%
Zn 206.200†	28.0	0.00104 mg/L	0.000223	0.00104 mg/L	0.000223	21.38%
Cd 226.502†	-12.8	-0.00033 mg/L	0.000236	-0.00033 mg/L	0.000236	72.42%
Ti 334.940†	276.3	0.00070 mg/L	0.000037	0.00070 mg/L	0.000037	5.25%
Ca 227.546†	3.4	0.01997 mg/L	0.010701	0.01997 mg/L	0.010701	53.59%

Sequence No.: 13

Sample ID: LCS-59623~LCS

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 39

Date Collected: 6/9/2011 10:40:27 AM

Data Type: Reprocessed on 6/9/2011 2:27:43 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCS-59623~LCS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	979671.6	97.174	%	1.4340				1.48%
Lu 261.542	958848.3	100.3	%	0.98				0.98%
Ag 328.068†	113695.1	1.1867	mg/L	0.01485	1.1867	mg/L	0.01485	1.25%
Al 308.215†	167962.9	9.1748	mg/L	0.15268	9.1748	mg/L	0.15268	1.66%
As 188.979†	658.3	0.47034	mg/L	0.002354	0.47034	mg/L	0.002354	0.50%
Ba 233.527†	347678.0	9.5435	mg/L	0.04301	9.5435	mg/L	0.04301	0.45%
Be 313.107†	304389.3	0.22897	mg/L	0.000989	0.22897	mg/L	0.000989	0.43%
Co 228.616†	56742.5	2.3784	mg/L	0.03938	2.3784	mg/L	0.03938	1.66%
Cr 267.716†	38174.3	0.91966	mg/L	0.011642	0.91966	mg/L	0.011642	1.27%
Cu 324.752†	118108.0	1.1505	mg/L	0.02188	1.1505	mg/L	0.02188	1.90%
Fe 273.955†	97686.9	4.7652	mg/L	0.08272	4.7652	mg/L	0.08272	1.74%
Mg 279.077†	388221.5	22.906	mg/L	0.3880	22.906	mg/L	0.3880	1.69%
Mn 257.610†	799778.2	2.3587	mg/L	0.00619	2.3587	mg/L	0.00619	0.26%
Ni 231.604†	47680.6	2.3432	mg/L	0.03352	2.3432	mg/L	0.03352	1.43%
Pb 220.353†	2434.1	0.47732	mg/L	0.005643	0.47732	mg/L	0.005643	1.18%
Sb 206.836†	842.6	0.46718	mg/L	0.004801	0.46718	mg/L	0.004801	1.03%
Se 196.026†	458.4	0.44894	mg/L	0.004879	0.44894	mg/L	0.004879	1.09%
Tl 190.801†	792.8	0.46949	mg/L	0.003878	0.46949	mg/L	0.003878	0.83%
V 292.402†	156723.1	2.2814	mg/L	0.03121	2.2814	mg/L	0.03121	1.37%
Zn 206.200†	62357.5	2.3173	mg/L	0.04263	2.3173	mg/L	0.04263	1.84%
Cd 226.502†	9271.4	0.23478	mg/L	0.005237	0.23478	mg/L	0.005237	2.23%
Ti 334.940†	516.1	0.00099	mg/L	0.000017	0.00099	mg/L	0.000017	1.73%
Ca 227.546†	4064.2	23.168	mg/L	0.1104	23.168	mg/L	0.1104	0.48%

Sequence No.: 14

Sample ID: K0910-01A~DEC-066D (24-2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 40

Date Collected: 6/9/2011 10:44:09 AM

Data Type: Reprocessed on 6/9/2011 2:27:44 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0910-01A~DEC-066D (24-2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1020807.2	101.25	%	0.440				0.43%
Lu 261.542	943912.1	98.74	%	0.619				0.63%
Ag 328.068†	-485.2	-0.00473	mg/L	0.000261	-0.00473	mg/L	0.000261	5.51%
Al 308.215†	2174093.2	119.11	mg/L	0.304	119.11	mg/L	0.304	0.26%
As 188.979†	-19.7	0.00694	mg/L	0.004119	0.00694	mg/L	0.004119	59.39%
Ba 233.527†	25642.0	0.70410	mg/L	0.005469	0.70410	mg/L	0.005469	0.78%
Be 313.107†	-9772.9	0.01027	mg/L	0.000245	0.01027	mg/L	0.000245	2.39%
Co 228.616†	3440.1	0.12443	mg/L	0.000196	0.12443	mg/L	0.000196	0.16%
Cr 267.716†	12481.9	0.29937	mg/L	0.000646	0.29937	mg/L	0.000646	0.22%
Cu 324.752†	20803.4	0.21460	mg/L	0.001257	0.21460	mg/L	0.001257	0.59%
Fe 273.955†	5415502.1	260.14	mg/L	0.548	260.14	mg/L	0.548	0.21%

Mg 279.077†	873618.7	51.549 mg/L	0.7591	51.549 mg/L	0.7591	1.47%
Mn 257.610†	2063217.2	6.0839 mg/L	0.02353	6.0839 mg/L	0.02353	0.39%
Ni 231.604†	4766.0	0.22798 mg/L	0.000427	0.22798 mg/L	0.000427	0.19%
Pb 220.353†	344.9	0.08303 mg/L	0.002162	0.08303 mg/L	0.002162	2.60%
Sb 206.836†	-22.0	-0.02817 mg/L	0.007178	-0.02817 mg/L	0.007178	25.49%
Se 196.026†	-90.2	-0.00313 mg/L	0.002208	-0.00313 mg/L	0.002208	70.55%
Tl 190.801†	-23.3	0.06433 mg/L	0.003326	0.06433 mg/L	0.003326	5.17%
V 292.402†	26718.2	0.39843 mg/L	0.007030	0.39843 mg/L	0.007030	1.76%
Zn 206.200†	15387.0	0.57201 mg/L	0.000979	0.57201 mg/L	0.000979	0.17%
Cd 226.502†	353.1	-0.01020 mg/L	0.000148	-0.01020 mg/L	0.000148	1.45%
Ti 334.940†	3568452.1	8.9930 mg/L	0.02314	8.9930 mg/L	0.02314	0.26%
Ca 227.546†	4776.7	40.990 mg/L	0.1710	40.990 mg/L	0.1710	0.42%

Sequence No.: 15

Sample ID: K0910-03A-DEC-065D(9-10')

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 41

Date Collected: 6/9/2011 10:48:00 AM

Data Type: Reprocessed on 6/9/2011 2:27:45 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0910-03A-DEC-065D(9-10')

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1079635.9	107.09 %	0.315			0.29%
Lu 261.542	926273.2	96.90 %	0.575			0.59%
Ag 328.068†	-1519.3	-0.01505 mg/L	0.000595	-0.01505 mg/L	0.000595	3.96%
Al 308.215†	4112536.4	225.30 mg/L	1.992	225.30 mg/L	1.992	0.88%
As 188.979†	-47.3	0.01601 mg/L	0.006166	0.01601 mg/L	0.006166	38.51%
Ba 233.527†	52623.8	1.4451 mg/L	0.01639	1.4451 mg/L	0.01639	1.13%
Be 313.107†	-7207.6	0.02049 mg/L	0.000053	0.02049 mg/L	0.000053	0.26%
Co 228.616†	6484.5	0.23052 mg/L	0.003332	0.23052 mg/L	0.003332	1.45%
Cr 267.716†	28665.9	0.68737 mg/L	0.007101	0.68737 mg/L	0.007101	1.03%
Cu 224.752†	39343.8	0.41754 mg/L	0.004250	0.41754 mg/L	0.004250	1.02%
Fe 273.955†	15400962.1	739.81 mg/L	1.094	739.81 mg/L	1.094	0.15%
Concentration greater than upper limit for Fe 273.955.						
Mg 279.077†	1196426.5	70.633 mg/L	0.6780	70.633 mg/L	0.6780	0.96%
Mn 257.610†	5407611.7	15.947 mg/L	0.0057	15.947 mg/L	0.0057	0.04%
Ni 231.604†	7948.6	0.37903 mg/L	0.005328	0.37903 mg/L	0.005328	1.41%
Pb 220.353†	888.7	0.20484 mg/L	0.001703	0.20484 mg/L	0.001703	0.83%
Sb 206.836†	-31.8	-0.04518 mg/L	0.001227	-0.04518 mg/L	0.001227	2.72%
Se 196.026†	-271.1	-0.02126 mg/L	0.004665	-0.02126 mg/L	0.004665	21.94%
Tl 190.801†	-87.7	0.08021 mg/L	0.000469	0.08021 mg/L	0.000469	0.59%
V 292.402†	64370.2	0.97476 mg/L	0.007629	0.97476 mg/L	0.007629	0.78%
Zn 206.200†	35678.0	1.3263 mg/L	0.01222	1.3263 mg/L	0.01222	0.92%
Cd 226.502†	1138.1	-0.02431 mg/L	0.001458	-0.02431 mg/L	0.001458	6.00%
Ti 334.940†	5246605.2	13.222 mg/L	0.0056	13.222 mg/L	0.0056	0.04%
Ca 227.546†	6289.2	75.227 mg/L	0.6700	75.227 mg/L	0.6700	0.89%

Sequence No.: 16

Sample ID: K0910-04A-DEC-065D(14-15)

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 42

Date Collected: 6/9/2011 10:52:07 AM

Data Type: Reprocessed on 6/9/2011 2:27:45 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0910-04A-DEC-065D(14-15)

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1103376.3	109.44 %	0.967			0.88%
Lu 261.542	920887.9	96.33 %	1.209			1.26%
Ag 328.068†	-2036.3	-0.02026 mg/L	0.000391	-0.02026 mg/L	0.000391	1.93%
Al 308.215†	4100942.9	224.67 mg/L	3.647	224.67 mg/L	3.647	1.62%
As 188.979†	-124.7	-0.02165 mg/L	0.002554	-0.02165 mg/L	0.002554	11.79%
Ba 233.527†	91324.7	2.5074 mg/L	0.03043	2.5074 mg/L	0.03043	1.21%
Be 313.107†	-2691.8	0.02520 mg/L	0.000104	0.02520 mg/L	0.000104	0.41%
Co 228.616†	9407.1	0.34237 mg/L	0.003984	0.34237 mg/L	0.003984	1.16%
Cr 267.716†	30319.6	0.72534 mg/L	0.015930	0.72534 mg/L	0.015930	2.20%

Cu 324.752†	62992.0	0.66122 mg/L	0.005902	0.66122 mg/L	0.005902	0.89%
Fe 273.955†	21385065.8	1027.3 mg/L	5.21	1027.3 mg/L	5.21	0.51%
Concentration greater than upper limit for Fe 273.955.						
Mg 279.077†	1194029.5	70.540 mg/L	1.1101	70.540 mg/L	1.1101	1.57%
Mn 257.610†	8779321.8	25.893 mg/L	0.0915	25.893 mg/L	0.0915	0.35%
Concentration greater than upper limit for Mn 257.610.						
Ni 231.604†	10291.7	0.49191 mg/L	0.007289	0.49191 mg/L	0.007289	1.48%
Pb 220.353†	1006.6	0.23380 mg/L	0.003940	0.23380 mg/L	0.003940	1.69%
Sb 206.836†	-32.0	-0.04625 mg/L	0.005835	-0.04625 mg/L	0.005835	12.62%
Se 196.026†	-383.8	-0.04072 mg/L	0.005424	-0.04072 mg/L	0.005424	13.32%
Tl 190.801†	-126.9	0.07631 mg/L	0.001738	0.07631 mg/L	0.001738	2.28%
V 292.402†	78764.9	1.2030 mg/L	0.02337	1.2030 mg/L	0.02337	1.94%
Zn 206.200†	33043.6	1.2286 mg/L	0.01791	1.2286 mg/L	0.01791	1.46%
Cd 226.502†	1500.0	-0.03533 mg/L	0.000758	-0.03533 mg/L	0.000758	2.14%
Ti 334.940†	5510447.5	13.888 mg/L	0.0508	13.888 mg/L	0.0508	0.37%
Ca 227.546†	14058.9	134.67 mg/L	1.360	134.67 mg/L	1.360	1.01%

Sequence No.: 17

Sample ID: K0911-01A~SED-1

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 43

Date Collected: 6/9/2011 10:56:19 AM

Data Type: Reprocessed on 6/9/2011 2:27:46 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0911-01A~SED-1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1051681.2	104.32 %		0.173			0.17%
Lu 261.542	954873.9	99.89 %		0.352			0.35%
Ag 328.068†	836.5	0.00897 mg/L		0.000317	0.00897 mg/L	0.000317	3.53%
Al 308.215†	584149.7	32.000 mg/L		0.1365	32.000 mg/L	0.1365	0.43%
As 188.979†	51.2	0.05060 mg/L		0.004191	0.05060 mg/L	0.004191	8.28%
Ba 233.527†	53945.4	1.4807 mg/L		0.00750	1.4807 mg/L	0.00750	0.51%
Be 313.107†	704.0	0.00288 mg/L		0.000036	0.00288 mg/L	0.000036	1.24%
Co 228.616†	2488.5	0.09780 mg/L		0.000458	0.09780 mg/L	0.000458	0.47%
Cr 267.716†	7434.2	0.16640 mg/L		0.000700	0.16640 mg/L	0.000700	0.42%
Cu 324.752†	40728.9	0.40350 mg/L		0.001454	0.40350 mg/L	0.001454	0.36%
Fe 273.955†	3085890.2	148.24 mg/L		0.086	148.24 mg/L	0.086	0.06%
Mg 279.077†	112971.4	6.9813 mg/L		0.03300	6.9813 mg/L	0.03300	0.47%
Mn 257.610†	22239898.5	65.612 mg/L		0.1481	65.612 mg/L	0.1481	0.23%
Concentration greater than upper limit for Mn 257.610.							
Ni 231.604†	1666.4	0.08029 mg/L		0.000178	0.08029 mg/L	0.000178	0.22%
Pb 220.353†	3855.8	0.75280 mg/L		0.001286	0.75280 mg/L	0.001286	0.17%
Sb 206.836†	5.8	-0.00087 mg/L		0.001155	-0.00087 mg/L	0.001155	132.06%
Se 196.026†	-9.3	0.00365 mg/L		0.006835	0.00365 mg/L	0.006835	187.04%
Tl 190.801†	1.3	0.01271 mg/L		0.003948	0.01271 mg/L	0.003948	31.05%
V 292.402†	21736.8	0.33020 mg/L		0.002564	0.33020 mg/L	0.002564	0.78%
Zn 206.200†	51233.5	1.9023 mg/L		0.00952	1.9023 mg/L	0.00952	0.50%
Cd 226.502†	11065.2	0.27009 mg/L		0.000550	0.27009 mg/L	0.000550	0.20%
Ti 334.940†	475086.1	1.1974 mg/L		0.00368	1.1974 mg/L	0.00368	0.31%
Ca 227.546†	2966.8	24.754 mg/L		0.0684	24.754 mg/L	0.0684	0.28%

Sequence No.: 18

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/9/2011 11:00:19 AM

Data Type: Reprocessed on 6/9/2011 2:27:47 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	974084.0	96.620 %		0.6360			0.66%
Lu 261.542	947070.9	99.07 %		0.836			0.84%
Ag 328.068†	124895.3	1.3036 mg/L		0.00551	1.3036 mg/L	0.00551	0.42%
QC value within limits for Ag 328.068 Recovery = 104.29%							
Al 308.215†	185993.0	10.160 mg/L		0.0074	10.160 mg/L	0.0074	0.07%

QC value within limits for Al	308.215	Recovery =	101.60%			
As 188.979†	691.0	0.49448 mg/L	0.009638	0.49448 mg/L	0.009638	1.95%
QC value within limits for As	188.979	Recovery =	98.90%			
Ba 233.527†	379747.6	10.424 mg/L	0.0636	10.424 mg/L	0.0636	0.61%
QC value within limits for Ba	233.527	Recovery =	104.24%			
Be 313.107†	334245.0	0.25244 mg/L	0.000925	0.25244 mg/L	0.000925	0.37%
QC value within limits for Be	313.107	Recovery =	100.98%			
Co 228.616†	62686.1	2.6269 mg/L	0.00730	2.6269 mg/L	0.00730	0.28%
QC value within limits for Co	228.616	Recovery =	105.08%			
Cr 267.716†	42607.9	1.0265 mg/L	0.00332	1.0265 mg/L	0.00332	0.32%
QC value within limits for Cr	267.716	Recovery =	102.65%			
Cu 324.752†	128810.9	1.2547 mg/L	0.00362	1.2547 mg/L	0.00362	0.29%
QC value within limits for Cu	324.752	Recovery =	100.38%			
Fe 273.955†	107395.9	5.2388 mg/L	0.01384	5.2388 mg/L	0.01384	0.26%
QC value within limits for Fe	273.955	Recovery =	104.78%			
Mg 279.077†	425536.1	25.107 mg/L	0.0831	25.107 mg/L	0.0831	0.33%
QC value within limits for Mg	279.077	Recovery =	100.43%			
Mn 257.610†	880188.2	2.5959 mg/L	0.01732	2.5959 mg/L	0.01732	0.67%
QC value within limits for Mn	257.610	Recovery =	103.84%			
Ni 231.604†	52133.7	2.5618 mg/L	0.00858	2.5618 mg/L	0.00858	0.34%
QC value within limits for Ni	231.604	Recovery =	102.47%			
Pb 220.353†	2601.5	0.51049 mg/L	0.006122	0.51049 mg/L	0.006122	1.20%
QC value within limits for Pb	220.353	Recovery =	102.10%			
Sb 206.836†	911.0	0.50403 mg/L	0.006448	0.50403 mg/L	0.006448	1.28%
QC value within limits for Sb	206.836	Recovery =	100.81%			
Se 196.026†	503.7	0.49312 mg/L	0.003366	0.49312 mg/L	0.003366	0.68%
QC value within limits for Se	196.026	Recovery =	98.62%			
Tl 190.801†	863.1	0.51497 mg/L	0.005026	0.51497 mg/L	0.005026	0.98%
QC value within limits for Tl	190.801	Recovery =	102.99%			
V 292.402†	172226.3	2.5067 mg/L	0.01032	2.5067 mg/L	0.01032	0.41%
QC value within limits for V	292.402	Recovery =	100.27%			
Zn 206.200†	68719.4	2.5538 mg/L	0.00878	2.5538 mg/L	0.00878	0.34%
QC value within limits for Zn	206.200	Recovery =	102.15%			
Cd 226.502†	9778.5	0.24755 mg/L	0.001523	0.24755 mg/L	0.001523	0.62%
QC value within limits for Cd	226.502	Recovery =	99.02%			
Ti 334.940†	207066.0	0.52154 mg/L	0.001502	0.52154 mg/L	0.001502	0.29%
QC value within limits for Ti	334.940	Recovery =	Not calculated			
Ca 227.546†	4587.3	26.144 mg/L	0.3699	26.144 mg/L	0.3699	1.42%
QC value within limits for Ca	227.546	Recovery =	104.58%			

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 6/9/2011 11:04:01 AM

Data Type: Reprocessed on 6/9/2011 2:27:48 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1008208.2	100.00 %	1.318			1.32%
Lu 261.542	959427.1	100.4 %	1.03			1.02%
Ag 328.068†	-68.3	-0.00071 mg/L	0.000362	-0.00071 mg/L	0.000362	50.83%
Al 308.215†	-232.0	-0.01271 mg/L	0.006517	-0.01271 mg/L	0.006517	51.26%
As 188.979†	2.7	0.00190 mg/L	0.004458	0.00190 mg/L	0.004458	234.39%
Ba 233.527†	36.8	0.00101 mg/L	0.000271	0.00101 mg/L	0.000271	26.78%
Be 313.107†	33.3	0.00003 mg/L	0.000014	0.00003 mg/L	0.000014	54.34%
Co 228.616†	7.2	0.00030 mg/L	0.000265	0.00030 mg/L	0.000265	87.92%
Cr 267.716†	12.3	0.00030 mg/L	0.000210	0.00030 mg/L	0.000210	71.05%
Cu 324.752†	19.4	0.00019 mg/L	0.000685	0.00019 mg/L	0.000685	361.69%
Fe 273.955†	210.4	0.01011 mg/L	0.001627	0.01011 mg/L	0.001627	16.09%
Mg 279.077†	51.7	0.00305 mg/L	0.003386	0.00305 mg/L	0.003386	110.86%
Mn 257.610†	530.6	0.00157 mg/L	0.000303	0.00157 mg/L	0.000303	19.37%
Ni 231.604†	2.0	0.00010 mg/L	0.000335	0.00010 mg/L	0.000335	339.91%
Pb 220.353†	3.1	0.00061 mg/L	0.001620	0.00061 mg/L	0.001620	266.74%
Sb 206.836†	14.3	0.00812 mg/L	0.002912	0.00812 mg/L	0.002912	35.84%
Se 196.026†	-4.6	-0.00452 mg/L	0.005583	-0.00452 mg/L	0.005583	123.57%
Tl 190.801†	1.4	0.00085 mg/L	0.002102	0.00085 mg/L	0.002102	246.03%

V 292.402†	12.4	0.00018 mg/L	0.000508	0.00018 mg/L	0.000508	281.35%
Zn 206.200†	24.1	0.00089 mg/L	0.000303	0.00089 mg/L	0.000303	33.90%
Cd 226.502†	2.3	0.00006 mg/L	0.000012	0.00006 mg/L	0.000012	20.19%
Ti 334.940†	238.1	0.00060 mg/L	0.000055	0.00060 mg/L	0.000055	9.24%
Ca 227.546†	-20.4	-0.11549 mg/L	0.069028	-0.11549 mg/L	0.069028	59.77%

Sequence No.: 20

Sample ID: K0911-02A~SED-2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 44

Date Collected: 6/9/2011 11:07:43 AM

Data Type: Reprocessed on 6/9/2011 2:27:49 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0911-02A~SED-2

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1119323.2	111.03	%	1.353			1.22%
Lu 261.542	970988.9	101.6	%	0.77			0.76%
Ag 328.068†	-172.3	-0.00157	mg/L	0.000337	-0.00157 mg/L	0.000337	21.54%
Al 308.215†	830257.8	45.484	mg/L	0.0676	45.484 mg/L	0.0676	0.15%
As 188.979†	93.4	0.07334	mg/L	0.002943	0.07334 mg/L	0.002943	4.01%
Ba 233.527†	21565.1	0.59212	mg/L	0.007500	0.59212 mg/L	0.007500	1.27%
Be 313.107†	1489.6	0.00410	mg/L	0.000018	0.00410 mg/L	0.000018	0.45%
Co 228.616†	1572.3	0.06085	mg/L	0.000590	0.06085 mg/L	0.000590	0.97%
Cr 267.716†	10327.3	0.24724	mg/L	0.003291	0.24724 mg/L	0.003291	1.33%
Cu 324.752†	44640.5	0.43907	mg/L	0.004785	0.43907 mg/L	0.004785	1.09%
Fe 273.955†	1965680.3	94.430	mg/L	0.1586	94.430 mg/L	0.1586	0.17%
Mg 279.077†	126000.5	7.4700	mg/L	0.05656	7.4700 mg/L	0.05656	0.76%
Mn 257.610†	2753473.8	8.1227	mg/L	0.01745	8.1227 mg/L	0.01745	0.21%
Ni 231.604†	1989.0	0.09636	mg/L	0.000971	0.09636 mg/L	0.000971	1.01%
Pb 220.353†	8805.6	1.7266	mg/L	0.01555	1.7266 mg/L	0.01555	0.90%
Sb 206.836†	13.1	0.00147	mg/L	0.000669	0.00147 mg/L	0.000669	45.48%
Se 196.026†	-25.8	0.00247	mg/L	0.006296	0.00247 mg/L	0.006296	254.62%
Tl 190.801†	-2.9	0.01356	mg/L	0.002908	0.01356 mg/L	0.002908	21.46%
V 292.402†	19943.3	0.29582	mg/L	0.003668	0.29582 mg/L	0.003668	1.24%
Zn 206.200†	59908.9	2.2246	mg/L	0.02022	2.2246 mg/L	0.02022	0.91%
Cd 226.502†	21123.2	0.52887	mg/L	0.003783	0.52887 mg/L	0.003783	0.72%
Ti 334.940†	601146.3	1.5151	mg/L	0.00189	1.5151 mg/L	0.00189	0.12%
Ca 227.546†	3291.6	23.721	mg/L	0.1662	23.721 mg/L	0.1662	0.70%

Sequence No.: 21

Sample ID: K0911-03A~SED-3

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 45

Date Collected: 6/9/2011 11:11:27 AM

Data Type: Reprocessed on 6/9/2011 2:27:49 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0911-03A~SED-3

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1047035.9	103.86	%	1.618			1.56%
Lu 261.542	962385.4	100.7	%	0.95			0.95%
Ag 328.068†	-32.5	-0.00025	mg/L	0.000455	-0.00025 mg/L	0.000455	179.98%
Al 308.215†	1101861.9	60.367	mg/L	0.2740	60.367 mg/L	0.2740	0.45%
As 188.979†	75.3	0.05840	mg/L	0.001501	0.05840 mg/L	0.001501	2.57%
Ba 233.527†	24300.6	0.66698	mg/L	0.002975	0.66698 mg/L	0.002975	0.45%
Be 313.107†	2612.3	0.00512	mg/L	0.000039	0.00512 mg/L	0.000039	0.77%
Co 228.616†	1485.4	0.05814	mg/L	0.000804	0.05814 mg/L	0.000804	1.38%
Cr 267.716†	3980.8	0.09373	mg/L	0.000918	0.09373 mg/L	0.000918	0.98%
Cu 324.752†	11147.5	0.11152	mg/L	0.001296	0.11152 mg/L	0.001296	1.16%
Fe 273.955†	1329957.5	63.887	mg/L	0.1379	63.887 mg/L	0.1379	0.22%
Mg 279.077†	116334.4	6.9146	mg/L	0.02244	6.9146 mg/L	0.02244	0.32%
Mn 257.610†	3769380.9	11.120	mg/L	0.0623	11.120 mg/L	0.0623	0.56%
Ni 231.604†	1228.7	0.05916	mg/L	0.001194	0.05916 mg/L	0.001194	2.02%
Pb 220.353†	2391.0	0.47168	mg/L	0.006009	0.47168 mg/L	0.006009	1.27%
Sb 206.836†	-2.0	-0.00503	mg/L	0.001179	-0.00503 mg/L	0.001179	23.43%
Se 196.026†	-20.2	-0.00408	mg/L	0.004974	-0.00408 mg/L	0.004974	122.02%

Tl 190.801†	-5.3	0.01088 mg/L	0.003238	0.01088 mg/L	0.003238	29.77%
V 292.402†	7254.1	0.10925 mg/L	0.000607	0.10925 mg/L	0.000607	0.56%
Zn 206.200†	20272.7	0.75281 mg/L	0.003088	0.75281 mg/L	0.003088	0.41%
Cd 226.502†	6703.8	0.16535 mg/L	0.002122	0.16535 mg/L	0.002122	1.28%
Ti 334.940†	638875.1	1.6104 mg/L	0.00836	1.6104 mg/L	0.00836	0.52%
Ca 227.546†	4708.8	30.142 mg/L	0.3234	30.142 mg/L	0.3234	1.07%

Sequence No.: 22

Autosampler Location: 46

Sample ID: K0911-04A~SED-4

Date Collected: 6/9/2011 11:15:13 AM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:27:50 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0911-04A~SED-4

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1048526.1	104.00	%	0.339			0.33%
Lu 261.542	962421.5	100.7	%	0.33			0.33%
Ag 328.068†	-7.4	0.00006	mg/L	0.000964	0.00006 mg/L	0.000964	>999.9%
Al 308.215†	710532.2	38.926	mg/L	0.1481	38.926 mg/L	0.1481	0.38%
As 188.979†	33.9	0.02904	mg/L	0.001800	0.02904 mg/L	0.001800	6.20%
Ba 233.527†	15726.0	0.43175	mg/L	0.004828	0.43175 mg/L	0.004828	1.12%
Be 313.107†	487.1	0.00300	mg/L	0.000046	0.00300 mg/L	0.000046	1.54%
Co 228.616†	1589.7	0.06293	mg/L	0.000385	0.06293 mg/L	0.000385	0.61%
Cr 267.716†	6066.1	0.14466	mg/L	0.001107	0.14466 mg/L	0.001107	0.77%
Cu 324.752†	33562.7	0.32964	mg/L	0.003202	0.32964 mg/L	0.003202	0.97%
Fe 273.955†	1271167.8	61.066	mg/L	0.1974	61.066 mg/L	0.1974	0.32%
Mg 279.077†	97422.0	5.7824	mg/L	0.02411	5.7824 mg/L	0.02411	0.42%
Mn 257.610†	2595342.0	7.6564	mg/L	0.01962	7.6564 mg/L	0.01962	0.26%
Ni 231.604†	1784.2	0.08661	mg/L	0.000554	0.08661 mg/L	0.000554	0.64%
Pb 220.353†	4392.1	0.86215	mg/L	0.004692	0.86215 mg/L	0.004692	0.54%
Sb 206.836†	11.5	0.00237	mg/L	0.003072	0.00237 mg/L	0.003072	129.67%
Se 196.026†	-13.2	0.00377	mg/L	0.002028	0.00377 mg/L	0.002028	53.83%
Tl 190.801†	-2.2	0.01100	mg/L	0.003394	0.01100 mg/L	0.003394	30.86%
V 292.402†	11947.1	0.17732	mg/L	0.001327	0.17732 mg/L	0.001327	0.75%
Zn 206.200†	41521.2	1.5417	mg/L	0.01283	1.5417 mg/L	0.01283	0.83%
Cd 226.502†	12604.6	0.31521	mg/L	0.004025	0.31521 mg/L	0.004025	1.28%
Ti 334.940†	533173.4	1.3438	mg/L	0.00467	1.3438 mg/L	0.00467	0.35%
Ca 227.546†	2429.8	17.050	mg/L	0.0558	17.050 mg/L	0.0558	0.33%

Sequence No.: 23

Autosampler Location: 47

Sample ID: K0911-05A~SED-5

Date Collected: 6/9/2011 11:19:00 AM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:27:51 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0911-05A~SED-5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1058153.9	104.96	%	0.250			0.24%
Lu 261.542	973173.9	101.8	%	0.21			0.21%
Ag 328.068†	-387.6	-0.00307	mg/L	0.000733	-0.00307 mg/L	0.000733	23.90%
Al 308.215†	793077.0	43.436	mg/L	0.0534	43.436 mg/L	0.0534	0.12%
As 188.979†	66.2	0.06421	mg/L	0.005481	0.06421 mg/L	0.005481	8.54%
Ba 233.527†	28638.6	0.78723	mg/L	0.010831	0.78723 mg/L	0.010831	1.38%
Be 313.107†	896.7	0.00391	mg/L	0.000021	0.00391 mg/L	0.000021	0.54%
Co 228.616†	2459.1	0.09169	mg/L	0.000165	0.09169 mg/L	0.000165	0.18%
Cr 267.716†	12655.1	0.30353	mg/L	0.001711	0.30353 mg/L	0.001711	0.56%
Cu 324.752†	116337.3	1.1457	mg/L	0.01380	1.1457 mg/L	0.01380	1.20%
Fe 273.955†	5726968.0	275.13	mg/L	0.400	275.13 mg/L	0.400	0.15%
Mg 279.077†	159581.9	9.4513	mg/L	0.09212	9.4513 mg/L	0.09212	0.97%
Mn 257.610†	2817542.5	8.3105	mg/L	0.02140	8.3105 mg/L	0.02140	0.26%
Ni 231.604†	3204.7	0.15481	mg/L	0.001058	0.15481 mg/L	0.001058	0.68%
Pb 220.353†	8024.9	1.5777	mg/L	0.00165	1.5777 mg/L	0.00165	0.10%
Sb 206.836†	25.3	0.00943	mg/L	0.002627	0.00943 mg/L	0.002627	27.86%

Se 196.026†	-92.2	-0.00147 mg/L	0.003253	-0.00147 mg/L	0.003253	221.04%
Tl 190.801†	-22.5	0.01290 mg/L	0.004443	0.01290 mg/L	0.004443	34.45%
V 292.402†	81827.5	1.2075 mg/L	0.00736	1.2075 mg/L	0.00736	0.61%
Zn 206.200†	81622.6	3.0308 mg/L	0.03586	3.0308 mg/L	0.03586	1.18%
Cd 226.502†	20746.5	0.50666 mg/L	0.007169	0.50666 mg/L	0.007169	1.41%
Ti 334.940†	647991.3	1.6334 mg/L	0.00498	1.6334 mg/L	0.00498	0.31%
Ca 227.546†	7079.3	54.842 mg/L	0.1728	54.842 mg/L	0.1728	0.32%

Sequence No.: 24

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/9/2011 11:22:47 AM

Data Type: Reprocessed on 6/9/2011 2:27:52 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	982749.1	97.479 %	0.9075			0.93%
Lu 261.542	951706.2	99.56 %	0.955			0.96%
Ag 328.068†	126818.6	1.3236 mg/L	0.01767	1.3236 mg/L	0.01767	1.33%
QC value within limits for Ag		328.068 Recovery = 105.89%				
Al 308.215†	188407.6	10.292 mg/L	0.1379	10.292 mg/L	0.1379	1.34%
QC value within limits for Al		308.215 Recovery = 102.92%				
As 188.979†	700.5	0.50126 mg/L	0.011019	0.50126 mg/L	0.011019	2.20%
QC value within limits for As		188.979 Recovery = 100.25%				
Ba 233.527†	382083.8	10.488 mg/L	0.0373	10.488 mg/L	0.0373	0.36%
QC value within limits for Ba		233.527 Recovery = 104.88%				
Be 313.107†	336662.0	0.25428 mg/L	0.001420	0.25428 mg/L	0.001420	0.56%
QC value within limits for Be		313.107 Recovery = 101.71%				
Co 228.616†	63840.8	2.6753 mg/L	0.03260	2.6753 mg/L	0.03260	1.22%
QC value within limits for Co		228.616 Recovery = 107.01%				
Cr 267.716†	43352.5	1.0444 mg/L	0.01206	1.0444 mg/L	0.01206	1.16%
QC value within limits for Cr		267.716 Recovery = 104.44%				
Cu 324.752†	131248.7	1.2785 mg/L	0.02166	1.2785 mg/L	0.02166	1.69%
QC value within limits for Cu		324.752 Recovery = 102.28%				
Fe 273.955†	109364.6	5.3348 mg/L	0.07720	5.3348 mg/L	0.07720	1.45%
QC value within limits for Fe		273.955 Recovery = 106.70%				
Mg 279.077†	433158.5	25.557 mg/L	0.3079	25.557 mg/L	0.3079	1.20%
QC value within limits for Mg		279.077 Recovery = 102.23%				
Mn 257.610†	880270.6	2.5961 mg/L	0.00651	2.5961 mg/L	0.00651	0.25%
QC value within limits for Mn		257.610 Recovery = 103.84%				
Ni 231.604†	53177.5	2.6131 mg/L	0.02846	2.6131 mg/L	0.02846	1.09%
QC value within limits for Ni		231.604 Recovery = 104.53%				
Pb 220.353†	2624.7	0.51506 mg/L	0.005463	0.51506 mg/L	0.005463	1.06%
QC value within limits for Pb		220.353 Recovery = 103.01%				
Sb 206.836†	925.5	0.51199 mg/L	0.004328	0.51199 mg/L	0.004328	0.85%
QC value within limits for Sb		206.836 Recovery = 102.40%				
Se 196.026†	512.5	0.50173 mg/L	0.006617	0.50173 mg/L	0.006617	1.32%
QC value within limits for Se		196.026 Recovery = 100.35%				
Tl 190.801†	871.2	0.51987 mg/L	0.009428	0.51987 mg/L	0.009428	1.81%
QC value within limits for Tl		190.801 Recovery = 103.97%				
V 292.402†	175172.9	2.5496 mg/L	0.02949	2.5496 mg/L	0.02949	1.16%
QC value within limits for V		292.402 Recovery = 101.98%				
Zn 206.200†	70429.3	2.6173 mg/L	0.03112	2.6173 mg/L	0.03112	1.19%
QC value within limits for Zn		206.200 Recovery = 104.69%				
Cd 226.502†	10014.8	0.25353 mg/L	0.003023	0.25353 mg/L	0.003023	1.19%
QC value within limits for Cd		226.502 Recovery = 101.41%				
Ti 334.940†	210795.1	0.53093 mg/L	0.007937	0.53093 mg/L	0.007937	1.49%
QC value within limits for Ti		334.940 Recovery = Not calculated				
Ca 227.546†	4630.1	26.389 mg/L	0.3080	26.389 mg/L	0.3080	1.17%
QC value within limits for Ca		227.546 Recovery = 105.56%				

All analyte(s) passed QC.

Sequence No.: 25

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Autosampler Location: 4

Date Collected: 6/9/2011 11:26:29 AM

Data Type: Reprocessed on 6/9/2011 2:27:53 PM

Initial Sample Wt:
Dilution:

Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1001424.6	99.332	%	0.7454				0.75%
Lu 261.542	948083.8	99.18	%	0.632				0.64%
Ag 328.068†	-2.5	-0.00002	mg/L	0.000214	-0.00002	mg/L	0.000214	854.73%
Al 308.215†	-134.6	-0.00738	mg/L	0.006718	-0.00738	mg/L	0.006718	91.00%
As 188.979†	1.5	0.00108	mg/L	0.001085	0.00108	mg/L	0.001085	100.87%
Ba 233.527†	46.6	0.00128	mg/L	0.000474	0.00128	mg/L	0.000474	37.00%
Be 313.107†	37.7	0.00003	mg/L	0.000017	0.00003	mg/L	0.000017	58.77%
Co 228.616†	5.3	0.00022	mg/L	0.000123	0.00022	mg/L	0.000123	55.35%
Cr 267.716†	19.7	0.00047	mg/L	0.000134	0.00047	mg/L	0.000134	28.22%
Cu 324.752†	75.0	0.00073	mg/L	0.000261	0.00073	mg/L	0.000261	35.75%
Fe 273.955†	146.0	0.00704	mg/L	0.001382	0.00704	mg/L	0.001382	19.64%
Mg 279.077†	-5.8	-0.00034	mg/L	0.003499	-0.00034	mg/L	0.003499	>999.9%
Mn 257.610†	177.6	0.00052	mg/L	0.000146	0.00052	mg/L	0.000146	27.84%
Ni 231.604†	9.3	0.00046	mg/L	0.000204	0.00046	mg/L	0.000204	44.44%
Pb 220.353†	2.8	0.00056	mg/L	0.002495	0.00056	mg/L	0.002495	447.54%
Sb 206.836†	6.4	0.00365	mg/L	0.000170	0.00365	mg/L	0.000170	4.66%
Se 196.026†	-4.4	-0.00431	mg/L	0.002635	-0.00431	mg/L	0.002635	61.16%
Tl 190.801†	-1.3	-0.00074	mg/L	0.001519	-0.00074	mg/L	0.001519	204.29%
V 292.402†	53.8	0.00078	mg/L	0.000259	0.00078	mg/L	0.000259	33.07%
Zn 206.200†	27.5	0.00102	mg/L	0.000194	0.00102	mg/L	0.000194	18.99%
Cd 226.502†	4.3	0.00011	mg/L	0.000089	0.00011	mg/L	0.000089	81.33%
Ti 334.940†	211.5	0.00053	mg/L	0.000193	0.00053	mg/L	0.000193	36.10%
Ca 227.546†	1.4	0.00836	mg/L	0.018123	0.00836	mg/L	0.018123	216.75%

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Sequence No.: 26

Sample ID: K0911-06A~SED-6

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 48

Date Collected: 6/9/2011 11:30:11 AM

Data Type: Reprocessed on 6/9/2011 2:27:54 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0911-06A~SED-6

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	975178.6	96.728	%	1.2610				1.30%
Lu 261.542	933354.4	97.64	%	0.142				0.15%
Ag 328.068†	-1370.7	-0.01417	mg/L	0.000658	-0.01417	mg/L	0.000658	4.65%
Al 308.215†	593961.7	32.540	mg/L	0.2633	32.540	mg/L	0.2633	0.81%
As 188.979†	28.4	0.06421	mg/L	0.003834	0.06421	mg/L	0.003834	5.97%
Ba 233.527†	8960.4	0.24605	mg/L	0.002485	0.24605	mg/L	0.002485	1.01%
Be 313.107†	-870.0	0.00263	mg/L	0.000045	0.00263	mg/L	0.000045	1.71%
Co 228.616†	1772.5	0.04530	mg/L	0.000131	0.04530	mg/L	0.000131	0.29%
Cr 267.716†	15725.1	0.37815	mg/L	0.004491	0.37815	mg/L	0.004491	1.19%
Cu 324.752†	48793.1	0.51170	mg/L	0.006907	0.51170	mg/L	0.006907	1.35%
Fe 273.955†	16375047.7	786.57	mg/L	0.766	786.57	mg/L	0.766	0.10%
Concentration greater than upper limit for Fe 273.955.								
Mg 279.077†	518112.1	30.568	mg/L	0.2522	30.568	mg/L	0.2522	0.82%
Mn 257.610†	953138.2	2.8063	mg/L	0.03360	2.8063	mg/L	0.03360	1.20%
Saturated outside survey window (code 6)								
Ni 231.604†	5019.7	0.24044	mg/L	0.001179	0.24044	mg/L	0.001179	0.49%
Pb 220.353†	4726.1	0.94398	mg/L	0.004084	0.94398	mg/L	0.004084	0.43%
Sb 206.836†	33.9	0.01046	mg/L	0.002518	0.01046	mg/L	0.002518	24.07%
Se 196.026†	-287.6	-0.01646	mg/L	0.004971	-0.01646	mg/L	0.004971	30.20%
Tl 190.801†	-110.4	-0.01305	mg/L	0.002976	-0.01305	mg/L	0.002976	22.80%
V 292.402†	10374.0	0.20099	mg/L	0.002548	0.20099	mg/L	0.002548	1.27%
Zn 206.200†	44056.3	1.6365	mg/L	0.01877	1.6365	mg/L	0.01877	1.15%
Cd 226.502†	1920.2	-0.00654	mg/L	0.001369	-0.00654	mg/L	0.001369	20.92%
Ti 334.940†	664741.5	1.6757	mg/L	0.02070	1.6757	mg/L	0.02070	1.24%
Ca 227.546†	12127.6	110.87	mg/L	0.231	110.87	mg/L	0.231	0.21%

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Sequence No.: 27

Autosampler Location: 49

Sample ID: K0911-06ADUP~SED-6D

Date Collected: 6/9/2011 11:34:03 AM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:27:54 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0911-06ADUP~SED-6D

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc. Units	Std.Dev.	
Y 360.073	1006136.2	99.799	%	0.9244			0.93%
Lu 261.542	960068.7	100.4	%	1.08			1.08%
Ag 328.068†	-201.3	-0.00199	mg/L	0.001080	-0.00199 mg/L	0.001080	54.29%
Al 308.215†	528588.0	28.958	mg/L	0.0440	28.958 mg/L	0.0440	0.15%
As 188.979†	26.6	0.02666	mg/L	0.001267	0.02666 mg/L	0.001267	4.75%
Ba 233.527†	5151.4	0.14153	mg/L	0.003870	0.14153 mg/L	0.003870	2.73%
Be 313.107†	-1229.2	0.00218	mg/L	0.000015	0.00218 mg/L	0.000015	0.67%
Co 228.616†	625.6	0.02078	mg/L	0.000359	0.02078 mg/L	0.000359	1.73%
Cr 267.716†	10147.9	0.24428	mg/L	0.005570	0.24428 mg/L	0.005570	2.28%
Cu 324.752†	40624.4	0.40034	mg/L	0.009249	0.40034 mg/L	0.009249	2.31%
Fe 273.955†	2147690.3	103.17	mg/L	0.177	103.17 mg/L	0.177	0.17%
Mg 279.077†	253886.1	14.976	mg/L	0.3686	14.976 mg/L	0.3686	2.46%
Mn 257.610†	242308.1	0.71379	mg/L	0.019532	0.71379 mg/L	0.019532	2.74%
Ni 231.604†	2382.4	0.11558	mg/L	0.000726	0.11558 mg/L	0.000726	0.63%
Pb 220.353†	2383.4	0.47089	mg/L	0.005881	0.47089 mg/L	0.005881	1.25%
Sb 206.836†	14.6	0.00212	mg/L	0.003104	0.00212 mg/L	0.003104	146.19%
Se 196.026†	-44.8	-0.00929	mg/L	0.006632	-0.00929 mg/L	0.006632	71.37%
Tl 190.801†	-14.6	0.00820	mg/L	0.001147	0.00820 mg/L	0.001147	13.99%
V 292.402†	10121.0	0.15285	mg/L	0.003149	0.15285 mg/L	0.003149	2.06%
Zn 206.200†	31015.1	1.1520	mg/L	0.03216	1.1520 mg/L	0.03216	2.79%
Cd 226.502†	749.2	0.01161	mg/L	0.000316	0.01161 mg/L	0.000316	2.73%
Ti 334.940†	627554.4	1.5817	mg/L	0.00626	1.5817 mg/L	0.00626	0.40%
Ca 227.546†	4539.4	31.265	mg/L	0.2080	31.265 mg/L	0.2080	0.67%

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Sequence No.: 28

Autosampler Location: 50

Sample ID: K0911-06AMS~SED-6S

Date Collected: 6/9/2011 11:37:49 AM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:27:55 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0911-06AMS~SED-6S

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc. Units	Std.Dev.	
Y 360.073	992293.5	98.426	%	0.5250			0.53%
Lu 261.542	942191.1	98.56	%	0.155			0.16%
Ag 328.068†	117125.0	1.2226	mg/L	0.00641	1.2226 mg/L	0.00641	0.52%
Al 308.215†	817027.6	44.733	mg/L	0.2314	44.733 mg/L	0.2314	0.52%
As 188.979†	680.3	0.49329	mg/L	0.004157	0.49329 mg/L	0.004157	0.84%
Ba 233.527†	349398.7	9.5910	mg/L	0.05647	9.5910 mg/L	0.05647	0.59%
Be 313.107†	305637.1	0.23341	mg/L	0.001033	0.23341 mg/L	0.001033	0.44%
Co 228.616†	57723.9	2.4141	mg/L	0.01418	2.4141 mg/L	0.01418	0.59%
Cr 267.716†	47533.9	1.1449	mg/L	0.00767	1.1449 mg/L	0.00767	0.67%
Cu 324.752†	153829.4	1.5027	mg/L	0.00548	1.5027 mg/L	0.00548	0.36%
Fe 273.955†	2081077.0	100.04	mg/L	0.619	100.04 mg/L	0.619	0.62%
Mg 279.077†	665909.4	39.287	mg/L	0.2254	39.287 mg/L	0.2254	0.57%
Mn 257.610†	1157931.2	3.4143	mg/L	0.02005	3.4143 mg/L	0.02005	0.59%
Ni 231.604†	50086.0	2.4599	mg/L	0.01940	2.4599 mg/L	0.01940	0.79%
Pb 220.353†	5441.0	1.0704	mg/L	0.00100	1.0704 mg/L	0.00100	0.09%
Sb 206.836†	586.8	0.31592	mg/L	0.003807	0.31592 mg/L	0.003807	1.20%
Se 196.026†	422.6	0.44565	mg/L	0.004331	0.44565 mg/L	0.004331	0.97%
Tl 190.801†	787.5	0.48426	mg/L	0.007569	0.48426 mg/L	0.007569	1.56%
V 292.402†	169279.8	2.4690	mg/L	0.01198	2.4690 mg/L	0.01198	0.49%
Zn 206.200†	95590.3	3.5516	mg/L	0.02366	3.5516 mg/L	0.02366	0.67%
Cd 226.502†	10233.3	0.25231	mg/L	0.000666	0.25231 mg/L	0.000666	0.26%
Ti 334.940†	709488.0	1.7878	mg/L	0.00328	1.7878 mg/L	0.00328	0.18%
Ca 227.546†	8611.1	54.054	mg/L	0.1311	54.054 mg/L	0.1311	0.24%

Sequence No.: 29
 Sample ID: K0911-06ASD-SED-6
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 51
 Date Collected: 6/9/2011 11:41:27 AM
 Data Type: Reprocessed on 6/9/2011 2:27:56 PM
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: K0911-06ASD-SED-6

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1022291.9	101.40	%	0.415			0.41%
Lu 261.542	973375.4	101.8	%	0.52			0.51%
Ag 328.068†	-247.0	-0.00255	mg/L	0.000005	-0.00255 mg/L	0.000005	0.19%
Al 308.215†	127704.2	6.9962	mg/L	0.04631	6.9962 mg/L	0.04631	0.66%
As 188.979†	7.0	0.01485	mg/L	0.004564	0.01485 mg/L	0.004564	30.75%
Ba 233.527†	1923.5	0.05282	mg/L	0.001601	0.05282 mg/L	0.001601	3.03%
Be 313.107†	-104.2	0.00060	mg/L	0.000078	0.00060 mg/L	0.000078	13.01%
Co 228.616†	399.5	0.01022	mg/L	0.000455	0.01022 mg/L	0.000455	4.45%
Cr 267.716†	3327.5	0.08002	mg/L	0.000146	0.08002 mg/L	0.000146	0.18%
Cu 324.752†	9773.1	0.10345	mg/L	0.001430	0.10345 mg/L	0.001430	1.38%
Fe 273.955†	3708087.9	178.12	mg/L	0.918	178.12 mg/L	0.918	0.52%
Mg 279.077†	114062.2	6.7294	mg/L	0.04482	6.7294 mg/L	0.04482	0.67%
Mn 257.610†	202914.2	0.59736	mg/L	0.008239	0.59736 mg/L	0.008239	1.38%
Ni 231.604†	1085.3	0.05194	mg/L	0.000692	0.05194 mg/L	0.000692	1.33%
Pb 220.353†	1012.5	0.20242	mg/L	0.001388	0.20242 mg/L	0.001388	0.69%
Sb 206.836†	5.2	0.00109	mg/L	0.004006	0.00109 mg/L	0.004006	367.87%
Se 196.026†	-61.3	0.00012	mg/L	0.004288	0.00012 mg/L	0.004288	>999.9%
Tl 190.801†	-24.7	-0.00305	mg/L	0.002049	-0.00305 mg/L	0.002049	67.27%
V 292.402†	2178.9	0.04306	mg/L	0.000853	0.04306 mg/L	0.000853	1.98%
Zn 206.200†	9521.2	0.35366	mg/L	0.004335	0.35366 mg/L	0.004335	1.23%
Cd 226.502†	400.9	-0.00234	mg/L	0.000131	-0.00234 mg/L	0.000131	5.63%
Ti 334.940†	136993.5	0.34533	mg/L	0.004186	0.34533 mg/L	0.004186	1.21%
Ca 227.546†	2512.3	23.780	mg/L	0.1250	23.780 mg/L	0.1250	0.53%

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Sequence No.: 30
 Sample ID: K0911-06APDS-SED-6
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 52
 Date Collected: 6/9/2011 11:45:10 AM
 Data Type: Reprocessed on 6/9/2011 2:27:57 PM
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: K0911-06APDS-SED-6

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	977773.0	96.986	%	0.6961			0.72%
Lu 261.542	926560.0	96.93	%	0.264			0.27%
Ag 328.068†	114933.0	1.1997	mg/L	0.00822	1.1997 mg/L	0.00822	0.69%
Al 308.215†	742850.0	40.670	mg/L	0.2508	40.670 mg/L	0.2508	0.62%
As 188.979†	641.4	0.50143	mg/L	0.003308	0.50143 mg/L	0.003308	0.66%
Ba 233.527†	339776.4	9.3269	mg/L	0.13452	9.3269 mg/L	0.13452	1.44%
Be 313.107†	295727.9	0.22572	mg/L	0.002251	0.22572 mg/L	0.002251	1.00%
Co 228.616†	56405.7	2.3359	mg/L	0.02109	2.3359 mg/L	0.02109	0.90%
Cr 267.716†	52943.4	1.2748	mg/L	0.00718	1.2748 mg/L	0.00718	0.56%
Cu 324.752†	165875.1	1.6514	mg/L	0.02189	1.6514 mg/L	0.02189	1.33%
Fe 273.955†	16094087.4	773.15	mg/L	2.944	773.15 mg/L	2.944	0.38%
Concentration greater than upper limit for Fe 273.955.							
Mg 279.077†	874549.8	51.598	mg/L	0.3807	51.598 mg/L	0.3807	0.74%
Mn 257.610†	1676053.7	4.9384	mg/L	0.05325	4.9384 mg/L	0.05325	1.08%
Ni 231.604†	51180.2	2.5091	mg/L	0.01721	2.5091 mg/L	0.01721	0.69%
Pb 220.353†	6790.5	1.3485	mg/L	0.00791	1.3485 mg/L	0.00791	0.59%
Sb 206.836†	796.3	0.43256	mg/L	0.006450	0.43256 mg/L	0.006450	1.49%
Se 196.026†	140.4	0.39675	mg/L	0.010541	0.39675 mg/L	0.010541	2.66%
Tl 190.801†	601.6	0.40786	mg/L	0.010317	0.40786 mg/L	0.010317	2.53%
V 292.402†	166601.2	2.4740	mg/L	0.01773	2.4740 mg/L	0.01773	0.72%
Zn 206.200†	102238.8	3.7987	mg/L	0.04157	3.7987 mg/L	0.04157	1.09%
Cd 226.502†	10215.6	0.20476	mg/L	0.001651	0.20476 mg/L	0.001651	0.81%
Ti 334.940†	661368.4	1.6669	mg/L	0.01790	1.6669 mg/L	0.01790	1.07%
Ca 227.546†	15843.1	131.09	mg/L	0.697	131.09 mg/L	0.697	0.53%

Sequence No.: 31
 Sample ID: K0911-07A~FD
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 53
 Date Collected: 6/9/2011 11:49:06 AM
 Data Type: Reprocessed on 6/9/2011 2:27:58 PM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: K0911-07A~FD

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1014637.2	100.64 %	1.244			1.24%
Lu 261.542	965906.9	101.0 %	0.97			0.96%
Ag 328.068†	-48.9	-0.00040 mg/L	0.000870	-0.00040 mg/L	0.000870	215.77%
Al 308.215†	471949.1	25.855 mg/L	0.0889	25.855 mg/L	0.0889	0.34%
As 188.979†	15.6	0.01655 mg/L	0.002488	0.01655 mg/L	0.002488	15.03%
Ba 233.527†	4197.7	0.11535 mg/L	0.001305	0.11535 mg/L	0.001305	1.13%
Be 313.107†	-1068.9	0.00189 mg/L	0.000003	0.00189 mg/L	0.000003	0.15%
Co 228.616†	437.2	0.01445 mg/L	0.000317	0.01445 mg/L	0.000317	2.19%
Cr 267.716†	8438.8	0.20315 mg/L	0.002407	0.20315 mg/L	0.002407	1.18%
Cu 324.752†	27671.9	0.27246 mg/L	0.000194	0.27246 mg/L	0.000194	0.07%
Fe 273.955†	1355035.0	65.093 mg/L	0.2739	65.093 mg/L	0.2739	0.42%
Mg 279.077†	195345.0	11.523 mg/L	0.0443	11.523 mg/L	0.0443	0.38%
Mn 257.610†	199142.5	0.58677 mg/L	0.001329	0.58677 mg/L	0.001329	0.23%
Ni 231.604†	1236.7	0.05964 mg/L	0.000611	0.05964 mg/L	0.000611	1.02%
Pb 220.353†	2339.5	0.46123 mg/L	0.003697	0.46123 mg/L	0.003697	0.80%
Sb 206.836†	10.8	0.00098 mg/L	0.002234	0.00098 mg/L	0.002234	227.12%
Se 196.026†	-24.2	-0.00201 mg/L	0.005107	-0.00201 mg/L	0.005107	253.64%
Tl 190.801†	-4.8	0.01052 mg/L	0.003045	0.01052 mg/L	0.003045	28.95%
V 292.402†	9436.6	0.14057 mg/L	0.001049	0.14057 mg/L	0.001049	0.75%
Zn 206.200†	23429.3	0.87028 mg/L	0.001924	0.87028 mg/L	0.001924	0.22%
Cd 226.502†	560.1	0.00950 mg/L	0.000139	0.00950 mg/L	0.000139	1.47%
Ti 334.940†	544918.8	1.3734 mg/L	0.00410	1.3734 mg/L	0.00410	0.30%
Ca 227.546†	3841.6	25.272 mg/L	0.2233	25.272 mg/L	0.2233	0.88%

Sequence No.: 32
 Sample ID: K0910-03A~DEC-065D 20xFe
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 26
 Date Collected: 6/9/2011 11:52:48 AM
 Data Type: Reprocessed on 6/9/2011 2:27:59 PM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: K0910-03A~DEC-065D 20xFe

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1014753.7	100.65 %	0.748			0.74%
Lu 261.542	965521.1	101.0 %	0.61			0.61%
Ag 328.068†	-100.0	-0.00100 mg/L	0.000458	-0.00100 mg/L	0.000458	45.67%
Al 308.215†	219088.9	12.003 mg/L	0.1295	12.003 mg/L	0.1295	1.08%
As 188.979†	-1.9	0.00140 mg/L	0.003732	0.00140 mg/L	0.003732	267.26%
Ba 233.527†	2631.1	0.07225 mg/L	0.001088	0.07225 mg/L	0.001088	1.51%
Be 313.107†	-337.0	0.00105 mg/L	0.000037	0.00105 mg/L	0.000037	3.48%
Co 228.616†	339.8	0.01201 mg/L	0.000142	0.01201 mg/L	0.000142	1.18%
Cr 267.716†	1466.3	0.03515 mg/L	0.000176	0.03515 mg/L	0.000176	0.50%
Cu 324.752†	1796.0	0.01943 mg/L	0.000306	0.01943 mg/L	0.000306	1.57%
Fe 273.955†	869167.3	41.752 mg/L	0.1193	41.752 mg/L	0.1193	0.29%
Mg 279.077†	65367.8	3.8590 mg/L	0.03918	3.8590 mg/L	0.03918	1.02%
Mn 257.610†	289507.8	0.85375 mg/L	0.008418	0.85375 mg/L	0.008418	0.99%
Ni 231.604†	423.4	0.02019 mg/L	0.000301	0.02019 mg/L	0.000301	1.49%
Pb 220.353†	41.5	0.00979 mg/L	0.001499	0.00979 mg/L	0.001499	15.31%
Sb 206.836†	-4.5	-0.00392 mg/L	0.001512	-0.00392 mg/L	0.001512	38.55%
Se 196.026†	-17.1	-0.00297 mg/L	0.002458	-0.00297 mg/L	0.002458	82.76%
Tl 190.801†	-6.1	0.00329 mg/L	0.004545	0.00329 mg/L	0.004545	138.21%
V 292.402†	3159.6	0.04819 mg/L	0.000438	0.04819 mg/L	0.000438	0.91%
Zn 206.200†	1858.2	0.06907 mg/L	0.000735	0.06907 mg/L	0.000735	1.06%
Cd 226.502†	57.4	-0.00154 mg/L	0.000107	-0.00154 mg/L	0.000107	6.97%
Ti 334.940†	264045.9	0.66543 mg/L	0.005334	0.66543 mg/L	0.005334	0.80%

Ca 227.546† 321.1 4.0540 mg/L 0.09061 4.0540 mg/L 0.09061 2.24%

Sequence No.: 33

Sample ID: K0910-04A-DEC-065 20xFeMn

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 27

Date Collected: 6/9/2011 11:56:29 AM

Data Type: Reprocessed on 6/9/2011 2:27:59 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0910-04A-DEC-065 20xFeMn

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1017133.7	100.89 %	1.050			1.04%
Lu 261.542	972578.0	101.7 %	1.46			1.44%
Ag 328.068†	-95.4	-0.00095 mg/L	0.000654	-0.00095 mg/L	0.000654	69.09%
Al 308.215†	223727.8	12.257 mg/L	0.2674	12.257 mg/L	0.2674	2.18%
As 188.979†	-6.8	-0.00095 mg/L	0.003002	-0.00095 mg/L	0.003002	314.69%
Ba 233.527†	4687.2	0.12869 mg/L	0.002005	0.12869 mg/L	0.002005	1.56%
Be 313.107†	-128.7	0.00130 mg/L	0.000007	0.00130 mg/L	0.000007	0.50%
Co 228.616†	510.6	0.01846 mg/L	0.000322	0.01846 mg/L	0.000322	1.75%
Cr 267.716†	1580.8	0.03780 mg/L	0.000648	0.03780 mg/L	0.000648	1.71%
Cu 324.752†	2956.4	0.03163 mg/L	0.000372	0.03163 mg/L	0.000372	1.18%
Fe 273.955†	1268269.7	60.923 mg/L	0.0645	60.923 mg/L	0.0645	0.11%
Mg 279.077†	67843.1	4.0078 mg/L	0.08657	4.0078 mg/L	0.08657	2.16%
Mn 257.610†	485932.8	1.4331 mg/L	0.00148	1.4331 mg/L	0.00148	0.10%
Ni 231.604†	560.4	0.02677 mg/L	0.000415	0.02677 mg/L	0.000415	1.55%
Pb 220.353†	59.5	0.01372 mg/L	0.001088	0.01372 mg/L	0.001088	7.93%
Sb 206.836†	0.6	-0.00115 mg/L	0.000368	-0.00115 mg/L	0.000368	32.10%
Se 196.026†	-22.3	-0.00189 mg/L	0.003392	-0.00189 mg/L	0.003392	179.79%
Tl 190.801†	-7.3	0.00384 mg/L	0.000839	0.00384 mg/L	0.000839	21.81%
V 292.402†	3976.8	0.06133 mg/L	0.001936	0.06133 mg/L	0.001936	3.16%
Zn 206.200†	1788.2	0.06648 mg/L	0.001083	0.06648 mg/L	0.001083	1.63%
Cd 226.502†	74.4	-0.00245 mg/L	0.000200	-0.00245 mg/L	0.000200	8.16%
Ti 334.940†	282148.7	0.71108 mg/L	0.000655	0.71108 mg/L	0.000655	0.09%
Ca 227.546†	730.0	7.3987 mg/L	0.13858	7.3987 mg/L	0.13858	1.87%

Sequence No.: 34

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/9/2011 12:00:10 PM

Data Type: Reprocessed on 6/9/2011 2:28:00 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	962473.9	95.468 %	0.9992			1.05%
Lu 261.542	937291.8	98.05 %	1.050			1.07%
Ag 328.068†	129886.5	1.3557 mg/L	0.00389	1.3557 mg/L	0.00389	0.29%
QC value within limits for Ag 328.068 Recovery = 108.45%						
Al 308.215†	190642.6	10.413 mg/L	0.0174	10.413 mg/L	0.0174	0.17%
QC value within limits for Al 308.215 Recovery = 104.13%						
As 188.979†	701.4	0.50202 mg/L	0.007110	0.50202 mg/L	0.007110	1.42%
QC value within limits for As 188.979 Recovery = 100.40%						
Ba 233.527†	383712.2	10.533 mg/L	0.0469	10.533 mg/L	0.0469	0.45%
QC value within limits for Ba 233.527 Recovery = 105.33%						
Be 313.107†	338311.4	0.25555 mg/L	0.000739	0.25555 mg/L	0.000739	0.29%
QC value within limits for Be 313.107 Recovery = 102.22%						
Co 228.616†	64353.0	2.6968 mg/L	0.00403	2.6968 mg/L	0.00403	0.15%
QC value within limits for Co 228.616 Recovery = 107.87%						
Cr 267.716†	43823.6	1.0558 mg/L	0.00361	1.0558 mg/L	0.00361	0.34%
QC value within limits for Cr 267.716 Recovery = 105.58%						
Cu 324.752†	133557.9	1.3010 mg/L	0.00646	1.3010 mg/L	0.00646	0.50%
QC value within limits for Cu 324.752 Recovery = 104.08%						
Fe 273.955†	109726.4	5.3540 mg/L	0.02057	5.3540 mg/L	0.02057	0.38%
QC value within limits for Fe 273.955 Recovery = 107.08%						
Mg 279.077†	442609.5	26.114 mg/L	0.0911	26.114 mg/L	0.0911	0.35%

QC value within limits for Mg 279.077 Recovery = 104.46%
Mn 257.610† 881701.7 2.6003 mg/L 0.01030 2.6003 mg/L 0.01030 0.40%
QC value within limits for Mn 257.610 Recovery = 104.01%
Ni 231.604† 53792.5 2.6433 mg/L 0.00626 2.6433 mg/L 0.00626 0.24%
QC value within limits for Ni 231.604 Recovery = 105.73%
Pb 220.353† 2637.4 0.51757 mg/L 0.003760 0.51757 mg/L 0.003760 0.73%
QC value within limits for Pb 220.353 Recovery = 103.51%
Sb 206.836† 924.6 0.51143 mg/L 0.002666 0.51143 mg/L 0.002666 0.52%
QC value within limits for Sb 206.836 Recovery = 102.29%
Se 196.026† 511.1 0.50044 mg/L 0.007153 0.50044 mg/L 0.007153 1.43%
QC value within limits for Se 196.026 Recovery = 100.09%
Tl 190.801† 880.3 0.52540 mg/L 0.007085 0.52540 mg/L 0.007085 1.35%
QC value within limits for Tl 190.801 Recovery = 105.08%
V 292.402† 179358.7 2.6104 mg/L 0.00649 2.6104 mg/L 0.00649 0.25%
QC value within limits for V 292.402 Recovery = 104.42%
Zn 206.200† 70605.5 2.6238 mg/L 0.01244 2.6238 mg/L 0.01244 0.47%
QC value within limits for Zn 206.200 Recovery = 104.95%
Cd 226.502† 10036.9 0.25409 mg/L 0.000945 0.25409 mg/L 0.000945 0.37%
QC value within limits for Cd 226.502 Recovery = 101.64%
Ti 334.940† 216387.3 0.54501 mg/L 0.002068 0.54501 mg/L 0.002068 0.38%
QC value within limits for Ti 334.940 Recovery = Not calculated
Ca 227.546† 4655.8 26.533 mg/L 0.3351 26.533 mg/L 0.3351 1.26%
QC value within limits for Ca 227.546 Recovery = 106.13%
All analyte(s) passed QC.

Sequence No.: 35

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 6/9/2011 12:03:46 PM

Data Type: Reprocessed on 6/9/2011 2:28:01 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1008881.4	100.07	%	0.760			0.76%
Lu 261.542	950222.8	99.40	%	0.539			0.54%
Ag 328.068†	38.5	0.00040	mg/L	0.000179	0.00040 mg/L	0.000179	44.60%
Al 308.215†	-238.2	-0.01305	mg/L	0.006428	-0.01305 mg/L	0.006428	49.24%
As 188.979†	5.0	0.00353	mg/L	0.004167	0.00353 mg/L	0.004167	118.00%
Ba 233.527†	23.9	0.00066	mg/L	0.000269	0.00066 mg/L	0.000269	41.03%
Be 313.107†	14.4	0.00001	mg/L	0.000017	0.00001 mg/L	0.000017	143.06%
Co 228.616†	1.7	0.00007	mg/L	0.000247	0.00007 mg/L	0.000247	350.92%
Cr 267.716†	10.3	0.00025	mg/L	0.000296	0.00025 mg/L	0.000296	119.54%
Cu 324.752†	50.6	0.00049	mg/L	0.000141	0.00049 mg/L	0.000141	28.67%
Fe 273.955†	127.1	0.00612	mg/L	0.000930	0.00612 mg/L	0.000930	15.19%
Mg 279.077†	11.8	0.00070	mg/L	0.004578	0.00070 mg/L	0.004578	655.87%
Mn 257.610†	86.6	0.00026	mg/L	0.000046	0.00026 mg/L	0.000046	18.02%
Ni 231.604†	0.6	0.00003	mg/L	0.000351	0.00003 mg/L	0.000351	>999.9%
Pb 220.353†	-2.7	-0.00053	mg/L	0.000119	-0.00053 mg/L	0.000119	22.48%
Sb 206.836†	4.7	0.00264	mg/L	0.001912	0.00264 mg/L	0.001912	72.37%
Se 196.026†	-1.9	-0.00190	mg/L	0.002393	-0.00190 mg/L	0.002393	125.81%
Tl 190.801†	4.2	0.00245	mg/L	0.002618	0.00245 mg/L	0.002618	106.77%
V 292.402†	29.4	0.00043	mg/L	0.000336	0.00043 mg/L	0.000336	78.43%
Zn 206.200†	23.6	0.00088	mg/L	0.000098	0.00088 mg/L	0.000098	11.19%
Cd 226.502†	1.8	0.00005	mg/L	0.000171	0.00005 mg/L	0.000171	369.95%
Ti 334.940†	161.6	0.00041	mg/L	0.000066	0.00041 mg/L	0.000066	16.15%
Ca 227.546†	-1.7	-0.00945	mg/L	0.088409	-0.00945 mg/L	0.088409	936.04%

Sequence No.: 36

Sample ID: K0911-01A~SED-1 20xMn

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 28

Date Collected: 6/9/2011 12:07:32 PM

Data Type: Reprocessed on 6/9/2011 2:28:02 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0911-01A~SED-1 20xMn

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1026655.4	101.83	%	1.476			1.45%
Lu 261.542	973748.3	101.9	%	1.22			1.20%
Ag 328.068†	25.3	0.00028	mg/L	0.000561	0.00028 mg/L	0.000561	202.88%
Al 308.215†	30433.6	1.6672	mg/L	0.00905	1.6672 mg/L	0.00905	0.54%
As 188.979†	6.0	0.00499	mg/L	0.001208	0.00499 mg/L	0.001208	24.20%
Ba 233.527†	2658.2	0.07297	mg/L	0.001008	0.07297 mg/L	0.001008	1.38%
Be 313.107†	43.0	0.00015	mg/L	0.000012	0.00015 mg/L	0.000012	8.06%
Co 228.616†	126.5	0.00497	mg/L	0.000068	0.00497 mg/L	0.000068	1.36%
Cr 267.716†	386.9	0.00859	mg/L	0.000407	0.00859 mg/L	0.000407	4.73%
Cu 324.752†	1883.3	0.01870	mg/L	0.000216	0.01870 mg/L	0.000216	1.15%
Fe 273.955†	161295.2	7.7482	mg/L	0.03985	7.7482 mg/L	0.03985	0.51%
Mg 279.077†	5865.9	0.36422	mg/L	0.003970	0.36422 mg/L	0.003970	1.09%
Mn 257.610†	1274794.1	3.7609	mg/L	0.01028	3.7609 mg/L	0.01028	0.27%
Ni 231.604†	84.7	0.00408	mg/L	0.000405	0.00408 mg/L	0.000405	9.93%
Pb 220.353†	201.1	0.03923	mg/L	0.000679	0.03923 mg/L	0.000679	1.73%
Sb 206.836†	3.7	0.00187	mg/L	0.001659	0.00187 mg/L	0.001659	88.94%
Se 196.026†	-6.0	-0.00542	mg/L	0.003845	-0.00542 mg/L	0.003845	70.94%
Tl 190.801†	5.0	0.00353	mg/L	0.002433	0.00353 mg/L	0.002433	69.01%
V 292.402†	1057.4	0.01615	mg/L	0.000106	0.01615 mg/L	0.000106	0.66%
Zn 206.200†	2584.9	0.09598	mg/L	0.001864	0.09598 mg/L	0.001864	1.94%
Cd 226.502†	565.3	0.01379	mg/L	0.000272	0.01379 mg/L	0.000272	1.97%
Ti 334.940†	23240.3	0.05858	mg/L	0.000497	0.05858 mg/L	0.000497	0.85%
Ca 227.546†	149.0	1.2596	mg/L	0.15993	1.2596 mg/L	0.15993	12.70%

Sequence No.: 37

Sample ID: K0911-06A~SED-6 20xFe

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 29

Date Collected: 6/9/2011 12:11:12 PM

Data Type: Reprocessed on 6/9/2011 2:28:03 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0911-06A~SED-6 20xFe

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1025121.8	101.68	%	0.837			0.82%
Lu 261.542	971898.8	101.7	%	0.19			0.19%
Ag 328.068†	-122.5	-0.00127	mg/L	0.000238	-0.00127 mg/L	0.000238	18.71%
Al 308.215†	31081.5	1.7028	mg/L	0.01553	1.7028 mg/L	0.01553	0.91%
As 188.979†	7.4	0.00762	mg/L	0.002618	0.00762 mg/L	0.002618	34.35%
Ba 233.527†	438.6	0.01204	mg/L	0.000184	0.01204 mg/L	0.000184	1.53%
Be 313.107†	-61.9	0.00012	mg/L	0.000036	0.00012 mg/L	0.000036	30.62%
Co 228.616†	93.0	0.00230	mg/L	0.000057	0.00230 mg/L	0.000057	2.48%
Cr 267.716†	791.4	0.01903	mg/L	0.000047	0.01903 mg/L	0.000047	0.25%
Cu 324.752†	2334.7	0.02477	mg/L	0.000428	0.02477 mg/L	0.000428	1.73%
Fe 273.955†	912006.9	43.808	mg/L	0.0469	43.808 mg/L	0.0469	0.11%
Mg 279.077†	27764.4	1.6380	mg/L	0.02344	1.6380 mg/L	0.02344	1.43%
Mn 257.610†	49671.2	0.14623	mg/L	0.001876	0.14623 mg/L	0.001876	1.28%
Ni 231.604†	261.8	0.01252	mg/L	0.000168	0.01252 mg/L	0.000168	1.34%
Pb 220.353†	251.2	0.05020	mg/L	0.001139	0.05020 mg/L	0.001139	2.27%
Sb 206.836†	1.5	0.00038	mg/L	0.003866	0.00038 mg/L	0.003866	>999.9%
Se 196.026†	-23.1	-0.00783	mg/L	0.002922	-0.00783 mg/L	0.002922	37.32%
Tl 190.801†	-4.5	0.00015	mg/L	0.001091	0.00015 mg/L	0.001091	739.61%
V 292.402†	487.7	0.00989	mg/L	0.000612	0.00989 mg/L	0.000612	6.19%
Zn 206.200†	2264.1	0.08410	mg/L	0.000217	0.08410 mg/L	0.000217	0.26%
Cd 226.502†	96.1	-0.00064	mg/L	0.000135	-0.00064 mg/L	0.000135	21.21%
Ti 334.940†	33224.7	0.08375	mg/L	0.001231	0.08375 mg/L	0.001231	1.47%
Ca 227.546†	619.7	5.8589	mg/L	0.10461	5.8589 mg/L	0.10461	1.79%

Sequence No.: 38

Sample ID: K0911-06ADUP~SED-6D 20xFe

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 30

Date Collected: 6/9/2011 12:14:52 PM

Data Type: Reprocessed on 6/9/2011 2:28:04 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0911-06ADUP~SED-6D 20xFe

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1015131.7	100.69	%	1.363			1.35%
Lu 261.542	959411.2	100.4	%	1.78			1.77%
Ag 328.068†	-6.2	-0.00006	mg/L	0.001126	-0.00006	mg/L	0.001126 >999.9%
Al 308.215†	27644.3	1.5145	mg/L	0.04589	1.5145	mg/L	0.04589 3.03%
As 188.979†	3.3	0.00276	mg/L	0.000554	0.00276	mg/L	0.000554 20.12%
Ba 233.527†	246.4	0.00677	mg/L	0.000132	0.00677	mg/L	0.000132 1.95%
Be 313.107†	-69.4	0.00010	mg/L	0.000012	0.00010	mg/L	0.000012 11.83%
Co 228.616†	30.4	0.00100	mg/L	0.000091	0.00100	mg/L	0.000091 9.10%
Cr 267.716†	514.0	0.01237	mg/L	0.000076	0.01237	mg/L	0.000076 0.62%
Cu 324.752†	1841.2	0.01818	mg/L	0.000464	0.01818	mg/L	0.000464 2.55%
Fe 273.955†	111103.3	5.3371	mg/L	0.11829	5.3371	mg/L	0.11829 2.22%
Mg 279.077†	13174.1	0.77708	mg/L	0.023852	0.77708	mg/L	0.023852 3.07%
Mn 257.610†	12355.1	0.03639	mg/L	0.000702	0.03639	mg/L	0.000702 1.93%
Ni 231.604†	118.9	0.00577	mg/L	0.000043	0.00577	mg/L	0.000043 0.74%
Pb 220.353†	123.7	0.02444	mg/L	0.001266	0.02444	mg/L	0.001266 5.18%
Sb 206.836†	2.0	0.00084	mg/L	0.002219	0.00084	mg/L	0.002219 264.09%
Se 196.026†	-7.6	-0.00563	mg/L	0.002816	-0.00563	mg/L	0.002816 49.99%
Tl 190.801†	1.6	0.00179	mg/L	0.001747	0.00179	mg/L	0.001747 97.42%
V 292.402†	474.4	0.00720	mg/L	0.000249	0.00720	mg/L	0.000249 3.46%
Zn 206.200†	1574.4	0.05848	mg/L	0.000608	0.05848	mg/L	0.000608 1.04%
Cd 226.502†	37.6	0.00057	mg/L	0.000168	0.00057	mg/L	0.000168 29.49%
Ti 334.940†	30524.2	0.07693	mg/L	0.001221	0.07693	mg/L	0.001221 1.59%
Ca 227.546†	227.1	1.5734	mg/L	0.04712	1.5734	mg/L	0.04712 2.99%

Sequence No.: 39

Sample ID: K0911-06ASD~SED-6 100xFe

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 31

Date Collected: 6/9/2011 12:18:32 PM

Data Type: Reprocessed on 6/9/2011 2:28:05 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0911-06ASD~SED-6 100xFe

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1009586.9	100.14	%	0.634			0.63%
Lu 261.542	955672.8	99.97	%	0.925			0.93%
Ag 328.068†	-76.9	-0.00080	mg/L	0.000859	-0.00080	mg/L	0.000859 107.24%
Al 308.215†	6426.3	0.35207	mg/L	0.009100	0.35207	mg/L	0.009100 2.58%
As 188.979†	3.4	0.00293	mg/L	0.002226	0.00293	mg/L	0.002226 75.98%
Ba 233.527†	88.0	0.00242	mg/L	0.000121	0.00242	mg/L	0.000121 4.99%
Be 313.107†	-17.4	0.00002	mg/L	0.000023	0.00002	mg/L	0.000023 105.79%
Co 228.616†	17.3	0.00039	mg/L	0.000335	0.00039	mg/L	0.000335 87.02%
Cr 267.716†	177.1	0.00426	mg/L	0.000244	0.00426	mg/L	0.000244 5.73%
Cu 324.752†	398.8	0.00432	mg/L	0.000130	0.00432	mg/L	0.000130 3.02%
Fe 273.955†	193478.6	9.2937	mg/L	0.11219	9.2937	mg/L	0.11219 1.21%
Mg 279.077†	5801.3	0.34227	mg/L	0.004108	0.34227	mg/L	0.004108 1.20%
Mn 257.610†	10570.2	0.03112	mg/L	0.000190	0.03112	mg/L	0.000190 0.61%
Ni 231.604†	54.4	0.00260	mg/L	0.000360	0.00260	mg/L	0.000360 13.87%
Pb 220.353†	49.3	0.00987	mg/L	0.000885	0.00987	mg/L	0.000885 8.96%
Sb 206.836†	-4.1	-0.00244	mg/L	0.002292	-0.00244	mg/L	0.002292 94.10%
Se 196.026†	-13.7	-0.01029	mg/L	0.001104	-0.01029	mg/L	0.001104 10.73%
Tl 190.801†	-1.2	-0.00008	mg/L	0.003698	-0.00008	mg/L	0.003698 >999.9%
V 292.402†	85.0	0.00183	mg/L	0.000675	0.00183	mg/L	0.000675 36.89%
Zn 206.200†	491.5	0.01826	mg/L	0.000213	0.01826	mg/L	0.000213 1.17%
Cd 226.502†	14.4	-0.00029	mg/L	0.000061	-0.00029	mg/L	0.000061 21.07%
Ti 334.940†	7133.6	0.01798	mg/L	0.000113	0.01798	mg/L	0.000113 0.63%
Ca 227.546†	123.9	1.1998	mg/L	0.03289	1.1998	mg/L	0.03289 2.74%

Sequence No.: 40

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/9/2011 12:22:12 PM

Data Type: Reprocessed on 6/9/2011 2:28:06 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	978743.2	97.082 %	0.3367			0.35%
Lu 261.542	938217.3	98.15 %	0.544			0.55%
Ag 328.068†	127476.5	1.3305 mg/L	0.00386	1.3305 mg/L	0.00386	0.29%
QC value within limits for Ag 328.068 Recovery = 106.44%						
Al 308.215†	188292.6	10.285 mg/L	0.0281	10.285 mg/L	0.0281	0.27%
QC value within limits for Al 308.215 Recovery = 102.85%						
As 188.979†	697.9	0.49947 mg/L	0.004530	0.49947 mg/L	0.004530	0.91%
QC value within limits for As 188.979 Recovery = 99.89%						
Ba 233.527†	378611.0	10.393 mg/L	0.0437	10.393 mg/L	0.0437	0.42%
QC value within limits for Ba 233.527 Recovery = 103.93%						
Be 313.107†	338060.7	0.25532 mg/L	0.000165	0.25532 mg/L	0.000165	0.06%
QC value within limits for Be 313.107 Recovery = 102.13%						
Co 228.616†	63615.9	2.6659 mg/L	0.01137	2.6659 mg/L	0.01137	0.43%
QC value within limits for Co 228.616 Recovery = 106.64%						
Cr 267.716†	43610.9	1.0506 mg/L	0.00521	1.0506 mg/L	0.00521	0.50%
QC value within limits for Cr 267.716 Recovery = 105.06%						
Cu 324.752†	128483.6	1.2516 mg/L	0.00955	1.2516 mg/L	0.00955	0.76%
QC value within limits for Cu 324.752 Recovery = 100.13%						
Fe 273.955†	108205.6	5.2793 mg/L	0.00993	5.2793 mg/L	0.00993	0.19%
QC value within limits for Fe 273.955 Recovery = 105.59%						
Mg 279.077†	431178.1	25.440 mg/L	0.0795	25.440 mg/L	0.0795	0.31%
QC value within limits for Mg 279.077 Recovery = 101.76%						
Mn 257.610†	878184.2	2.5900 mg/L	0.00265	2.5900 mg/L	0.00265	0.10%
QC value within limits for Mn 257.610 Recovery = 103.60%						
Ni 231.604†	53302.9	2.6193 mg/L	0.00889	2.6193 mg/L	0.00889	0.34%
QC value within limits for Ni 231.604 Recovery = 104.77%						
Pb 220.353†	2612.7	0.51272 mg/L	0.005390	0.51272 mg/L	0.005390	1.05%
QC value within limits for Pb 220.353 Recovery = 102.54%						
Sb 206.836†	926.0	0.51222 mg/L	0.011074	0.51222 mg/L	0.011074	2.16%
QC value within limits for Sb 206.836 Recovery = 102.44%						
Se 196.026†	505.5	0.49489 mg/L	0.004178	0.49489 mg/L	0.004178	0.84%
QC value within limits for Se 196.026 Recovery = 98.98%						
Tl 190.801†	878.1	0.52388 mg/L	0.006875	0.52388 mg/L	0.006875	1.31%
QC value within limits for Tl 190.801 Recovery = 104.78%						
V 292.402†	175503.6	2.5544 mg/L	0.00598	2.5544 mg/L	0.00598	0.23%
QC value within limits for V 292.402 Recovery = 102.18%						
Zn 206.200†	69425.7	2.5800 mg/L	0.01477	2.5800 mg/L	0.01477	0.57%
QC value within limits for Zn 206.200 Recovery = 103.20%						
Cd 226.502†	9876.5	0.25003 mg/L	0.000364	0.25003 mg/L	0.000364	0.15%
QC value within limits for Cd 226.502 Recovery = 100.01%						
Ti 334.940†	208679.6	0.52560 mg/L	0.002537	0.52560 mg/L	0.002537	0.48%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	4641.3	26.450 mg/L	0.1641	26.450 mg/L	0.1641	0.62%
QC value within limits for Ca 227.546 Recovery = 105.80%						
All analyte(s) passed QC.						

Sequence No.: 41

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 6/9/2011 12:25:54 PM

Data Type: Reprocessed on 6/9/2011 2:28:06 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1016661.6	100.84 %	0.980			0.97%
Lu 261.542	954529.6	99.85 %	1.276			1.28%
Ag 328.068†	55.5	0.00058 mg/L	0.001128	0.00058 mg/L	0.001128	194.79%
Al 308.215†	-134.0	-0.00734 mg/L	0.002023	-0.00734 mg/L	0.002023	27.55%
As 188.979†	5.3	0.00375 mg/L	0.002005	0.00375 mg/L	0.002005	53.49%
Ba 233.527†	37.4	0.00103 mg/L	0.000493	0.00103 mg/L	0.000493	48.05%
Be 313.107†	54.0	0.00004 mg/L	0.000023	0.00004 mg/L	0.000023	55.24%
Co 228.616†	4.5	0.00019 mg/L	0.000223	0.00019 mg/L	0.000223	119.92%
Cr 267.716†	13.8	0.00033 mg/L	0.000068	0.00033 mg/L	0.000068	20.45%

Cu 324.752†	20.7	0.00020 mg/L	0.000304	0.00020 mg/L	0.000304	150.67%
Fe 273.955†	80.8	0.00389 mg/L	0.000573	0.00389 mg/L	0.000573	14.72%
Mg 279.077†	-51.1	-0.00301 mg/L	0.005550	-0.00301 mg/L	0.005550	184.38%
Mn 257.610†	110.7	0.00033 mg/L	0.000081	0.00033 mg/L	0.000081	24.75%
Ni 231.604†	3.8	0.00019 mg/L	0.000387	0.00019 mg/L	0.000387	205.85%
Pb 220.353†	-5.1	-0.00101 mg/L	0.001764	-0.00101 mg/L	0.001764	175.40%
Sb 206.836†	9.0	0.00511 mg/L	0.004088	0.00511 mg/L	0.004088	80.00%
Se 196.026†	-1.0	-0.00097 mg/L	0.008259	-0.00097 mg/L	0.008259	852.83%
Tl 190.801†	4.4	0.00257 mg/L	0.002269	0.00257 mg/L	0.002269	88.26%
V 292.402†	22.5	0.00033 mg/L	0.000439	0.00033 mg/L	0.000439	133.70%
Zn 206.200†	23.3	0.00087 mg/L	0.000111	0.00087 mg/L	0.000111	12.76%
Cd 226.502†	1.2	0.00003 mg/L	0.000052	0.00003 mg/L	0.000052	166.12%
Ti 334.940†	133.5	0.00034 mg/L	0.000084	0.00034 mg/L	0.000084	24.87%
Ca 227.546†	1.3	0.00783 mg/L	0.123896	0.00783 mg/L	0.123896	>999.9%

Sequence No.: 42

Sample ID: MB-59617~PBW

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 54

Date Collected: 6/9/2011 12:29:36 PM

Data Type: Reprocessed on 6/9/2011 2:28:07 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: MB-59617~PBW

	Mean Corrected		Calib.			Sample		
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 360.073	1014893.4	100.67	%	1.261				1.25%
Lu 261.542	962399.6	100.7	%	1.36				1.35%
Ag 328.068†	-36.1	-0.00038	mg/L	0.000655	-0.00038	mg/L	0.000655	174.11%
Al 308.215†	-693.1	-0.03797	mg/L	0.007284	-0.03797	mg/L	0.007284	19.18%
As 188.979†	2.0	0.00142	mg/L	0.002223	0.00142	mg/L	0.002223	156.78%
Ba 233.527†	-3.4	-0.00009	mg/L	0.000111	-0.00009	mg/L	0.000111	118.77%
Be 313.107†	-31.6	-0.00002	mg/L	0.000017	-0.00002	mg/L	0.000017	74.60%
Co 228.616†	-4.0	-0.00017	mg/L	0.000009	-0.00017	mg/L	0.000009	5.54%
Cr 267.716†	10.5	0.00025	mg/L	0.000217	0.00025	mg/L	0.000217	85.86%
Cu 324.752†	83.5	0.00081	mg/L	0.000023	0.00081	mg/L	0.000023	2.89%
Fe 273.955†	216.1	0.01037	mg/L	0.000689	0.01037	mg/L	0.000689	6.64%
Mg 279.077†	-17.7	-0.00104	mg/L	0.003899	-0.00104	mg/L	0.003899	374.83%
Mn 257.610†	201.3	0.00059	mg/L	0.000047	0.00059	mg/L	0.000047	7.86%
Ni 231.604†	-4.9	-0.00024	mg/L	0.000141	-0.00024	mg/L	0.000141	58.49%
Pb 220.353†	-1.0	-0.00020	mg/L	0.001272	-0.00020	mg/L	0.001272	622.66%
Sb 206.836†	3.4	0.00195	mg/L	0.002327	0.00195	mg/L	0.002327	119.44%
Se 196.026†	-2.8	-0.00277	mg/L	0.002214	-0.00277	mg/L	0.002214	79.96%
Tl 190.801†	5.2	0.00306	mg/L	0.002567	0.00306	mg/L	0.002567	83.76%
V 292.402†	-12.9	-0.00019	mg/L	0.000256	-0.00019	mg/L	0.000256	136.23%
Zn 206.200†	2.9	0.00011	mg/L	0.000132	0.00011	mg/L	0.000132	121.80%
Cd 226.502†	-1.2	-0.00003	mg/L	0.000013	-0.00003	mg/L	0.000013	40.24%
Ti 334.940†	142.5	0.00036	mg/L	0.000088	0.00036	mg/L	0.000088	24.56%
Ca 227.546†	-16.2	-0.09161	mg/L	0.023513	-0.09161	mg/L	0.023513	25.67%

Sequence No.: 43

Sample ID: LCS-59617~LCS

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 55

Date Collected: 6/9/2011 12:33:17 PM

Data Type: Reprocessed on 6/9/2011 2:28:08 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCS-59617~LCS

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity		Units		Conc.	Units		
Y 360.073	991627.6	98.360	%	0.9480				0.96%
Lu 261.542	953303.5	99.72	%	0.439				0.44%
Ag 328.068†	118008.1	1.2317	mg/L	0.00673	1.2317	mg/L	0.00673	0.55%
Al 308.215†	172507.0	9.4232	mg/L	0.05366	9.4232	mg/L	0.05366	0.57%
As 188.979†	685.0	0.48929	mg/L	0.002285	0.48929	mg/L	0.002285	0.47%
Ba 233.527†	346088.1	9.5000	mg/L	0.06891	9.5000	mg/L	0.06891	0.73%
Be 313.107†	312960.6	0.23541	mg/L	0.000651	0.23541	mg/L	0.000651	0.28%
Co 228.616†	57847.4	2.4247	mg/L	0.01563	2.4247	mg/L	0.01563	0.64%

Cr 267.716†	39328.9	0.94748 mg/L	0.005335	0.94748 mg/L	0.005335	0.56%
Cu 324.752†	116772.7	1.1375 mg/L	0.00976	1.1375 mg/L	0.00976	0.86%
Fe 273.955†	99736.4	4.8652 mg/L	0.03186	4.8652 mg/L	0.03186	0.65%
Mg 279.077†	395591.5	23.340 mg/L	0.1478	23.340 mg/L	0.1478	0.63%
Mn 257.610†	805794.8	2.3765 mg/L	0.00994	2.3765 mg/L	0.00994	0.42%
Ni 231.604†	48957.9	2.4060 mg/L	0.01645	2.4060 mg/L	0.01645	0.68%
Pb 220.353†	2479.9	0.48634 mg/L	0.001679	0.48634 mg/L	0.001679	0.35%
Sb 206.836†	889.9	0.49360 mg/L	0.004604	0.49360 mg/L	0.004604	0.93%
Se 196.026†	487.3	0.47720 mg/L	0.008639	0.47720 mg/L	0.008639	1.81%
Tl 190.801†	820.6	0.48593 mg/L	0.003128	0.48593 mg/L	0.003128	0.64%
V 292.402†	159981.0	2.3289 mg/L	0.01303	2.3289 mg/L	0.01303	0.56%
Zn 206.200†	63196.0	2.3485 mg/L	0.01884	2.3485 mg/L	0.01884	0.80%
Cd 226.502†	9346.8	0.23668 mg/L	0.002074	0.23668 mg/L	0.002074	0.88%
Ti 334.940†	283.4	0.00040 mg/L	0.000105	0.00040 mg/L	0.000105	26.06%
Ca 227.546†	4198.2	23.930 mg/L	0.1285	23.930 mg/L	0.1285	0.54%

Sequence No.: 44

Sample ID: K0919-01A~LMW-06U

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 56

Date Collected: 6/9/2011 12:36:58 PM

Data Type: Reprocessed on 6/9/2011 2:28:09 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-01A~LMW-06U

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	1015049.6	100.68	%	0.661			0.66%
Lu 261.542	965946.6	101.0	%	1.55			1.53%
Ag 328.068†	2.1	0.00002	mg/L	0.000424	0.00002	mg/L	0.000424 >999.9%
Al 308.215†	-296.9	-0.01626	mg/L	0.008895	-0.01626	mg/L	0.008895 54.69%
As 188.979†	-0.2	0.00037	mg/L	0.004540	0.00037	mg/L	0.004540 >999.9%
Ba 233.527†	1252.7	0.03438	mg/L	0.000516	0.03438	mg/L	0.000516 1.50%
Be 313.107†	86.2	0.00007	mg/L	0.000011	0.00007	mg/L	0.000011 16.91%
Co 228.616†	0.3	0.00001	mg/L	0.000099	0.00001	mg/L	0.000099 852.62%
Cr 267.716†	654.2	0.01575	mg/L	0.000346	0.01575	mg/L	0.000346 2.20%
Cu 324.752†	133.2	0.00129	mg/L	0.000546	0.00129	mg/L	0.000546 42.26%
Fe 273.955†	350.8	0.01692	mg/L	0.000736	0.01692	mg/L	0.000736 4.35%
Mg 279.077†	37062.4	2.1857	mg/L	0.03581	2.1857	mg/L	0.03581 1.64%
Mn 257.610†	2080.3	0.00607	mg/L	0.000105	0.00607	mg/L	0.000105 1.73%
Ni 231.604†	4.5	0.00021	mg/L	0.000202	0.00021	mg/L	0.000202 94.20%
Pb 220.353†	-6.2	-0.00079	mg/L	0.001923	-0.00079	mg/L	0.001923 244.39%
Sb 206.836†	0.6	0.00007	mg/L	0.001484	0.00007	mg/L	0.001484 >999.9%
Se 196.026†	-3.1	-0.00348	mg/L	0.012075	-0.00348	mg/L	0.012075 347.25%
Tl 190.801†	4.7	0.00297	mg/L	0.001928	0.00297	mg/L	0.001928 64.84%
V 292.402†	5.9	0.00011	mg/L	0.000454	0.00011	mg/L	0.000454 406.80%
Zn 206.200†	444.7	0.01655	mg/L	0.000214	0.01655	mg/L	0.000214 1.30%
Cd 226.502†	4.5	0.00011	mg/L	0.000205	0.00011	mg/L	0.000205 180.46%
Ti 334.940†	51.5	0.00034	mg/L	0.000069	0.00034	mg/L	0.000069 20.27%
Ca 227.546†	3436.0	19.495	mg/L	0.4234	19.495	mg/L	0.4234 2.17%

Sequence No.: 45

Sample ID: K0919-02A~LMW-06F

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 57

Date Collected: 6/9/2011 12:40:39 PM

Data Type: Reprocessed on 6/9/2011 2:28:10 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-02A~LMW-06F

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	1017548.3	100.93	%	1.286			1.27%
Lu 261.542	973454.1	101.8	%	1.28			1.26%
Ag 328.068†	-9.4	-0.00010	mg/L	0.000417	-0.00010	mg/L	0.000417 425.55%
Al 308.215†	-608.4	-0.03333	mg/L	0.003269	-0.03333	mg/L	0.003269 9.81%
As 188.979†	4.4	0.00359	mg/L	0.003148	0.00359	mg/L	0.003148 87.60%
Ba 233.527†	1235.6	0.03391	mg/L	0.000186	0.03391	mg/L	0.000186 0.55%
Be 313.107†	11.8	0.00001	mg/L	0.000028	0.00001	mg/L	0.000028 313.46%

Co 228.616†	-3.1	-0.00013	mg/L	0.000030	-0.00013	mg/L	0.000030	23.86%
Cr 267.716†	610.9	0.01471	mg/L	0.000333	0.01471	mg/L	0.000333	2.26%
Cu 324.752†	75.7	0.00073	mg/L	0.000191	0.00073	mg/L	0.000191	26.05%
Fe 273.955†	361.1	0.01741	mg/L	0.000809	0.01741	mg/L	0.000809	4.65%
Mg 279.077†	38067.8	2.2449	mg/L	0.02140	2.2449	mg/L	0.02140	0.95%
Mn 257.610†	564.4	0.00160	mg/L	0.000007	0.00160	mg/L	0.000007	0.43%
Ni 231.604†	-1.3	-0.00007	mg/L	0.000328	-0.00007	mg/L	0.000328	458.37%
Pb 220.353†	-8.9	-0.00129	mg/L	0.001701	-0.00129	mg/L	0.001701	131.57%
Sb 206.836†	-2.1	-0.00145	mg/L	0.001895	-0.00145	mg/L	0.001895	131.04%
Se 196.026†	-3.3	-0.00370	mg/L	0.003852	-0.00370	mg/L	0.003852	104.04%
Tl 190.801†	2.2	0.00153	mg/L	0.001614	0.00153	mg/L	0.001614	105.40%
V 292.402†	-6.2	-0.00007	mg/L	0.000518	-0.00007	mg/L	0.000518	791.95%
Zn 206.200†	505.3	0.01880	mg/L	0.000121	0.01880	mg/L	0.000121	0.64%
Cd 226.502†	6.3	0.00016	mg/L	0.000076	0.00016	mg/L	0.000076	48.16%
Ti 334.940†	6.3	0.00023	mg/L	0.000190	0.00023	mg/L	0.000190	80.99%
Ca 227.546†	3530.4	20.030	mg/L	0.1706	20.030	mg/L	0.1706	0.85%

Sequence No.: 46

Sample ID: K0919-03A-LMW-05U

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 58

Date Collected: 6/9/2011 12:44:20 PM

Data Type: Reprocessed on 6/9/2011 2:28:11 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-03A-LMW-05U

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1000609.1	99.251 %	0.3734			0.38%
Lu 261.542	956024.1	100.0 %	0.26			0.26%
Ag 328.068†	-62.7	-0.00065 mg/L	0.000296	-0.00065 mg/L	0.000296	45.22%
Al 308.215†	-42.3	-0.00232 mg/L	0.003245	-0.00232 mg/L	0.003245	140.06%
As 188.979†	5.8	0.00423 mg/L	0.002534	0.00423 mg/L	0.002534	59.93%
Ba 233.527†	328.0	0.00900 mg/L	0.000038	0.00900 mg/L	0.000038	0.42%
Be 113.107†	11.7	0.00001 mg/L	0.000043	0.00001 mg/L	0.000043	403.97%
Co 228.616†	-1.7	-0.00008 mg/L	0.000069	-0.00008 mg/L	0.000069	88.94%
Cr 267.716†	75.0	0.00179 mg/L	0.000185	0.00179 mg/L	0.000185	10.32%
Cu 324.752†	185.5	0.00181 mg/L	0.000341	0.00181 mg/L	0.000341	18.91%
Fe 273.955†	3149.6	0.15129 mg/L	0.001277	0.15129 mg/L	0.001277	0.84%
Mg 279.077†	40241.5	2.3732 mg/L	0.02958	2.3732 mg/L	0.02958	1.25%
Mn 257.610†	3544.6	0.01038 mg/L	0.000046	0.01038 mg/L	0.000046	0.44%
Ni 231.604†	51.7	0.00253 mg/L	0.000059	0.00253 mg/L	0.000059	2.32%
Pb 220.353†	-1.6	-0.00014 mg/L	0.000211	-0.00014 mg/L	0.000211	147.84%
Sb 206.836†	5.0	0.00278 mg/L	0.001751	0.00278 mg/L	0.001751	62.96%
Se 196.026†	-8.5	-0.00839 mg/L	0.002478	-0.00839 mg/L	0.002478	29.53%
Tl 190.801†	0.3	0.00025 mg/L	0.002487	0.00025 mg/L	0.002487	994.92%
V 292.402†	-9.9	-0.00013 mg/L	0.000477	-0.00013 mg/L	0.000477	363.34%
Zn 206.200†	752.1	0.02792 mg/L	0.000188	0.02792 mg/L	0.000188	0.67%
Cd 226.502†	11.4	0.00028 mg/L	0.000096	0.00028 mg/L	0.000096	34.55%
Ti 334.940†	357.2	0.00094 mg/L	0.000060	0.00094 mg/L	0.000060	6.36%
Ca 227.546†	1104.9	6.2763 mg/L	0.08736	6.2763 mg/L	0.08736	1.39%

Sequence No.: 47

Sample ID: K0919-04A-LMW-05F

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 59

Date Collected: 6/9/2011 12:48:01 PM

Data Type: Reprocessed on 6/9/2011 2:28:11 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-04A-LMW-05F

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1016638.1	100.84 %	1.467			1.45%
Lu 261.542	973283.3	101.8 %	1.00			0.98%
Ag 328.068†	-43.6	-0.00045 mg/L	0.000261	-0.00045 mg/L	0.000261	57.53%
Al 308.215†	-549.8	-0.03012 mg/L	0.003283	-0.03012 mg/L	0.003283	10.90%
As 188.979†	2.1	0.00166 mg/L	0.004101	0.00166 mg/L	0.004101	247.66%
Ba 233.527†	304.2	0.00835 mg/L	0.000137	0.00835 mg/L	0.000137	1.64%

Be 313.107†	-5.8	0.00000	mg/L	0.000019	0.00000	mg/L	0.000019	547.18%
Co 228.616†	-2.8	-0.00012	mg/L	0.000342	-0.00012	mg/L	0.000342	283.78%
Cr 267.716†	36.8	0.00088	mg/L	0.000344	0.00088	mg/L	0.000344	39.25%
Cu 324.752†	2.2	0.00002	mg/L	0.000321	0.00002	mg/L	0.000321	>999.9%
Fe 273.955†	1130.4	0.05430	mg/L	0.000675	0.05430	mg/L	0.000675	1.24%
Mg 279.077†	36221.4	2.1361	mg/L	0.02554	2.1361	mg/L	0.02554	1.20%
Mn 257.610†	2243.1	0.00655	mg/L	0.000089	0.00655	mg/L	0.000089	1.37%
Ni 231.604†	26.8	0.00131	mg/L	0.000331	0.00131	mg/L	0.000331	25.20%
Pb 220.353†	4.7	0.00108	mg/L	0.002824	0.00108	mg/L	0.002824	261.70%
Sb 206.836†	-1.3	-0.00078	mg/L	0.003611	-0.00078	mg/L	0.003611	465.31%
Se 196.026†	-5.2	-0.00513	mg/L	0.004609	-0.00513	mg/L	0.004609	89.80%
Tl 190.801†	-0.0	0.00005	mg/L	0.002298	0.00005	mg/L	0.002298	>999.9%
V 292.402†	-5.9	-0.00008	mg/L	0.000121	-0.00008	mg/L	0.000121	150.71%
Zn 206.200†	660.0	0.02450	mg/L	0.000186	0.02450	mg/L	0.000186	0.76%
Cd 226.502†	1.7	0.00004	mg/L	0.000291	0.00004	mg/L	0.000291	756.36%
Ti 334.940†	168.2	0.00046	mg/L	0.000210	0.00046	mg/L	0.000210	45.70%
Ca 227.546†	951.1	5.3984	mg/L	0.02599	5.3984	mg/L	0.02599	0.48%

Sequence No.: 48

Sample ID: K0919-05A~LMW-18U

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 60

Date Collected: 6/9/2011 12:51:42 PM

Data Type: Reprocessed on 6/9/2011 2:28:12 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-05A~LMW-18U

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	976847.7	96.894	%	1.2918				1.33%
Lu 261.542	944764.3	98.83	%	1.559				1.58%
Ag 328.068†	-38.5	-0.00040	mg/L	0.000305	-0.00040	mg/L	0.000305	75.99%
Al 308.215†	3531.0	0.19345	mg/L	0.005289	0.19345	mg/L	0.005289	2.73%
As 188.979†	3.8	0.00324	mg/L	0.001481	0.00324	mg/L	0.001481	45.73%
Ba 233.527†	3665.3	0.10058	mg/L	0.001737	0.10058	mg/L	0.001737	1.73%
Be 313.107†	62.0	0.00005	mg/L	0.000017	0.00005	mg/L	0.000017	32.10%
Co 228.616†	4.9	0.00019	mg/L	0.000261	0.00019	mg/L	0.000261	137.48%
Cr 267.716†	133.3	0.00309	mg/L	0.000190	0.00309	mg/L	0.000190	6.15%
Cu 324.752†	706.2	0.00688	mg/L	0.000946	0.00688	mg/L	0.000946	13.75%
Fe 273.955†	6810.5	0.32715	mg/L	0.001569	0.32715	mg/L	0.001569	0.48%
Mg 279.077†	74258.8	4.3817	mg/L	0.02530	4.3817	mg/L	0.02530	0.58%
Mn 257.610†	176641.4	0.52100	mg/L	0.002765	0.52100	mg/L	0.002765	0.53%
Ni 231.604†	70.3	0.00344	mg/L	0.000333	0.00344	mg/L	0.000333	9.69%
Pb 220.353†	6.5	0.00175	mg/L	0.001064	0.00175	mg/L	0.001064	60.87%
Sb 206.836†	2.8	0.00154	mg/L	0.000757	0.00154	mg/L	0.000757	49.18%
Se 196.026†	-5.3	-0.00588	mg/L	0.002789	-0.00588	mg/L	0.002789	47.46%
Tl 190.801†	2.0	0.00141	mg/L	0.000443	0.00141	mg/L	0.000443	31.33%
V 292.402†	7.1	0.00017	mg/L	0.000423	0.00017	mg/L	0.000423	252.84%
Zn 206.200†	1002.8	0.03723	mg/L	0.000735	0.03723	mg/L	0.000735	1.97%
Cd 226.502†	117.5	0.00296	mg/L	0.000123	0.00296	mg/L	0.000123	4.16%
Ti 334.940†	1290.5	0.00345	mg/L	0.000153	0.00345	mg/L	0.000153	4.42%
Ca 227.546†	3710.0	21.065	mg/L	0.3711	21.065	mg/L	0.3711	1.76%

Sequence No.: 49

Sample ID: K0919-06A~LMW-18F

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 61

Date Collected: 6/9/2011 12:55:18 PM

Data Type: Reprocessed on 6/9/2011 2:28:13 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-06A~LMW-18F

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	986973.9	97.898	%	1.1654				1.19%
Lu 261.542	957702.9	100.2	%	0.66				0.65%
Ag 328.068†	-26.4	-0.00028	mg/L	0.000308	-0.00028	mg/L	0.000308	111.71%
Al 308.215†	-312.4	-0.01711	mg/L	0.002415	-0.01711	mg/L	0.002415	14.11%
As 188.979†	0.6	0.00095	mg/L	0.004069	0.00095	mg/L	0.004069	428.63%

Ba 233.527†	3771.8	0.10351 mg/L	0.000968	0.10351 mg/L	0.000968	0.94%
Be 313.107†	53.9	0.00004 mg/L	0.000014	0.00004 mg/L	0.000014	35.18%
Co 228.616†	0.5	0.00002 mg/L	0.000211	0.00002 mg/L	0.000211	>999.9%
Cr 267.716†	97.7	0.00225 mg/L	0.000135	0.00225 mg/L	0.000135	6.01%
Cu 324.752†	370.6	0.00360 mg/L	0.000505	0.00360 mg/L	0.000505	14.05%
Fe 273.955†	255.3	0.01227 mg/L	0.000447	0.01227 mg/L	0.000447	3.64%
Mg 279.077†	77330.3	4.5624 mg/L	0.07046	4.5624 mg/L	0.07046	1.54%
Mn 257.610†	142881.5	0.42140 mg/L	0.007163	0.42140 mg/L	0.007163	1.70%
Ni 231.604†	48.6	0.00237 mg/L	0.000356	0.00237 mg/L	0.000356	15.00%
Pb 220.353†	-1.2	0.00025 mg/L	0.001721	0.00025 mg/L	0.001721	694.89%
Sb 206.836†	1.4	0.00076 mg/L	0.002616	0.00076 mg/L	0.002616	343.40%
Se 196.026†	-4.8	-0.00539 mg/L	0.001989	-0.00539 mg/L	0.001989	36.89%
Tl 190.801†	1.3	0.00098 mg/L	0.002385	0.00098 mg/L	0.002385	243.10%
V 292.402†	-17.5	-0.00022 mg/L	0.000356	-0.00022 mg/L	0.000356	164.72%
Zn 206.200†	910.5	0.03381 mg/L	0.000222	0.03381 mg/L	0.000222	0.66%
Cd 226.502†	113.1	0.00287 mg/L	0.000044	0.00287 mg/L	0.000044	1.55%
Ti 334.940†	-52.0	0.00008 mg/L	0.000108	0.00008 mg/L	0.000108	140.52%
Ca 227.546†	3854.1	21.866 mg/L	0.0630	21.866 mg/L	0.0630	0.29%

Sequence No.: 50

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/9/2011 12:59:00 PM

Data Type: Reprocessed on 6/9/2011 2:28:14 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	972113.6	96.424 %		0.3930			0.41%
Lu 261.542	937719.6	98.09 %		0.493			0.50%
Ag 328.068†	128924.5	1.3456 mg/L		0.02813	1.3456 mg/L	0.02813	2.09%
QC value within limits for Ag 328.068 Recovery = 107.65%							
Al 308.215†	191395.7	10.455 mg/L		0.1146	10.455 mg/L	0.1146	1.10%
QC value within limits for Al 308.215 Recovery = 104.55%							
As 188.979†	708.0	0.50673 mg/L		0.001795	0.50673 mg/L	0.001795	0.35%
QC value within limits for As 188.979 Recovery = 101.35%							
Ba 233.527†	385587.2	10.584 mg/L		0.0420	10.584 mg/L	0.0420	0.40%
QC value within limits for Ba 233.527 Recovery = 105.84%							
Be 313.107†	342058.0	0.25835 mg/L		0.000691	0.25835 mg/L	0.000691	0.27%
QC value within limits for Be 313.107 Recovery = 103.34%							
Co 228.616†	64820.5	2.7164 mg/L		0.03687	2.7164 mg/L	0.03687	1.36%
QC value within limits for Co 228.616 Recovery = 108.65%							
Cr 267.716†	44269.2	1.0665 mg/L		0.02117	1.0665 mg/L	0.02117	1.98%
QC value within limits for Cr 267.716 Recovery = 106.65%							
Cu 324.752†	131380.5	1.2798 mg/L		0.01134	1.2798 mg/L	0.01134	0.89%
QC value within limits for Cu 324.752 Recovery = 102.38%							
Fe 273.955†	110026.2	5.3679 mg/L		0.06424	5.3679 mg/L	0.06424	1.20%
QC value within limits for Fe 273.955 Recovery = 107.36%							
Mg 279.077†	438446.2	25.869 mg/L		0.3490	25.869 mg/L	0.3490	1.35%
QC value within limits for Mg 279.077 Recovery = 103.48%							
Mn 257.610†	892229.4	2.6314 mg/L		0.00546	2.6314 mg/L	0.00546	0.21%
QC value within limits for Mn 257.610 Recovery = 105.26%							
Ni 231.604†	54138.4	2.6604 mg/L		0.04782	2.6604 mg/L	0.04782	1.80%
QC value within limits for Ni 231.604 Recovery = 106.41%							
Pb 220.353†	2646.6	0.51937 mg/L		0.001443	0.51937 mg/L	0.001443	0.28%
QC value within limits for Pb 220.353 Recovery = 103.87%							
Sb 206.836†	928.7	0.51351 mg/L		0.002024	0.51351 mg/L	0.002024	0.39%
QC value within limits for Sb 206.836 Recovery = 102.70%							
Se 196.026†	515.6	0.50474 mg/L		0.006514	0.50474 mg/L	0.006514	1.29%
QC value within limits for Se 196.026 Recovery = 100.95%							
Tl 190.801†	887.6	0.52960 mg/L		0.002712	0.52960 mg/L	0.002712	0.51%
QC value within limits for Tl 190.801 Recovery = 105.92%							
V 292.402†	178085.5	2.5920 mg/L		0.05212	2.5920 mg/L	0.05212	2.01%
QC value within limits for V 292.402 Recovery = 103.68%							
Zn 206.200†	70914.9	2.6354 mg/L		0.04004	2.6354 mg/L	0.04004	1.52%
QC value within limits for Zn 206.200 Recovery = 105.41%							
Cd 226.502†	10063.0	0.25475 mg/L		0.002807	0.25475 mg/L	0.002807	1.10%
QC value within limits for Cd 226.502 Recovery = 101.90%							

Ti 334.940† 213195.4 0.53697 mg/L 0.005339 0.53697 mg/L 0.005339 0.99%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 4709.1 26.837 mg/L 0.0735 26.837 mg/L 0.0735 0.27%
 QC value within limits for Ca 227.546 Recovery = 107.35%
 All analyte(s) passed QC.

Sequence No.: 51

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 6/9/2011 1:02:42 PM

Data Type: Reprocessed on 6/9/2011 2:28:15 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1002433.1	99.432	%	0.6841			0.69%
Lu 261.542	942682.1	98.61	%	0.013			0.01%
Ag 328.068†	31.0	0.00032	mg/L	0.000581	0.00032 mg/L	0.000581	180.31%
Al 308.215†	-102.8	-0.00563	mg/L	0.005782	-0.00563 mg/L	0.005782	102.75%
As 188.979†	2.9	0.00204	mg/L	0.001165	0.00204 mg/L	0.001165	57.19%
Ba 233.527†	38.5	0.00106	mg/L	0.000460	0.00106 mg/L	0.000460	43.51%
Be 313.107†	13.5	0.00001	mg/L	0.000025	0.00001 mg/L	0.000025	226.87%
Co 228.616†	2.3	0.00009	mg/L	0.000072	0.00009 mg/L	0.000072	76.35%
Cr 267.716†	7.4	0.00018	mg/L	0.000218	0.00018 mg/L	0.000218	121.70%
Cu 324.752†	56.0	0.00055	mg/L	0.000730	0.00055 mg/L	0.000730	133.91%
Fe 273.955†	78.8	0.00378	mg/L	0.001524	0.00378 mg/L	0.001524	40.34%
Mg 279.077†	19.5	0.00115	mg/L	0.003492	0.00115 mg/L	0.003492	303.66%
Mn 257.610†	121.8	0.00036	mg/L	0.000125	0.00036 mg/L	0.000125	34.86%
Ni 231.604†	8.0	0.00039	mg/L	0.000334	0.00039 mg/L	0.000334	84.73%
Pb 220.353†	0.3	0.00006	mg/L	0.001946	0.00006 mg/L	0.001946	>999.9%
Sb 206.836†	3.3	0.00188	mg/L	0.006213	0.00188 mg/L	0.006213	329.72%
Se 196.026†	-10.5	-0.01028	mg/L	0.006169	-0.01028 mg/L	0.006169	60.04%
Tl 190.801†	5.5	0.00323	mg/L	0.006654	0.00323 mg/L	0.006654	206.17%
V 292.402†	-17.9	-0.00026	mg/L	0.000179	-0.00026 mg/L	0.000179	68.78%
Zn 206.200†	25.0	0.00093	mg/L	0.000075	0.00093 mg/L	0.000075	8.12%
Cd 226.502†	-1.5	-0.00004	mg/L	0.000118	-0.00004 mg/L	0.000118	310.63%
Ti 334.940†	197.2	0.00050	mg/L	0.000065	0.00050 mg/L	0.000065	13.19%
Ca 227.546†	-0.3	-0.00165	mg/L	0.070885	-0.00165 mg/L	0.070885	>999.9%

Sequence No.: 52

Sample ID: K0919-07A-LMW-19U

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 62

Date Collected: 6/9/2011 1:06:24 PM

Data Type: Reprocessed on 6/9/2011 2:28:15 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-07A-LMW-19U

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	995560.5	98.750	%	1.1137			1.13%
Lu 261.542	964574.0	100.9	%	1.53			1.52%
Ag 328.068†	17.4	0.00018	mg/L	0.000413	0.00018 mg/L	0.000413	226.97%
Al 308.215†	-409.4	-0.02243	mg/L	0.004562	-0.02243 mg/L	0.004562	20.33%
As 188.979†	0.7	0.00077	mg/L	0.004989	0.00077 mg/L	0.004989	644.03%
Ba 233.527†	474.5	0.01302	mg/L	0.000328	0.01302 mg/L	0.000328	2.52%
Be 313.107†	13.2	0.00001	mg/L	0.000042	0.00001 mg/L	0.000042	359.51%
Co 228.616†	-4.5	-0.00019	mg/L	0.000130	-0.00019 mg/L	0.000130	68.05%
Cr 267.716†	40.0	0.00094	mg/L	0.000181	0.00094 mg/L	0.000181	19.20%
Cu 324.752†	270.3	0.00262	mg/L	0.000149	0.00262 mg/L	0.000149	5.70%
Fe 273.955†	834.9	0.04012	mg/L	0.000319	0.04012 mg/L	0.000319	0.80%
Mg 279.077†	75587.0	4.4575	mg/L	0.02373	4.4575 mg/L	0.02373	0.53%
Mn 257.610†	1100.4	0.00311	mg/L	0.000059	0.00311 mg/L	0.000059	1.88%
Ni 231.604†	11.9	0.00057	mg/L	0.000413	0.00057 mg/L	0.000413	72.25%
Pb 220.353†	4.1	0.00112	mg/L	0.000971	0.00112 mg/L	0.000971	86.81%
Sb 206.836†	4.2	0.00238	mg/L	0.001088	0.00238 mg/L	0.001088	45.65%
Se 196.026†	-1.0	-0.00119	mg/L	0.004714	-0.00119 mg/L	0.004714	394.70%

Tl 190.801†	5.1	0.00318 mg/L	0.003169	0.00318 mg/L	0.003169	99.80%
V 292.402†	19.6	0.00029 mg/L	0.000589	0.00029 mg/L	0.000589	204.13%
Zn 206.200†	755.1	0.02803 mg/L	0.000519	0.02803 mg/L	0.000519	1.85%
Cd 226.502†	27.3	0.00069 mg/L	0.000035	0.00069 mg/L	0.000035	5.14%
Ti 334.940†	366.7	0.00100 mg/L	0.000459	0.00100 mg/L	0.000459	45.77%
Ca 227.546†	2042.6	11.590 mg/L	0.2148	11.590 mg/L	0.2148	1.85%

Sequence No.: 53

Autosampler Location: 63

Sample ID: K0919-08A~LMW-19F

Date Collected: 6/9/2011 1:09:59 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:28:16 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0919-08A~LMW-19F

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1001774.9	99.366	%	0.3694			0.37%
Lu 261.542	960270.9	100.5	%	0.36			0.36%
Ag 328.068†	-40.6	-0.00042	mg/L	0.000399	-0.00042 mg/L	0.000399	94.11%
Al 308.215†	-462.9	-0.02536	mg/L	0.005066	-0.02536 mg/L	0.005066	19.98%
As 188.979†	0.4	0.00057	mg/L	0.002957	0.00057 mg/L	0.002957	522.46%
Ba 233.527†	460.6	0.01264	mg/L	0.000185	0.01264 mg/L	0.000185	1.46%
Be 313.107†	13.4	0.00001	mg/L	0.000030	0.00001 mg/L	0.000030	286.66%
Co 228.616†	-1.4	-0.00006	mg/L	0.000126	-0.00006 mg/L	0.000126	206.82%
Cr 267.716†	20.1	0.00046	mg/L	0.000088	0.00046 mg/L	0.000088	18.87%
Cu 324.752†	107.2	0.00103	mg/L	0.000600	0.00103 mg/L	0.000600	58.22%
Fe 273.955†	297.0	0.01426	mg/L	0.000048	0.01426 mg/L	0.000048	0.34%
Mg 279.077†	75933.9	4.4780	mg/L	0.09693	4.4780 mg/L	0.09693	2.16%
Mn 257.610†	1898.1	0.00546	mg/L	0.000015	0.00546 mg/L	0.000015	0.28%
Ni 231.604†	3.8	0.00017	mg/L	0.000128	0.00017 mg/L	0.000128	73.45%
Pb 220.353†	-9.5	-0.00153	mg/L	0.000900	-0.00153 mg/L	0.000900	58.75%
Sb 206.836†	1.1	0.00061	mg/L	0.004762	0.00061 mg/L	0.004762	781.41%
Se 196.026†	-4.1	-0.00430	mg/L	0.002573	-0.00430 mg/L	0.002573	59.91%
Tl 190.801†	-0.4	-0.00008	mg/L	0.001945	-0.00008 mg/L	0.001945	>999.9%
V 292.402†	-30.7	-0.00044	mg/L	0.000373	-0.00044 mg/L	0.000373	83.89%
Zn 206.200†	760.3	0.02823	mg/L	0.000104	0.02823 mg/L	0.000104	0.37%
Cd 226.502†	93.3	0.00237	mg/L	0.000071	0.00237 mg/L	0.000071	3.00%
Ti 334.940†	72.2	0.00026	mg/L	0.000049	0.00026 mg/L	0.000049	18.59%
Ca 227.546†	2060.4	11.690	mg/L	0.0427	11.690 mg/L	0.0427	0.37%

Sequence No.: 54

Autosampler Location: 64

Sample ID: K0919-09A~LMW-12U

Date Collected: 6/9/2011 1:13:40 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:28:17 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0919-09A~LMW-12U

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1014099.5	100.59	%	0.523			0.52%
Lu 261.542	959194.8	100.3	%	0.98			0.97%
Ag 328.068†	-51.0	-0.00051	mg/L	0.000582	-0.00051 mg/L	0.000582	114.33%
Al 308.215†	219350.9	12.017	mg/L	0.1089	12.017 mg/L	0.1089	0.91%
As 188.979†	5.1	0.00510	mg/L	0.000606	0.00510 mg/L	0.000606	11.90%
Ba 233.527†	3239.9	0.08895	mg/L	0.000792	0.08895 mg/L	0.000792	0.89%
Be 313.107†	117.2	0.00079	mg/L	0.000023	0.00079 mg/L	0.000023	2.93%
Co 228.616†	118.0	0.00413	mg/L	0.000294	0.00413 mg/L	0.000294	7.12%
Cr 267.716†	3023.4	0.07280	mg/L	0.001096	0.07280 mg/L	0.001096	1.51%
Cu 324.752†	15000.3	0.14657	mg/L	0.002520	0.14657 mg/L	0.002520	1.72%
Fe 273.955†	234705.2	11.275	mg/L	0.1618	11.275 mg/L	0.1618	1.43%
Mg 279.077†	97735.9	5.7641	mg/L	0.08271	5.7641 mg/L	0.08271	1.43%
Mn 257.610†	26399.7	0.07764	mg/L	0.001276	0.07764 mg/L	0.001276	1.64%
Ni 231.604†	382.0	0.01851	mg/L	0.000077	0.01851 mg/L	0.000077	0.41%
Pb 220.353†	1169.9	0.23025	mg/L	0.001075	0.23025 mg/L	0.001075	0.47%
Sb 206.836†	2.1	-0.00058	mg/L	0.000577	-0.00058 mg/L	0.000577	98.87%

Se 196.026†	-12.1	-0.00838	mg/L	0.003112	-0.00838	mg/L	0.003112	37.11%
Tl 190.801†	1.8	0.00442	mg/L	0.001278	0.00442	mg/L	0.001278	28.90%
V 292.402†	2231.4	0.03296	mg/L	0.000454	0.03296	mg/L	0.000454	1.38%
Zn 206.200†	13128.7	0.48755	mg/L	0.007636	0.48755	mg/L	0.007636	1.57%
Cd 226.502†	2192.2	0.05476	mg/L	0.000363	0.05476	mg/L	0.000363	0.66%
Ti 334.940†	142866.9	0.36025	mg/L	0.005739	0.36025	mg/L	0.005739	1.59%
Ca 227.546†	3993.9	23.262	mg/L	0.2260	23.262	mg/L	0.2260	0.97%

Sequence No.: 55

Sample ID: K0919-09ADUP-LMW-12UD

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 65

Date Collected: 6/9/2011 1:17:21 PM

Data Type: Reprocessed on 6/9/2011 2:28:18 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-09ADUP-LMW-12UD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1015971.2	100.77	%	0.533				0.53%
Lu 261.542	958405.7	100.3	%	0.61				0.61%
Ag 328.068†	-118.4	-0.00121	mg/L	0.000806	-0.00121	mg/L	0.000806	66.65%
Al 308.215†	246308.7	13.494	mg/L	0.1962	13.494	mg/L	0.1962	1.45%
As 188.979†	6.4	0.00620	mg/L	0.003024	0.00620	mg/L	0.003024	48.79%
Ba 233.527†	3441.3	0.09448	mg/L	0.000749	0.09448	mg/L	0.000749	0.79%
Be 313.107†	94.1	0.00088	mg/L	0.000024	0.00088	mg/L	0.000024	2.71%
Co 228.616†	134.5	0.00471	mg/L	0.000206	0.00471	mg/L	0.000206	4.38%
Cr 267.716†	3359.1	0.08088	mg/L	0.001072	0.08088	mg/L	0.001072	1.33%
Cu 324.752†	15406.2	0.15059	mg/L	0.001950	0.15059	mg/L	0.001950	1.29%
Fe 273.955†	264545.5	12.709	mg/L	0.2031	12.709	mg/L	0.2031	1.60%
Mg 279.077†	101674.4	5.9964	mg/L	0.09501	5.9964	mg/L	0.09501	1.58%
Mn 257.610†	28836.6	0.08482	mg/L	0.001306	0.08482	mg/L	0.001306	1.54%
Ni 231.604†	417.3	0.02021	mg/L	0.000191	0.02021	mg/L	0.000191	0.94%
Pb 220.353†	1211.5	0.23850	mg/L	0.001158	0.23850	mg/L	0.001158	0.49%
Sb 206.836†	5.7	0.00126	mg/L	0.003788	0.00126	mg/L	0.003788	301.13%
Se 196.026†	-13.1	-0.00881	mg/L	0.003397	-0.00881	mg/L	0.003397	38.57%
Tl 190.801†	-0.4	0.00357	mg/L	0.001730	0.00357	mg/L	0.001730	48.53%
V 292.402†	2502.0	0.03695	mg/L	0.000682	0.03695	mg/L	0.000682	1.85%
Zn 206.200†	13564.1	0.50374	mg/L	0.008033	0.50374	mg/L	0.008033	1.59%
Cd 226.502†	2225.8	0.05551	mg/L	0.000147	0.05551	mg/L	0.000147	0.27%
Ti 334.940†	163547.2	0.41238	mg/L	0.006540	0.41238	mg/L	0.006540	1.59%
Ca 227.546†	4064.8	23.741	mg/L	0.2281	23.741	mg/L	0.2281	0.96%

Sequence No.: 56

Sample ID: K0919-09AMS-LMW-12US

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 66

Date Collected: 6/9/2011 1:21:02 PM

Data Type: Reprocessed on 6/9/2011 2:28:19 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-09AMS-LMW-12US

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1000991.5	99.289	%	1.0318				1.04%
Lu 261.542	949577.0	99.33	%	0.457				0.46%
Ag 328.068†	118524.2	1.2371	mg/L	0.00534	1.2371	mg/L	0.00534	0.43%
Al 308.215†	421590.1	23.069	mg/L	0.0693	23.069	mg/L	0.0693	0.30%
As 188.979†	691.8	0.49582	mg/L	0.002885	0.49582	mg/L	0.002885	0.58%
Ba 233.527†	349770.4	9.6011	mg/L	0.03535	9.6011	mg/L	0.03535	0.37%
Be 313.107†	315246.5	0.23795	mg/L	0.001040	0.23795	mg/L	0.001040	0.44%
Co 228.616†	58654.2	2.4576	mg/L	0.02177	2.4576	mg/L	0.02177	0.89%
Cr 267.716†	42872.6	1.0328	mg/L	0.00565	1.0328	mg/L	0.00565	0.55%
Cu 324.752†	132858.5	1.2947	mg/L	0.01795	1.2947	mg/L	0.01795	1.39%
Fe 273.955†	373828.9	18.033	mg/L	0.0822	18.033	mg/L	0.0822	0.46%
Mg 279.077†	502301.5	29.634	mg/L	0.1200	29.634	mg/L	0.1200	0.40%
Mn 257.610†	835347.4	2.4634	mg/L	0.00283	2.4634	mg/L	0.00283	0.11%
Ni 231.604†	49637.3	2.4391	mg/L	0.01711	2.4391	mg/L	0.01711	0.70%
Pb 220.353†	3652.3	0.71722	mg/L	0.002738	0.71722	mg/L	0.002738	0.38%

Sb 206.836†	840.8	0.46370 mg/L	0.001546	0.46370 mg/L	0.001546	0.33%
Se 196.026†	478.0	0.47223 mg/L	0.007169	0.47223 mg/L	0.007169	1.52%
Tl 190.801†	819.6	0.48919 mg/L	0.002811	0.48919 mg/L	0.002811	0.57%
V 292.402†	163621.4	2.3824 mg/L	0.01199	2.3824 mg/L	0.01199	0.50%
Zn 206.200†	76969.7	2.8600 mg/L	0.03581	2.8600 mg/L	0.03581	1.25%
Cd 226.502†	11588.4	0.29256 mg/L	0.003939	0.29256 mg/L	0.003939	1.35%
Ti 334.940†	164911.2	0.41549 mg/L	0.003988	0.41549 mg/L	0.003988	0.96%
Ca 227.546†	8227.9	47.497 mg/L	0.2059	47.497 mg/L	0.2059	0.43%

Sequence No.: 57

Autosampler Location: 67

Sample ID: K0919-09ASD-LMW-12U

Date Collected: 6/9/2011 1:24:48 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:28:19 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0919-09ASD-LMW-12U

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1011244.3	100.31 %	0.818			0.82%
Lu 261.542	956408.7	100.0 %	0.76			0.76%
Ag 328.068†	-8.1	-0.00008 mg/L	0.000612	-0.00008 mg/L	0.000612	767.79%
Al 308.215†	46946.8	2.5720 mg/L	0.05743	2.5720 mg/L	0.05743	2.23%
As 188.979†	9.9	0.00731 mg/L	0.001003	0.00731 mg/L	0.001003	13.71%
Ba 233.527†	693.0	0.01902 mg/L	0.000511	0.01902 mg/L	0.000511	2.68%
Be 313.107†	27.5	0.00017 mg/L	0.000029	0.00017 mg/L	0.000029	17.23%
Co 228.616†	28.2	0.00101 mg/L	0.000080	0.00101 mg/L	0.000080	7.96%
Cr 267.716†	627.1	0.01510 mg/L	0.000204	0.01510 mg/L	0.000204	1.35%
Cu 324.752†	3062.9	0.02993 mg/L	0.000474	0.02993 mg/L	0.000474	1.59%
Fe 273.955†	49544.4	2.3801 mg/L	0.06045	2.3801 mg/L	0.06045	2.54%
Mg 279.077†	20777.4	1.2254 mg/L	0.03138	1.2254 mg/L	0.03138	2.56%
Mn 257.610†	5610.8	0.01650 mg/L	0.000482	0.01650 mg/L	0.000482	2.92%
Ni 231.604†	82.8	0.00401 mg/L	0.000231	0.00401 mg/L	0.000231	5.76%
Pb 220.353†	247.3	0.04867 mg/L	0.002495	0.04867 mg/L	0.002495	5.13%
Sb 206.836†	1.3	0.00036 mg/L	0.003927	0.00036 mg/L	0.003927	>999.9%
Se 196.026†	-4.9	-0.00406 mg/L	0.007401	-0.00406 mg/L	0.007401	182.08%
Tl 190.801†	-1.5	-0.00018 mg/L	0.001688	-0.00018 mg/L	0.001688	941.58%
V 292.402†	445.6	0.00659 mg/L	0.000491	0.00659 mg/L	0.000491	7.45%
Zn 206.200†	2691.2	0.09994 mg/L	0.001372	0.09994 mg/L	0.001372	1.37%
Cd 226.502†	455.4	0.01137 mg/L	0.000084	0.01137 mg/L	0.000084	0.74%
Ti 334.940†	29807.2	0.07516 mg/L	0.002199	0.07516 mg/L	0.002199	2.93%
Ca 227.546†	824.6	4.8060 mg/L	0.05254	4.8060 mg/L	0.05254	1.09%

Sequence No.: 58

Autosampler Location: 68

Sample ID: K0919-09APDS-LMW-12U

Date Collected: 6/9/2011 1:28:47 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:28:20 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0919-09APDS-LMW-12U

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1003127.6	99.501 %	1.1927			1.20%
Lu 261.542	951971.3	99.58 %	0.889			0.89%
Ag 328.068†	113714.2	1.1869 mg/L	0.00655	1.1869 mg/L	0.00655	0.55%
Al 308.215†	377011.5	20.628 mg/L	0.0339	20.628 mg/L	0.0339	0.16%
As 188.979†	636.9	0.45665 mg/L	0.003205	0.45665 mg/L	0.003205	0.70%
Ba 233.527†	338282.0	9.2857 mg/L	0.04674	9.2857 mg/L	0.04674	0.50%
Be 313.107†	303633.5	0.22908 mg/L	0.001128	0.22908 mg/L	0.001128	0.49%
Co 228.616†	56102.1	2.3508 mg/L	0.00990	2.3508 mg/L	0.00990	0.42%
Cr 267.716†	40774.8	0.98227 mg/L	0.003987	0.98227 mg/L	0.003987	0.41%
Cu 324.752†	126515.1	1.2328 mg/L	0.00747	1.2328 mg/L	0.00747	0.61%
Fe 273.955†	316932.1	15.297 mg/L	0.0699	15.297 mg/L	0.0699	0.46%
Mg 279.077†	479995.0	28.318 mg/L	0.0953	28.318 mg/L	0.0953	0.34%
Mn 257.610†	803378.7	2.3691 mg/L	0.00663	2.3691 mg/L	0.00663	0.28%
Ni 231.604†	47463.5	2.3323 mg/L	0.01526	2.3323 mg/L	0.01526	0.65%

Pb 220.353†	3359.9	0.65977 mg/L	0.007333	0.65977 mg/L	0.007333	1.11%
Sb 206.836†	798.5	0.44047 mg/L	0.006211	0.44047 mg/L	0.006211	1.41%
Se 196.026†	438.8	0.43299 mg/L	0.008089	0.43299 mg/L	0.008089	1.87%
Tl 190.801†	755.7	0.45081 mg/L	0.005887	0.45081 mg/L	0.005887	1.31%
V 292.402†	156708.1	2.2817 mg/L	0.01189	2.2817 mg/L	0.01189	0.52%
Zn 206.200†	72755.5	2.7035 mg/L	0.02429	2.7035 mg/L	0.02429	0.90%
Cd 226.502†	10647.0	0.26888 mg/L	0.003064	0.26888 mg/L	0.003064	1.14%
Ti 334.940†	138453.0	0.34882 mg/L	0.002325	0.34882 mg/L	0.002325	0.67%
Ca 227.546†	7871.7	45.335 mg/L	0.4377	45.335 mg/L	0.4377	0.97%

Sequence No.: 59

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/9/2011 1:32:31 PM

Data Type: Reprocessed on 6/9/2011 2:28:21 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	978765.6	97.084 %	1.4473			1.49%
Lu 261.542	943992.3	98.75 %	0.844			0.85%
Ag 328.068†	128795.3	1.3443 mg/L	0.00510	1.3443 mg/L	0.00510	0.38%
QC value within limits for Ag		328.068 Recovery =	107.54%			
Al 308.215†	190168.3	10.388 mg/L	0.0696	10.388 mg/L	0.0696	0.67%
QC value within limits for Al		308.215 Recovery =	103.88%			
As 188.979†	692.1	0.49545 mg/L	0.007783	0.49545 mg/L	0.007783	1.57%
QC value within limits for As		188.979 Recovery =	99.09%			
Ba 233.527†	378857.1	10.399 mg/L	0.0588	10.399 mg/L	0.0588	0.57%
QC value within limits for Ba		233.527 Recovery =	103.99%			
Be 313.107†	337525.9	0.25494 mg/L	0.000916	0.25494 mg/L	0.000916	0.36%
QC value within limits for Be		313.107 Recovery =	101.97%			
Co 228.616†	64544.9	2.7048 mg/L	0.01518	2.7048 mg/L	0.01518	0.56%
QC value within limits for Co		228.616 Recovery =	108.19%			
Cr 267.716†	44188.5	1.0646 mg/L	0.00365	1.0646 mg/L	0.00365	0.34%
QC value within limits for Cr		267.716 Recovery =	106.46%			
Cu 324.752†	129714.1	1.2636 mg/L	0.00967	1.2636 mg/L	0.00967	0.77%
QC value within limits for Cu		324.752 Recovery =	101.08%			
Fe 273.955†	109591.8	5.3469 mg/L	0.02335	5.3469 mg/L	0.02335	0.44%
QC value within limits for Fe		273.955 Recovery =	106.94%			
Mg 279.077†	437095.7	25.789 mg/L	0.1396	25.789 mg/L	0.1396	0.54%
QC value within limits for Mg		279.077 Recovery =	103.16%			
Mn 257.610†	877592.5	2.5882 mg/L	0.00529	2.5882 mg/L	0.00529	0.20%
QC value within limits for Mn		257.610 Recovery =	103.53%			
Ni 231.604†	54140.2	2.6604 mg/L	0.01119	2.6604 mg/L	0.01119	0.42%
QC value within limits for Ni		231.604 Recovery =	106.42%			
Pb 220.353†	2597.0	0.50966 mg/L	0.005098	0.50966 mg/L	0.005098	1.00%
QC value within limits for Pb		220.353 Recovery =	101.93%			
Sb 206.836†	918.8	0.50795 mg/L	0.011860	0.50795 mg/L	0.011860	2.33%
QC value within limits for Sb		206.836 Recovery =	101.59%			
Se 196.026†	507.4	0.49677 mg/L	0.004032	0.49677 mg/L	0.004032	0.81%
QC value within limits for Se		196.026 Recovery =	99.35%			
Tl 190.801†	867.6	0.51779 mg/L	0.003710	0.51779 mg/L	0.003710	0.72%
QC value within limits for Tl		190.801 Recovery =	103.56%			
V 292.402†	177736.2	2.5869 mg/L	0.01131	2.5869 mg/L	0.01131	0.44%
QC value within limits for V		292.402 Recovery =	103.47%			
Zn 206.200†	70325.7	2.6135 mg/L	0.01879	2.6135 mg/L	0.01879	0.72%
QC value within limits for Zn		206.200 Recovery =	104.54%			
Cd 226.502†	9977.2	0.25258 mg/L	0.002696	0.25258 mg/L	0.002696	1.07%
QC value within limits for Cd		226.502 Recovery =	101.03%			
Ti 334.940†	211332.5	0.53227 mg/L	0.003418	0.53227 mg/L	0.003418	0.64%
QC value within limits for Ti		334.940 Recovery =	Not calculated			
Ca 227.546†	4612.6	26.288 mg/L	0.2810	26.288 mg/L	0.2810	1.07%
QC value within limits for Ca		227.546 Recovery =	105.15%			

All analyte(s) passed QC.

Sequence No.: 60

Sample ID: CCB

Autosampler Location: 4

Date Collected: 6/9/2011 1:36:12 PM

Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Data Type: Reprocessed on 6/9/2011 2:28:21 PM

Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1003708.5	99.558	%	1.0370				1.04%
Lu 261.542	940190.5	98.35	%	1.016				1.03%
Ag 328.068†	-3.1	-0.00003	mg/L	0.000569	-0.00003	mg/L	0.000569	>999.9%
Al 308.215†	-78.6	-0.00431	mg/L	0.008456	-0.00431	mg/L	0.008456	196.25%
As 188.979†	2.3	0.00163	mg/L	0.002258	0.00163	mg/L	0.002258	138.34%
Ba 233.527†	35.2	0.00097	mg/L	0.000405	0.00097	mg/L	0.000405	41.96%
Be 313.107†	-20.8	-0.00002	mg/L	0.000040	-0.00002	mg/L	0.000040	266.29%
Co 228.616†	6.7	0.00028	mg/L	0.000190	0.00028	mg/L	0.000190	67.59%
Cr 267.716†	14.6	0.00035	mg/L	0.000181	0.00035	mg/L	0.000181	51.75%
Cu 224.752†	-27.9	-0.00027	mg/L	0.000381	-0.00027	mg/L	0.000381	140.26%
Fe 273.955†	75.8	0.00365	mg/L	0.000501	0.00365	mg/L	0.000501	13.73%
Mg 279.077†	76.8	0.00453	mg/L	0.003976	0.00453	mg/L	0.003976	87.77%
Mn 257.610†	112.5	0.00033	mg/L	0.000061	0.00033	mg/L	0.000061	18.28%
Ni 231.604†	7.9	0.00039	mg/L	0.000400	0.00039	mg/L	0.000400	102.58%
Pb 220.353†	5.3	0.00103	mg/L	0.001513	0.00103	mg/L	0.001513	147.19%
Sb 206.836†	6.8	0.00387	mg/L	0.000397	0.00387	mg/L	0.000397	10.24%
Se 196.026†	-5.2	-0.00511	mg/L	0.002124	-0.00511	mg/L	0.002124	41.53%
Tl 190.801†	3.8	0.00224	mg/L	0.001653	0.00224	mg/L	0.001653	73.91%
V 292.402†	6.3	0.00009	mg/L	0.000577	0.00009	mg/L	0.000577	625.14%
Zn 206.200†	39.9	0.00148	mg/L	0.000003	0.00148	mg/L	0.000003	0.21%
Cd 226.502†	4.9	0.00012	mg/L	0.000175	0.00012	mg/L	0.000175	140.55%
Ti 334.940†	106.5	0.00027	mg/L	0.000057	0.00027	mg/L	0.000057	21.21%
Ca 227.546†	4.2	0.02420	mg/L	0.035138	0.02420	mg/L	0.035138	145.19%

Sequence No.: 61
 Sample ID: K0919-10A~LMW-12F
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 69
 Date Collected: 6/9/2011 1:39:54 PM
 Data Type: Reprocessed on 6/9/2011 2:28:22 PM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: K0919-10A~LMW-12F

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1013441.5	100.52	%	1.414				1.41%
Lu 261.542	967450.1	101.2	%	0.94				0.93%
Ag 328.068†	-35.1	-0.00036	mg/L	0.000209	-0.00036	mg/L	0.000209	57.26%
Al 308.215†	-441.1	-0.02418	mg/L	0.007927	-0.02418	mg/L	0.007927	32.78%
As 188.979†	4.4	0.00358	mg/L	0.002343	0.00358	mg/L	0.002343	65.51%
Ba 233.527†	1024.9	0.02813	mg/L	0.000623	0.02813	mg/L	0.000623	2.22%
Be 313.107†	-3.4	0.00000	mg/L	0.000036	0.00000	mg/L	0.000036	>999.9%
Co 228.616†	7.3	0.00025	mg/L	0.000184	0.00025	mg/L	0.000184	73.51%
Cr 267.716†	24.2	0.00056	mg/L	0.000254	0.00056	mg/L	0.000254	45.14%
Cu 324.752†	37.2	0.00043	mg/L	0.000607	0.00043	mg/L	0.000607	141.87%
Fe 273.955†	33732.7	1.6204	mg/L	0.00728	1.6204	mg/L	0.00728	0.45%
Mg 279.077†	56141.7	3.3110	mg/L	0.01037	3.3110	mg/L	0.01037	0.31%
Mn 257.610†	12691.6	0.03733	mg/L	0.000144	0.03733	mg/L	0.000144	0.39%
Ni 231.604†	39.3	0.00191	mg/L	0.000209	0.00191	mg/L	0.000209	10.92%
Pb 220.353†	-2.9	-0.00010	mg/L	0.000792	-0.00010	mg/L	0.000792	802.22%
Sb 206.836†	9.0	0.00511	mg/L	0.002617	0.00511	mg/L	0.002617	51.21%
Se 196.026†	-4.2	-0.00396	mg/L	0.001644	-0.00396	mg/L	0.001644	41.53%
Tl 190.801†	2.0	0.00147	mg/L	0.002037	0.00147	mg/L	0.002037	138.15%
V 292.402†	95.6	0.00150	mg/L	0.000581	0.00150	mg/L	0.000581	38.74%
Zn 206.200†	1403.5	0.05210	mg/L	0.000685	0.05210	mg/L	0.000685	1.32%
Cd 226.502†	182.1	0.00450	mg/L	0.000093	0.00450	mg/L	0.000093	2.07%
Ti 334.940†	127.6	0.00051	mg/L	0.000186	0.00051	mg/L	0.000186	36.59%
Ca 227.546†	3287.9	18.740	mg/L	0.2573	18.740	mg/L	0.2573	1.37%

Sequence No.: 62

Autosampler Location: 70

Sample ID: K0919-10ADUP-LMW-12FD

Date Collected: 6/9/2011 1:43:35 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:28:23 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0919-10ADUP-LMW-12FD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	992861.9	98.482	%	0.8780				0.89%
Lu 261.542	955021.2	99.90	%	1.080				1.08%
Ag 328.068†	-71.6	-0.00074	mg/L	0.000472	-0.00074	mg/L	0.000472	63.35%
Al 308.215†	-462.2	-0.02534	mg/L	0.004098	-0.02534	mg/L	0.004098	16.17%
As 188.979†	5.2	0.00418	mg/L	0.003239	0.00418	mg/L	0.003239	77.52%
Ba 233.527†	1034.2	0.02838	mg/L	0.000621	0.02838	mg/L	0.000621	2.19%
Be 313.107†	-26.1	-0.00002	mg/L	0.000013	-0.00002	mg/L	0.000013	68.93%
Co 228.616†	11.1	0.00041	mg/L	0.000073	0.00041	mg/L	0.000073	17.86%
Cr 267.716†	16.7	0.00038	mg/L	0.000211	0.00038	mg/L	0.000211	55.38%
Cu 324.752†	77.9	0.00083	mg/L	0.000742	0.00083	mg/L	0.000742	89.90%
Fe 273.955†	34400.4	1.6524	mg/L	0.00806	1.6524	mg/L	0.00806	0.49%
Mg 279.077†	57063.3	3.3653	mg/L	0.01004	3.3653	mg/L	0.01004	0.30%
Mn 257.610†	12854.3	0.03781	mg/L	0.000040	0.03781	mg/L	0.000040	0.11%
Ni 231.604†	39.0	0.00190	mg/L	0.000296	0.00190	mg/L	0.000296	15.62%
Pb 220.353†	5.7	0.00158	mg/L	0.002227	0.00158	mg/L	0.002227	140.96%
Sb 206.836†	8.1	0.00458	mg/L	0.001503	0.00458	mg/L	0.001503	32.84%
Se 196.026†	-7.0	-0.00673	mg/L	0.003829	-0.00673	mg/L	0.003829	56.92%
Tl 190.801†	-0.5	0.00001	mg/L	0.001198	0.00001	mg/L	0.001198	>999.9%
V 292.402†	78.1	0.00125	mg/L	0.000155	0.00125	mg/L	0.000155	12.47%
Zn 206.200†	1330.7	0.04940	mg/L	0.000927	0.04940	mg/L	0.000927	1.88%
Cd 226.502†	185.6	0.00459	mg/L	0.000063	0.00459	mg/L	0.000063	1.38%
Ti 334.940†	98.7	0.00044	mg/L	0.000142	0.00044	mg/L	0.000142	32.37%
Ca 227.546†	3326.4	18.960	mg/L	0.3864	18.960	mg/L	0.3864	2.04%

Sequence No.: 63

Autosampler Location: 71

Sample ID: K0919-10AMS-LMW-12FS

Date Collected: 6/9/2011 1:47:10 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 2:28:24 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0919-10AMS-LMW-12FS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	956981.8	94.923	%	1.0996				1.16%
Lu 261.542	927387.2	97.01	%	0.571				0.59%
Ag 328.068†	122358.3	1.2771	mg/L	0.00656	1.2771	mg/L	0.00656	0.51%
Al 308.215†	178610.7	9.7563	mg/L	0.02068	9.7563	mg/L	0.02068	0.21%
As 188.979†	710.2	0.50778	mg/L	0.001733	0.50778	mg/L	0.001733	0.34%
Ba 233.527†	356692.7	9.7911	mg/L	0.01522	9.7911	mg/L	0.01522	0.16%
Be 313.107†	320449.0	0.24105	mg/L	0.000787	0.24105	mg/L	0.000787	0.33%
Co 228.616†	59823.3	2.5075	mg/L	0.00716	2.5075	mg/L	0.00716	0.29%
Cr 267.716†	40405.1	0.97340	mg/L	0.004358	0.97340	mg/L	0.004358	0.45%
Cu 324.752†	122793.6	1.1962	mg/L	0.00305	1.1962	mg/L	0.00305	0.26%
Fe 273.955†	136707.3	6.6444	mg/L	0.01176	6.6444	mg/L	0.01176	0.18%
Mg 279.077†	469121.8	27.677	mg/L	0.0559	27.677	mg/L	0.0559	0.20%
Mn 257.610†	836783.9	2.4677	mg/L	0.00335	2.4677	mg/L	0.00335	0.14%
Ni 231.604†	50378.9	2.4758	mg/L	0.00810	2.4758	mg/L	0.00810	0.33%
Pb 220.353†	2560.0	0.50253	mg/L	0.001787	0.50253	mg/L	0.001787	0.36%
Sb 206.836†	901.4	0.49994	mg/L	0.001091	0.49994	mg/L	0.001091	0.22%
Se 196.026†	499.6	0.48936	mg/L	0.005942	0.48936	mg/L	0.005942	1.21%
Tl 190.801†	847.0	0.50188	mg/L	0.006155	0.50188	mg/L	0.006155	1.23%
V 292.402†	167195.6	2.4340	mg/L	0.00915	2.4340	mg/L	0.00915	0.38%
Zn 206.200†	66673.4	2.4777	mg/L	0.00410	2.4777	mg/L	0.00410	0.17%
Cd 226.502†	9812.1	0.24836	mg/L	0.000037	0.24836	mg/L	0.000037	0.02%
Ti 334.940†	271.2	0.00055	mg/L	0.000093	0.00055	mg/L	0.000093	16.96%
Ca 227.546†	7656.5	43.640	mg/L	0.1384	43.640	mg/L	0.1384	0.32%

Sequence No.: 64
 Sample ID: K0919-10ASD-LMW-12F
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 72
 Date Collected: 6/9/2011 1:50:46 PM
 Data Type: Reprocessed on 6/9/2011 2:28:24 PM
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: K0919-10ASD-LMW-12F

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1013606.0	100.54	%	0.465			0.46%
Lu 261.542	967986.7	101.3	%	1.04			1.03%
Ag 328.068†	-66.8	-0.00070	mg/L	0.000228	-0.00070 mg/L	0.000228	32.75%
Al 308.215†	-640.5	-0.03510	mg/L	0.001810	-0.03510 mg/L	0.001810	5.16%
As 188.979†	7.0	0.00507	mg/L	0.003405	0.00507 mg/L	0.003405	67.20%
Ba 233.527†	232.4	0.00638	mg/L	0.000287	0.00638 mg/L	0.000287	4.50%
Be 313.107†	-19.6	-0.00001	mg/L	0.000013	-0.00001 mg/L	0.000013	89.64%
Co 228.616†	-2.9	-0.00013	mg/L	0.000215	-0.00013 mg/L	0.000215	162.49%
Cr 267.716†	7.7	0.00018	mg/L	0.000241	0.00018 mg/L	0.000241	133.10%
Cu 324.752†	35.2	0.00036	mg/L	0.000339	0.00036 mg/L	0.000339	95.05%
Fe 273.955†	7230.0	0.34731	mg/L	0.001441	0.34731 mg/L	0.001441	0.41%
Mg 279.077†	12141.2	0.71603	mg/L	0.007381	0.71603 mg/L	0.007381	1.03%
Mn 257.610†	2799.3	0.00823	mg/L	0.000044	0.00823 mg/L	0.000044	0.54%
Ni 231.604†	7.9	0.00038	mg/L	0.000055	0.00038 mg/L	0.000055	14.36%
Pb 220.353†	-5.4	-0.00097	mg/L	0.000060	-0.00097 mg/L	0.000060	6.18%
Sb 206.836†	-1.8	-0.00103	mg/L	0.003005	-0.00103 mg/L	0.003005	292.60%
Se 196.026†	-7.9	-0.00765	mg/L	0.004325	-0.00765 mg/L	0.004325	56.52%
Tl 190.801†	2.3	0.00144	mg/L	0.001124	0.00144 mg/L	0.001124	78.28%
V 292.402†	37.3	0.00057	mg/L	0.000099	0.00057 mg/L	0.000099	17.53%
Zn 206.200†	305.5	0.01134	mg/L	0.000322	0.01134 mg/L	0.000322	2.84%
Cd 226.502†	35.4	0.00087	mg/L	0.000202	0.00087 mg/L	0.000202	23.09%
Ti 334.940†	105.6	0.00030	mg/L	0.000070	0.00030 mg/L	0.000070	23.14%
Ca 227.546†	685.0	3.9049	mg/L	0.19155	3.9049 mg/L	0.19155	4.91%

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Sequence No.: 65
 Sample ID: K0919-10APDS-LMW-12F
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 73
 Date Collected: 6/9/2011 1:54:28 PM
 Data Type: Reprocessed on 6/9/2011 2:28:25 PM
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: K0919-10APDS-LMW-12F

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	981323.6	97.338	%	1.5570			1.60%
Lu 261.542	936959.8	98.01	%	0.794			0.81%
Ag 328.068†	116336.6	1.2142	mg/L	0.00999	1.2142 mg/L	0.00999	0.82%
Al 308.215†	168956.8	9.2290	mg/L	0.12463	9.2290 mg/L	0.12463	1.35%
As 188.979†	640.3	0.45821	mg/L	0.003370	0.45821 mg/L	0.003370	0.74%
Ba 233.527†	341666.0	9.3786	mg/L	0.05487	9.3786 mg/L	0.05487	0.59%
Be 313.107†	310517.7	0.23358	mg/L	0.000350	0.23358 mg/L	0.000350	0.15%
Co 228.616†	56856.2	2.3831	mg/L	0.02866	2.3831 mg/L	0.02866	1.20%
Cr 267.716†	38818.3	0.93516	mg/L	0.008533	0.93516 mg/L	0.008533	0.91%
Cu 324.752†	113751.6	1.1081	mg/L	0.01777	1.1081 mg/L	0.01777	1.60%
Fe 273.955†	130181.6	6.3267	mg/L	0.08401	6.3267 mg/L	0.08401	1.33%
Mg 279.077†	439756.3	25.945	mg/L	0.3452	25.945 mg/L	0.3452	1.33%
Mn 257.610†	808170.1	2.3834	mg/L	0.00653	2.3834 mg/L	0.00653	0.27%
Ni 231.604†	48176.3	2.3676	mg/L	0.02621	2.3676 mg/L	0.02621	1.11%
Pb 220.353†	2312.6	0.45405	mg/L	0.001334	0.45405 mg/L	0.001334	0.29%
Sb 206.836†	809.4	0.44811	mg/L	0.009562	0.44811 mg/L	0.009562	2.13%
Se 196.026†	444.7	0.43563	mg/L	0.002651	0.43563 mg/L	0.002651	0.61%
Tl 190.801†	772.9	0.45808	mg/L	0.002059	0.45808 mg/L	0.002059	0.45%
V 292.402†	157989.3	2.3000	mg/L	0.02373	2.3000 mg/L	0.02373	1.03%
Zn 206.200†	63085.2	2.3444	mg/L	0.03121	2.3444 mg/L	0.03121	1.33%
Cd 226.502†	8824.0	0.22332	mg/L	0.003574	0.22332 mg/L	0.003574	1.60%
Ti 334.940†	234.6	0.00048	mg/L	0.000093	0.00048 mg/L	0.000093	19.54%
Ca 227.546†	7372.1	42.018	mg/L	0.3297	42.018 mg/L	0.3297	0.78%

Sequence No.: 66

Sample ID: K0919-11A-LMW-14U

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 74

Date Collected: 6/9/2011 1:58:12 PM

Data Type: Reprocessed on 6/9/2011 2:28:26 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-11A-LMW-14U

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	998157.5	99.008 %	0.0248			0.03%
Lu 261.542	954917.4	99.89 %	0.751			0.75%
Ag 328.068†	13.4	0.00014 mg/L	0.000622	0.00014 mg/L	0.000622	440.40%
Al 308.215†	11898.9	0.65188 mg/L	0.012064	0.65188 mg/L	0.012064	1.85%
As 188.979†	6.9	0.00563 mg/L	0.001498	0.00563 mg/L	0.001498	26.61%
Ba 233.527†	2079.2	0.05706 mg/L	0.000300	0.05706 mg/L	0.000300	0.53%
Be 313.107†	24.5	0.00006 mg/L	0.000030	0.00006 mg/L	0.000030	46.22%
Co 228.616†	19.2	0.00072 mg/L	0.000156	0.00072 mg/L	0.000156	21.84%
Cr 267.716†	2134.5	0.05135 mg/L	0.000329	0.05135 mg/L	0.000329	0.64%
Cu 324.752†	1393.9	0.01365 mg/L	0.000669	0.01365 mg/L	0.000669	4.90%
Fe 273.955†	37071.9	1.7810 mg/L	0.01150	1.7810 mg/L	0.01150	0.65%
Mg 279.077†	65118.4	3.8414 mg/L	0.02547	3.8414 mg/L	0.02547	0.66%
Mn 257.610†	88253.7	0.26024 mg/L	0.001781	0.26024 mg/L	0.001781	0.68%
Ni 231.604†	241.6	0.01184 mg/L	0.000204	0.01184 mg/L	0.000204	1.72%
Pb 220.353†	93.8	0.01884 mg/L	0.000915	0.01884 mg/L	0.000915	4.86%
Sb 206.836†	13.4	0.00666 mg/L	0.003154	0.00666 mg/L	0.003154	47.33%
Se 196.026†	-3.2	-0.00302 mg/L	0.004724	-0.00302 mg/L	0.004724	156.20%
Tl 190.801†	-2.3	-0.00090 mg/L	0.003539	-0.00090 mg/L	0.003539	394.03%
V 292.402†	154.3	0.00244 mg/L	0.000316	0.00244 mg/L	0.000316	12.94%
Zn 206.200†	2667.1	0.09915 mg/L	0.000549	0.09915 mg/L	0.000549	0.55%
Cd 226.502†	369.2	0.00923 mg/L	0.000225	0.00923 mg/L	0.000225	2.44%
Ti 334.940†	9257.0	0.02350 mg/L	0.000314	0.02350 mg/L	0.000314	1.34%
Ca 227.546†	3208.0	18.295 mg/L	0.0495	18.295 mg/L	0.0495	0.27%

Sequence No.: 67

Sample ID: K0919-12A-LMW-14F

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 75

Date Collected: 6/9/2011 2:01:54 PM

Data Type: Reprocessed on 6/9/2011 2:28:27 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-12A-LMW-14F

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1002609.9	99.449 %	0.6163			0.62%
Lu 261.542	955977.8	100.0 %	1.26			1.26%
Ag 328.068†	-4.1	-0.00004 mg/L	0.000485	-0.00004 mg/L	0.000485	>999.9%
Al 308.215†	-268.0	-0.01469 mg/L	0.007563	-0.01469 mg/L	0.007563	51.50%
As 188.979†	4.2	0.00364 mg/L	0.005082	0.00364 mg/L	0.005082	139.74%
Ba 233.527†	1835.0	0.05036 mg/L	0.000404	0.05036 mg/L	0.000404	0.80%
Be 313.107†	-3.4	0.00000 mg/L	0.000018	0.00000 mg/L	0.000018	838.04%
Co 228.616†	5.7	0.00019 mg/L	0.000047	0.00019 mg/L	0.000047	24.67%
Cr 267.716†	1232.2	0.02962 mg/L	0.000606	0.02962 mg/L	0.000606	2.05%
Cu 324.752†	196.0	0.00197 mg/L	0.000364	0.00197 mg/L	0.000364	18.54%
Fe 273.955†	29745.4	1.4289 mg/L	0.02212	1.4289 mg/L	0.02212	1.55%
Mg 279.077†	62743.4	3.7013 mg/L	0.04917	3.7013 mg/L	0.04917	1.33%
Mn 257.610†	79592.1	0.23470 mg/L	0.002918	0.23470 mg/L	0.002918	1.24%
Ni 231.604†	177.4	0.00870 mg/L	0.000199	0.00870 mg/L	0.000199	2.29%
Pb 220.353†	-8.0	-0.00111 mg/L	0.000841	-0.00111 mg/L	0.000841	75.46%
Sb 206.836†	4.8	0.00219 mg/L	0.004864	0.00219 mg/L	0.004864	221.74%
Se 196.026†	-2.9	-0.00288 mg/L	0.008956	-0.00288 mg/L	0.008956	310.89%
Tl 190.801†	0.2	0.00040 mg/L	0.001584	0.00040 mg/L	0.001584	392.13%
V 292.402†	20.5	0.00046 mg/L	0.000277	0.00046 mg/L	0.000277	60.74%
Zn 206.200†	1885.6	0.07008 mg/L	0.000790	0.07008 mg/L	0.000790	1.13%
Cd 226.502†	304.8	0.00763 mg/L	0.000091	0.00763 mg/L	0.000091	1.20%
Ti 334.940†	87.1	0.00039 mg/L	0.000067	0.00039 mg/L	0.000067	17.21%
Ca 227.546†	3224.6	18.371 mg/L	0.2642	18.371 mg/L	0.2642	1.44%

Sequence No.: 68
 Sample ID: K0919-13A~LMW-64U
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 76
 Date Collected: 6/9/2011 2:05:35 PM
 Data Type: Reprocessed on 6/9/2011 2:28:27 PM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: K0919-13A~LMW-64U

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1000379.0	99.228 %	0.5103			0.51%
Lu 261.542	950993.8	99.48 %	0.544			0.55%
Ag 328.068†	-2.0	-0.00002 mg/L	0.000638	-0.00002 mg/L	0.000638	>999.9%
Al 308.215†	13100.5	0.71772 mg/L	0.013389	0.71772 mg/L	0.013389	1.87%
As 188.979†	0.1	0.00084 mg/L	0.002418	0.00084 mg/L	0.002418	287.27%
Ba 233.527†	2104.5	0.05775 mg/L	0.000275	0.05775 mg/L	0.000275	0.48%
Be 313.107†	6.7	0.00005 mg/L	0.000003	0.00005 mg/L	0.000003	6.25%
Co 228.616†	13.7	0.00049 mg/L	0.000175	0.00049 mg/L	0.000175	36.03%
Cr 267.716†	2152.7	0.05179 mg/L	0.000643	0.05179 mg/L	0.000643	1.24%
Cu 324.752†	1409.1	0.01379 mg/L	0.000776	0.01379 mg/L	0.000776	5.62%
Fe 273.955†	36440.1	1.7507 mg/L	0.02085	1.7507 mg/L	0.02085	1.19%
Mg 279.077†	65275.2	3.8507 mg/L	0.04546	3.8507 mg/L	0.04546	1.18%
Mn 257.610†	88730.6	0.26165 mg/L	0.003223	0.26165 mg/L	0.003223	1.23%
Ni 231.604†	219.1	0.01073 mg/L	0.000138	0.01073 mg/L	0.000138	1.28%
Pb 220.353†	99.7	0.01998 mg/L	0.000565	0.01998 mg/L	0.000565	2.83%
Sb 206.836†	-4.6	-0.00357 mg/L	0.002166	-0.00357 mg/L	0.002166	60.74%
Se 196.026†	-5.3	-0.00512 mg/L	0.005251	-0.00512 mg/L	0.005251	102.58%
Tl 190.801†	2.4	0.00183 mg/L	0.001347	0.00183 mg/L	0.001347	73.58%
V 292.402†	146.4	0.00232 mg/L	0.000699	0.00232 mg/L	0.000699	30.12%
Zn 206.200†	2660.6	0.09891 mg/L	0.001112	0.09891 mg/L	0.001112	1.12%
Cd 226.502†	376.8	0.00943 mg/L	0.000212	0.00943 mg/L	0.000212	2.25%
Ti 334.940†	9865.0	0.02503 mg/L	0.000354	0.02503 mg/L	0.000354	1.42%
Ca 227.546†	3192.5	18.206 mg/L	0.2895	18.206 mg/L	0.2895	1.59%

Sequence No.: 69
 Sample ID: K0919-14A~LMW-64F
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 77
 Date Collected: 6/9/2011 2:09:16 PM
 Data Type: Reprocessed on 6/9/2011 2:28:28 PM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: K0919-14A~LMW-64F

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1004287.9	99.616 %	0.4089			0.41%
Lu 261.542	949186.3	99.29 %	0.510			0.51%
Ag 328.068†	6.9	0.00007 mg/L	0.000258	0.00007 mg/L	0.000258	357.19%
Al 308.215†	-150.5	-0.00825 mg/L	0.005651	-0.00825 mg/L	0.005651	68.51%
As 188.979†	1.6	0.00174 mg/L	0.001005	0.00174 mg/L	0.001005	57.69%
Ba 233.527†	1799.2	0.04937 mg/L	0.000577	0.04937 mg/L	0.000577	1.17%
Be 313.107†	-9.3	-0.00001 mg/L	0.000020	-0.00001 mg/L	0.000020	302.11%
Co 228.616†	-1.5	-0.00006 mg/L	0.000190	-0.00006 mg/L	0.000190	301.16%
Cr 267.716†	1234.5	0.02968 mg/L	0.000161	0.02968 mg/L	0.000161	0.54%
Cu 324.752†	232.3	0.00225 mg/L	0.000063	0.00225 mg/L	0.000063	2.78%
Fe 273.955†	679.1	0.03276 mg/L	0.000572	0.03276 mg/L	0.000572	1.74%
Mg 279.077†	63557.0	3.7492 mg/L	0.06459	3.7492 mg/L	0.06459	1.72%
Mn 257.610†	78127.4	0.23038 mg/L	0.005707	0.23038 mg/L	0.005707	2.48%
Ni 231.604†	172.7	0.00847 mg/L	0.000213	0.00847 mg/L	0.000213	2.51%
Pb 220.353†	5.5	0.00149 mg/L	0.000622	0.00149 mg/L	0.000622	41.85%
Sb 206.836†	6.7	0.00325 mg/L	0.000907	0.00325 mg/L	0.000907	27.92%
Se 196.026†	-6.2	-0.00663 mg/L	0.003791	-0.00663 mg/L	0.003791	57.14%
Tl 190.801†	2.5	0.00164 mg/L	0.004212	0.00164 mg/L	0.004212	256.48%
V 292.402†	27.3	0.00046 mg/L	0.000497	0.00046 mg/L	0.000497	106.89%
Zn 206.200†	1866.4	0.06936 mg/L	0.000589	0.06936 mg/L	0.000589	0.85%
Cd 226.502†	307.0	0.00778 mg/L	0.000104	0.00778 mg/L	0.000104	1.33%
Ti 334.940†	42.8	0.00028 mg/L	0.000136	0.00028 mg/L	0.000136	48.58%

Ca 227.546† 3240.0 18.383 mg/L 0.0742 18.383 mg/L 0.0742 0.40%

Sequence No.: 70

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/9/2011 2:12:57 PM

Data Type: Reprocessed on 6/9/2011 2:28:29 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	974039.4	96.615 %	0.3247			0.34%
Lu 261.542	930441.6	97.33 %	0.343			0.35%
Ag 328.068†	129214.4	1.3486 mg/L	0.00716	1.3486 mg/L	0.00716	0.53%
QC value within limits for Ag		328.068 Recovery =	107.89%			
Al 308.215†	191416.9	10.456 mg/L	0.0640	10.456 mg/L	0.0640	0.61%
QC value within limits for Al		308.215 Recovery =	104.56%			
As 188.979†	699.9	0.50104 mg/L	0.004044	0.50104 mg/L	0.004044	0.81%
QC value within limits for As		188.979 Recovery =	100.21%			
Ba 233.527†	377018.3	10.349 mg/L	0.1203	10.349 mg/L	0.1203	1.16%
QC value within limits for Ba		233.527 Recovery =	103.49%			
Be 313.107†	340211.7	0.25695 mg/L	0.001087	0.25695 mg/L	0.001087	0.42%
QC value within limits for Be		313.107 Recovery =	102.78%			
Co 228.616†	64576.7	2.7061 mg/L	0.01835	2.7061 mg/L	0.01835	0.68%
QC value within limits for Co		228.616 Recovery =	108.25%			
Cr 267.716†	44459.8	1.0711 mg/L	0.00562	1.0711 mg/L	0.00562	0.52%
QC value within limits for Cr		267.716 Recovery =	107.11%			
Cu 324.752†	128673.6	1.2534 mg/L	0.00687	1.2534 mg/L	0.00687	0.55%
QC value within limits for Cu		324.752 Recovery =	100.27%			
Fe 273.955†	109990.2	5.3662 mg/L	0.03000	5.3662 mg/L	0.03000	0.56%
QC value within limits for Fe		273.955 Recovery =	107.32%			
Mg 279.077†	438310.4	25.861 mg/L	0.1402	25.861 mg/L	0.1402	0.54%
QC value within limits for Mg		279.077 Recovery =	103.44%			
Mn 257.610†	880486.0	2.5967 mg/L	0.01500	2.5967 mg/L	0.01500	0.58%
QC value within limits for Mn		257.610 Recovery =	103.87%			
Ni 231.604†	54157.8	2.6613 mg/L	0.01505	2.6613 mg/L	0.01505	0.57%
QC value within limits for Ni		231.604 Recovery =	106.45%			
Pb 220.353†	2627.4	0.51562 mg/L	0.005028	0.51562 mg/L	0.005028	0.98%
QC value within limits for Pb		220.353 Recovery =	103.12%			
Sb 206.836†	925.0	0.51136 mg/L	0.013942	0.51136 mg/L	0.013942	2.73%
QC value within limits for Sb		206.836 Recovery =	102.27%			
Se 196.026†	511.9	0.50115 mg/L	0.001601	0.50115 mg/L	0.001601	0.32%
QC value within limits for Se		196.026 Recovery =	100.23%			
Tl 190.801†	881.8	0.52617 mg/L	0.005531	0.52617 mg/L	0.005531	1.05%
QC value within limits for Tl		190.801 Recovery =	105.23%			
V 292.402†	178063.6	2.5917 mg/L	0.01560	2.5917 mg/L	0.01560	0.60%
QC value within limits for V		292.402 Recovery =	103.67%			
Zn 206.200†	69939.0	2.5991 mg/L	0.01398	2.5991 mg/L	0.01398	0.54%
QC value within limits for Zn		206.200 Recovery =	103.97%			
Cd 226.502†	9907.3	0.25080 mg/L	0.001741	0.25080 mg/L	0.001741	0.69%
QC value within limits for Cd		226.502 Recovery =	100.32%			
Ti 334.940†	210433.5	0.53001 mg/L	0.002618	0.53001 mg/L	0.002618	0.49%
QC value within limits for Ti		334.940 Recovery =	Not calculated			
Ca 227.546†	4698.9	26.779 mg/L	0.2172	26.779 mg/L	0.2172	0.81%
QC value within limits for Ca		227.546 Recovery =	107.11%			

All analyte(s) passed QC.

Sequence No.: 71

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 6/9/2011 2:16:38 PM

Data Type: Reprocessed on 6/9/2011 2:28:30 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Mean Corrected

Calib.

Sample

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1010601.3	100.24 %	0.204			0.20%
Lu 261.542	939910.5	98.32 %	0.281			0.29%
Ag 328.068†	51.5	0.00054 mg/L	0.000748	0.00054 mg/L	0.000748	139.18%
Al 308.215†	-111.4	-0.00610 mg/L	0.002611	-0.00610 mg/L	0.002611	42.77%
As 188.979†	1.5	0.00103 mg/L	0.001988	0.00103 mg/L	0.001988	192.49%
Ba 233.527†	20.8	0.00057 mg/L	0.000297	0.00057 mg/L	0.000297	52.01%
Be 313.107†	6.6	0.00001 mg/L	0.000007	0.00001 mg/L	0.000007	117.37%
Co 228.616†	2.0	0.00008 mg/L	0.000248	0.00008 mg/L	0.000248	294.90%
Cr 267.716†	10.1	0.00024 mg/L	0.000241	0.00024 mg/L	0.000241	99.43%
Cu 324.752†	-16.3	-0.00016 mg/L	0.000596	-0.00016 mg/L	0.000596	375.14%
Fe 273.955†	67.0	0.00322 mg/L	0.000903	0.00322 mg/L	0.000903	28.07%
Mg 279.077†	60.8	0.00359 mg/L	0.003038	0.00359 mg/L	0.003038	84.74%
Mn 257.610†	65.6	0.00019 mg/L	0.000055	0.00019 mg/L	0.000055	28.27%
Ni 231.604†	2.1	0.00010 mg/L	0.000304	0.00010 mg/L	0.000304	293.53%
Pb 220.353†	0.7	0.00014 mg/L	0.001097	0.00014 mg/L	0.001097	794.08%
Sb 206.836†	0.6	0.00034 mg/L	0.001768	0.00034 mg/L	0.001768	522.37%
Se 196.026†	-1.8	-0.00175 mg/L	0.003361	-0.00175 mg/L	0.003361	191.60%
Tl 190.801†	4.0	0.00234 mg/L	0.004379	0.00234 mg/L	0.004379	187.02%
V 292.402†	0.7	0.00001 mg/L	0.000262	0.00001 mg/L	0.000262	>999.9%
Zn 206.200†	28.2	0.00105 mg/L	0.000192	0.00105 mg/L	0.000192	18.38%
Cd 226.502†	4.2	0.00011 mg/L	0.000077	0.00011 mg/L	0.000077	73.18%
Ti 334.940†	151.3	0.00038 mg/L	0.000089	0.00038 mg/L	0.000089	23.49%
Ca 227.546†	0.1	0.00094 mg/L	0.060501	0.00094 mg/L	0.060501	>999.9%

=====

Reprocessing Begun

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Results Data Set (original): B11060904

Results Library (original): C:\pe\Administrator\Results\Results.mdb

Results Data Set (reprocessed): B11060904A

Results Library (reprocessed): C:\pe\Administrator\Results\Results.mdb

=====

Sequence No.: 1

Autosampler Location: 1

Sample ID: S0

Date Collected: 6/9/2011 3:09:03 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 5:22:01 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S0

Analyte	Mean Corrected	Std.Dev.	RSD	Calib
	Intensity			Conc. Units
Y 360.073	24167.5	251.46	1.04%	100.0 %
Na 589.592	-958.5	72.91	7.61%	[0.00] mg/L
K 766.490	476.7	100.36	21.05%	[0.00] mg/L

=====

Sequence No.: 2

Autosampler Location: 9

Sample ID: S1

Date Collected: 6/9/2011 3:11:22 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 5:22:04 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S1

Analyte	Mean Corrected	Std.Dev.	RSD	Calib
	Intensity			Conc. Units
Y 360.073	24307.7	293.70	1.21%	100.6 %
Na 589.592	175729.8	1418.87	0.81%	[50] mg/L
K 766.490	40242.0	397.29	0.99%	[50] mg/L

=====

Sequence No.: 3

Autosampler Location: 10

Sample ID: S2

Date Collected: 6/9/2011 3:13:50 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 5:22:04 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S2

Analyte	Mean Corrected	Std.Dev.	RSD	Calib
	Intensity			Conc. Units
Y 360.073	24068.4	106.95	0.44%	99.59 %
Na 589.592	86280.9	42.23	0.05%	[25] mg/L
K 766.490	19112.9	50.54	0.26%	[25] mg/L

=====

Sequence No.: 4

Autosampler Location: 11

Sample ID: S3

Date Collected: 6/9/2011 3:16:12 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 5:22:04 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S3

Analyte	Mean Corrected	Std.Dev.	RSD	Calib
	Intensity			Conc. Units
Y 360.073	24543.6	251.22	1.02%	101.6 %

Na 589.592	1596.3	31.11	1.95%	[0.5] mg/L
K 766.490	452.3	51.86	11.47%	[0.5] mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Na 589.592	3	Lin Thru 0	0.0	3502	0.00000	0.999974	
K 766.490	3	Lin Thru 0	0.0	796.8	0.00000	0.999794	

=====

Sequence No.: 5	Autosampler Location: 3
Sample ID: ICV	Date Collected: 6/9/2011 3:18:34 PM
Analyst:	Data Type: Reprocessed on 6/9/2011 5:22:05 PM
Logged In Analyst (Original) : mitOptima3	
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	24238.9	100.3 %	0.91			0.91%
Na 589.592	87604.5	25.016 mg/L	0.2574	25.016 mg/L	0.2574	1.03%
QC value within limits for Na 589.592 Recovery = 100.07%						
K 766.490	19280.5	24.198 mg/L	0.3204	24.198 mg/L	0.3204	1.32%
QC value within limits for K 766.490 Recovery = 96.79%						
All analyte(s) passed QC.						

=====

Sequence No.: 6	Autosampler Location: 4
Sample ID: ICB	Date Collected: 6/9/2011 3:20:57 PM
Analyst:	Data Type: Reprocessed on 6/9/2011 5:22:05 PM
Logged In Analyst (Original) : mitOptima3	
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	24365.6	100.8 %	0.61			0.60%
Na 589.592	-6.2	-0.0018 mg/L	0.02635	-0.0018 mg/L	0.02635	>999.9%
K 766.490	37.8	0.0475 mg/L	0.05675	0.0475 mg/L	0.05675	119.58%

=====

Sequence No.: 7	Autosampler Location: 2
Sample ID: LLICV	Date Collected: 6/9/2011 3:23:26 PM
Analyst:	Data Type: Reprocessed on 6/9/2011 5:22:05 PM
Logged In Analyst (Original) : mitOptima3	
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	24455.0	101.2 %	0.75			0.74%
Na 589.592	3665.0	1.0466 mg/L	0.02772	1.0466 mg/L	0.02772	2.65%
QC value within limits for Na 589.592 Recovery = 104.66%						
K 766.490	828.6	1.0400 mg/L	0.09503	1.0400 mg/L	0.09503	9.14%
QC value within limits for K 766.490 Recovery = 104.00%						
All analyte(s) passed QC.						

=====

Sequence No.: 8	Autosampler Location: 5
Sample ID: ICSEA	Date Collected: 6/9/2011 3:25:49 PM
Analyst:	Data Type: Reprocessed on 6/9/2011 5:22:05 PM
Logged In Analyst (Original) : mitOptima3	
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	23136.1	95.73	%	0.724			0.76%
Na 589.592	318.5	0.0909	mg/L	0.01623	0.0909 mg/L	0.01623	17.85%
QC value within limits for Na 589.592 Recovery = Not calculated							
K 766.490	106.6	0.1337	mg/L	0.04697	0.1337 mg/L	0.04697	35.12%
QC value within limits for K 766.490 Recovery = Not calculated							

All analyte(s) passed QC.

=====

Sequence No.: 9	Autosampler Location: 6
Sample ID: ICSAB	Date Collected: 6/9/2011 3:28:12 PM
Analyst:	Data Type: Reprocessed on 6/9/2011 5:22:05 PM
Logged In Analyst (Original) : mitOptima3	
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	22847.9	94.54	%	0.652			0.69%
Na 589.592	97678.2	27.893	mg/L	0.1354	27.893 mg/L	0.1354	0.49%
QC value within limits for Na 589.592 Recovery = 111.57%							
K 766.490	23601.6	29.621	mg/L	0.2337	29.621 mg/L	0.2337	0.79%
QC value within limits for K 766.490 Recovery = 118.48%							

All analyte(s) passed QC.

=====

Sequence No.: 10	Autosampler Location: 38
Sample ID: MB-59623~PBS	Date Collected: 6/9/2011 3:30:31 PM
Analyst:	Data Type: Reprocessed on 6/9/2011 5:22:05 PM
Logged In Analyst (Original) : mitOptima3	
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Mean Data: MB-59623~PBS

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	24941.5	103.2	%	2.04			1.98%
Na 589.592	90.1	0.0257	mg/L	0.00373	0.0257 mg/L	0.00373	14.52%
K 766.490	-16.6	-0.0208	mg/L	0.11866	-0.0208 mg/L	0.11866	569.35%

=====

Sequence No.: 11	Autosampler Location: 39
Sample ID: LCS-59623~LCS	Date Collected: 6/9/2011 3:32:53 PM
Analyst:	Data Type: Reprocessed on 6/9/2011 5:22:06 PM
Logged In Analyst (Original) : mitOptima3	
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Mean Data: LCS-59623~LCS

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	24250.3	100.3	%	0.43			0.43%
Na 589.592	80661.8	23.034	mg/L	0.2011	23.034 mg/L	0.2011	0.87%
K 766.490	17425.2	21.869	mg/L	0.1583	21.869 mg/L	0.1583	0.72%

=====

Sequence No.: 12	Autosampler Location: 40
Sample ID: K0910-01A-DEC-066D (24-2	Date Collected: 6/9/2011 3:35:14 PM
Analyst:	Data Type: Reprocessed on 6/9/2011 5:22:06 PM
Logged In Analyst (Original) : mitOptima3	
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Mean Data: K0910-01A-DEC-066D (24-2

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25555.3	105.7	%	0.73			0.69%
Na 589.592	7661.1	2.1877	mg/L	0.04225	2.1877 mg/L	0.04225	1.93%
K 766.490	22103.8	27.741	mg/L	0.2175	27.741 mg/L	0.2175	0.78%

Sequence No.: 13

Sample ID: K0910-03A-DEC-065D(9-10'

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 41

Date Collected: 6/9/2011 3:37:35 PM

Data Type: Reprocessed on 6/9/2011 5:22:06 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0910-03A-DEC-065D(9-10'

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	35401.1	146.5	%	11.56			7.89%
Na 589.592	948.1	0.2707	mg/L	0.19783	0.2707 mg/L	0.19783	73.07%
K 766.490	1047.9	1.3152	mg/L	1.08265	1.3152 mg/L	1.08265	82.32%

Sequence No.: 14

Sample ID: K0910-04A-DEC-065D(14-15

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 42

Date Collected: 6/9/2011 3:39:58 PM

Data Type: Reprocessed on 6/9/2011 5:22:06 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0910-04A-DEC-065D(14-15

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	28603.3	118.4	%	1.10			0.93%
Na 589.592	27972.5	7.9878	mg/L	0.06446	7.9878 mg/L	0.06446	0.81%
K 766.490	36712.8	46.076	mg/L	0.5055	46.076 mg/L	0.5055	1.10%

Sequence No.: 15

Sample ID: K0911-01A-SED-1

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 43

Date Collected: 6/9/2011 3:42:19 PM

Data Type: Reprocessed on 6/9/2011 5:22:06 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0911-01A-SED-1

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25963.3	107.4	%	0.38			0.35%
Na 589.592	5047.9	1.4415	mg/L	0.00855	1.4415 mg/L	0.00855	0.59%
K 766.490	1983.6	2.4894	mg/L	0.14897	2.4894 mg/L	0.14897	5.98%

Sequence No.: 16

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/9/2011 3:44:40 PM

Data Type: Reprocessed on 6/9/2011 5:22:06 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	24592.7	101.8	%	1.33			1.31%
Na 589.592	91656.0	26.173	mg/L	0.3044	26.173 mg/L	0.3044	1.16%

QC value within limits for Na 589.592 Recovery = 104.69%

K 766.490 20450.1 25.666 mg/L 0.3356 25.666 mg/L 0.3356 1.31%
 QC value within limits for K 766.490 Recovery = 102.66%
 All analyte(s) passed QC.

Sequence No.: 17 Autosampler Location: 4
 Sample ID: CCB Date Collected: 6/9/2011 3:47:01 PM
 Analyst: Data Type: Reprocessed on 6/9/2011 5:22:06 PM
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution: Initial Sample Vol:
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	24946.8	103.2	%	0.74			0.72%
Na 589.592	-66.2	-0.0189	mg/L	0.02413	-0.0189 mg/L	0.02413	127.69%
K 766.490	38.3	0.0480	mg/L	0.04124	0.0480 mg/L	0.04124	85.83%

Sequence No.: 18 Autosampler Location: 44
 Sample ID: K0911-02A~SED-2 Date Collected: 6/9/2011 3:49:23 PM
 Analyst: Data Type: Reprocessed on 6/9/2011 5:22:06 PM
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution: Initial Sample Vol:
 Sample Prep Vol:

Mean Data: K0911-02A~SED-2

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	27543.3	114.0	%	0.18			0.16%
Na 589.592	4205.8	1.2010	mg/L	0.04152	1.2010 mg/L	0.04152	3.46%
K 766.490	1697.9	2.1309	mg/L	0.11206	2.1309 mg/L	0.11206	5.26%

Sequence No.: 19 Autosampler Location: 45
 Sample ID: K0911-03A~SED-3 Date Collected: 6/9/2011 3:51:45 PM
 Analyst: Data Type: Reprocessed on 6/9/2011 5:22:06 PM
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution: Initial Sample Vol:
 Sample Prep Vol:

Mean Data: K0911-03A~SED-3

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	26183.2	108.3	%	0.42			0.39%
Na 589.592	3707.8	1.0588	mg/L	0.01142	1.0588 mg/L	0.01142	1.08%
K 766.490	2074.6	2.6038	mg/L	0.12812	2.6038 mg/L	0.12812	4.92%

Sequence No.: 20 Autosampler Location: 46
 Sample ID: K0911-04A~SED-4 Date Collected: 6/9/2011 3:54:07 PM
 Analyst: Data Type: Reprocessed on 6/9/2011 5:22:07 PM
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution: Initial Sample Vol:
 Sample Prep Vol:

Mean Data: K0911-04A~SED-4

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	26479.0	109.6	%	1.54			1.40%
Na 589.592	3373.4	0.9633	mg/L	0.01046	0.9633 mg/L	0.01046	1.09%
K 766.490	2029.6	2.5472	mg/L	0.09043	2.5472 mg/L	0.09043	3.55%

Sequence No.: 21 Autosampler Location: 47
 Sample ID: K0911-05A~SED-5 Date Collected: 6/9/2011 3:56:29 PM

Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Data Type: Reprocessed on 6/9/2011 5:22:07 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0911-05A~SED-5

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	26053.9	107.8 %		1.08			1.00%
Na 589.592	7784.7	2.2230 mg/L		0.03124	2.2230 mg/L	0.03124	1.41%
K 766.490	1975.2	2.4790 mg/L		0.09614	2.4790 mg/L	0.09614	3.88%

Sequence No.: 22
Sample ID: K0911-06A~SED-6
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 6/9/2011 3:58:51 PM
Data Type: Reprocessed on 6/9/2011 5:22:07 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0911-06A~SED-6

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25509.0	105.6 %		1.01			0.96%
Na 589.592	4307.9	1.2302 mg/L		0.03839	1.2302 mg/L	0.03839	3.12%
K 766.490	1846.8	2.3179 mg/L		0.06282	2.3179 mg/L	0.06282	2.71%

Sequence No.: 23
Sample ID: K0911-06ADUP~SED-6D
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 49
Date Collected: 6/9/2011 4:01:15 PM
Data Type: Reprocessed on 6/9/2011 5:22:07 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0911-06ADUP~SED-6D

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25795.0	106.7 %		0.87			0.82%
Na 589.592	3444.9	0.9837 mg/L		0.02407	0.9837 mg/L	0.02407	2.45%
K 766.490	1742.9	2.1874 mg/L		0.09873	2.1874 mg/L	0.09873	4.51%

Sequence No.: 24
Sample ID: K0911-06ASD~SED-6
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 51
Date Collected: 6/9/2011 4:03:39 PM
Data Type: Reprocessed on 6/9/2011 5:22:07 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0911-06ASD~SED-6

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25180.5	104.2 %		0.41			0.40%
Na 589.592	764.7	0.2184 mg/L		0.01621	0.2184 mg/L	0.01621	7.42%
K 766.490	423.8	0.5319 mg/L		0.05950	0.5319 mg/L	0.05950	11.19%

Sequence No.: 25
Sample ID: K0911-07A~FD
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 53
Date Collected: 6/9/2011 4:06:00 PM
Data Type: Reprocessed on 6/9/2011 5:22:07 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0911-07A~FD

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25445.3	105.3 %	1.12			1.06%
Na 589.592	4013.3	1.1460 mg/L	0.01469	1.1460 mg/L	0.01469	1.28%
K 766.490	1403.0	1.7608 mg/L	0.11524	1.7608 mg/L	0.11524	6.54%

Sequence No.: 26

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/9/2011 4:08:22 PM

Data Type: Reprocessed on 6/9/2011 5:22:07 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	24847.4	102.8 %	0.68			0.66%
Na 589.592	93441.7	26.683 mg/L	0.2105	26.683 mg/L	0.2105	0.79%
QC value within limits for Na 589.592 Recovery = 106.73%						
K 766.490	20812.7	26.121 mg/L	0.1754	26.121 mg/L	0.1754	0.67%
QC value within limits for K 766.490 Recovery = 104.48%						
All analyte(s) passed QC.						

Sequence No.: 27

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 6/9/2011 4:10:44 PM

Data Type: Reprocessed on 6/9/2011 5:22:07 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25513.5	105.6 %	0.56			0.53%
Na 589.592	-42.4	-0.0121 mg/L	0.01299	-0.0121 mg/L	0.01299	107.24%
K 766.490	55.3	0.0693 mg/L	0.01811	0.0693 mg/L	0.01811	26.12%

Sequence No.: 28

Sample ID: MB-59617~PBW

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 54

Date Collected: 6/9/2011 4:13:07 PM

Data Type: Reprocessed on 6/9/2011 5:22:08 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: MB-59617~PBW

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25507.6	105.5 %	0.19			0.18%
Na 589.592	-134.6	-0.0384 mg/L	0.02750	-0.0384 mg/L	0.02750	71.55%
K 766.490	49.9	0.0626 mg/L	0.07162	0.0626 mg/L	0.07162	114.36%

Sequence No.: 29

Sample ID: LCS-59617~LCS

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 55

Date Collected: 6/9/2011 4:15:28 PM

Data Type: Reprocessed on 6/9/2011 5:22:08 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCS-59617~LCS

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25400.6	105.1 %	0.97			0.93%
Na 589.592	86844.3	24.799 mg/L	0.2008	24.799 mg/L	0.2008	0.81%

K 766.490 19098.8 23.970 mg/L 0.2274 23.970 mg/L 0.2274 0.95%

Sequence No.: 30

Sample ID: K0919-01A-LMW-06U

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 56

Date Collected: 6/9/2011 4:17:50 PM

Data Type: Reprocessed on 6/9/2011 5:22:08 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-01A-LMW-06U

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25343.5	104.9	%	0.79			0.75%
Na 589.592	27165.1	7.7573	mg/L	0.06683	7.7573 mg/L	0.06683	0.86%
K 766.490	2789.2	3.5006	mg/L	0.09986	3.5006 mg/L	0.09986	2.85%

Sequence No.: 31

Sample ID: K0919-02A-LMW-06F

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 57

Date Collected: 6/9/2011 4:20:12 PM

Data Type: Reprocessed on 6/9/2011 5:22:08 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-02A-LMW-06F

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25771.3	106.6	%	1.20			1.13%
Na 589.592	27618.6	7.8867	mg/L	0.09145	7.8867 mg/L	0.09145	1.16%
K 766.490	2808.8	3.5252	mg/L	0.10243	3.5252 mg/L	0.10243	2.91%

Sequence No.: 32

Sample ID: K0919-03A-LMW-05U

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 58

Date Collected: 6/9/2011 4:22:34 PM

Data Type: Reprocessed on 6/9/2011 5:22:08 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-03A-LMW-05U

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25943.4	107.3	%	0.45			0.42%
Na 589.592	28023.0	8.0022	mg/L	0.04149	8.0022 mg/L	0.04149	0.52%
K 766.490	499.2	0.6265	mg/L	0.11719	0.6265 mg/L	0.11719	18.70%

Sequence No.: 33

Sample ID: K0919-04A-LMW-05F

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 59

Date Collected: 6/9/2011 4:24:56 PM

Data Type: Reprocessed on 6/9/2011 5:22:08 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0919-04A-LMW-05F

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25422.6	105.2	%	0.74			0.70%
Na 589.592	25991.7	7.4222	mg/L	0.07243	7.4222 mg/L	0.07243	0.98%
K 766.490	488.7	0.6133	mg/L	0.04328	0.6133 mg/L	0.04328	7.06%

Sequence No.: 34

Sample ID: K0919-05A-LMW-18U

Analyst:

Logged In Analyst (Original) : mitOptima3

Autosampler Location: 60

Date Collected: 6/9/2011 4:27:18 PM

Data Type: Reprocessed on 6/9/2011 5:22:08 PM

Initial Sample Wt:
Dilution:

Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0919-05A-LMW-18U

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25431.7	105.2 %		0.69			0.66%
Na 589.592	99475.4	28.406 mg/L		0.0908	28.406 mg/L	0.0908	0.32%
K 766.490	9127.0	11.455 mg/L		0.0980	11.455 mg/L	0.0980	0.86%

=====

Sequence No.: 35
Sample ID: K0919-06A-LMW-18F
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 61
Date Collected: 6/9/2011 4:29:42 PM
Data Type: Reprocessed on 6/9/2011 5:22:09 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0919-06A-LMW-18F

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25538.4	105.7 %		1.37			1.30%
Na 589.592	105836.1	30.222 mg/L		0.3982	30.222 mg/L	0.3982	1.32%
K 766.490	9943.9	12.480 mg/L		0.0915	12.480 mg/L	0.0915	0.73%

=====

Sequence No.: 36
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 6/9/2011 4:32:05 PM
Data Type: Reprocessed on 6/9/2011 5:22:09 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	24697.4	102.2 %		0.55			0.54%
Na 589.592	93153.4	26.601 mg/L		0.1577	26.601 mg/L	0.1577	0.59%
QC value within limits for Na 589.592 Recovery = 106.40%							
K 766.490	20768.4	26.065 mg/L		0.1239	26.065 mg/L	0.1239	0.48%
QC value within limits for K 766.490 Recovery = 104.26%							

All analyte(s) passed QC.

=====

Sequence No.: 37
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 6/9/2011 4:34:26 PM
Data Type: Reprocessed on 6/9/2011 5:22:09 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25382.7	105.0 %		0.98			0.93%
Na 589.592	18.8	0.0054 mg/L		0.03223	0.0054 mg/L	0.03223	600.82%
K 766.490	52.5	0.0659 mg/L		0.02306	0.0659 mg/L	0.02306	34.98%

=====

Sequence No.: 38
Sample ID: K0919-07A-LMW-19U
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 62
Date Collected: 6/9/2011 4:36:48 PM
Data Type: Reprocessed on 6/9/2011 5:22:09 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0919-07A~LMW-19U

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25424.3	105.2	%	0.67			0.64%
Na 589.592	51131.0	14.601	mg/L	0.1163	14.601 mg/L	0.1163	0.80%
K 766.490	791.1	0.9929	mg/L	0.11030	0.9929 mg/L	0.11030	11.11%

Sequence No.: 39

Autosampler Location: 63

Sample ID: K0919-08A~LMW-19F

Date Collected: 6/9/2011 4:39:10 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 5:22:09 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0919-08A~LMW-19F

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25663.9	106.2	%	1.69			1.59%
Na 589.592	51198.4	14.620	mg/L	0.1335	14.620 mg/L	0.1335	0.91%
K 766.490	889.6	1.1165	mg/L	0.05155	1.1165 mg/L	0.05155	4.62%

Sequence No.: 40

Autosampler Location: 64

Sample ID: K0919-09A~LMW-12U

Date Collected: 6/9/2011 4:41:33 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 5:22:09 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0919-09A~LMW-12U

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	26104.8	108.0	%	0.40			0.37%
Na 589.592	28889.1	8.2495	mg/L	0.00981	8.2495 mg/L	0.00981	0.12%
K 766.490	2924.7	3.6707	mg/L	0.00794	3.6707 mg/L	0.00794	0.22%

Sequence No.: 41

Autosampler Location: 65

Sample ID: K0919-09ADUP~LMW-12UD

Date Collected: 6/9/2011 4:43:54 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 5:22:09 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0919-09ADUP~LMW-12UD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25932.5	107.3	%	0.71			0.66%
Na 589.592	29573.3	8.4449	mg/L	0.06842	8.4449 mg/L	0.06842	0.81%
K 766.490	3057.8	3.8377	mg/L	0.01697	3.8377 mg/L	0.01697	0.44%

Sequence No.: 42

Autosampler Location: 67

Sample ID: K0919-09ASD~LMW-12U

Date Collected: 6/9/2011 4:46:16 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 5:22:09 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0919-09ASD~LMW-12U

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25683.9	106.3	%	0.27			0.25%
Na 589.592	5708.2	1.6300	mg/L	0.01337	1.6300 mg/L	0.01337	0.82%
K 766.490	686.2	0.8612	mg/L	0.02546	0.8612 mg/L	0.02546	2.96%

Sequence No.: 43
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 6/9/2011 4:48:38 PM
Data Type: Reprocessed on 6/9/2011 5:22:10 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25044.9	103.6 %	0.63			0.61%
Na 589.592	94101.1	26.871 mg/L	0.2365	26.871 mg/L	0.2365	0.88%
QC value within limits for Na 589.592 Recovery = 107.49%						
K 766.490	20937.7	26.278 mg/L	0.2679	26.278 mg/L	0.2679	1.02%
QC value within limits for K 766.490 Recovery = 105.11%						
All analyte(s) passed QC.						

Sequence No.: 44
Sample ID: CCB
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 6/9/2011 4:51:00 PM
Data Type: Reprocessed on 6/9/2011 5:22:10 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25449.0	105.3 %	0.81			0.77%
Na 589.592	-172.6	-0.0493 mg/L	0.03005	-0.0493 mg/L	0.03005	60.96%
K 766.490	101.3	0.1271 mg/L	0.05607	0.1271 mg/L	0.05607	44.10%

Sequence No.: 45
Sample ID: K0919-10A~LMW-12F
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 69
Date Collected: 6/9/2011 4:53:22 PM
Data Type: Reprocessed on 6/9/2011 5:22:10 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0919-10A~LMW-12F

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25676.4	106.2 %	1.62			1.52%
Na 589.592	26825.1	7.6602 mg/L	0.08556	7.6602 mg/L	0.08556	1.12%
K 766.490	2288.8	2.8726 mg/L	0.04437	2.8726 mg/L	0.04437	1.54%

Sequence No.: 46
Sample ID: K0919-10ADUP~LMW-12FD
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 70
Date Collected: 6/9/2011 4:55:46 PM
Data Type: Reprocessed on 6/9/2011 5:22:10 PM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0919-10ADUP~LMW-12FD

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25670.3	106.2 %	0.14			0.13%
Na 589.592	26567.3	7.5865 mg/L	0.05309	7.5865 mg/L	0.05309	0.70%
K 766.490	2273.3	2.8531 mg/L	0.00376	2.8531 mg/L	0.00376	0.13%

Sequence No.: 47
Sample ID: K0919-10ASD~LMW-12F
Analyst:

Autosampler Location: 72
Date Collected: 6/9/2011 4:58:16 PM
Data Type: Reprocessed on 6/9/2011 5:22:10 PM

Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0919-10ASD-LMW-12F

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25566.1	105.8 %		0.73			0.69%
Na 589.592	5269.7	1.5048 mg/L		0.02596	1.5048 mg/L	0.02596	1.72%
K 766.490	440.7	0.5531 mg/L		0.05733	0.5531 mg/L	0.05733	10.37%

=====

Sequence No.: 48
Sample ID: K0919-11A-LMW-14U
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 74
Date Collected: 6/9/2011 5:00:45 PM
Data Type: Reprocessed on 6/9/2011 5:22:10 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0919-11A-LMW-14U

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25439.6	105.3 %		1.92			1.83%
Na 589.592	71289.4	20.357 mg/L		0.2652	20.357 mg/L	0.2652	1.30%
K 766.490	3525.9	4.4252 mg/L		0.03937	4.4252 mg/L	0.03937	0.89%

=====

Sequence No.: 49
Sample ID: K0919-12A-LMW-14F
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 75
Date Collected: 6/9/2011 5:03:07 PM
Data Type: Reprocessed on 6/9/2011 5:22:10 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0919-12A-LMW-14F

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25366.9	105.0 %		0.51			0.48%
Na 589.592	71157.6	20.320 mg/L		0.0817	20.320 mg/L	0.0817	0.40%
K 766.490	3640.7	4.5693 mg/L		0.04823	4.5693 mg/L	0.04823	1.06%

=====

Sequence No.: 50
Sample ID: K0919-13A-LMW-64U
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 76
Date Collected: 6/9/2011 5:05:29 PM
Data Type: Reprocessed on 6/9/2011 5:22:10 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0919-13A-LMW-64U

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25360.2	104.9 %		0.88			0.84%
Na 589.592	70046.8	20.003 mg/L		0.2015	20.003 mg/L	0.2015	1.01%
K 766.490	3534.0	4.4354 mg/L		0.12911	4.4354 mg/L	0.12911	2.91%

=====

Sequence No.: 51
Sample ID: K0919-14A-LMW-64F
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 77
Date Collected: 6/9/2011 5:07:51 PM
Data Type: Reprocessed on 6/9/2011 5:22:11 PM

Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0919-14A-LMW-64F

Mean Corrected	Calib.	Sample

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	25692.6	106.3 %	1.60			1.50%
Na 589.592	71898.6	20.531 mg/L	0.2602	20.531 mg/L	0.2602	1.27%
K 766.490	3540.0	4.4428 mg/L	0.09899	4.4428 mg/L	0.09899	2.23%

Sequence No.: 52

Autosampler Location: 3

Sample ID: CCV

Date Collected: 6/9/2011 5:10:15 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 5:22:11 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	24904.1	103.0 %	1.01			0.98%
Na 589.592	94433.9	26.966 mg/L	0.2852	26.966 mg/L	0.2852	1.06%
QC value within limits for Na 589.592 Recovery = 107.87%						
K 766.490	21050.2	26.419 mg/L	0.2410	26.419 mg/L	0.2410	0.91%
QC value within limits for K 766.490 Recovery = 105.68%						

All analyte(s) passed QC.

Sequence No.: 53

Autosampler Location: 4

Sample ID: CCB

Date Collected: 6/9/2011 5:12:37 PM

Analyst:

Data Type: Reprocessed on 6/9/2011 5:22:11 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	25514.3	105.6 %	1.53			1.45%
Na 589.592	-78.1	-0.0223 mg/L	0.01150	-0.0223 mg/L	0.01150	51.55%
K 766.490	104.9	0.1317 mg/L	0.01841	0.1317 mg/L	0.01841	13.98%

Method Name: comm hg
 Method Description: Hg Analysis by Cold Vapor AA
 Element: Hg

Date: 06/08/2011
 Technique: FI-MMS
 Calibration Type:
 Hg, Zero Intercept: Linear
 Wavelength: 253.7 nm

Sample Info Name: 59653M-1.SIF Results Data Set Name: H11060803

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 06/08/2011
 Sample ID: S0

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0004	0.0020	0.0004	03:09:47	Yes
2			0.0004	0.0019	0.0004	03:10:21	Yes
Mean:			0.0004				
SD :			0.0000				
%RSD:			3.6060				

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 06/08/2011
 Sample ID: S0.2

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0028	0.0163	0.0033	03:11:17	Yes
2			0.0027	0.0146	0.0031	03:11:51	Yes
Mean:			0.0028				
SD :			0.0001				
%RSD:			4.9749				

[Hg] Standard number 1 applied. [0.200]
 Correlation Coefficient: 1.00000 Slope: 0.01376

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 06/08/2011
 Sample ID: S1.0

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0125	0.0628	0.0129	03:12:45	Yes
2			0.0120	0.0599	0.0124	03:13:19	Yes
Mean:			0.0122				
SD :			0.0004				
%RSD:			2.8784				

[Hg] Standard number 2 applied. [1.000]
 Correlation Coefficient: 0.99906 Slope: 0.01229

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 06/08/2011
 Sample ID: S2.0

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0258	0.1276	0.0263	03:14:15	Yes
2			0.0241	0.1209	0.0245	03:14:49	Yes
Mean:			0.0250				
SD :			0.0012				
%RSD:			4.8795				

[Hg] Standard number 3 applied. [2.000]
 Correlation Coefficient: 0.99975 Slope: 0.01245

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 06/08/2011
Sample ID: S5.0

Repl #	SampleConc µg/L	StdConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0632	0.3080	0.0636	03:15:44	Yes
2			0.0590	0.2927	0.0595	03:16:17	Yes
Mean:			0.0611				
SD :			0.0029				
%RSD:			4.7877				
[Hg] Standard number 4 applied. [5.000]							
Correlation Coefficient: 0.99991				Slope: 0.01226			

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 06/08/2011
Sample ID: S10.0

Repl #	SampleConc µg/L	StdConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.1219	0.6188	0.1223	03:17:12	Yes
2			0.1172	0.5749	0.1176	03:17:46	Yes
Mean:			0.1195				
SD :			0.0033				
%RSD:			2.7760				
[Hg] Standard number 5 applied. [10.00]							
Correlation Coefficient: 0.99987				Slope: 0.01202			

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
S0	0.0004	---	---	---	---
S0.2	0.0028	0.200	0.229	0.0001	5.0
S1.0	0.0122	1.000	1.017	0.0004	2.9
S2.0	0.0250	2.000	2.077	0.0012	4.9
S5.0	0.0611	5.000	5.081	0.0029	4.8
S10.0	0.1195	10.000	9.940	0.0033	2.8
Correlation Coefficient: 0.99987		Slope: 0.01202		----	

Element: Hg Seq. No.: 7 AS Loc.: 7 Date: 06/08/2011
Sample ID: ICV

Repl #	SampleConc µg/L	StdConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.240	5.240	0.0630	0.3161	0.0634	03:18:42	Yes
2	4.958	4.958	0.0596	0.2885	0.0600	03:19:16	Yes
Mean:	5.099	5.099	0.0613				
SD :	0.1996	0.1996	0.0024				
%RSD:	3.9	3.9	3.9136				
QC value within specified limits.							

Element: Hg Seq. No.: 8 AS Loc.: 1 Date: 06/08/2011
Sample ID: ICB

Repl #	SampleConc µg/L	StdConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	-0.0007	0.0005	03:20:13	Yes
2	0.010	0.010	0.0001	0.0027	0.0006	03:20:47	Yes
Mean:	0.006	0.006	0.0001				
SD :	0.0059	0.0059	0.0001				
%RSD:	105.8	105.8	105.8443				
QC value within specified limits.							

=====

Element: Hg Seq. No.: 9 AS Loc.: 17 Date: 06/08/2011
Sample ID: MB-59653-PBW

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0004	-0.0014	0.0000	03:21:41	Yes
2	-0.027	-0.027	-0.0003	-0.0005	0.0001	03:22:15	Yes
Mean:	-0.031	-0.031	-0.0004				
SD :	0.0050	0.0050	0.0001				
%RSD:	16.3	16.3	16.3216				

=====

Element: Hg Seq. No.: 10 AS Loc.: 18 Date: 06/08/2011
Sample ID: LCS-59653-LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.891	4.891	0.0588	0.2924	0.0592	03:23:09	Yes
2	4.589	4.589	0.0552	0.2712	0.0556	03:23:43	Yes
Mean:	4.740	4.740	0.0570				
SD :	0.2136	0.2136	0.0026				
%RSD:	4.5	4.5	4.5070				

=====

Element: Hg Seq. No.: 11 AS Loc.: 19 Date: 06/08/2011
Sample ID: K0911-08A-SW-1

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.028	-0.028	-0.0003	-0.0004	0.0001	03:24:37	Yes
2	-0.033	-0.033	-0.0004	-0.0012	0.0000	03:25:11	Yes
Mean:	-0.030	-0.030	-0.0004				
SD :	0.0035	0.0035	0.0000				
%RSD:	11.5	11.5	11.4921				

=====

Element: Hg Seq. No.: 12 AS Loc.: 20 Date: 06/08/2011
Sample ID: K0911-09A-SW-2

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0004	0.0000	0.0001	03:26:05	Yes
2	-0.032	-0.032	-0.0004	-0.0010	0.0000	03:26:40	Yes
Mean:	-0.032	-0.032	-0.0004				
SD :	0.0011	0.0011	0.0000				
%RSD:	3.5	3.5	3.4715				

=====

Element: Hg Seq. No.: 13 AS Loc.: 21 Date: 06/08/2011
Sample ID: K0911-10A-SW-3

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0004	-0.0017	0.0000	03:27:35	Yes
2	-0.033	-0.033	-0.0004	-0.0022	0.0000	03:28:08	Yes
Mean:	-0.034	-0.034	-0.0004				
SD :	0.0004	0.0004	0.0000				
%RSD:	1.3	1.3	1.3213				

=====

Element: Hg Seq. No.: 14 AS Loc.: 22 Date: 06/08/2011
Sample ID: K0911-11A-SW-4

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.006	-0.006	-0.0001	0.0014	0.0004	03:29:03	Yes
2	-0.006	-0.006	-0.0001	0.0000	0.0004	03:29:36	Yes
Mean:	-0.006	-0.006	-0.0001				

SD : 0.0000 0.0000 0.0000
 %RSD:

=====
 Element: Hg Seq. No.: 15 AS Loc.: 23 Date: 06/08/2011
 Sample ID: K0911-11ADUP-SW-4D

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0002	-0.0009	0.0003	03:30:31	Yes
2	-0.010	-0.010	-0.0001	-0.0002	0.0003	03:31:05	Yes
Mean:	-0.012	-0.012	-0.0001				
SD :	0.0028	0.0028	0.0000				
%RSD:	23.5	23.5	23.4711				

=====
 Element: Hg Seq. No.: 16 AS Loc.: 24 Date: 06/08/2011
 Sample ID: K0911-11AMS-SW-4S

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.773	4.773	0.0574	0.2736	0.0578	03:32:00	Yes
2	4.493	4.493	0.0540	0.2609	0.0545	03:32:34	Yes
Mean:	4.633	4.633	0.0557				
SD :	0.1985	0.1985	0.0024				
%RSD:	4.3	4.3	4.2855				

=====
 Element: Hg Seq. No.: 17 AS Loc.: 25 Date: 06/08/2011
 Sample ID: K0911-12A-SW-5

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0000	0.0027	0.0005	03:33:28	Yes
2	-0.004	-0.004	0.0000	0.0019	0.0004	03:34:02	Yes
Mean:	-0.001	-0.001	0.0000				
SD :	0.0050	0.0050	0.0001				
%RSD:	965.5	965.5	965.5023				

=====
 Element: Hg Seq. No.: 18 AS Loc.: 26 Date: 06/08/2011
 Sample ID: K0911-13A-SW-6

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.033	-0.033	-0.0004	-0.0036	0.0000	03:34:56	Yes
2	-0.019	-0.019	-0.0002	0.0006	0.0002	03:35:32	Yes
Mean:	-0.026	-0.026	-0.0003				
SD :	0.0099	0.0099	0.0001				
%RSD:	37.6	37.6	37.6303				

=====
 Element: Hg Seq. No.: 19 AS Loc.: 7 Date: 06/08/2011
 Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.330	5.330	0.0641	0.3177	0.0645	03:36:28	Yes
2	4.999	4.999	0.0601	0.2980	0.0605	03:37:02	Yes
Mean:	5.164	5.164	0.0621				
SD :	0.2344	0.2344	0.0028				
%RSD:	4.5	4.5	4.5386				

QC value within specified limits.

=====
 Element: Hg Seq. No.: 20 AS Loc.: 1 Date: 06/08/2011
 Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.020	0.020	0.0002	0.0037	0.0007	03:38:00	Yes
2	0.005	0.005	0.0001	0.0009	0.0005	03:38:34	Yes
Mean:	0.013	0.013	0.0002				
SD :	0.0110	0.0110	0.0001				
%RSD:	87.9	87.9	87.9021				

QC value within specified limits.

Element: Hg Seq. No.: 21 AS Loc.: 27 Date: 06/08/2011
Sample ID: K0911-14A-SWD

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.030	-0.030	-0.0004	0.0003	0.0001	03:39:31	Yes
2	-0.033	-0.033	-0.0004	-0.0015	0.0000	03:40:05	Yes
Mean:	-0.031	-0.031	-0.0004				
SD :	0.0025	0.0025	0.0000				
%RSD:	7.8	7.8	7.8113				

Element: Hg Seq. No.: 22 AS Loc.: 28 Date: 06/08/2011
Sample ID: K0911-15A-FB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.028	-0.028	-0.0003	0.0001	0.0001	03:41:00	Yes
2	-0.033	-0.033	-0.0004	-0.0006	0.0000	03:41:34	Yes
Mean:	-0.030	-0.030	-0.0004				
SD :	0.0037	0.0037	0.0000				
%RSD:	12.1	12.1	12.1444				

Element: Hg Seq. No.: 23 AS Loc.: 29 Date: 06/08/2011
Sample ID: K0915-01C-LEACH-110525

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.035	-0.035	-0.0004	-0.0034	0.0000	03:42:28	Yes
2	-0.031	-0.031	-0.0004	-0.0002	0.0001	03:43:02	Yes
Mean:	-0.033	-0.033	-0.0004				
SD :	0.0031	0.0031	0.0000				
%RSD:	9.5	9.5	9.4699				

Element: Hg Seq. No.: 24 AS Loc.: 30 Date: 06/08/2011
Sample ID: K0937-01D-EFF-052711

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0004	-0.0002	0.0001	03:43:57	Yes
2	-0.027	-0.027	-0.0003	0.0006	0.0001	03:44:31	Yes
Mean:	-0.029	-0.029	-0.0004				
SD :	0.0031	0.0031	0.0000				
%RSD:	10.6	10.6	10.5690				

Element: Hg Seq. No.: 25 AS Loc.: 31 Date: 06/08/2011
Sample ID: K0937-02D-INF-052711

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.028	-0.028	-0.0003	0.0002	0.0001	03:45:25	Yes
2	-0.024	-0.024	-0.0003	0.0015	0.0001	03:45:59	Yes
Mean:	-0.026	-0.026	-0.0003				

SD : 0.0028 0.0028 0.0000
 %RSD: 10.6 10.6 10.6386

=====
 Element: Hg Seq. No.: 26 AS Loc.: 32 Date: 06/08/2011
 Sample ID: K0947-01A-CD-WC-L30
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.036	-0.036	-0.0004	-0.0029	0.0000	03:46:57	Yes
2	-0.020	-0.020	-0.0002	0.0024	0.0002	03:47:31	Yes
Mean:	-0.028	-0.028	-0.0003				
SD :	0.0115	0.0115	0.0001				
%RSD:	40.6	40.6	40.6008				

=====
 Element: Hg Seq. No.: 27 AS Loc.: 33 Date: 06/08/2011
 Sample ID: K0947-02A-CD-WC-L31
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0004	-0.0010	0.0000	03:48:25	Yes
2	-0.033	-0.033	-0.0004	-0.0016	0.0000	03:48:59	Yes
Mean:	-0.033	-0.033	-0.0004				
SD :	0.0005	0.0005	0.0000				
%RSD:	1.4	1.4	1.4459				

=====
 Element: Hg Seq. No.: 28 AS Loc.: 34 Date: 06/08/2011
 Sample ID: K0947-03A-CD-WC-L32
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.030	-0.030	-0.0004	0.0000	0.0001	03:49:53	Yes
2	-0.012	-0.012	-0.0001	0.0028	0.0003	03:50:27	Yes
Mean:	-0.021	-0.021	-0.0003				
SD :	0.0129	0.0129	0.0002				
%RSD:	60.5	60.5	60.4833				

=====
 Element: Hg Seq. No.: 29 AS Loc.: 35 Date: 06/08/2011
 Sample ID: K0947-04A-CD-WC-M34
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.030	-0.030	-0.0004	-0.0008	0.0001	03:51:22	Yes
2	-0.029	-0.029	-0.0004	-0.0007	0.0001	03:51:56	Yes
Mean:	-0.030	-0.030	-0.0004				
SD :	0.0007	0.0007	0.0000				
%RSD:	2.3	2.3	2.2998				

=====
 Element: Hg Seq. No.: 30 AS Loc.: 36 Date: 06/08/2011
 Sample ID: MB-59513-PBW
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.028	-0.028	-0.0003	0.0010	0.0001	03:52:51	Yes
2	-0.031	-0.031	-0.0004	-0.0009	0.0001	03:53:25	Yes
Mean:	-0.029	-0.029	-0.0004				
SD :	0.0020	0.0020	0.0000				
%RSD:	6.8	6.8	6.7802				

=====
 Element: Hg Seq. No.: 31 AS Loc.: 7 Date: 06/08/2011
 Sample ID: CCV
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.221	5.221	0.0628	0.3183	0.0632	03:54:22	Yes
2	4.828	4.828	0.0580	0.2858	0.0585	03:54:56	Yes
Mean:	5.024	5.024	0.0604				
SD :	0.2781	0.2781	0.0033				
%RSD:	5.5	5.5	5.5342				

QC value within specified limits.

=====

Element: Hg Seq. No.: 32 AS Loc.: 1 Date: 06/08/2011

Sample ID: CCB

=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.020	0.020	0.0002	0.0045	0.0007	03:55:53	Yes
2	0.006	0.006	0.0001	0.0018	0.0005	03:56:27	Yes
Mean:	0.013	0.013	0.0002				
SD :	0.0104	0.0104	0.0001				
%RSD:	79.5	79.5	79.4859				

QC value within specified limits.

=====

Element: Hg Seq. No.: 33 AS Loc.: 37 Date: 06/08/2011

Sample ID: K0968-01C-INF060311

=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.029	-0.029	-0.0003	-0.0003	0.0001	03:57:23	Yes
2	-0.017	-0.017	-0.0002	0.0021	0.0002	03:57:57	Yes
Mean:	-0.023	-0.023	-0.0003				
SD :	0.0080	0.0080	0.0001				
%RSD:	34.9	34.9	34.8520				

=====

Element: Hg Seq. No.: 34 AS Loc.: 38 Date: 06/08/2011

Sample ID: MB-59654-PBW

=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.026	-0.026	-0.0003	0.0010	0.0001	03:59:04	Yes
2	-0.034	-0.034	-0.0004	-0.0029	0.0000	03:59:38	Yes
Mean:	-0.030	-0.030	-0.0004				
SD :	0.0056	0.0056	0.0001				
%RSD:	18.7	18.7	18.7289				

=====

Element: Hg Seq. No.: 35 AS Loc.: 39 Date: 06/08/2011

Sample ID: LCS-59654-LCS

=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.742	4.742	0.0570	0.2924	0.0575	04:00:32	Yes
2	4.447	4.447	0.0535	0.2660	0.0539	04:01:06	Yes
Mean:	4.595	4.595	0.0552				
SD :	0.2090	0.2090	0.0025				
%RSD:	4.5	4.5	4.5483				

=====

Element: Hg Seq. No.: 36 AS Loc.: 40 Date: 06/08/2011

Sample ID: K0914-01E-CELL 1

=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0001	0.0003	0.0003	04:02:00	Yes
2	-0.033	-0.033	-0.0004	-0.0002	0.0000	04:02:34	Yes
Mean:	-0.022	-0.022	-0.0003				

SD : 0.0151 0.0151 0.0002
 %RSD: 68.6 68.6 68.5575

=====
 Element: Hg Seq. No.: 37 AS Loc.: 41 Date: 06/08/2011
 Sample ID: K0919-01A-LMW-06U

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0004	0.0002	0.0001	04:03:29	Yes
2	-0.034	-0.034	-0.0004	-0.0006	0.0000	04:04:03	Yes
Mean:	-0.033	-0.033	-0.0004				
SD :	0.0019	0.0019	0.0000				
%RSD:	5.9	5.9	5.8634				

=====
 Element: Hg Seq. No.: 38 AS Loc.: 42 Date: 06/08/2011
 Sample ID: K0919-02A-LMW-06F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.031	-0.031	-0.0004	0.0000	0.0001	04:04:57	Yes
2	-0.031	-0.031	-0.0004	0.0002	0.0001	04:05:32	Yes
Mean:	-0.031	-0.031	-0.0004				
SD :	0.0000	0.0000	0.0000				
%RSD:							

=====
 Element: Hg Seq. No.: 39 AS Loc.: 43 Date: 06/08/2011
 Sample ID: K0919-03A-LMW-05U

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0004	-0.0020	0.0000	04:06:26	Yes
2	-0.031	-0.031	-0.0004	-0.0007	0.0001	04:07:00	Yes
Mean:	-0.032	-0.032	-0.0004				
SD :	0.0023	0.0023	0.0000				
%RSD:	7.0	7.0	6.9768				

=====
 Element: Hg Seq. No.: 40 AS Loc.: 44 Date: 06/08/2011
 Sample ID: K0919-04A-LMW-05F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.021	-0.021	-0.0002	0.0021	0.0002	04:07:55	Yes
2	-0.034	-0.034	-0.0004	-0.0005	0.0000	04:08:29	Yes
Mean:	-0.027	-0.027	-0.0003				
SD :	0.0093	0.0093	0.0001				
%RSD:	34.1	34.1	34.0547				

=====
 Element: Hg Seq. No.: 41 AS Loc.: 45 Date: 06/08/2011
 Sample ID: K0919-05A-LMW-18U

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.026	-0.026	-0.0003	-0.0004	0.0001	04:09:24	Yes
2	-0.023	-0.023	-0.0003	0.0016	0.0002	04:09:58	Yes
Mean:	-0.025	-0.025	-0.0003				
SD :	0.0025	0.0025	0.0000				
%RSD:	10.0	10.0	10.0462				

=====
 Element: Hg Seq. No.: 42 AS Loc.: 46 Date: 06/08/2011
 Sample ID: K0919-06A-LMW-18F

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.026	-0.026	-0.0003	0.0008	0.0001	04:10:56	Yes
2	-0.027	-0.027	-0.0003	0.0006	0.0001	04:11:30	Yes
Mean:	-0.027	-0.027	-0.0003				
SD :	0.0004	0.0004	0.0000				
%RSD:	1.4	1.4	1.4252				

=====

Element: Hg Seq. No.: 43 AS Loc.: 7 Date: 06/08/2011

Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.166	5.166	0.0621	0.3158	0.0625	04:12:26	Yes
2	4.774	4.774	0.0574	0.2892	0.0578	04:13:00	Yes
Mean:	4.970	4.970	0.0598				
SD :	0.2772	0.2772	0.0033				
%RSD:	5.6	5.6	5.5774				

QC value within specified limits.

=====

Element: Hg Seq. No.: 44 AS Loc.: 1 Date: 06/08/2011

Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.018	0.018	0.0002	0.0031	0.0007	04:13:57	Yes
2	0.008	0.008	0.0001	0.0019	0.0005	04:14:31	Yes
Mean:	0.013	0.013	0.0002				
SD :	0.0073	0.0073	0.0001				
%RSD:	55.9	55.9	55.9041				

QC value within specified limits.

=====

Element: Hg Seq. No.: 45 AS Loc.: 47 Date: 06/08/2011

Sample ID: K0919-07A-LMW-19U

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.028	-0.028	-0.0003	0.0003	0.0001	04:15:30	Yes
2	-0.023	-0.023	-0.0003	0.0017	0.0002	04:16:04	Yes
Mean:	-0.025	-0.025	-0.0003				
SD :	0.0034	0.0034	0.0000				
%RSD:	13.4	13.4	13.3675				

=====

Element: Hg Seq. No.: 46 AS Loc.: 48 Date: 06/08/2011

Sample ID: K0919-08A-LMW-19F

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.030	-0.030	-0.0004	0.0003	0.0001	04:17:02	Yes
2	-0.030	-0.030	-0.0004	0.0003	0.0001	04:17:36	Yes
Mean:	-0.030	-0.030	-0.0004				
SD :	0.0000	0.0000	0.0000				
%RSD:	0.1	0.1	0.1096				

=====

Element: Hg Seq. No.: 47 AS Loc.: 49 Date: 06/08/2011

Sample ID: K0919-09A-LMW-12U

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.026	-0.026	-0.0003	0.0004	0.0001	04:18:31	Yes
2	-0.017	-0.017	-0.0002	0.0028	0.0002	04:19:05	Yes
Mean:	-0.022	-0.022	-0.0003				

SD : 0.0067 0.0067 0.0001
 %RSD: 30.9 30.9 30.9334

=====
 Element: Hg Seq. No.: 48 AS Loc.: 50 Date: 06/08/2011
 Sample ID: K0919-09ADUP-LMW-12UD

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.018	-0.018	-0.0002	0.0002	0.0002	04:20:00	Yes
2	-0.014	-0.014	-0.0002	0.0008	0.0003	04:20:34	Yes
Mean:	-0.016	-0.016	-0.0002				
SD :	0.0031	0.0031	0.0000				
%RSD:	20.0	20.0	19.9531				

=====
 Element: Hg Seq. No.: 49 AS Loc.: 51 Date: 06/08/2011
 Sample ID: K0919-09AMS-LMW-12US

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.534	4.534	0.0545	0.2814	0.0550	04:21:29	Yes
2	4.211	4.211	0.0506	0.2584	0.0511	04:22:03	Yes
Mean:	4.373	4.373	0.0526				
SD :	0.2281	0.2281	0.0027				
%RSD:	5.2	5.2	5.2161				

=====
 Element: Hg Seq. No.: 50 AS Loc.: 52 Date: 06/08/2011
 Sample ID: K0919-10A-LMW-12F

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	-0.0002	-0.0011	0.0002	04:22:57	Yes
2	-0.019	-0.019	-0.0002	0.0008	0.0002	04:23:31	Yes
Mean:	-0.018	-0.018	-0.0002				
SD :	0.0017	0.0017	0.0000				
%RSD:	9.9	9.9	9.8922				

=====
 Element: Hg Seq. No.: 51 AS Loc.: 53 Date: 06/08/2011
 Sample ID: K0919-10ADUP-LMW-12FD

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0004	-0.0012	0.0000	04:24:25	Yes
2	-0.020	-0.020	-0.0002	0.0022	0.0002	04:24:59	Yes
Mean:	-0.027	-0.027	-0.0003				
SD :	0.0097	0.0097	0.0001				
%RSD:	36.0	36.0	35.9518				

=====
 Element: Hg Seq. No.: 52 AS Loc.: 54 Date: 06/08/2011
 Sample ID: K0919-10AMS-LMW-12FS

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.486	4.486	0.0539	0.2770	0.0544	04:25:53	Yes
2	4.150	4.150	0.0499	0.2520	0.0503	04:26:27	Yes
Mean:	4.318	4.318	0.0519				
SD :	0.2380	0.2380	0.0029				
%RSD:	5.5	5.5	5.5110				

=====
 Element: Hg Seq. No.: 53 AS Loc.: 55 Date: 06/08/2011
 Sample ID: K0919-11A-LMW-14U

Repl #	SampleConc µg/L	StdConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.015	-0.015	-0.0002	-0.0001	0.0003	04:27:22	Yes
2	-0.024	-0.024	-0.0003	-0.0002	0.0001	04:27:56	Yes
Mean:	-0.020	-0.020	-0.0002				
SD :	0.0063	0.0063	0.0001				
%RSD:	32.1	32.1	32.0573				

Element: Hg Seq. No.: 54 AS Loc.: 56 Date: 06/08/2011
Sample ID: K0919-12A-LMW-14F

Repl #	SampleConc µg/L	StdConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.033	-0.033	-0.0004	-0.0011	0.0000	04:28:51	Yes
2	-0.026	-0.026	-0.0003	0.0005	0.0001	04:29:25	Yes
Mean:	-0.030	-0.030	-0.0004				
SD :	0.0051	0.0051	0.0001				
%RSD:	17.0	17.0	16.9896				

Element: Hg Seq. No.: 55 AS Loc.: 7 Date: 06/08/2011
Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.105	5.105	0.0614	0.3149	0.0618	04:30:21	Yes
2	4.757	4.757	0.0572	0.2863	0.0576	04:30:55	Yes
Mean:	4.931	4.931	0.0593				
SD :	0.2463	0.2463	0.0030				
%RSD:	5.0	5.0	4.9946				

QC value within specified limits.

Element: Hg Seq. No.: 56 AS Loc.: 1 Date: 06/08/2011
Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.023	0.023	0.0003	0.0032	0.0007	04:31:52	Yes
2	0.006	0.006	0.0001	0.0001	0.0005	04:32:26	Yes
Mean:	0.015	0.015	0.0002				
SD :	0.0120	0.0120	0.0001				
%RSD:	80.8	80.8	80.8414				

QC value within specified limits.

Element: Hg Seq. No.: 57 AS Loc.: 57 Date: 06/08/2011
Sample ID: K0919-13A-LMW-64U

Repl #	SampleConc µg/L	StdConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.027	-0.027	-0.0003	-0.0003	0.0001	04:33:24	Yes
2	-0.022	-0.022	-0.0003	0.0008	0.0002	04:33:58	Yes
Mean:	-0.025	-0.025	-0.0003				
SD :	0.0038	0.0038	0.0000				
%RSD:	15.5	15.5	15.4952				

Element: Hg Seq. No.: 58 AS Loc.: 58 Date: 06/08/2011
Sample ID: K0919-14A-LMW-64F

Repl #	SampleConc µg/L	StdConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.025	-0.025	-0.0003	0.0010	0.0001	04:34:52	Yes
2	-0.026	-0.026	-0.0003	0.0009	0.0001	04:35:26	Yes
Mean:	-0.025	-0.025	-0.0003				

SD : 0.0008 0.0008 0.0000
 %RSD: 3.1 3.1 3.1382

=====

Element: Hg Seq. No.: 59 AS Loc.: 59 Date: 06/08/2011
 Sample ID: K0980-01C-GWTS EFFLUENT

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.908	2.908	0.0350	0.1814	0.0354	04:36:20	Yes
2	2.624	2.624	0.0315	0.1629	0.0320	04:36:54	Yes
Mean:	2.766	2.766	0.0333				
SD :	0.2011	0.2011	0.0024				
%RSD:	7.3	7.3	7.2702				

=====

Element: Hg Seq. No.: 60 AS Loc.: 60 Date: 06/08/2011
 Sample ID: K0980-04C-COLUMBIA WELL

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	17.91	17.91	0.2154	1.4481	0.2158	04:37:48	Yes
Sample absorbance is greater than that of the highest standard.							
2	17.59	17.59	0.2115	1.4062	0.2119	04:38:22	Yes
Sample absorbance is greater than that of the highest standard.							
Mean:	17.75	17.75	0.2134				
SD :	0.2311	0.2311	0.0028				
%RSD:	1.3	1.3	1.3031				
Sample absorbance is greater than that of the highest standard.							

=====

Element: Hg Seq. No.: 61 AS Loc.: 61 Date: 06/08/2011
 Sample ID: K0980-05C-COLLECTION TRE

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	86.51	86.51	1.0401	6.7362	1.0406	04:39:16	Yes
Sample absorbance is greater than that of the highest standard.							
2	83.83	83.83	1.0080	6.3643	1.0084	04:39:50	Yes
Sample absorbance is greater than that of the highest standard.							
Mean:	85.17	85.17	1.0241				
SD :	1.890	1.890	0.0227				
%RSD:	2.2	2.2	2.2193				
Sample absorbance is greater than that of the highest standard.							

=====

Element: Hg Seq. No.: 62 AS Loc.: 7 Date: 06/08/2011
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.202	5.202	0.0625	0.3155	0.0630	04:40:46	Yes
2	4.678	4.678	0.0562	0.2824	0.0567	04:41:20	Yes
Mean:	4.940	4.940	0.0594				
SD :	0.3703	0.3703	0.0045				
%RSD:	7.5	7.5	7.4974				
QC value within specified limits.							

=====

Element: Hg Seq. No.: 63 AS Loc.: 1 Date: 06/08/2011
 Sample ID: CCE

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.029	0.029	0.0003	0.0007	0.0008	04:42:17	Yes
2	0.013	0.013	0.0002	0.0030	0.0006	04:42:51	Yes
Mean:	0.021	0.021	0.0002				

SD : 0.0110 0.0110 0.0001
%RSD: 53.0 53.0 53.0300
QC value within specified limits.

Prep Logbooks

☒ ICP

☒ Mercury

☐ Cyanide

☐ Percent Solids

Prep Start Date: 06/07/2011 10:30:00

Prep End Date: 06/07/2011 14:30:00

Prep Batch ID: 59617

Prep Code: ICP_W_PR

Technician: Ryan M Sullivan

Prep Type: 3005A/SW3005A

Prep Factor Units:
mL / mL

QC Matrix: N/A

QC Matrix Lot: N/A

Filter?: N/A

Filter Lot: N/A

Conc HNO3 N/A 116/20

Conc HNO3 (mL): N/A 1.0 mL

Conc HCl N/A 411/2080

Conc HCl (mL): N/A 2.5 mL

Reagent 5 Lot: N/A

Reagent 5 (mL): N/A

Reagent 6 Lot: N/A

Reagent 6 (mL): N/A

Start Time: N/A

End Time: N/A

Bath Temp1 (C): N/A

Therm ID1: N/A

Corr Fac N/A

Miktem Sample ID	Client Samp ID	Test	M	Initial (mL/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	HOT BLOCK
MB-59617	Batch QC	Batch QC		50	50	--	--	--	--			06/07/11	RMS				HB-3
LCS-59617	Batch QC	Batch QC		50	50	--	--	--	--			06/07/11	RMS				HB-3
K0919-01A	LAW-45U	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
TAL																	
K0919-02A	LAW-46F	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
TAL																	
K0919-03A	LAW-45U	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
TAL																	
K0919-04A	LAW-46F	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
TAL																	
K0919-05A	LAW-1BU	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
TAL																	
K0919-06A	LAW-1BF	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
TAL																	
K0919-07A	LAW-1BU	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
TAL																	
K0919-08A	LAW-1BF	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
TAL																	
K0919-09A	LAW-12U	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
TAL																	
K0919-09ADUP	LAW-12U	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
K0919-09AMS	LAW-12U	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
K0919-10A	LAW-12F	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
TAL																	
K0919-10ADUP	LAW-12F	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
K0919-10AMS	LAW-12F	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
K0919-11A	LAW-14U	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
TAL																	
K0919-12A	LAW-14F	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
TAL																	
K0919-13A	LAW-54U	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2		HB-3
TAL																	

Logbook ID 100.0125-03/11

Reviewed By: ASD 6/7/11

Reviewed By: H2A 6/7/11

Tuesday, June 07, 2011 10:28

Page 02 of 02

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

PREP BATCH REPORT

Prep Start Date: 06/07/2011 10:30:00

Prep End Date: 06/07/2011 14:30:00

Prep Batch ID: 59617

Prep Code: ICP_W_PR

Prep Type: 3005A/SW3005A

Technician: Ryan M Sullivan

Prep Factor Units:

mL / mL

QC Matrix: N/A

QC Matrix Lot: N/A

Filter?: N/A

Filter Lot: N/A

Conc HNO3 N/A

Conc HNO3 (mL): N/A

Conc HCl N/A

Conc HCl (mL): N/A

Reagent 3 Lot: N/A

Reagent 3 (mL): N/A

Reagent 4 Lot: N/A

Reagent 4 (mL): N/A

Reagent 5 Lot: N/A

Reagent 5 (mL): N/A

Reagent 6 Lot: N/A

Reagent 6 (mL): N/A

Start Time: N/A

End Time: N/A

Bath Temp1 (C): N/A

Therm ID1: N/A

Corr Fac N/A

Mitekem Sample ID	Client Samp ID	Test	M	Initial (mL/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans Bv	Storage	pH	pH >11	HOT BLOCK
K0919-14A	SW6010	SW6010	A	50	50	--	--	--	--	06/16/11	01	06/07/11	RMS		2	☐	HB-3

TAL

Ryan M Sullivan

Analyst Reviewed

Date

06/07/2011

Manager Reviewed

Date

Comments:

AED 6/7/11																	

HCl Lot# 4110080

HNO3 Lot# 1110170

Analyst: AED

Method#: 3005A

Hotblock ID: HB-3

Digestion Temp: 120°C MT-94 CF=0

LCS/Spike Lot # 101223B 455 uL

IP 100622A 455 uL

IP 100622C 455 uL

Digestate Relinquished to: HZA

Logbook ID 100.0125 -03/11

Reviewed By: HZA

6/7/11

MITKEM LABORATORIES

Mercury Digestion Logbook

Date	Bottle No.	Sample ID	Initial pH	Reagents Added				5% K ₂ S ₂ O ₈ (ml)	Aqua-regia (ml)	Final Volume (ml)	Comments
				Conc. H ₂ SO ₄ (ml)	Conc. HNO ₃ (ml)	5% KMnO ₄ (ml)	5% K ₂ S ₂ O ₈ (ml)				
6/5/11	C10	50	-	5.0	2.5	15.0	8.0	-	-	100	
	250	50.2								100	II 110516A
	199	51.0								100	
	327	52.0								100	
	C5	55.0								100	
	C11	510.0								100	II 110516A
	157	±CV								100	II 110516B
	334KT	MB-591653								100	
	262	LCS-591653								100	II 110516C
	4	K0911	08A							100	
	24		09A							100	
	21		10A							100	
	G4		11A							100	
	331B		12A							100	
	324Y		13A							100	II 110516C
	G8	K0911	12A							100	

Waters In: 11:15 Out: 13:15
 Matrix: Aqueous Method #:
 In: In: Matrix: Soil/Solid
 Spills: In: In:
 Hotblock ID: HB-A Temp: 69°C °C/MT-MT CP=
 LCSS ID: B110516C H₂SO₄ Lot #: 8110020
 LCSS volume: 1 ml HNO₃ Lot #: 1110120
 Spike ID: II 110516C HCl Lot #:
 Spike volume: 1 ml KMnO₄ ID #: 18110602 11/18/01
 K2S2O8 ID #: 18110602 11/18/01

Reviewed by: H24 6/9/11
 Digestate Relinquished to: H24

MITKEM LABORATORIES

Mercury Digestion Logbook

Sample ID				Initial pH	Reagents Added					Aqua-regia (ml)	Final Volume (ml)	Analyst: <u>B.S.</u>	Comments
Date	Bottle No.	Sample ID			Sample Vol (ml)/Wt (g)	Conc. H ₂ SO ₄ (ml)	Conc. HNO ₃ (ml)	5% KMnO ₄ (ml)	5% K ₂ S ₂ O ₈ (ml)				
6/8/11	9	K0911	13A		100	5.0	2.5	15.0	8.0	-	100		
	3130	↓	14A		100						100		
	330A	K0911	15A		100						100		
	3334	K0915	01C		100						100		
	1327	K0937	01D		100						100		
	210	K0937	01D		100						100		
	322A	K0947	01A		100						100		TCLP
	323Y	↓	02A		100						100		
	17	↓	03A		100						100		
	1	K0947	04A		100						100		TCLP
	335Y	K0968	01C		100						100		TCLP
C732A	11B-595B				100						100		TCLP
321	CS-59654				1/100						100		II110516C
	10	K0915	01A		100						100		
↓	318QT	K0915	02A		100						100		
6/8/11	11	K0945	K091903A	-	100	5.0	2.5	15.0	8.0	-	100		

Temp: _____ °C/ MT-
 H₂SO₄ Lot # _____
 HNO₃ Lot # _____
 HCl Lot # _____
 KMnO₄ ID # _____
 K₂S₂O₈ ID # _____

Hotblock ID: _____
 LCSS ID _____
 LCSS volume: _____
 Spike ID _____
 Spike volume: _____

Soils
 In: _____ Out: _____
 In: _____ Out: _____
 Matrix: Soil/Solid

Waters
 In: _____ Out: _____
 In: _____ Out: _____
 Matrix: Aqueous
 Method # _____

Digestate Relinquished to: _____

HZA

Reviewed by: HZA 6/9/11

see page 96

MITKEM LABORATORIES

Mercury Digestion Logbook

Date	Bottle No.	Sample ID	Initial pH	Reagents Added						Analyst: <u>RY</u>	
				Sample Vol (ml)/Wt (g)	Conc. H ₂ SO ₄ (ml)	Conc. HNO ₃ (ml)	5% KMnO ₄ (ml)	5% K ₂ S ₂ O ₈ (ml)	Aqua-regia (ml)	Final Volume (ml)	Comments
9/8/11	105	K0919	←	100	5.0	2.5	15.0	8.0	—	100	
	320NAB			100						100	
	1325			100						100	
	1318			100						100	
	G11			100						100	
	326X			100						100	
	1315			100						100	
	210G			100						100	II 110516C
	14F			100						100	
	19			100						100	
	1328			100						100	II 110516C
	324M			100						100	
	263			100						100	
	8			100						100	
✓	128N	K0919	↓	100		↓	↓	↓	↓	100	
9/8/11	G2	K0980	←	100	5.0	2.5	15.0	8.0	—	100	

Waters

In: _____
Out: _____Matrix: Aqueous
Method # 7410 K

Digestate Relinquished to: _____

Soils

In: _____
Out: _____

Matrix: Soil/Solid

HZA

Hotblock ID: _____

LCSS ID _____

LCSS volume: _____

Spike ID _____

Spike volume: _____

Reviewed by: HZA 6/9/11

Temp: _____

H₂SO₄ Lot # _____HNO₃ Lot # _____

HCl Lot # _____

KMnO₄ ID # _____K₂S₂O₈ ID # _____

see page 94

Mercury Digestion Logbook

Analyst: 

Waters		Soils		Temp: _____ °C/ MT- _____	
In: _____	In: _____	Out: _____	LCSS ID _____	H ₂ SO ₄ Lot # _____	
Out: _____	In: _____	Out: _____	LCSS volume: _____	HNO ₃ Lot # _____	
Matrix: <u>Aqueous</u>	Matrix: <u>Soil/Solid</u>		Spike ID _____	HCl Lot # _____	
Method # _____			Spike volume: _____	KMnO ₄ ID # _____	
				K ₂ S ₂ O ₈ ID# _____	

Digestate Relinquished to:

十/五/十

Reviewed by:

See page 96

100

Client: AECOM_CHSNTRDG

Work Order: K0919

Profile Name: MULTI_SITE

MATRIX Aqueous

Samp #	Bottle	Test	Status	Received	Date
01A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
01A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
02A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
02A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
03A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
03A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
04A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
04A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
05A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
05A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
06A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
06A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
07A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
07A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
08A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
08A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
09A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
09A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
09A	002	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
09A	002	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
09A	003	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
09A	003	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
10A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
10A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
10A	002	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
10A	002	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
10A	003	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
10A	003	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
11A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
11A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
12A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
12A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00

Client: AECOM_CHSNTRDG

Work Order: K0919

Profile Name: MULTI_SITE

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
13A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
13A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00
14A	001	SW6010_W	In	LOGIN: sng	05/26/2011 12:59:00
14A	001	SW7470	In	LOGIN: sng	05/26/2011 12:59:00

Last Page of Data Report

Report Date:
22-Jun-11 15:43



- ☒ Final Report
☐ Re-Issued Report
☐ Revised Report

Laboratory Report

AECOM Environment
100 Red Schoolhouse Road Suite B-1
Chestnut Ridge, NY 10977

Work Order: K0943
Project : Multi Site G
Project #: LIBERTY

Attn: Paul Kareth

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
K0943-01	FB-U	Aqueous	26-May-11 14:35	31-May-11 10:30
K0943-02	FB-F	Aqueous	26-May-11 14:35	31-May-11 10:30
K0943-03	LMW-10U	Aqueous	26-May-11 12:15	31-May-11 10:30
K0943-04	LMW-10F	Aqueous	26-May-11 12:15	31-May-11 10:30
K0943-05	LMW-20U	Aqueous	26-May-11 14:00	31-May-11 10:30
K0943-06	LMW-20F	Aqueous	26-May-11 14:00	31-May-11 10:30
K0943-07	LMW-21U	Aqueous	26-May-11 13:50	31-May-11 10:30
K0943-08	LMW-21F	Aqueous	26-May-11 13:50	31-May-11 10:30
K0943-09	LMW-16U	Aqueous	26-May-11 12:20	31-May-11 10:30
K0943-10	LMW-16F	Aqueous	26-May-11 12:20	31-May-11 10:30
K0943-11	LMW-02U	Aqueous	26-May-11 09:20	31-May-11 10:30
K0943-12	LMW-02F	Aqueous	26-May-11 09:20	31-May-11 10:30
K0943-13	LMW-04U	Aqueous	26-May-11 10:50	31-May-11 10:30
K0943-14	LMW-04F	Aqueous	26-May-11 10:50	31-May-11 10:30
K0943-15	LMW-03U	Aqueous	26-May-11 10:05	31-May-11 10:30
K0943-16	LMW-03F	Aqueous	26-May-11 10:05	31-May-11 10:30

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Mitkem Laboratories.

All applicable NELAC or USEPA CLP requirements have been met.

Mitkem Laboratories is accredited under the National Environmental Laboratory Approval Program (NELAP) and is certified by several States, as well as USEPA and US Department of Defense. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.mitkem.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
Texas	T104704422-08-TX
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-05-030



Authorized by:

Yihai Ding
Laboratory Director

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Identification and Analytical Requirements Summary

Project Name : Multi Site G -- LIBERTY

SDG : K0943

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
FB-U	K0943-01				SW6010_W	
FB-U	K0943-01				SW7470	
FB-F	K0943-02				SW6010_W	
FB-F	K0943-02				SW7470	
LMW-10U	K0943-03				SW6010_W	
LMW-10U	K0943-03				SW7470	
LMW-10F	K0943-04				SW6010_W	
LMW-10F	K0943-04				SW7470	
LMW-20U	K0943-05				SW6010_W	
LMW-20U	K0943-05				SW7470	
LMW-20F	K0943-06				SW6010_W	
LMW-20F	K0943-06				SW7470	
LMW-21U	K0943-07				SW6010_W	
LMW-21U	K0943-07				SW7470	
LMW-21F	K0943-08				SW6010_W	
LMW-21F	K0943-08				SW7470	
LMW-16U	K0943-09				SW6010_W	
LMW-16U	K0943-09				SW7470	
LMW-16F	K0943-10				SW6010_W	
LMW-16F	K0943-10				SW7470	
LMW-02U	K0943-11				SW6010_W	
LMW-02U	K0943-11				SW7470	
LMW-02F	K0943-12				SW6010_W	
LMW-02F	K0943-12				SW7470	
LMW-04U	K0943-13				SW6010_W	
LMW-04U	K0943-13				SW7470	
LMW-04F	K0943-14				SW6010_W	
LMW-04F	K0943-14				SW7470	
LMW-03U	K0943-15				SW6010_W	
LMW-03U	K0943-15				SW7470	
LMW-03F	K0943-16				SW6010_W	
LMW-03F	K0943-16				SW7470	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation Sample Preparation and Analysis Summary ME

Project Name : Multi Site G -- LIBERTY

SDG : K0943

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
K0943-01A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-02A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-03A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-04A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-05A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-06A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-07A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-08A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-09A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-10A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-11A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-12A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-13A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-14A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-15A	AQ	SW6010_W	5/31/2011	6/11/2011
K0943-16A	AQ	SW6010_W	5/31/2011	6/11/2011
SW7470				
K0943-01A	AQ	SW7470	5/31/2011	6/10/2011
K0943-02A	AQ	SW7470	5/31/2011	6/10/2011
K0943-03A	AQ	SW7470	5/31/2011	6/10/2011
K0943-04A	AQ	SW7470	5/31/2011	6/10/2011
K0943-05A	AQ	SW7470	5/31/2011	6/10/2011
K0943-06A	AQ	SW7470	5/31/2011	6/10/2011
K0943-07A	AQ	SW7470	5/31/2011	6/10/2011
K0943-08A	AQ	SW7470	5/31/2011	6/10/2011
K0943-09A	AQ	SW7470	5/31/2011	6/10/2011
K0943-10A	AQ	SW7470	5/31/2011	6/10/2011
K0943-11A	AQ	SW7470	5/31/2011	6/10/2011
K0943-12A	AQ	SW7470	5/31/2011	6/10/2011
K0943-13A	AQ	SW7470	5/31/2011	6/10/2011
K0943-14A	AQ	SW7470	5/31/2011	6/10/2011
K0943-15A	AQ	SW7470	5/31/2011	6/10/2011
K0943-16A	AQ	SW7470	5/31/2011	6/10/2011

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K0943

Client ID: AECOM_CHSNTRDG

Project: Multi Site G

WO Name: Multi Site G

Location: MULTI_SITE, LIBERTY

Comments: send invoice to Paul according to e-mail on 5/28/08

Case:

SDG:

PO: 95900-04

HC Due: 06/21/11

Fax Due:

Fax Report: ☐

Report Level: ASP-B

Special Program:

EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K0943-01A	FB-U	05/26/2011 14:35	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-01A	FB-U	05/26/2011 14:35	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-02A	FB-F	05/26/2011 14:35	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-02A	FB-F	05/26/2011 14:35	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-03A	LMW-10U	05/26/2011 12:15	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-03A	LMW-10U	05/26/2011 12:15	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-04A	LMW-10F	05/26/2011 12:15	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-04A	LMW-10F	05/26/2011 12:15	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-05A	LMW-20U	05/26/2011 14:00	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-05A	LMW-20U	05/26/2011 14:00	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-06A	LMW-20F	05/26/2011 14:00	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-06A	LMW-20F	05/26/2011 14:00	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-07A	LMW-21U	05/26/2011 13:50	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-07A	LMW-21U	05/26/2011 13:50	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-08A	LMW-21F	05/26/2011 13:50	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-08A	LMW-21F	05/26/2011 13:50	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-09A	LMW-16U	05/26/2011 12:20	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-09A	LMW-16U	05/26/2011 12:20	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-10A	LMW-16F	05/26/2011 12:20	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-10A	LMW-16F	05/26/2011 12:20	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-11A	LMW-02U	05/26/2011 09:20	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: K0943

Client ID: AECOM_CHSNTRDG

Project: Multi Site G

WO Name: Multi Site G

Location: MULTI_SITE, LIBERTY

Comments: send invoice to Paul according to e-mail on 5/28/08

Case:

SDG:

PO: 95900-04

HC Due: 06/21/11

Fax Due:

Fax Report: ☐

Report Level: ASP-B

Special Program:

EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
K0943-11A	LMW-02U	05/26/2011 09:20	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-12A	LMW-02F	05/26/2011 09:20	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-12A	LMW-02F	05/26/2011 09:20	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-13A	LMW-04U	05/26/2011 10:50	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-13A	LMW-04U	05/26/2011 10:50	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-14A	LMW-04F	05/26/2011 10:50	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-14A	LMW-04F	05/26/2011 10:50	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-15A	LMW-03U	05/26/2011 10:05	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-15A	LMW-03U	05/26/2011 10:05	05/31/2011	Aqueous	SW7470	/ TAL					M6
K0943-16A	LMW-03F	05/26/2011 10:05	05/31/2011	Aqueous	SW6010_W	/ TAL				Y	M6
K0943-16A	LMW-03F	05/26/2011 10:05	05/31/2011	Aqueous	SW7470	/ TAL					M6

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Sample Transmittal Documentation



A DIVISION OF SPECTRUM ANALYTICAL, INC. FEATURING HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:

TAT- Indicate Date Needed: _____
All TATs subject to laboratory approval.
Min. 24-hour notification needed for rushes.
Samples disposed of after 30 days unless otherwise instructed.

Report To: Paul Kareth Aecom
100 Red Schoolhouse Rd
Chastnut Ridge NY

Invoice To: Same

Project No.: 60135736

Site Name: LIBERTY

Location: BRENTWOOD State: NY

Sampler(s): Celeste Foster/Steven Wright

Project Mgr.: Paul Kareth

P.O. No.: 60135736RQN

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9=_____ 10=_____ 11=_____

List preservative code below:

Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analyses:	QA/QC Reporting Level
1	FB-4	5/26/11	1435	G	GW						
2	FB-F	5/26/11	1435	G	GW						
3	LMW-10U	5/26/11	1215	G	GW						
4	LMW-10F	5/26/11	1215	G	GW						
5	LMW-20U	5/26/11	1400	G	GW						
6	LMW-20F	5/26/11	1400	G	GW						
7	LMW-21U	5/26/11	1350	G	GW						
8	LMW-21F	5/26/11	1350	G	GW						
9	LMW-16U	5/26/11	1220	G	GW						
10	LMW-16F	5/26/11	1220	G	GW						

□ E-mail to Paul.Kareth@aecom.com

EDD Format See contract

Relinquished by:

Received by:

Date:

Time:

Celeste Foster
Paul Kareth

5/27/11
5/31/11
10:39am
10:30

Condition upon receipt: ☒ Iced ☐ Ambient 1.4 °C 5/31/11



A DIVISION OF SPECTRUM ANALYTICAL, INC. FEATURING HAMBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 2 of 2

Special Handling:

TAT- Indicate Date Needed: _____
• All TATs subject to laboratory approval.
• Min. 24-hour notification needed for rushes.
• Samples disposed of after 30 days unless otherwise instructed.

Report To: AECOM
100 Red Schoolhouse Rd
Chestnut Ridge NY
Project Mgr.: Paul Kareth

Invoice To: Same
P.O. No.: 60135 736 RQN

Project No.: 60135 736
Site Name: Liberty
Location: Bentwood State: NY
Sampler(s): Cebste Foster / Steve Wigh

1=Na₂SO₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
8=NaHSO₄ 9= 10= 11=

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1= X2= X3=

List preservative code below:
4

Containers:

of VOA Vials
of Amber Glass
of Clear Glass
of Plastic

Analyses:

QA/QC Reporting Level

☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

Matrix

Type

Time:

Sample Id: _____

Lab Id: _____

Date: _____

Time: _____

5/25/11 0920

LMW-024

5/25/11 0920

LMW-02F

5/25/11 1050

LMW-044

5/25/11 1050

LMW-04F

5/25/11 1005

LMW-034

5/25/11 1005

LMW-03F

5/25/11 1005

LMW-03F

5/25/11 1005

LMW-03F

5/25/11 1005

LMW-03F

5/25/11 1005

LMW-03F

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LMW-03F

5/25/11 1005

LMW-03F

5/25/11 1005

LMW-03F

5/25/11 1005

LMW-03F

E-mail to Paul.Kareth@aecom.com
EDD Format See contract

Relinquished by: Paul Kareth
Received by: Jeff
Date: 5/27/11 Time: 10:39
5/31/11 10:30

Condition upon receipt: ☒ Iced ☐ Ambient ☐ °C 1.4 °C

Signature: Paul Kareth

Signature: Jeff

Signature: Paul Kareth

Signature: Jeff

Signature: Paul Kareth

Signature: Jeff

Signature: Paul Kareth

Signature: Jeff

Signature: Paul Kareth

Signature: Jeff

Signature: Paul Kareth

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MITKEM LABORATORIES

Sample Condition Form

Page 1 of 1

Received By: <u>SW</u>		Reviewed By: <u>[Signature]</u>		Date: <u>5/31/11</u>		Mitkem Work Order #: <u>K0943</u>	
Client Project: <u>Multi</u>		Client: <u>AECOM</u>		Preservation (pH)		Soil Headspace or Air Bubble ≥ 1/4"	
		Lab Sample ID		HNO ₃	H ₂ SO ₄	HCl	NaOH
				H ₃ PO ₄	Matrix		
1) Cooler Sealed	Yes / <u>No</u>	<u>K0943</u>	<u>01</u>	<u>2</u>			
			<u>02</u>				
2) Custody Seal(s)	Present / <u>Absent</u>		<u>03</u>				
	Coolers / Bottles		<u>04</u>				
	Intact / Broken		<u>05</u>				
			<u>06</u>				
3) Custody Seal Number(s)	<u>NA</u>		<u>07</u>				
			<u>08</u>				
			<u>09</u>				
			<u>10</u>				
			<u>11</u>				
4) Chain-of-Custody	<u>Present</u> / Absent		<u>12</u>				
			<u>13</u>				
5) Cooler Temperature	<u>2 °C</u>		<u>14</u>				
IR Temp Gun ID	<u>MT-1</u>		<u>15</u>				
Coolant Condition	<u>Ice</u>	<u>K0943</u>	<u>16</u>	<u>2</u>			
6) Airbill(s)	Present / <u>Absent</u>						
Airbill Number(s)	<u>Carrier</u>						
7) Samples Bottles	<u>Intact</u> / Broken / Leaking						
8) Date Received	<u>5/31/11</u>						
9) Time Received	<u>10:30</u>						
Preservative Name/Lot No.:							

VOA Matrix Key:

US = Unpreserved Soil	A = Air
UA = Unpreserved Aqueous	H = HCl
M = MeOH	E = Encore
N = NaHSO ₄	F = Freeze

See Sample Condition Notification/Corrective Action Form yes / No

Form ID: QAF.0006

Rad OK yes / no



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** Metals ***

REPORT NARRATIVE

Mitkem Laboratories, a Division of Spectrum Analytical, Inc.

Client : AECOM Environment

Project: Multi Site G

Laboratory Workorder / SDG #: K0943

SW846 6010C, SW846 7470A

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code:
SW846 6010C, SW846 7470A

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3005A
Aqueous Samples were prepared following procedures in laboratory test code: SW7470A

V. INSTRUMENTATION

The following instrumentation was used to perform

Instrument Code: FIMS1
Instrument Type: CVAA
Description: FIMS
Manufacturer: Perkin-Elmer
Model: FIMS

Instrument Code: OPTIMA3
Instrument Type: ICP
Description: Optima ICP-OES
Manufacturer: Perkin-Elmer
Model: 4300 DV

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for laboratory control samples were within the QC limits.

2. Matrix spike (MS):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

A serial dilution was not performed on any sample in this SDG.

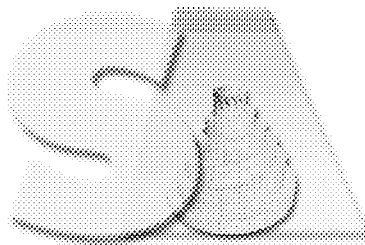
G. Samples:

No unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Mitkem, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:  _____

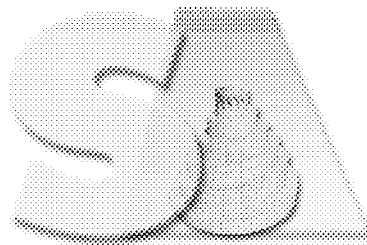
Date: 06/22/11



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Data Flag/Qualifiers:

- U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).
- J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
 - estimated concentration for Tentatively Identified Compound
- B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a “trace” concentration below the reporting limit and equal to or above the detection limit.
- D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis
- E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.
- P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.
- A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.
- N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.
- * For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Sample ID Suffixes

- DL** Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution
- RE** Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.
- RA** Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.
- RX** Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.
- MS** Matrix Spike.
- MSD** Matrix Spike Duplicate
- DUP** Duplicate analysis
- SD** Serial Dilution
- PS** Post-digestion or Post-distillation spike. For metals or inorganic analyses

U.S.EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SK0943
SOW No.: SW846

EPA Sample No.	Lab Sample ID
<u>FB-F</u>	<u>K0943-02</u>
<u>FB-U</u>	<u>K0943-01</u>
<u>LMW-02F</u>	<u>K0943-12</u>
<u>LMW-02U</u>	<u>K0943-11</u>
<u>LMW-03F</u>	<u>K0943-16</u>
<u>LMW-03U</u>	<u>K0943-15</u>
<u>LMW-04F</u>	<u>K0943-14</u>
<u>LMW-04U</u>	<u>K0943-13</u>
<u>LMW-10F</u>	<u>K0943-04</u>
<u>LMW-10U</u>	<u>K0943-03</u>
<u>LMW-16F</u>	<u>K0943-10</u>
<u>LMW-16U</u>	<u>K0943-09</u>
<u>LMW-20F</u>	<u>K0943-06</u>
<u>LMW-20U</u>	<u>K0943-05</u>
<u>LMW-21F</u>	<u>K0943-08</u>
<u>LMW-21U</u>	<u>K0943-07</u>

Were ICP interelement corrections applied?	Yes/No	<u>Yes</u>
Were background corrections applied?	Yes/No	<u>Yes</u>
If yes-were raw data generated before application of background corrections?	Yes/No	<u>No</u>

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature

Signature:  Name: Dawn E. Smart
Date: 6/22/11 Title: _____

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

FB-F

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-02

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	1.1	U		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	150	B		P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	31.0	U		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	76.0	U		P
7439-96-5	Manganese	10.0	U		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	0.85	U		P
7440-09-7	Potassium	76.0	U		P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	428	B		P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	17.7	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

FB-U

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-01

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	1.1	U		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	152	B		P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	31.0	U		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	76.0	U		P
7439-96-5	Manganese	13.2	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	1.6	B		P
7440-09-7	Potassium	387	B		P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	941	B		P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	17.3	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-02F

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-12

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	44.9	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	5.5			P
7440-70-2	Calcium	16700			P
7440-47-3	Chromium	48.2			P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	31.0	U		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3250			P
7439-96-5	Manganese	10.0	U		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	2.7	B		P
7440-09-7	Potassium	2610			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	22400			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	24.8	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-02U

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-11

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	118	B		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	44.6	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	8.5			P
7440-70-2	Calcium	16300			P
7440-47-3	Chromium	51.9			P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	24.0	B		P
7439-89-6	Iron	205			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3180			P
7439-96-5	Manganese	10.0	U		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	5.5	B		P
7440-09-7	Potassium	2720			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	21300			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	29.2	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-03F

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-16

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	18.1	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	4.6	B		P
7440-70-2	Calcium	16800			P
7440-47-3	Chromium	32.6			P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	11.7	B		P
7439-89-6	Iron	31.0	U		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	2760			P
7439-96-5	Manganese	10.0	U		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	4.3	B		P
7440-09-7	Potassium	1770			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	13200			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	40.4	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-03U

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-15

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	346			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	19.1	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	6.6			P
7440-70-2	Calcium	16900			P
7440-47-3	Chromium	59.6			P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	45.5			P
7439-89-6	Iron	462			P
7439-92-1	Lead	14.1			P
7439-95-4	Magnesium	2710			P
7439-96-5	Manganese	11.8	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	6.7	B		P
7440-09-7	Potassium	1950			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	12400			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.4	B		P
7440-66-6	Zinc	54.9			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-04F

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-14

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	13.2	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	19.8			P
7440-70-2	Calcium	12300			P
7440-47-3	Chromium	142			P
7440-48-4	Cobalt	2.6	B		P
7440-50-8	Copper	43.5			P
7439-89-6	Iron	109	B		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	1270			P
7439-96-5	Manganese	12.3	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	12.8	B		P
7440-09-7	Potassium	6790			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	29100			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.2	B		P
7440-66-6	Zinc	109			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-04U

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-13

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2560			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.8	B		P
7440-39-3	Barium	27.1	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	54.2			P
7440-70-2	Calcium	14200			P
7440-47-3	Chromium	176			P
7440-48-4	Cobalt	3.3	B		P
7440-50-8	Copper	137			P
7439-89-6	Iron	2660			P
7439-92-1	Lead	43.2			P
7439-95-4	Magnesium	1710			P
7439-96-5	Manganese	47.1	B		P
7439-97-6	Mercury	0.036	B		CV
7440-02-0	Nickel	43.5	B		P
7440-09-7	Potassium	6600			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	26100			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	7.0	B		P
7440-66-6	Zinc	630			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-10F

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-04

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	32.5	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	11.3			P
7440-70-2	Calcium	18700			P
7440-47-3	Chromium	89.3			P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	31.0	U		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3590			P
7439-96-5	Manganese	10.0	U		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	0.91	B		P
7440-09-7	Potassium	2530			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	19300			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	21.7	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-10U

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-03

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	101	B		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	35.0	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	10.3			P
7440-70-2	Calcium	18700			P
7440-47-3	Chromium	72.7			P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	245			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3700			P
7439-96-5	Manganese	16.8	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	1.6	B		P
7440-09-7	Potassium	2380			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	17100			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	27.1	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-16F

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-10

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	586			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	351			P
7440-41-7	Beryllium	1.8	B		P
7440-43-9	Cadmium	4.9	B		P
7440-70-2	Calcium	9890			P
7440-47-3	Chromium	8.9	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	11.3	B		P
7439-89-6	Iron	31.0	U		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	2570			P
7439-96-5	Manganese	623			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	14.1	B		P
7440-09-7	Potassium	4880			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	14500			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	69.0			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-16U

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-09

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1150			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	299			P
7440-41-7	Beryllium	2.0	B		P
7440-43-9	Cadmium	5.3			P
7440-70-2	Calcium	9240			P
7440-47-3	Chromium	11.7	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	9.4	B		P
7439-89-6	Iron	115	B		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	2350			P
7439-96-5	Manganese	597			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	13.9	B		P
7440-09-7	Potassium	4930			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	14700			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	67.5			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-20F

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-06

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	25.4	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	7870			P
7440-47-3	Chromium	1.1	B		P
7440-48-4	Cobalt	0.93	B		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	71.7	B		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3870			P
7439-96-5	Manganese	10.0	U		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	0.85	U		P
7440-09-7	Potassium	2060			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	40300			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	29.7	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-20U

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-05

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	303			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	27.0	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	7700			P
7440-47-3	Chromium	5.1	B		P
7440-48-4	Cobalt	1.2	B		P
7440-50-8	Copper	6.0	B		P
7439-89-6	Iron	879			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3790			P
7439-96-5	Manganese	17.5	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	1.8	B		P
7440-09-7	Potassium	2430			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	38400			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	52.5			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-21F

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-08

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	66.0	U		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	76.2	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	16900			P
7440-47-3	Chromium	3.3	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	32.4	B		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	7240			P
7439-96-5	Manganese	19.7	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	1.3	B		P
7440-09-7	Potassium	9270			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	21700			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	30.5	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

LMW-21U

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SK0943

Matrix (soil/water): WATER

Lab Sample ID: K0943-07

Level (low/med): MED

Date Received: 05/31/2011

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	319			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	B		P
7440-39-3	Barium	78.8	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	1.2	B		P
7440-70-2	Calcium	17000			P
7440-47-3	Chromium	6.2	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	8.5	B		P
7439-89-6	Iron	694			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	6960			P
7439-96-5	Manganese	36.1	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	3.3	B		P
7440-09-7	Potassium	12500			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	24300			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.5	B		P
7440-66-6	Zinc	65.1			P

Comments:

2A

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0943

Initial Calibration Source:

Continuing Calibration Source:

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Mercury	5.0	4.94	98.7	5.0	5.16	103.2	5.31	106.2	CV

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

2A

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0943

Initial Calibration Source:

Continuing Calibration Source:

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Mercury				5.0	5.11	102.2	5.07	101.3	CV

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SK0943

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum	10000.0	10237.79	102.4	10000.0	10133.84	101.3	10030.08	100.3	P
Antimony	500.0	522.43	104.5	500.0	505.42	101.1	499.57	99.9	P
Arsenic	500.0	496.63	99.3	500.0	492.14	98.4	487.45	97.5	P
Barium	10000.0	10326.22	103.3	10000.0	10272.33	102.7	10126.76	101.3	P
Beryllium	250.0	253.56	101.4	250.0	251.68	100.7	246.60	98.6	P
Cadmium	250.0	249.23	99.7	250.0	248.37	99.3	243.96	97.6	P
Calcium	25000.0	26087.58	104.4	25000.0	25716.51	102.9	25697.87	102.8	P
Chromium	1000.0	1034.40	103.4	1000.0	1022.21	102.2	1002.39	100.2	P
Cobalt	2500.0	2630.26	105.2	2500.0	2604.74	104.2	2561.62	102.5	P
Copper	1250.0	1289.31	103.1	1250.0	1279.88	102.4	1263.34	101.1	P
Iron	5000.0	5202.65	104.1	5000.0	5148.58	103.0	5068.69	101.4	P
Lead	500.0	514.06	102.8	500.0	507.15	101.4	503.25	100.6	P
Magnesium	25000.0	25722.33	102.9	25000.0	25511.15	102.0	25068.18	100.3	P
Manganese	2500.0	2563.16	102.5	2500.0	2542.47	101.7	2503.20	100.1	P
Nickel	2500.0	2587.96	103.5	2500.0	2563.08	102.5	2515.93	100.6	P
Potassium	25000.0	24925.44	99.7	25000.0	25263.74	101.1	24921.71	99.7	P
Selenium	500.0	506.71	101.3	500.0	502.60	100.5	493.84	98.8	P
Silver	1250.0	1275.12	102.0	1250.0	1261.99	101.0	1238.33	99.1	P
Sodium	25000.0	25239.64	101.0	25000.0	25467.60	101.9	25072.84	100.3	P
Thallium	500.0	518.96	103.8	500.0	512.94	102.6	508.98	101.8	P
Vanadium	2500.0	2560.26	102.4	2500.0	2533.46	101.3	2482.82	99.3	P
Zinc	2500.0	2575.31	103.0	2500.0	2560.48	102.4	2506.26	100.3	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SK0943

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	10133.85	101.3			P
Antimony				500.0	498.60	99.7			P
Arsenic				500.0	486.67	97.3			P
Barium				10000.0	10291.90	102.9			P
Beryllium				250.0	247.80	99.1			P
Cadmium				250.0	245.76	98.3			P
Calcium				25000.0	25689.97	102.8			P
Chromium				1000.0	1003.63	100.4			P
Cobalt				2500.0	2586.35	103.5			P
Copper				1250.0	1280.78	102.5			P
Iron				5000.0	5114.13	102.3			P
Lead				500.0	503.03	100.6			P
Magnesium				25000.0	25259.85	101.0			P
Manganese				2500.0	2532.34	101.3			P
Nickel				2500.0	2519.54	100.8			P
Potassium				25000.0	24459.96	97.8			P
Selenium				500.0	496.35	99.3			P
Silver				1250.0	1240.47	99.2			P
Sodium				25000.0	24713.78	98.9			P
Thallium				500.0	508.15	101.6			P
Vanadium				2500.0	2494.02	99.8			P
Zinc				2500.0	2535.39	101.4			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0943Preparation Blank Matrix (soil/water): WATER Method Blank ID:Preparation Blank Concentration Units (ug/L or mg/kg): UG/L **MB-59657****FIMS1_110610A**

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Mercury	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U	CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0943

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

MB-59733

OPTIMA3_110611D

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	66.0	U	66.0	U	66.0	U	66.0	U	66.000	U	P
Antimony	9.3	U	9.3	U	9.3	U	9.3	U	9.300	U	P
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Barium	1.1	U	1.5	B	1.4	B	1.6	B	1.100	U	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.260	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.890	U	P
Calcium	198.7	B	195.6	B	110.0	U	223.6	B	200.421	B	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.640	U	P
Cobalt	0.7	U	0.7	U	0.7	U	0.7	U	0.670	U	P
Copper	3.6	U	3.6	U	3.6	U	3.6	U	3.600	U	P
Iron	31.0	U	31.0	U	31.0	U	31.0	U	31.000	U	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Magnesium	76.0	U	76.0	U	76.0	U	76.0	U	76.000	U	P
Manganese	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	P
Nickel	0.9	U	0.8	U	0.8	U	0.8	U	0.850	U	P
Potassium	76.0	U	-122.4	B	76.0	U	-120.0	B	76.000	U	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	12.000	U	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	6.900	U	P
Sodium	29.0	U	29.0	U	31.6	B	29.0	U	29.000	U	P
Thallium	6.2	U	6.2	U	6.2	U	6.2	U	6.200	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	1.100	U	P
Zinc	4.9	U	4.9	U	4.9	U	4.9	U	4.900	U	P

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ICP INTERFERENCE CHECK SAMPLE

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SK0943

ICP ID Number:

OPTIMA3

ICS Source:

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found			
	Sol.	Sol.	Sol.	Sol.		Sol.		Sol.	
	A	AB	A	AB	%R	A	%R	AB	%R
Aluminum	500000	500000	495351	484144	96.8				
Antimony	0	600	-14	639.4	106.6				
Arsenic	0	100	-14	97.6	97.6				
Barium	0	500	6	549.5	109.9				
Beryllium	0	500	0	527	105.4				
Cadmium	0	1000	-8	993.9	99.4				
Calcium	500000	500000	540107	522116.2	104.4				
Chromium	0	500	1	525.1	105.0				
Cobalt	0	500	-3	505.1	101.0				
Copper	0	500	-10	541.9	108.4				
Iron	200000	200000	194052	189952.1	95.0				
Lead	0	500	-4	512.4	102.5				
Magnesium	500000	500000	500016	486536.9	97.3				
Manganese	0	500	-16	515.2	103.0				
Nickel	0	1000	-3	998.3	99.8				
Potassium	0	25000	488	29851.5	119.4				
Selenium	0	500	4	512.5	102.5				
Silver	0	200	0	224.8	112.4				
Sodium	0	25000	146	27895.9	111.6				
Thallium	0	100	-13	88.8	88.8				
Vanadium	0	500	0	530.4	106.1				
Zinc	0	1000	9	1017.5	101.8				

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name: <u>Spectrum Analytical, Inc.</u>	Contract: <u>95900-04</u>
Lab Code: <u>MITKEM</u> Case No.: <u></u>	SAS No.: <u></u> SDG No.: <u>SK0943</u>
Solid LCS Source: <u></u>	LCS(D) ID: <u></u>
Aqueous LCS Source: <u></u>	LCS-59657

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte	True	Found	%R	True	Found	C	Limits	%R	
Mercury	4.6	4.79	104.1						

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name: <u>Spectrum Analytical, Inc.</u>	Contract: <u>95900-04</u>
Lab Code: <u>MITKEM</u> Case No.: _____	SAS No.: _____ SDG No.: <u>SK0943</u>
Solid LCS Source: _____	LCS(D) ID:
Aqueous LCS Source:	LCS-59733

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	9275.08	101.9						
Antimony	455.0	472.45	103.8						
Arsenic	455.0	482.73	106.1						
Barium	9100.0	9248.99	101.6						
Beryllium	227.0	230.33	101.5						
Cadmium	227.0	236.01	104.0						
Calcium	22700.0	23515.10	103.6						
Chromium	910.0	916.77	100.7						
Cobalt	2270.0	2306.36	101.6						
Copper	1130.0	1144.48	101.3						
Iron	4550.0	4701.56	103.3						
Lead	455.0	485.98	106.8						
Magnesium	22700.0	23280.43	102.6						
Manganese	2270.0	2290.13	100.9						
Nickel	2270.0	2328.30	102.6						
Potassium	22700.0	22663.18	99.8						
Selenium	455.0	478.38	105.1						
Silver	1130.0	1159.94	102.6						
Sodium	22700.0	23089.75	101.7						
Thallium	455.0	482.26	106.0						
Vanadium	2270.0	2289.93	100.9						
Zinc	2270.0	2294.66	101.1						

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LABORATORY CONTROL SAMPLE

Lab Name:	Spectrum Analytical, Inc.	Contract:	95900-04				
Lab Code:	MITKEM	Case No.:		SAS No.:		SDG No.:	SK0943
Solid LCS Source:		LCS(D) ID:					
Aqueous LCS Source:		LCSD-59733					

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	9468.60	104.1						
Antimony	455.0	481.97	105.9						
Arsenic	455.0	487.19	107.1						
Barium	9100.0	9502.34	104.4						
Beryllium	227.0	235.62	103.8						
Cadmium	227.0	237.37	104.6						
Calcium	22700.0	23946.16	105.5						
Chromium	910.0	934.03	102.6						
Cobalt	2270.0	2358.13	103.9						
Copper	1130.0	1176.14	104.1						
Iron	4550.0	4806.60	105.6						
Lead	455.0	487.40	107.1						
Magnesium	22700.0	23756.60	104.7						
Manganese	2270.0	2344.14	103.3						
Nickel	2270.0	2370.60	104.4						
Potassium	22700.0	23289.31	102.6						
Selenium	455.0	474.75	104.3						
Silver	1130.0	1181.72	104.6						
Sodium	22700.0	23657.94	104.2						
Thallium	455.0	481.54	105.8						
Vanadium	2270.0	2336.73	102.9						
Zinc	2270.0	2347.63	103.4						

U.S. EPA - CLP

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0943

Instrument Type: CV InstrumentID: FIMS1 Date: 03/04/2010

Preparation Method: 7470A

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRDL	MDL
Mercury	253.70	0.2	0.028

Comments:

U.S. EPA - CLP

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METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0943

Instrument Type: P InstrumentID: OPTIMA3 Date: 03/03/2010

Preparation Method: 3005A

Concentration Units (ug/L or mg/kg): ug/L

Analyte	Wavelength /Mass	CRDL	MDL
Aluminum	308.21	200	66.0
Antimony	206.83	20	9.3
Arsenic	188.98	20	4.3
Barium	233.53	200	1.1
Beryllium	313.11	5.0	0.26
Cadmium	226.50	5.0	0.89
Calcium	227.54	800	110
Chromium	267.72	20	0.64
Cobalt	228.62	50	0.67
Copper	324.75	30	3.6
Iron	273.96	200	31.0
Lead	220.35	10	4.2
Magnesium	279.08	500	76.0
Manganese	257.61	50	10.0
Nickel	231.60	50	0.85
Potassium	766.49	1000	76.0
Selenium	196.03	30	12.0
Silver	328.07	30	6.9
Sodium	589.59	1000	29.0
Thallium	190.80	20	6.2
Vanadium	292.40	50	1.1
Zinc	206.20	50	4.9

Comments:

U.S. EPA - CLP

11A

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SK0943

ICP ID Number:

OPTIMA3

Date:

3/17/2011

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Cr
Aluminum	308.21		0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.83	0.0548458	0.0019692	0.0402283	0.0119694	18.0976000
Arsenic	188.97	0.0241052	-0.0179703	-0.0502240	-0.0108453	-5.3626600
Barium	233.52	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.10	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.1165300	0.0000000	0.0000000
Calcium	227.54	-0.3951530		-53.4983000	0.1370440	-2.4637200
Chromium	267.71	0.0000000	0.0000000	0.0000000	0.0044220	
Cobalt	228.61	0.0000000	0.0000000	0.0342838	0.0000000	-0.0770625
Copper	324.75	0.0000000	0.0000000	-0.0466325	0.0029665	-0.0749057
Iron	273.95	0.0000000	0.0000000		0.0000000	-4.2926900
Lead	220.35	-0.0376433	-0.0020174	0.0000000	0.0000000	0.0000000
Magnesium	279.07	0.0000000	0.0000000	0.0000000		0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0060664	0.0303744	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0068563	0.0029325	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0230022	0.0344876	-0.3266930	-0.0115824	-0.1016280
Silver	328.06	0.0000000	0.0000000	-0.0195341	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	-0.0035055	-0.0281063	-0.0065002	0.2697230
Titanium	334.94	0.0000000	-0.0127604	0.0000000	0.0155639	0.1077440
Vanadium	292.40	0.0000000	0.0000000	-0.0646350	0.0000000	-1.5918000
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	-2.7465900

Comments:

U.S. EPA - CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SK0943

ICP ID Number:

OPTIMA3

Date:

3/17/2011

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cu	Mn	Ni	Tl	Ti
Aluminum	308.21	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.83	0.2323840	0.0000000	0.0219824	0.0879220	1.1106900
Arsenic	188.97	-0.1211030	-0.0818075	-0.0385500	0.0000000	-0.7705050
Barium	233.52	0.0000000	0.0000000	0.0338339	0.0000000	0.0000000
Beryllium	313.10	0.0000000	0.0000000	0.0000000	0.0000000	-1.9571600
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.1051920
Calcium	227.54	5.8225100	0.0000000	28.4899000	3.5969000	5.3831000
Chromium	267.71	0.0000000	0.1940960	0.0000000	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.2228410	0.0000000	1.2071700
Copper	324.75		0.0000000	0.0000000	0.0000000	0.0000000
Iron	273.95	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.3749550	0.1018340	-0.1299870	-0.0630506	-0.5488580
Magnesium	279.07	0.0000000	-4.8641600	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000		0.0420350	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000		0.2792550	0.4816400
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0422333	0.5763650	0.0000000	-0.1188130	0.2916260
Silver	328.06	0.0422486	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	-0.0495957		-7.3156200
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.1659360	
Vanadium	292.40	0.2183960	-0.0806874	0.0000000	0.0000000	0.8845330
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

U.S. EPA - CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.:

SK0943

ICP ID Number:

OPTIMA3

Date:

3/17/2011

Analyte	Wave-length (nm)	Interelement Correction Factors for:			
		V			
Aluminum	308.21	12.0696000			
Antimony	206.83	-2.5893500			
Arsenic	188.97	0.0000000			
Barium	233.52	-1.1190600			
Beryllium	313.10	-0.0336399			
Cadmium	226.50	0.0000000			
Calcium	227.54	30.3214000			
Chromium	267.71	-0.3004160			
Cobalt	228.61	0.0000000			
Copper	324.75	-0.1475070			
Iron	273.95	-30.2263000			
Lead	220.35	-0.0588981			
Magnesium	279.07	0.0000000			
Manganese	257.61	0.0000000			
Nickel	231.60	0.0000000			
Potassium	766.49	0.0000000			
Selenium	196.02	-0.1688320			
Silver	328.06	-0.8565220			
Sodium	589.59	0.0000000			
Thallium	190.80	-0.8892970			
Titanium	334.94	0.0299746			
Vanadium	292.40				
Zinc	206.20	0.0000000			

Comments:

U.S. EPA - CLP
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ICP LINEAR RANGES (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SK0943
ICP ID Number: OPTIMA3 Date: 3/17/2011

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	0.20	500000	P
Antimony	0.20	50000	P
Arsenic	0.20	50000	P
Barium	0.20	50000	P
Beryllium	0.20	1000	P
Cadmium	0.20	10000	P
Calcium	0.20	500000	P
Chromium	0.20	25000	P
Cobalt	0.20	100000	P
Copper	0.20	50000	P
Iron	0.20	500000	P
Lead	0.20	100000	P
Magnesium	0.20	500000	P
Manganese	0.20	25000	P
Nickel	0.20	100000	P
Potassium	0.20	400000	P
Selenium	0.20	25000	P
Silver	0.20	2500	P
Sodium	0.20	400000	P
Thallium	0.20	25000	P
Vanadium	0.20	50000	P
Zinc	0.20	25000	P

Comments:

U.S. EPA - CLP
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PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0943
Preparation Method: 7470A Batch ID: 59655

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB	06/09/2011		100
CCV	06/09/2011		100
ICB	06/09/2011		100
ICV	06/09/2011		100
S0	06/09/2011		100
S0.2	06/09/2011		100
S1.0	06/09/2011		100
S10.0	06/09/2011		100
S2.0	06/09/2011		100
S5.0	06/09/2011		100

Comments:

U.S. EPA - CLP
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PREPARATION LOG

Lab Name: <u>Spectrum Analytical, Inc.</u>	Contract: <u>95900-04</u>
Lab Code: <u>MITKEM</u> Case No.: _____	SAS No.: _____ SDG No.: <u>SK0943</u>
Preparation Method: <u>7470A</u>	Batch ID: <u>59657</u>

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
FB-F	06/09/2011		100
FB-U	06/09/2011		100
LCSW	06/09/2011		100
LMW-02F	06/09/2011		100
LMW-02U	06/09/2011		100
LMW-03F	06/09/2011		100
LMW-03U	06/09/2011		100
LMW-04F	06/09/2011		100
LMW-04U	06/09/2011		100
LMW-10F	06/09/2011		100
LMW-10U	06/09/2011		100
LMW-16F	06/09/2011		100
LMW-16U	06/09/2011		100
LMW-20F	06/09/2011		100
LMW-20U	06/09/2011		100
LMW-21F	06/09/2011		100
LMW-21U	06/09/2011		100
PBW	06/09/2011		100

Comments:

U.S. EPA - CLP
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PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0943

Preparation Method: 3005A Batch ID: 59733

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
FB-F	06/11/2011		50
FB-U	06/11/2011		50
LCSW	06/11/2011		50
LCSW02	06/11/2011		50
LMW-02F	06/11/2011		50
LMW-02U	06/11/2011		50
LMW-03F	06/11/2011		50
LMW-03U	06/11/2011		50
LMW-04F	06/11/2011		50
LMW-04U	06/11/2011		50
LMW-10F	06/11/2011		50
LMW-10U	06/11/2011		50
LMW-16F	06/11/2011		50
LMW-16U	06/11/2011		50
LMW-20F	06/11/2011		50
LMW-20U	06/11/2011		50
LMW-21F	06/11/2011		50
LMW-21U	06/11/2011		50
PBW	06/11/2011		50

Comments:

U.S. EPA - CLP
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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0943
 Instrument ID Number: FIMS1 Method: CV
 Start Date: 06/10/2011 End Date: 06/10/2011

FIMS1_110610A

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
S0	1.0	0901															X												
S0.2	1.0	0902															X												
S1.0	1.0	0904															X												
S2.0	1.0	0905															X												
S5.0	1.0	0907															X												
S10.0	1.0	0908															X												
ICV	1.0	0910															X												
ICB	1.0	0911															X												
ZZZZZZ	1.0	0913																											
ZZZZZZ	1.0	0914																											
ZZZZZZ	1.0	0916																											
ZZZZZZ	1.0	0917																											
ZZZZZZ	1.0	0919																											
ZZZZZZ	1.0	0920																											
ZZZZZZ	1.0	0922																											
ZZZZZZ	1.0	0923																											
ZZZZZZ	1.0	0925																											
ZZZZZZ	1.0	0926																											
CCV	1.0	0928															X												
CCB	1.0	0929															X												
ZZZZZZ	1.0	0931																											
ZZZZZZ	1.0	0932																											
ZZZZZZ	1.0	0934																											
ZZZZZZ	1.0	0935																											
ZZZZZZ	1.0	0937																											
ZZZZZZ	1.0	0938																											
ZZZZZZ	1.0	0940																											
ZZZZZZ	1.0	0941																											
ZZZZZZ	1.0	0943																											
ZZZZZZ	1.0	0944																											
CCV	1.0	0946															X												
CCB	1.0	0947															X												

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0943
 Instrument ID Number: FIMS1 Method: CV
 Start Date: 06/10/2011 End Date: 06/10/2011

FIMS1_110610A

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
ZZZZZZ	1.0	0949																											
ZZZZZZ	1.0	0950																											
ZZZZZZ	1.0	0952																											
ZZZZZZ	1.0	0953																											
ZZZZZZ	1.0	0955																											
ZZZZZZ	1.0	0956																											
ZZZZZZ	1.0	0958																											
ZZZZZZ	1.0	0959																											
ZZZZZZ	1.0	1001																											
ZZZZZZ	1.0	1002																											
CCV	1.0	1004																X											
CCB	1.0	1005																X											
ZZZZZZ	1.0	1007																											
ZZZZZZ	1.0	1008																											
ZZZZZZ	1.0	1010																											
ZZZZZZ	1.0	1011																											
ZZZZZZ	1.0	1013																											
ZZZZZZ	1.0	1014																											
ZZZZZZ	1.0	1016																											
ZZZZZZ	1.0	1017																											
ZZZZZZ	1.0	1019																											
ZZZZZZ	1.0	1021																											
CCV	1.0	1022																X											
CCB	1.0	1024																X											
ZZZZZZ	1.0	1025																											
ZZZZZZ	1.0	1027																											
ZZZZZZ	1.0	1028																											
ZZZZZZ	1.0	1030																											
ZZZZZZ	1.0	1031																											
ZZZZZZ	1.0	1032																											
ZZZZZZ	1.0	1034																											
ZZZZZZ	1.0	1035																											

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0943
 Instrument ID Number: FIMS1 Method: CV
 Start Date: 06/10/2011 End Date: 06/10/2011

FIMS1_110610A

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
PBW	1.0	1037															X														
LCSW	1.0	1038															X														
CCV	1.0	1040															X														
CCB	1.0	1042															X														
ZZZZZZ	1.0	1043																													
ZZZZZZ	1.0	1045																													
ZZZZZZ	1.0	1046																													
ZZZZZZ	1.0	1047																													
ZZZZZZ	1.0	1049																													
ZZZZZZ	1.0	1050																													
FB-U	1.0	1052															X														
FB-F	1.0	1053															X														
LMW-10U	1.0	1055															X														
LMW-10F	1.0	1056															X														
CCV	1.0	1058															X														
CCB	1.0	1059															X														
LMW-20U	1.0	1101															X														
LMW-20F	1.0	1103															X														
LMW-21U	1.0	1104															X														
LMW-21F	1.0	1105															X														
LMW-16U	1.0	1107															X														
LMW-16F	1.0	1108															X														
LMW-02U	1.0	1110															X														
LMW-02F	1.0	1111															X														
LMW-04U	1.0	1113															X														
LMW-04F	1.0	1114															X														
CCV	1.0	1116															X														
CCB	1.0	1117															X														
LMW-03U	1.0	1119															X														
LMW-03F	1.0	1120															X														
CCV	1.0	1122															X														
CCB	1.0	1123															X														

U.S. EPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
 Lab Code: MITKEM Case No.: SAS No.: SDG No.: SK0943
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 06/11/2011 End Date: 06/11/2011

OPTIMA3_110611D

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
S0	1.0	1636		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
S1	1.0	1640		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
S2	1.0	1644		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
S3	1.0	1647		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ICV	1.0	1651		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ICB	1.0	1655		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	1658																													
ZZZZZZ	1.0	1703																													
ICSA	1.0	1706		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ICSAB	1.0	1710		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
PBW	1.0	1714		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LCSW	1.0	1717		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LCSW02	1.0	1721		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCV	1.0	1725		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCB	1.0	1728		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	1732																													
FB-U	1.0	1736		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
FB-F	1.0	1739		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LMW-10U	1.0	1743		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LMW-10F	1.0	1747		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LMW-20U	1.0	1750		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LMW-20F	1.0	1754		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCV	1.0	1758		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCB	1.0	1801		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LMW-21U	1.0	1805		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LMW-21F	1.0	1808		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LMW-16U	1.0	1812		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LMW-16F	1.0	1816		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LMW-02U	1.0	1819		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LMW-02F	1.0	1823		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LMW-04U	1.0	1826		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LMW-04F	1.0	1830		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						

U.S. EPA - CLP
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ANALYSIS RUN LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
 Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SK0943
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 06/11/2011 End Date: 06/11/2011

OPTIMA3_110611D

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C O	C R	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
LMW-03U	1.0	1834		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
LMW-03F	1.0	1837		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCV	1.0	1841		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				
CCB	1.0	1844		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X				

Instrument Raw Data

☒ ICP

☒ Mercury

☐ Cyanide

=====

Reprocessing Begun

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Results Data Set (original): B11061102

Results Library (original): C:\pe\Administrator\Results\Results.mdb

Results Data Set (reprocessed): B11061102A

Results Library (reprocessed): C:\pe\Administrator\Results\Results.mdb

=====

Sequence No.: 1

Autosampler Location: 1

Sample ID: S0

Date Collected: 6/11/2011 4:36:39 PM

Analyst:

Data Type: Reprocessed on 6/12/2011 8:11:09 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S0

Analyte	Mean Corrected		RSD	Calib	
	Intensity	Std.Dev.		Conc.	Units
Y 360.073	887189.3	4826.24	0.54%	100.00	%
Lu 261.542	901275.7	5619.80	0.62%	100.0	%
Ag 328.068†	-1678.0	24.04	1.43%	[0.00]	mg/L
Al 308.215†	5465.5	41.28	0.76%	[0.00]	mg/L
As 188.979†	2.4	3.84	163.01%	[0.00]	mg/L
Ba 233.527†	-80.0	5.94	7.42%	[0.00]	mg/L
Be 313.107†	-399.6	43.47	10.88%	[0.00]	mg/L
Co 228.616†	12.0	4.21	35.11%	[0.00]	mg/L
Cr 267.716†	0.5	13.25	>999.9%	[0.00]	mg/L
Cu 324.752†	-185.5	69.77	37.60%	[0.00]	mg/L
Fe 273.955†	255.7	25.45	9.96%	[0.00]	mg/L
Mg 279.077†	-271.2	59.34	21.88%	[0.00]	mg/L
Mn 257.610†	-53.1	6.34	11.93%	[0.00]	mg/L
Ni 231.604†	-69.6	2.70	3.88%	[0.00]	mg/L
Pb 220.353†	36.0	2.29	6.36%	[0.00]	mg/L
Sb 206.836†	16.2	2.18	13.45%	[0.00]	mg/L
Se 196.026†	4.3	5.81	136.61%	[0.00]	mg/L
Tl 190.801†	-18.0	1.98	10.95%	[0.00]	mg/L
V 292.402†	-64.8	24.32	37.55%	[0.00]	mg/L
Zn 206.200†	38.3	2.80	7.31%	[0.00]	mg/L
Cd 226.502†	-42.5	4.93	11.59%	[0.00]	mg/L
Ti 334.940†	-352.5	41.29	11.71%	[0.00]	mg/L
Ca 227.546†	218.4	6.17	2.83%	[0.00]	mg/L
Na 589.592	-991.2	58.57	5.91%	[0.00]	mg/L
K 766.490	1283.4	60.30	4.70%	[0.00]	mg/L

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Sequence No.: 2

Autosampler Location: 9

Sample ID: S1

Date Collected: 6/11/2011 4:40:18 PM

Analyst:

Data Type: Reprocessed on 6/12/2011 8:11:30 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S1

Analyte	Mean Corrected		RSD	Calib	
	Intensity	Std.Dev.		Conc.	Units
Y 360.073	855278.2	1690.33	0.20%	96.403	%
Lu 261.542	891467.6	5544.27	0.62%	98.91	%
Ag 328.068†	234735.3	1128.21	0.48%	[2.5]	mg/L
Al 308.215†	371139.5	173.80	0.05%	[20]	mg/L
As 188.979†	1444.8	5.56	0.39%	[1]	mg/L
Ba 233.527†	857385.8	4896.47	0.57%	[20]	mg/L
Be 313.107†	665786.6	1199.41	0.18%	[0.5]	mg/L
Co 228.616†	122270.4	1976.50	1.62%	[5]	mg/L
Cr 267.716†	76524.5	926.78	1.21%	[2]	mg/L
Cu 324.752†	288927.9	1093.03	0.38%	[2.5]	mg/L
Fe 273.955†	211344.6	3486.20	1.65%	[10]	mg/L

Mg 279.077†	845708.1	1083.21	0.13%	[50]	mg/L
Mn 257.610†	1824203.4	4508.74	0.25%	[5]	mg/L
Ni 231.604†	96240.2	1270.86	1.32%	[5]	mg/L
Pb 220.353†	4783.5	36.14	0.76%	[1]	mg/L
Sb 206.836†	1300.6	1.66	0.13%	[1]	mg/L
Se 196.026†	1029.0	7.71	0.75%	[1]	mg/L
Tl 190.801†	1685.9	12.90	0.76%	[1]	mg/L
V 292.402†	328733.1	657.98	0.20%	[5]	mg/L
Zn 206.200†	143826.1	2481.57	1.73%	[5]	mg/L
Cd 226.502†	21114.4	376.82	1.78%	[0.5]	mg/L
Ti 334.940†	429949.4	1135.84	0.26%	[1]	mg/L
Ca 227.546†	9003.8	46.11	0.51%	[50]	mg/L
Na 589.592	170448.9	2697.50	1.58%	[50]	mg/L
K 766.490	41069.0	702.98	1.71%	[50]	mg/L

Sequence No.: 3

Sample ID: S2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 6/11/2011 4:44:03 PM

Data Type: Reprocessed on 6/12/2011 8:11:31 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	862413.3	721.03	0.08%	97.207	%
Lu 261.542	900821.2	4660.58	0.52%	99.95	%
Ag 328.068†	120578.7	1740.61	1.44%	[1.25]	mg/L
Al 308.215†	191436.3	1630.27	0.85%	[10]	mg/L
As 188.979†	725.5	5.30	0.73%	[0.5]	mg/L
Ba 233.527†	439992.0	3230.38	0.73%	[10]	mg/L
Be 313.107†	339243.3	2608.07	0.77%	[0.25]	mg/L
Co 228.616†	62923.9	513.86	0.82%	[2.5]	mg/L
Cr 267.716†	39261.7	401.81	1.02%	[1]	mg/L
Cu 324.752†	146282.1	769.58	0.53%	[1.25]	mg/L
Fe 273.955†	108470.1	818.34	0.75%	[5]	mg/L
Mg 279.077†	437316.3	3857.44	0.88%	[25]	mg/L
Mn 257.610†	937594.7	7677.09	0.82%	[2.5]	mg/L
Ni 231.604†	49969.0	520.34	1.04%	[2.5]	mg/L
Pb 220.353†	2447.3	18.37	0.75%	[0.5]	mg/L
Sb 206.836†	664.7	5.18	0.78%	[0.5]	mg/L
Se 196.026†	519.0	10.33	1.99%	[0.5]	mg/L
Tl 190.801†	861.8	4.59	0.53%	[0.5]	mg/L
V 292.402†	167617.9	1703.80	1.02%	[2.5]	mg/L
Zn 206.200†	74388.2	625.59	0.84%	[2.5]	mg/L
Cd 226.502†	10716.6	79.98	0.75%	[0.25]	mg/L
Ti 334.940†	217948.0	1638.14	0.75%	[0.5]	mg/L
Ca 227.546†	4573.4	36.23	0.79%	[25]	mg/L
Na 589.592	86128.0	655.35	0.76%	[25]	mg/L
K 766.490	20596.4	161.58	0.78%	[25]	mg/L

Sequence No.: 4

Sample ID: S3

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 6/11/2011 4:47:41 PM

Data Type: Reprocessed on 6/12/2011 8:11:32 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	893594.7	4455.99	0.50%	100.72	%
Lu 261.542	915667.7	5509.64	0.60%	101.6	%
Ag 328.068†	2488.5	21.83	0.88%	[0.025]	mg/L
Al 308.215†	3949.3	149.34	3.78%	[0.2]	mg/L
As 188.979†	18.6	4.05	21.83%	[0.01]	mg/L
Ba 233.527†	9078.3	71.54	0.79%	[0.2]	mg/L

Be 313.107†	6592.0	49.41	0.75%	[0.005]	mg/L
Co 228.616†	1274.7	13.42	1.05%	[0.05]	mg/L
Cr 267.716†	766.0	16.88	2.20%	[0.02]	mg/L
Cu 324.752†	2929.9	16.37	0.56%	[0.025]	mg/L
Fe 273.955†	2168.8	34.74	1.60%	[0.1]	mg/L
Mg 279.077†	9160.8	159.48	1.74%	[0.5]	mg/L
Mn 257.610†	19648.4	218.89	1.11%	[0.05]	mg/L
Ni 231.604†	996.5	11.48	1.15%	[0.05]	mg/L
Pb 220.353†	43.5	3.41	7.84%	[0.01]	mg/L
Sb 206.836†	25.0	2.35	9.40%	[0.01]	mg/L
Se 196.026†	10.8	2.48	22.89%	[0.01]	mg/L
Tl 190.801†	18.1	3.21	17.77%	[0.01]	mg/L
V 292.402†	3236.8	75.79	2.34%	[0.05]	mg/L
Zn 206.200†	1491.3	19.63	1.32%	[0.05]	mg/L
Cd 226.502†	218.1	5.25	2.41%	[0.005]	mg/L
Ti 334.940†	4403.6	51.81	1.18%	[0.01]	mg/L
Ca 227.546†	105.9	8.72	8.24%	[0.5]	mg/L
Na 589.592	1682.8	143.01	8.50%	[0.5]	mg/L
K 766.490	471.7	20.78	4.40%	[0.5]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	94410	0.00000	0.999941	
Al 308.215	3	Lin Thru 0	0.0	18670	0.00000	0.999921	
As 188.979	3	Lin Thru 0	0.0	1446	0.00000	0.999995	
Ba 233.527	3	Lin Thru 0	0.0	43100	0.00000	0.999945	
Be 313.107	3	Lin Thru 0	0.0	1337000	0.00000	0.999971	
Co 228.616	3	Lin Thru 0	0.0	24600	0.00000	0.999932	
Cr 267.716	3	Lin Thru 0	0.0	38460	0.00000	0.999946	
Cu 324.752	3	Lin Thru 0	0.0	115900	0.00000	0.999987	
Fe 273.955	3	Lin Thru 0	0.0	21250	0.00000	0.999945	
Mg 279.077	3	Lin Thru 0	0.0	17030	0.00000	0.999907	
Mn 257.610	3	Lin Thru 0	0.0	366900	0.00000	0.999938	
Ni 231.604	3	Lin Thru 0	0.0	19400	0.00000	0.999884	
Pb 220.353	3	Lin Thru 0	0.0	4806	0.00000	0.999957	
Sb 206.836	3	Lin Thru 0	0.0	1306	0.00000	0.999928	
Se 196.026	3	Lin Thru 0	0.0	1031	0.00000	0.999994	
Tl 190.801	3	Lin Thru 0	0.0	1693	0.00000	0.999960	
V 292.402	3	Lin Thru 0	0.0	66010	0.00000	0.999969	
Zn 206.200	3	Lin Thru 0	0.0	28960	0.00000	0.999907	
Cd 226.502	3	Lin Thru 0	0.0	42360	0.00000	0.999982	
Ti 334.940	3	Lin Thru 0	0.0	431100	0.00000	0.999985	
Ca 227.546	3	Lin Thru 0	0.0	180.6	0.00000	0.999979	
Na 589.592	3	Lin Thru 0	0.0	3416	0.00000	0.999991	
K 766.490	3	Lin Thru 0	0.0	821.9	0.00000	0.999998	

Sequence No.: 5

Sample ID: ICV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/11/2011 4:51:27 PM

Data Type: Reprocessed on 6/12/2011 8:11:33 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	846713.3	95.438 %	1.3829			1.45%
Lu 261.542	890804.0	98.84 %	1.085			1.10%
Ag 328.068†	120180.1	1.2751 mg/L	0.00722	1.2751 mg/L	0.00722	0.57%
QC value within limits for Ag 328.068 Recovery = 102.01%						
Al 308.215†	191761.2	10.238 mg/L	0.0034	10.238 mg/L	0.0034	0.03%
QC value within limits for Al 308.215 Recovery = 102.38%						
As 188.979†	708.5	0.49663 mg/L	0.004539	0.49663 mg/L	0.004539	0.91%
QC value within limits for As 188.979 Recovery = 99.33%						
Ba 233.527†	444893.3	10.326 mg/L	0.0841	10.326 mg/L	0.0841	0.81%
QC value within limits for Ba 233.527 Recovery = 103.26%						
Be 313.107†	337453.9	0.25356 mg/L	0.001057	0.25356 mg/L	0.001057	0.42%

QC value within limits for Be 313.107 Recovery = 101.42%
 Co 228.616† 64729.1 2.6303 mg/L 0.01172 2.6303 mg/L 0.01172 0.45%
 QC value within limits for Co 228.616 Recovery = 105.21%
 Cr 267.716† 39779.0 1.0344 mg/L 0.00685 1.0344 mg/L 0.00685 0.66%
 QC value within limits for Cr 267.716 Recovery = 103.44%
 Cu 324.752† 149311.2 1.2893 mg/L 0.00628 1.2893 mg/L 0.00628 0.49%
 QC value within limits for Cu 324.752 Recovery = 103.15%
 Fe 273.955† 108800.1 5.2027 mg/L 0.01986 5.2027 mg/L 0.01986 0.38%
 QC value within limits for Fe 273.955 Recovery = 104.05%
 Mg 279.077† 437837.9 25.722 mg/L 0.1091 25.722 mg/L 0.1091 0.42%
 QC value within limits for Mg 279.077 Recovery = 102.89%
 Mn 257.610† 940716.8 2.5632 mg/L 0.00828 2.5632 mg/L 0.00828 0.32%
 QC value within limits for Mn 257.610 Recovery = 102.53%
 Ni 231.604† 50205.8 2.5880 mg/L 0.01599 2.5880 mg/L 0.01599 0.62%
 QC value within limits for Ni 231.604 Recovery = 103.52%
 Pb 220.353† 2467.6 0.51406 mg/L 0.003248 0.51406 mg/L 0.003248 0.63%
 QC value within limits for Pb 220.353 Recovery = 102.81%
 Sb 206.836† 700.6 0.52243 mg/L 0.003637 0.52243 mg/L 0.003637 0.70%
 QC value within limits for Sb 206.836 Recovery = 104.49%
 Se 196.026† 521.6 0.50671 mg/L 0.003176 0.50671 mg/L 0.003176 0.63%
 QC value within limits for Se 196.026 Recovery = 101.34%
 Tl 190.801† 868.0 0.51896 mg/L 0.000828 0.51896 mg/L 0.000828 0.16%
 QC value within limits for Tl 190.801 Recovery = 103.79%
 V 292.402† 168898.9 2.5603 mg/L 0.01126 2.5603 mg/L 0.01126 0.44%
 QC value within limits for V 292.402 Recovery = 102.41%
 Zn 206.200† 74507.2 2.5753 mg/L 0.01556 2.5753 mg/L 0.01556 0.60%
 QC value within limits for Zn 206.200 Recovery = 103.01%
 Cd 226.502† 10576.0 0.24923 mg/L 0.001445 0.24923 mg/L 0.001445 0.58%
 QC value within limits for Cd 226.502 Recovery = 99.69%
 Ti 334.940† 223332.0 0.51766 mg/L 0.001298 0.51766 mg/L 0.001298 0.25%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 4692.2 26.088 mg/L 0.2678 26.088 mg/L 0.2678 1.03%
 QC value within limits for Ca 227.546 Recovery = 104.35%
 Na 589.592 86223.7 25.240 mg/L 0.1312 25.240 mg/L 0.1312 0.52%
 QC value within limits for Na 589.592 Recovery = 100.96%
 K 766.490 20485.8 24.925 mg/L 0.1452 24.925 mg/L 0.1452 0.58%
 QC value within limits for K 766.490 Recovery = 99.70%
 All analyte(s) passed QC.

Sequence No.: 6

Sample ID: ICB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 6/11/2011 4:55:05 PM

Data Type: Reprocessed on 6/12/2011 8:11:35 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	882905.0	99.517	%	1.5768			1.58%
Lu 261.542	896378.5	99.46	%	0.969			0.97%
Ag 328.068†	19.9	0.00021	mg/L	0.001070	0.00021 mg/L	0.001070	506.97%
Al 308.215†	638.1	0.03416	mg/L	0.005150	0.03416 mg/L	0.005150	15.08%
As 188.979†	4.4	0.00302	mg/L	0.000550	0.00302 mg/L	0.000550	18.18%
Ba 233.527†	41.1	0.00095	mg/L	0.000065	0.00095 mg/L	0.000065	6.80%
Be 313.107†	15.1	0.00001	mg/L	0.000012	0.00001 mg/L	0.000012	103.79%
Co 228.616†	5.6	0.00023	mg/L	0.000265	0.00023 mg/L	0.000265	117.50%
Cr 267.716†	6.0	0.00016	mg/L	0.000130	0.00016 mg/L	0.000130	82.82%
Cu 324.752†	10.9	0.00009	mg/L	0.000308	0.00009 mg/L	0.000308	326.07%
Fe 273.955†	56.2	0.00266	mg/L	0.000651	0.00266 mg/L	0.000651	24.45%
Mg 279.077†	51.6	0.00303	mg/L	0.002256	0.00303 mg/L	0.002256	74.39%
Mn 257.610†	146.6	0.00040	mg/L	0.000060	0.00040 mg/L	0.000060	15.01%
Ni 231.604†	-5.6	-0.00029	mg/L	0.000287	-0.00029 mg/L	0.000287	98.97%
Pb 220.353†	-3.4	-0.00071	mg/L	0.000955	-0.00071 mg/L	0.000955	133.70%
Sb 206.836†	7.3	0.00557	mg/L	0.002328	0.00557 mg/L	0.002328	41.79%
Se 196.026†	-1.3	-0.00131	mg/L	0.006227	-0.00131 mg/L	0.006227	474.36%
Tl 190.801†	0.5	0.00028	mg/L	0.001411	0.00028 mg/L	0.001411	508.36%
V 292.402†	37.9	0.00057	mg/L	0.000560	0.00057 mg/L	0.000560	97.46%
Zn 206.200†	41.6	0.00144	mg/L	0.000384	0.00144 mg/L	0.000384	26.68%

Cd 226.502†	4.4	0.00010 mg/L	0.000107	0.00010 mg/L	0.000107	104.22%
Ti 334.940†	89.2	0.00021 mg/L	0.000042	0.00021 mg/L	0.000042	20.16%
Ca 227.546†	35.9	0.19871 mg/L	0.021461	0.19871 mg/L	0.021461	10.80%
Na 589.592	-34.3	-0.01004 mg/L	0.039015	-0.01004 mg/L	0.039015	388.67%
K 766.490	-11.0	-0.01338 mg/L	0.031893	-0.01338 mg/L	0.031893	238.45%

Sequence No.: 7

Sample ID: LLICV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 6/11/2011 4:58:43 PM

Data Type: Reprocessed on 6/12/2011 8:11:36 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	892576.7	100.61 %	0.750			0.75%
Lu 261.542	910982.1	101.1 %	0.61			0.61%
Ag 328.068†	3291.2	0.03491 mg/L	0.000334	0.03491 mg/L	0.000334	0.96%
QC value within limits for Ag 328.068 Recovery = 116.37%						
Al 308.215†	4604.2	0.24585 mg/L	0.008177	0.24585 mg/L	0.008177	3.33%
QC value within limits for Al 308.215 Recovery = 122.93%						
As 188.979†	36.9	0.02571 mg/L	0.003367	0.02571 mg/L	0.003367	13.09%
QC value within limits for As 188.979 Recovery = 128.56%						
Ba 233.527†	10224.4	0.23731 mg/L	0.003986	0.23731 mg/L	0.003986	1.68%
QC value within limits for Ba 233.527 Recovery = 118.66%						
Be 313.107†	7481.0	0.00564 mg/L	0.000120	0.00564 mg/L	0.000120	2.13%
QC value within limits for Be 313.107 Recovery = 112.84%						
Co 228.616†	1532.8	0.06227 mg/L	0.000063	0.06227 mg/L	0.000063	0.10%
QC value within limits for Co 228.616 Recovery = 124.54%						
Cr 267.716†	859.3	0.02234 mg/L	0.000205	0.02234 mg/L	0.000205	0.92%
QC value within limits for Cr 267.716 Recovery = 111.71%						
Cu 324.752†	3889.8	0.03359 mg/L	0.000837	0.03359 mg/L	0.000837	2.49%
QC value within limits for Cu 324.752 Recovery = 111.97%						
Fe 273.955†	4950.4	0.23485 mg/L	0.005285	0.23485 mg/L	0.005285	2.25%
QC value within limits for Fe 273.955 Recovery = 117.42%						
Mg 279.077†	10835.8	0.63659 mg/L	0.015137	0.63659 mg/L	0.015137	2.38%
QC value within limits for Mg 279.077 Recovery = 127.32%						
Mn 257.610†	23224.9	0.06328 mg/L	0.001109	0.06328 mg/L	0.001109	1.75%
QC value within limits for Mn 257.610 Recovery = 126.56%						
Ni 231.604†	1190.0	0.06133 mg/L	0.000513	0.06133 mg/L	0.000513	0.84%
QC value within limits for Ni 231.604 Recovery = 122.67%						
Pb 220.353†	44.3	0.00924 mg/L	0.001173	0.00924 mg/L	0.001173	12.69%
QC value within limits for Pb 220.353 Recovery = 92.44%						
Sb 206.836†	29.9	0.02257 mg/L	0.004334	0.02257 mg/L	0.004334	19.20%
QC value within limits for Sb 206.836 Recovery = 112.84%						
Se 196.026†	32.5	0.03155 mg/L	0.003316	0.03155 mg/L	0.003316	10.51%
QC value within limits for Se 196.026 Recovery = 105.17%						
Tl 190.801†	40.1	0.02392 mg/L	0.002472	0.02392 mg/L	0.002472	10.33%
QC value within limits for Tl 190.801 Recovery = 119.61%						
V 292.402†	3822.7	0.05794 mg/L	0.001060	0.05794 mg/L	0.001060	1.83%
QC value within limits for V 292.402 Recovery = 115.89%						
Zn 206.200†	1760.8	0.06086 mg/L	0.000229	0.06086 mg/L	0.000229	0.38%
QC value within limits for Zn 206.200 Recovery = 121.71%						
Cd 226.502†	242.6	0.00571 mg/L	0.000117	0.00571 mg/L	0.000117	2.05%
QC value within limits for Cd 226.502 Recovery = 114.15%						
Ti 334.940†	9468.0	0.02196 mg/L	0.000524	0.02196 mg/L	0.000524	2.39%
QC value within limits for Ti 334.940 Recovery = 109.78%						
Ca 227.546†	194.2	1.0837 mg/L	0.05953	1.0837 mg/L	0.05953	5.49%
QC value greater than the upper limit for Ca 227.546 Recovery = 135.46%						
Na 589.592	3868.0	1.1323 mg/L	0.02057	1.1323 mg/L	0.02057	1.82%
QC value within limits for Na 589.592 Recovery = 113.23%						
K 766.490	957.7	1.1652 mg/L	0.13465	1.1652 mg/L	0.13465	11.56%
QC value within limits for K 766.490 Recovery = 116.52%						
QC Failed. Continue with analysis.						

Sequence No.: 8

Sample ID: LLICV

Autosampler Location: 2

Date Collected: 6/11/2011 5:03:10 PM

Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Data Type: Reprocessed on 6/12/2011 8:11:37 AM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: LLICV

	Mean Corrected	Calib.		Sample		
Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	867337.6	97.762 %	0.6093			0.62%
Lu 261.542	902726.3	100.2 %	0.43			0.43%
Ag 328.068†	3306.3	0.03507 mg/L	0.000225	0.03507 mg/L	0.000225	0.64%
QC value within limits for Ag	328.068	Recovery =	116.90%			
Al 308.215†	4634.9	0.24750 mg/L	0.008061	0.24750 mg/L	0.008061	3.26%
QC value within limits for Al	308.215	Recovery =	123.75%			
As 188.979†	36.8	0.02564 mg/L	0.001825	0.02564 mg/L	0.001825	7.12%
QC value within limits for As	188.979	Recovery =	128.18%			
Ba 233.527†	10339.5	0.23998 mg/L	0.002827	0.23998 mg/L	0.002827	1.18%
QC value within limits for Ba	233.527	Recovery =	119.99%			
Be 313.107†	7576.2	0.00571 mg/L	0.000063	0.00571 mg/L	0.000063	1.10%
QC value within limits for Be	313.107	Recovery =	114.27%			
Co 228.616†	1566.4	0.06363 mg/L	0.000168	0.06363 mg/L	0.000168	0.26%
QC value within limits for Co	228.616	Recovery =	127.27%			
Cr 267.716†	872.2	0.02268 mg/L	0.000193	0.02268 mg/L	0.000193	0.85%
QC value within limits for Cr	267.716	Recovery =	113.39%			
Cu 324.752†	3945.2	0.03407 mg/L	0.000037	0.03407 mg/L	0.000037	0.11%
QC value within limits for Cu	324.752	Recovery =	113.57%			
Fe 273.955†	4954.4	0.23504 mg/L	0.000341	0.23504 mg/L	0.000341	0.14%
QC value within limits for Fe	273.955	Recovery =	117.52%			
Mg 279.077†	10817.5	0.63552 mg/L	0.007138	0.63552 mg/L	0.007138	1.12%
QC value within limits for Mg	279.077	Recovery =	127.10%			
Mn 257.610†	23442.9	0.06387 mg/L	0.000707	0.06387 mg/L	0.000707	1.11%
QC value within limits for Mn	257.610	Recovery =	127.75%			
Ni 231.604†	1199.8	0.06184 mg/L	0.000769	0.06184 mg/L	0.000769	1.24%
QC value within limits for Ni	231.604	Recovery =	123.68%			
Pb 220.353†	54.0	0.01126 mg/L	0.000753	0.01126 mg/L	0.000753	6.69%
QC value within limits for Pb	220.353	Recovery =	112.55%			
Sb 206.836†	27.9	0.02104 mg/L	0.003548	0.02104 mg/L	0.003548	16.87%
QC value within limits for Sb	206.836	Recovery =	105.18%			
Se 196.026†	37.3	0.03622 mg/L	0.004908	0.03622 mg/L	0.004908	13.55%
QC value within limits for Se	196.026	Recovery =	120.73%			
Tl 190.801†	35.8	0.02140 mg/L	0.000559	0.02140 mg/L	0.000559	2.61%
QC value within limits for Tl	190.801	Recovery =	106.99%			
V 292.402†	3828.4	0.05803 mg/L	0.000179	0.05803 mg/L	0.000179	0.31%
QC value within limits for V	292.402	Recovery =	116.06%			
Zn 206.200†	1793.2	0.06197 mg/L	0.000573	0.06197 mg/L	0.000573	0.92%
QC value within limits for Zn	206.200	Recovery =	123.95%			
Cd 226.502†	245.6	0.00578 mg/L	0.000121	0.00578 mg/L	0.000121	2.10%
QC value within limits for Cd	226.502	Recovery =	115.56%			
Ti 334.940†	9618.8	0.02231 mg/L	0.000178	0.02231 mg/L	0.000178	0.80%
QC value within limits for Ti	334.940	Recovery =	111.53%			
Ca 227.546†	186.2	1.0394 mg/L	0.03275	1.0394 mg/L	0.03275	3.15%
QC value within limits for Ca	227.546	Recovery =	129.92%			
Na 589.592	4019.1	1.1765 mg/L	0.02589	1.1765 mg/L	0.02589	2.20%
QC value within limits for Na	589.592	Recovery =	117.65%			
K 766.490	889.4	1.0822 mg/L	0.01572	1.0822 mg/L	0.01572	1.45%
QC value within limits for K	766.490	Recovery =	108.22%			
All analyte(s) passed QC.						

Sequence No.: 9
 Sample ID: IC5A
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 6/11/2011 5:06:45 PM
 Data Type: Reprocessed on 6/12/2011 8:11:38 AM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: IC5A

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD

Y 360.073	799919.0	90.163 %	1.7929			1.99%
Lu 261.542	835447.6	92.70 %	1.864			2.01%
Ag 328.068†	-61.1	-0.00066 mg/L	0.000388	-0.00066 mg/L	0.000388	59.09%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 308.215†	9250368.7	495.35 mg/L	9.936	495.35 mg/L	9.936	2.01%
QC value within limits for Al 308.215 Recovery = 99.07%						
As 188.979†	-25.4	-0.01443 mg/L	0.006305	-0.01443 mg/L	0.006305	43.71%
QC value within limits for As 188.979 Recovery = Not calculated						
Ba 233.527†	239.6	0.00555 mg/L	0.000267	0.00555 mg/L	0.000267	4.82%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-26.8	-0.00004 mg/L	0.000007	-0.00004 mg/L	0.000007	17.70%
QC value within limits for Be 313.107 Recovery = Not calculated						
Co 228.616†	94.4	-0.00280 mg/L	0.000365	-0.00280 mg/L	0.000365	13.02%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	123.1	0.00099 mg/L	0.000212	0.00099 mg/L	0.000212	21.53%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-2068.3	-0.01029 mg/L	0.000186	-0.01029 mg/L	0.000186	1.80%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 273.955†	4122907.3	194.05 mg/L	3.804	194.05 mg/L	3.804	1.96%
QC value within limits for Fe 273.955 Recovery = 97.03%						
Mg 279.077†	8515261.1	500.02 mg/L	9.620	500.02 mg/L	9.620	1.92%
QC value within limits for Mg 279.077 Recovery = 100.00%						
Mn 257.610†	230.0	-0.01574 mg/L	0.000305	-0.01574 mg/L	0.000305	1.94%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Ni 231.604†	-7.0	-0.00315 mg/L	0.000237	-0.00315 mg/L	0.000237	7.51%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-122.0	-0.00408 mg/L	0.000891	-0.00408 mg/L	0.000891	21.83%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	27.0	-0.01363 mg/L	0.001955	-0.01363 mg/L	0.001955	14.34%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-67.8	0.00410 mg/L	0.008677	0.00410 mg/L	0.008677	211.74%
QC value within limits for Se 196.026 Recovery = Not calculated						
Tl 190.801†	-44.3	-0.01277 mg/L	0.002841	-0.01277 mg/L	0.002841	22.26%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 292.402†	-803.2	0.00039 mg/L	0.000221	0.00039 mg/L	0.000221	56.40%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.200†	249.5	0.00862 mg/L	0.000503	0.00862 mg/L	0.000503	5.83%
QC value within limits for Zn 206.200 Recovery = Not calculated						
Cd 226.502†	301.6	-0.00840 mg/L	0.000252	-0.00840 mg/L	0.000252	3.00%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Ti 334.940†	-4064.7	-0.01045 mg/L	0.000186	-0.01045 mg/L	0.000186	1.78%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	95671.9	540.11 mg/L	1.817	540.11 mg/L	1.817	0.34%
QC value within limits for Ca 227.546 Recovery = 108.02%						
Na 589.592	498.2	0.14582 mg/L	0.005662	0.14582 mg/L	0.005662	3.88%
QC value within limits for Na 589.592 Recovery = Not calculated						
K 766.490	401.2	0.48811 mg/L	0.072235	0.48811 mg/L	0.072235	14.80%
QC value within limits for K 766.490 Recovery = Not calculated						
All analyte(s) passed QC.						

Sequence No.: 10

Sample ID: ICSAB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 6/11/2011 5:10:33 PM

Data Type: Reprocessed on 6/12/2011 8:11:39 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	792267.8	89.301 %	0.5776			0.65%
Lu 261.542	828308.3	91.90 %	0.708			0.77%
Ag 328.068†	21181.3	0.22478 mg/L	0.001901	0.22478 mg/L	0.001901	0.85%
QC value within limits for Ag 328.068 Recovery = 112.39%						
Al 308.215†	9041210.6	484.14 mg/L	4.576	484.14 mg/L	4.576	0.95%
QC value within limits for Al 308.215 Recovery = 96.83%						
As 188.979†	132.5	0.09761 mg/L	0.003294	0.09761 mg/L	0.003294	3.37%
QC value within limits for As 188.979 Recovery = 97.61%						
Ba 233.527†	23657.1	0.54949 mg/L	0.003412	0.54949 mg/L	0.003412	0.62%

QC value within limits for Ba 233.527 Recovery = 109.90%
 Be 313.107† 704394.2 0.52698 mg/L 0.001042 0.52698 mg/L 0.001042 0.20%
 QC value within limits for Be 313.107 Recovery = 105.40%
 Co 228.616† 12588.0 0.50508 mg/L 0.006360 0.50508 mg/L 0.006360 1.26%
 QC value within limits for Co 228.616 Recovery = 101.02%
 Cr 267.716† 20277.4 0.52511 mg/L 0.002828 0.52511 mg/L 0.002828 0.54%
 QC value within limits for Cr 267.716 Recovery = 105.02%
 Cu 324.752† 61918.3 0.54194 mg/L 0.003284 0.54194 mg/L 0.003284 0.61%
 QC value within limits for Cu 324.752 Recovery = 108.39%
 Fe 273.955† 4035419.0 189.95 mg/L 1.974 189.95 mg/L 1.974 1.04%
 QC value within limits for Fe 273.955 Recovery = 94.98%
 Mg 279.077† 8285660.7 486.54 mg/L 5.162 486.54 mg/L 5.162 1.06%
 QC value within limits for Mg 279.077 Recovery = 97.31%
 Mn 257.610† 194880.6 0.51521 mg/L 0.002543 0.51521 mg/L 0.002543 0.49%
 QC value within limits for Mn 257.610 Recovery = 103.04%
 Ni 231.604† 19416.7 0.99832 mg/L 0.012752 0.99832 mg/L 0.012752 1.28%
 QC value within limits for Ni 231.604 Recovery = 99.83%
 Pb 220.353† 2363.1 0.51242 mg/L 0.005456 0.51242 mg/L 0.005456 1.06%
 QC value within limits for Pb 220.353 Recovery = 102.48%
 Sb 206.836† 889.8 0.63935 mg/L 0.011879 0.63935 mg/L 0.011879 1.86%
 QC value within limits for Sb 206.836 Recovery = 106.56%
 Se 196.026† 457.7 0.51246 mg/L 0.016666 0.51246 mg/L 0.016666 3.25%
 QC value within limits for Se 196.026 Recovery = 102.49%
 Tl 190.801† 127.6 0.08877 mg/L 0.004055 0.08877 mg/L 0.004055 4.57%
 QC value within limits for Tl 190.801 Recovery = 88.77%
 V 292.402† 34149.0 0.53041 mg/L 0.002282 0.53041 mg/L 0.002282 0.43%
 QC value within limits for V 292.402 Recovery = 106.08%
 Zn 206.200† 29426.9 1.0175 mg/L 0.00351 1.0175 mg/L 0.00351 0.34%
 QC value within limits for Zn 206.200 Recovery = 101.75%
 Cd 226.502† 42741.6 0.99390 mg/L 0.000642 0.99390 mg/L 0.000642 0.06%
 QC value within limits for Cd 226.502 Recovery = 99.39%
 Ti 334.940† -3894.1 -0.01016 mg/L 0.000169 -0.01016 mg/L 0.000169 1.66%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 92470.5 522.12 mg/L 2.741 522.12 mg/L 2.741 0.52%
 QC value within limits for Ca 227.546 Recovery = 104.42%
 Na 589.592 95298.2 27.896 mg/L 0.3994 27.896 mg/L 0.3994 1.43%
 QC value within limits for Na 589.592 Recovery = 111.58%
 K 766.490 24534.5 29.852 mg/L 0.3386 29.852 mg/L 0.3386 1.13%
 QC value within limits for K 766.490 Recovery = 119.41%
 All analyte(s) passed QC.

Sequence No.: 11

Sample ID: MB-59733~PBW

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 136

Date Collected: 6/11/2011 5:14:21 PM

Data Type: Reprocessed on 6/12/2011 8:11:39 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: MB-59733~PBW

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	892303.1	100.58 %	1.765			1.76%
Lu 261.542	923580.9	102.5 %	1.23			1.20%
Ag 328.068†	63.0	0.00067 mg/L	0.000525	0.00067 mg/L	0.000525	78.62%
Al 308.215†	879.1	0.04707 mg/L	0.024561	0.04707 mg/L	0.024561	52.18%
As 188.979†	1.3	0.00093 mg/L	0.003889	0.00093 mg/L	0.003889	419.04%
Ba 233.527†	14.0	0.00032 mg/L	0.000154	0.00032 mg/L	0.000154	47.45%
Be 313.107†	54.1	0.00004 mg/L	0.000021	0.00004 mg/L	0.000021	52.06%
Co 228.616†	-3.1	-0.00013 mg/L	0.000106	-0.00013 mg/L	0.000106	83.24%
Cr 267.716†	2.7	0.00007 mg/L	0.000136	0.00007 mg/L	0.000136	191.31%
Cu 324.752†	41.6	0.00036 mg/L	0.000655	0.00036 mg/L	0.000655	182.02%
Fe 273.955†	609.4	0.02868 mg/L	0.008999	0.02868 mg/L	0.008999	31.37%
Mg 279.077†	840.9	0.04938 mg/L	0.022600	0.04938 mg/L	0.022600	45.77%
Mn 257.610†	27.3	0.00007 mg/L	0.000005	0.00007 mg/L	0.000005	6.89%
Ni 231.604†	2.8	0.00015 mg/L	0.000215	0.00015 mg/L	0.000215	147.98%
Pb 220.353†	1.2	0.00026 mg/L	0.001470	0.00026 mg/L	0.001470	566.61%
Sb 206.836†	5.4	0.00416 mg/L	0.001690	0.00416 mg/L	0.001690	40.62%
Se 196.026†	0.5	0.00050 mg/L	0.001797	0.00050 mg/L	0.001797	361.74%
Tl 190.801†	1.2	0.00073 mg/L	0.001455	0.00073 mg/L	0.001455	199.17%

V 292.402†	3.3	0.00005 mg/L	0.000626	0.00005 mg/L	0.000626	>999.9%
Zn 206.200†	13.0	0.00045 mg/L	0.000088	0.00045 mg/L	0.000088	19.70%
Cd 226.502†	2.3	0.00005 mg/L	0.000052	0.00005 mg/L	0.000052	101.26%
Ti 334.940†	17.7	0.00004 mg/L	0.000057	0.00004 mg/L	0.000057	134.24%
Ca 227.546†	35.9	0.20042 mg/L	0.131682	0.20042 mg/L	0.131682	65.70%
Na 589.592	-68.8	-0.02014 mg/L	0.029394	-0.02014 mg/L	0.029394	145.92%
K 766.490	-106.2	-0.12927 mg/L	0.115757	-0.12927 mg/L	0.115757	89.55%

Sequence No.: 12

Sample ID: LCS-59733~LCS

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 137

Date Collected: 6/11/2011 5:17:58 PM

Data Type: Reprocessed on 6/12/2011 8:11:40 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCS-59733~LCS

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	863067.0	97.281	%	0.4526			0.47%
Lu 261.542	904100.1	100.3	%	0.39			0.39%
Ag 328.068†	109327.1	1.1599	mg/L	0.00118	1.1599 mg/L	0.00118	0.10%
Al 308.215†	173722.3	9.2751	mg/L	0.01137	9.2751 mg/L	0.01137	0.12%
As 188.979†	690.0	0.48273	mg/L	0.008511	0.48273 mg/L	0.008511	1.76%
Ba 233.527†	398482.7	9.2490	mg/L	0.02554	9.2490 mg/L	0.02554	0.28%
Be 313.107†	307770.4	0.23033	mg/L	0.000398	0.23033 mg/L	0.000398	0.17%
Co 228.616†	56745.0	2.3064	mg/L	0.00224	2.3064 mg/L	0.00224	0.10%
Cr 267.716†	35255.7	0.91677	mg/L	0.002202	0.91677 mg/L	0.002202	0.24%
Cu 324.752†	132537.8	1.1445	mg/L	0.00256	1.1445 mg/L	0.00256	0.22%
Fe 273.955†	98338.1	4.7016	mg/L	0.00393	4.7016 mg/L	0.00393	0.08%
Mg 279.077†	396275.0	23.280	mg/L	0.0082	23.280 mg/L	0.0082	0.04%
Mn 257.610†	840513.8	2.2901	mg/L	0.00581	2.2901 mg/L	0.00581	0.25%
Ni 231.604†	45164.3	2.3283	mg/L	0.00746	2.3283 mg/L	0.00746	0.32%
Pb 220.353†	2334.2	0.48598	mg/L	0.003461	0.48598 mg/L	0.003461	0.71%
Sb 206.836†	632.7	0.47245	mg/L	0.007191	0.47245 mg/L	0.007191	1.52%
Se 196.026†	492.4	0.47838	mg/L	0.005218	0.47838 mg/L	0.005218	1.09%
Tl 190.801†	812.7	0.48226	mg/L	0.003443	0.48226 mg/L	0.003443	0.71%
V 292.402†	151039.1	2.2899	mg/L	0.00261	2.2899 mg/L	0.00261	0.11%
Zn 206.200†	66388.1	2.2947	mg/L	0.00525	2.2947 mg/L	0.00525	0.23%
Cd 226.502†	10012.2	0.23601	mg/L	0.000426	0.23601 mg/L	0.000426	0.18%
Ti 334.940†	330.3	0.00046	mg/L	0.000154	0.00046 mg/L	0.000154	33.89%
Ca 227.546†	4228.8	23.515	mg/L	0.0906	23.515 mg/L	0.0906	0.39%
Na 589.592	78879.2	23.090	mg/L	0.2519	23.090 mg/L	0.2519	1.09%
K 766.490	18626.5	22.663	mg/L	0.2324	22.663 mg/L	0.2324	1.03%

Sequence No.: 13

Sample ID: LCSD-59733~LCSD

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 138

Date Collected: 6/11/2011 5:21:36 PM

Data Type: Reprocessed on 6/12/2011 8:11:41 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCSD-59733~LCSD

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	859062.3	96.830	%	1.2740			1.32%
Lu 261.542	904386.5	100.3	%	1.09			1.09%
Ag 328.068†	111380.2	1.1817	mg/L	0.00287	1.1817 mg/L	0.00287	0.24%
Al 308.215†	177346.7	9.4686	mg/L	0.04064	9.4686 mg/L	0.04064	0.43%
As 188.979†	696.3	0.48719	mg/L	0.004882	0.48719 mg/L	0.004882	1.00%
Ba 233.527†	409398.5	9.5023	mg/L	0.05113	9.5023 mg/L	0.05113	0.54%
Be 313.107†	314828.6	0.23562	mg/L	0.000624	0.23562 mg/L	0.000624	0.26%
Co 228.616†	58018.7	2.3581	mg/L	0.00754	2.3581 mg/L	0.00754	0.32%
Cr 267.716†	35919.2	0.93403	mg/L	0.003208	0.93403 mg/L	0.003208	0.34%
Cu 324.752†	136204.9	1.1761	mg/L	0.00187	1.1761 mg/L	0.00187	0.16%
Fe 273.955†	100538.3	4.8066	mg/L	0.02239	4.8066 mg/L	0.02239	0.47%
Mg 279.077†	404379.8	23.757	mg/L	0.1109	23.757 mg/L	0.1109	0.47%
Mn 257.610†	860336.3	2.3441	mg/L	0.00641	2.3441 mg/L	0.00641	0.27%

Ni 231.604†	45984.7	2.3706 mg/L	0.00618	2.3706 mg/L	0.00618	0.26%
Pb 220.353†	2341.0	0.48740 mg/L	0.003169	0.48740 mg/L	0.003169	0.65%
Sb 206.836†	645.5	0.48197 mg/L	0.003198	0.48197 mg/L	0.003198	0.66%
Se 196.026†	488.6	0.47475 mg/L	0.007729	0.47475 mg/L	0.007729	1.63%
Tl 190.801†	811.4	0.48154 mg/L	0.007679	0.48154 mg/L	0.007679	1.59%
V 292.402†	154125.6	2.3367 mg/L	0.00366	2.3367 mg/L	0.00366	0.16%
Zn 206.200†	67920.8	2.3476 mg/L	0.00894	2.3476 mg/L	0.00894	0.38%
Cd 226.502†	10070.2	0.23737 mg/L	0.000614	0.23737 mg/L	0.000614	0.26%
Ti 334.940†	327.3	0.00044 mg/L	0.000159	0.00044 mg/L	0.000159	35.88%
Ca 227.546†	4306.2	23.946 mg/L	0.2365	23.946 mg/L	0.2365	0.99%
Na 589.592	80820.3	23.658 mg/L	0.0429	23.658 mg/L	0.0429	0.18%
K 766.490	19141.1	23.289 mg/L	0.0683	23.289 mg/L	0.0683	0.29%

Sequence No.: 14

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/11/2011 5:25:15 PM

Data Type: Reprocessed on 6/12/2011 8:11:42 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	857437.7	96.647 %	0.2203			0.23%
Lu 261.542	902589.0	100.1 %	0.34			0.34%
Ag 328.068†	118942.4	1.2620 mg/L	0.00768	1.2620 mg/L	0.00768	0.61%
QC value within limits for Ag	328.068	Recovery = 100.96%				
Al 308.215†	189814.1	10.134 mg/L	0.0451	10.134 mg/L	0.0451	0.45%
QC value within limits for Al	308.215	Recovery = 101.34%				
As 188.979†	702.1	0.49214 mg/L	0.000813	0.49214 mg/L	0.000813	0.17%
QC value within limits for As	188.979	Recovery = 98.43%				
Ba 233.527†	442572.4	10.272 mg/L	0.1137	10.272 mg/L	0.1137	1.11%
QC value within limits for Ba	233.527	Recovery = 102.72%				
Be 313.107†	334959.1	0.25168 mg/L	0.001711	0.25168 mg/L	0.001711	0.68%
QC value within limits for Be	313.107	Recovery = 100.67%				
Co 228.616†	64100.9	2.6047 mg/L	0.01537	2.6047 mg/L	0.01537	0.59%
QC value within limits for Co	228.616	Recovery = 104.19%				
Cr 267.716†	39310.5	1.0222 mg/L	0.00503	1.0222 mg/L	0.00503	0.49%
QC value within limits for Cr	267.716	Recovery = 102.22%				
Cu 324.752†	148218.8	1.2799 mg/L	0.01445	1.2799 mg/L	0.01445	1.13%
QC value within limits for Cu	324.752	Recovery = 102.39%				
Fe 273.955†	107669.5	5.1486 mg/L	0.02948	5.1486 mg/L	0.02948	0.57%
QC value within limits for Fe	273.955	Recovery = 102.97%				
Mg 279.077†	434243.3	25.511 mg/L	0.1208	25.511 mg/L	0.1208	0.47%
QC value within limits for Mg	279.077	Recovery = 102.04%				
Mn 257.610†	933121.1	2.5425 mg/L	0.01823	2.5425 mg/L	0.01823	0.72%
QC value within limits for Mn	257.610	Recovery = 101.70%				
Ni 231.604†	49723.1	2.5631 mg/L	0.01275	2.5631 mg/L	0.01275	0.50%
QC value within limits for Ni	231.604	Recovery = 102.52%				
Pb 220.353†	2434.5	0.50715 mg/L	0.004883	0.50715 mg/L	0.004883	0.96%
QC value within limits for Pb	220.353	Recovery = 101.43%				
Sb 206.836†	678.2	0.50542 mg/L	0.004593	0.50542 mg/L	0.004593	0.91%
QC value within limits for Sb	206.836	Recovery = 101.08%				
Se 196.026†	517.4	0.50260 mg/L	0.004582	0.50260 mg/L	0.004582	0.91%
QC value within limits for Se	196.026	Recovery = 100.52%				
Tl 190.801†	858.0	0.51294 mg/L	0.004863	0.51294 mg/L	0.004863	0.95%
QC value within limits for Tl	190.801	Recovery = 102.59%				
V 292.402†	167131.0	2.5335 mg/L	0.01430	2.5335 mg/L	0.01430	0.56%
QC value within limits for V	292.402	Recovery = 101.34%				
Zn 206.200†	74078.8	2.5605 mg/L	0.01955	2.5605 mg/L	0.01955	0.76%
QC value within limits for Zn	206.200	Recovery = 102.42%				
Cd 226.502†	10539.6	0.24837 mg/L	0.001612	0.24837 mg/L	0.001612	0.65%
QC value within limits for Cd	226.502	Recovery = 99.35%				
Ti 334.940†	220130.3	0.51024 mg/L	0.002806	0.51024 mg/L	0.002806	0.55%
QC value within limits for Ti	334.940	Recovery = Not calculated				
Ca 227.546†	4625.4	25.717 mg/L	0.1473	25.717 mg/L	0.1473	0.57%
QC value within limits for Ca	227.546	Recovery = 102.87%				
Na 589.592	87002.5	25.468 mg/L	0.2817	25.468 mg/L	0.2817	1.11%
QC value within limits for Na	589.592	Recovery = 101.87%				

K 766.490 20763.9 25.264 mg/L 0.1794 25.264 mg/L 0.1794 0.71%
 QC value within limits for K 766.490 Recovery = 101.05%
 All analyte(s) passed QC.

Sequence No.: 15

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 6/11/2011 5:28:53 PM

Data Type: Reprocessed on 6/12/2011 8:11:43 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	875386.3	98.670	%	0.6329			0.64%
Lu 261.542	902893.1	100.2	%	0.08			0.08%
Ag 328.068†	51.7	0.00055	mg/L	0.000375	0.00055 mg/L	0.000375	68.38%
Al 308.215†	559.1	0.02993	mg/L	0.002124	0.02993 mg/L	0.002124	7.10%
As 188.979†	4.7	0.00326	mg/L	0.000266	0.00326 mg/L	0.000266	8.17%
Ba 233.527†	64.2	0.00149	mg/L	0.000187	0.00149 mg/L	0.000187	12.52%
Be 313.107†	70.2	0.00005	mg/L	0.000027	0.00005 mg/L	0.000027	51.14%
Co 228.616†	8.2	0.00033	mg/L	0.000226	0.00033 mg/L	0.000226	68.14%
Cr 267.716†	2.2	0.00006	mg/L	0.000098	0.00006 mg/L	0.000098	167.88%
Cu 324.752†	-6.2	-0.00005	mg/L	0.000598	-0.00005 mg/L	0.000598	>999.9%
Fe 273.955†	86.9	0.00411	mg/L	0.000612	0.00411 mg/L	0.000612	14.89%
Mg 279.077†	105.3	0.00618	mg/L	0.005664	0.00618 mg/L	0.005664	91.60%
Mn 257.610†	156.0	0.00042	mg/L	0.000053	0.00042 mg/L	0.000053	12.55%
Ni 231.604†	6.2	0.00032	mg/L	0.000280	0.00032 mg/L	0.000280	87.89%
Pb 220.353†	-5.4	-0.00112	mg/L	0.000582	-0.00112 mg/L	0.000582	52.20%
Sb 206.836†	6.5	0.00498	mg/L	0.001137	0.00498 mg/L	0.001137	22.82%
Se 196.026†	-0.0	-0.00005	mg/L	0.000699	-0.00005 mg/L	0.000699	>999.9%
Tl 190.801†	3.3	0.00195	mg/L	0.002004	0.00195 mg/L	0.002004	102.86%
V 292.402†	43.4	0.00066	mg/L	0.000279	0.00066 mg/L	0.000279	42.43%
Zn 206.200†	49.4	0.00171	mg/L	0.000254	0.00171 mg/L	0.000254	14.91%
Cd 226.502†	3.7	0.00009	mg/L	0.000128	0.00009 mg/L	0.000128	148.93%
Ti 334.940†	43.1	0.00010	mg/L	0.000262	0.00010 mg/L	0.000262	256.96%
Ca 227.546†	35.3	0.19563	mg/L	0.031845	0.19563 mg/L	0.031845	16.28%
Na 589.592	-56.0	-0.01638	mg/L	0.015117	-0.01638 mg/L	0.015117	92.28%
K 766.490	-100.6	-0.12245	mg/L	0.100673	-0.12245 mg/L	0.100673	82.22%

Sequence No.: 16

Sample ID: K0980-04C~COLUMBIA WELL

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 130

Date Collected: 6/11/2011 5:32:28 PM

Data Type: Reprocessed on 6/12/2011 8:11:43 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0980-04C~COLUMBIA WELL

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	786182.9	88.615	%	1.0477			1.18%
Lu 261.542	817251.7	90.68	%	0.621			0.68%
Ag 328.068†	1734.2	0.01836	mg/L	0.000905	0.01836 mg/L	0.000905	4.93%
Al 308.215†	3401.0	0.18220	mg/L	0.002857	0.18220 mg/L	0.002857	1.57%
As 188.979†	9.6	0.01050	mg/L	0.002035	0.01050 mg/L	0.002035	19.38%
Ba 233.527†	3709.0	0.08606	mg/L	0.000768	0.08606 mg/L	0.000768	0.89%
Be 313.107†	92.6	0.00006	mg/L	0.000015	0.00006 mg/L	0.000015	24.49%
Co 228.616†	10193.7	0.41345	mg/L	0.001851	0.41345 mg/L	0.001851	0.45%
Cr 267.716†	1981.8	0.05069	mg/L	0.000838	0.05069 mg/L	0.000838	1.65%
Cu 324.752†	-305.7	-0.00187	mg/L	0.000558	-0.00187 mg/L	0.000558	29.81%
Fe 273.955†	603915.7	28.424	mg/L	0.0305	28.424 mg/L	0.0305	0.11%
Mg 279.077†	3218804.3	189.01	mg/L	0.348	189.01 mg/L	0.348	0.18%
Mn 257.610†	Saturated2						
Ni 231.604†	948.6	0.04817	mg/L	0.000251	0.04817 mg/L	0.000251	0.52%
Pb 220.353†	49.0	0.01128	mg/L	0.000721	0.01128 mg/L	0.000721	6.39%
Sb 206.836†	16.4	0.00892	mg/L	0.004702	0.00892 mg/L	0.004702	52.71%
Se 196.026†	55.5	0.06033	mg/L	0.010221	0.06033 mg/L	0.010221	16.94%

Tl 190.801†	-79.9	-0.04326 mg/L	0.002156	-0.04326 mg/L	0.002156	4.98%
V 292.402†	-435.3	-0.00467 mg/L	0.000054	-0.00467 mg/L	0.000054	1.16%
Zn 206.200†	1024.2	0.03550 mg/L	0.000177	0.03550 mg/L	0.000177	0.50%
Cd 226.502†	158.1	0.00146 mg/L	0.000062	0.00146 mg/L	0.000062	4.25%
Ti 334.940†	-1750.4	-0.00424 mg/L	0.000166	-0.00424 mg/L	0.000166	3.91%
Ca 227.546†	39130.0	218.10 mg/L	1.157	218.10 mg/L	1.157	0.53%
Na 589.592	4064097.6	1189.7 mg/L	6.66	1189.7 mg/L	6.66	0.56%
Concentration greater than upper limit for Na 589.592.						
K 766.490	76818.5	93.466 mg/L	0.3526	93.466 mg/L	0.3526	0.38%

Sequence No.: 17

Sample ID: K0943-01A~FB-U

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 139

Date Collected: 6/11/2011 5:36:16 PM

Data Type: Reprocessed on 6/12/2011 8:11:44 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0943-01A~FB-U

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	886050.6	99.872 %	1.7320			1.73%
Lu 261.542	913510.4	101.4 %	0.98			0.97%
Ag 328.068†	17.5	0.00019 mg/L	0.000336	0.00019 mg/L	0.000336	180.68%
Al 308.215†	-18.7	-0.00100 mg/L	0.006808	-0.00100 mg/L	0.006808	677.50%
As 188.979†	1.9	0.00131 mg/L	0.002856	0.00131 mg/L	0.002856	218.43%
Ba 233.527†	17.9	0.00042 mg/L	0.000180	0.00042 mg/L	0.000180	43.33%
Be 313.107†	-28.4	-0.00002 mg/L	0.000015	-0.00002 mg/L	0.000015	69.61%
Co 228.616†	-2.2	-0.00009 mg/L	0.000261	-0.00009 mg/L	0.000261	289.69%
Cr 267.716†	4.1	0.00010 mg/L	0.000434	0.00010 mg/L	0.000434	416.35%
Cu 324.752†	139.5	0.00120 mg/L	0.000297	0.00120 mg/L	0.000297	24.68%
Fe 273.955†	208.6	0.00983 mg/L	0.002610	0.00983 mg/L	0.002610	26.54%
Mg 279.077†	433.6	0.02552 mg/L	0.013449	0.02552 mg/L	0.013449	52.69%
Mn 257.610†	4851.8	0.01322 mg/L	0.004317	0.01322 mg/L	0.004317	32.65%
Ni 231.604†	31.0	0.00160 mg/L	0.000948	0.00160 mg/L	0.000948	59.24%
Pb 220.353†	-5.9	-0.00123 mg/L	0.000673	-0.00123 mg/L	0.000673	54.93%
Sb 206.836†	1.5	0.00112 mg/L	0.000803	0.00112 mg/L	0.000803	71.59%
Se 196.026†	-6.1	-0.00594 mg/L	0.003583	-0.00594 mg/L	0.003583	60.28%
Tl 190.801†	-4.3	-0.00257 mg/L	0.002711	-0.00257 mg/L	0.002711	105.69%
V 292.402†	29.2	0.00044 mg/L	0.000335	0.00044 mg/L	0.000335	75.47%
Zn 206.200†	502.3	0.01734 mg/L	0.001432	0.01734 mg/L	0.001432	8.26%
Cd 226.502†	-5.2	-0.00012 mg/L	0.000168	-0.00012 mg/L	0.000168	134.93%
Ti 334.940†	54.4	0.00013 mg/L	0.000202	0.00013 mg/L	0.000202	157.34%
Ca 227.546†	27.4	0.15206 mg/L	0.028969	0.15206 mg/L	0.028969	19.05%
Na 589.592	3213.4	0.94064 mg/L	0.036561	0.94064 mg/L	0.036561	3.89%
K 766.490	317.7	0.38654 mg/L	0.061630	0.38654 mg/L	0.061630	15.94%

Sequence No.: 18

Sample ID: K0943-02A~FB-F

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 140

Date Collected: 6/11/2011 5:39:55 PM

Data Type: Reprocessed on 6/12/2011 8:11:45 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0943-02A~FB-F

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	887062.7	99.986 %	1.0723			1.07%
Lu 261.542	914812.9	101.5 %	0.20			0.20%
Ag 328.068†	-28.0	-0.00030 mg/L	0.000272	-0.00030 mg/L	0.000272	91.83%
Al 308.215†	-39.6	-0.00213 mg/L	0.003983	-0.00213 mg/L	0.003983	187.41%
As 188.979†	0.3	0.00022 mg/L	0.001598	0.00022 mg/L	0.001598	724.49%
Ba 233.527†	13.5	0.00031 mg/L	0.000070	0.00031 mg/L	0.000070	22.29%
Be 313.107†	-20.6	-0.00002 mg/L	0.000018	-0.00002 mg/L	0.000018	118.72%
Co 228.616†	-0.2	-0.00001 mg/L	0.000116	-0.00001 mg/L	0.000116	>999.9%
Cr 267.716†	5.7	0.00015 mg/L	0.000078	0.00015 mg/L	0.000078	52.53%
Cu 324.752†	18.7	0.00016 mg/L	0.000208	0.00016 mg/L	0.000208	128.20%
Fe 273.955†	46.1	0.00218 mg/L	0.000508	0.00218 mg/L	0.000508	23.34%

Mg 279.077†	100.7	0.00592 mg/L	0.004674	0.00592 mg/L	0.004674	79.01%
Mn 257.610†	210.7	0.00057 mg/L	0.000024	0.00057 mg/L	0.000024	4.16%
Ni 231.604†	-0.7	-0.00004 mg/L	0.000178	-0.00004 mg/L	0.000178	504.34%
Pb 220.353†	-2.0	-0.00042 mg/L	0.000717	-0.00042 mg/L	0.000717	171.32%
Sb 206.836†	-0.5	-0.00038 mg/L	0.000944	-0.00038 mg/L	0.000944	249.76%
Se 196.026†	-1.3	-0.00129 mg/L	0.004424	-0.00129 mg/L	0.004424	343.27%
Tl 190.801†	-3.4	-0.00203 mg/L	0.001168	-0.00203 mg/L	0.001168	57.44%
V 292.402†	17.3	0.00026 mg/L	0.000468	0.00026 mg/L	0.000468	178.11%
Zn 206.200†	513.1	0.01772 mg/L	0.000214	0.01772 mg/L	0.000214	1.21%
Cd 226.502†	-5.3	-0.00013 mg/L	0.000065	-0.00013 mg/L	0.000065	51.22%
Ti 334.940†	57.3	0.00014 mg/L	0.000048	0.00014 mg/L	0.000048	35.45%
Ca 227.546†	27.1	0.15010 mg/L	0.072107	0.15010 mg/L	0.072107	48.04%
Na 589.592	1460.9	0.42764 mg/L	0.011997	0.42764 mg/L	0.011997	2.81%
K 766.490	-42.8	-0.05202 mg/L	0.038476	-0.05202 mg/L	0.038476	73.96%

Sequence No.: 19

Autosampler Location: 141

Sample ID: K0943-03A~LMW-10U

Date Collected: 6/11/2011 5:43:32 PM

Analyst:

Data Type: Reprocessed on 6/12/2011 8:11:46 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0943-03A~LMW-10U

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	863822.0	97.366 %		0.4746			0.49%
Lu 261.542	899312.5	99.78 %		0.655			0.66%
Ag 328.068†	32.8	0.00035 mg/L		0.000070	0.00035 mg/L	0.000070	20.04%
Al 308.215†	1885.4	0.10096 mg/L		0.004085	0.10096 mg/L	0.004085	4.05%
As 188.979†	3.9	0.00330 mg/L		0.002252	0.00330 mg/L	0.002252	68.29%
Ba 233.527†	1506.5	0.03496 mg/L		0.000186	0.03496 mg/L	0.000186	0.53%
Be 313.107†	13.1	0.00002 mg/L		0.000003	0.00002 mg/L	0.000003	21.59%
Co 228.616†	8.4	0.00034 mg/L		0.000091	0.00034 mg/L	0.000091	27.16%
Cr 267.716†	2795.5	0.07266 mg/L		0.001110	0.07266 mg/L	0.001110	1.53%
Cu 324.752†	229.7	0.00199 mg/L		0.000666	0.00199 mg/L	0.000666	33.51%
Fe 273.955†	5207.0	0.24539 mg/L		0.001073	0.24539 mg/L	0.001073	0.44%
Mg 279.077†	63066.3	3.7033 mg/L		0.00636	3.7033 mg/L	0.00636	0.17%
Mn 257.610†	6210.0	0.01681 mg/L		0.000123	0.01681 mg/L	0.000123	0.73%
Ni 231.604†	30.3	0.00155 mg/L		0.000446	0.00155 mg/L	0.000446	28.77%
Pb 220.353†	1.6	0.00043 mg/L		0.000446	0.00043 mg/L	0.000446	103.43%
Sb 206.836†	4.9	0.00238 mg/L		0.002894	0.00238 mg/L	0.002894	121.61%
Se 196.026†	2.5	0.00207 mg/L		0.002675	0.00207 mg/L	0.002675	129.28%
Tl 190.801†	-4.7	-0.00260 mg/L		0.002850	-0.00260 mg/L	0.002850	109.55%
V 292.402†	1.8	0.00016 mg/L		0.000455	0.00016 mg/L	0.000455	289.96%
Zn 206.200†	780.3	0.02714 mg/L		0.000189	0.02714 mg/L	0.000189	0.70%
Cd 226.502†	435.7	0.01027 mg/L		0.000060	0.01027 mg/L	0.000060	0.59%
Ti 334.940†	1318.5	0.00323 mg/L		0.000078	0.00323 mg/L	0.000078	2.42%
Ca 227.546†	3373.5	18.687 mg/L		0.1535	18.687 mg/L	0.1535	0.82%
Na 589.592	58577.9	17.147 mg/L		0.0640	17.147 mg/L	0.0640	0.37%
K 766.490	1953.5	2.3769 mg/L		0.11989	2.3769 mg/L	0.11989	5.04%

Sequence No.: 20

Autosampler Location: 142

Sample ID: K0943-04A~LMW-10F

Date Collected: 6/11/2011 5:47:09 PM

Analyst:

Data Type: Reprocessed on 6/12/2011 8:11:47 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0943-04A~LMW-10F

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	871673.4	98.251 %		1.0059			1.02%
Lu 261.542	911250.6	101.1 %		0.91			0.90%
Ag 328.068†	35.8	0.00038 mg/L		0.000383	0.00038 mg/L	0.000383	101.11%
Al 308.215†	141.5	0.00758 mg/L		0.001563	0.00758 mg/L	0.001563	20.62%
As 188.979†	1.8	0.00194 mg/L		0.003823	0.00194 mg/L	0.003823	197.50%
Ba 233.527†	1399.1	0.03247 mg/L		0.000369	0.03247 mg/L	0.000369	1.14%

Be 313.107†	-7.4	-0.00001	mg/L	0.000043	-0.00001	mg/L	0.000043	745.05%
Co 228.616†	8.7	0.00036	mg/L	0.000140	0.00036	mg/L	0.000140	38.81%
Cr 267.716†	3434.2	0.08927	mg/L	0.000601	0.08927	mg/L	0.000601	0.67%
Cu 324.752†	110.0	0.00095	mg/L	0.000641	0.00095	mg/L	0.000641	67.75%
Fe 273.955†	228.1	0.01112	mg/L	0.001300	0.01112	mg/L	0.001300	11.69%
Mg 279.077†	61192.9	3.5933	mg/L	0.00199	3.5933	mg/L	0.00199	0.06%
Mn 257.610†	2676.4	0.00719	mg/L	0.000072	0.00719	mg/L	0.000072	1.00%
Ni 231.604†	17.8	0.00091	mg/L	0.000145	0.00091	mg/L	0.000145	16.00%
Pb 220.353†	-11.7	-0.00233	mg/L	0.001051	-0.00233	mg/L	0.001051	45.04%
Sb 206.836†	-0.8	-0.00234	mg/L	0.003309	-0.00234	mg/L	0.003309	141.35%
Se 196.026†	0.1	-0.00029	mg/L	0.001685	-0.00029	mg/L	0.001685	578.05%
Tl 190.801†	3.1	0.00198	mg/L	0.002003	0.00198	mg/L	0.002003	101.34%
V 292.402†	-1.9	0.00011	mg/L	0.000728	0.00011	mg/L	0.000728	633.05%
Zn 206.200†	620.8	0.02168	mg/L	0.000294	0.02168	mg/L	0.000294	1.36%
Cd 226.502†	480.4	0.01134	mg/L	0.000197	0.01134	mg/L	0.000197	1.74%
Ti 334.940†	-54.5	0.00005	mg/L	0.000016	0.00005	mg/L	0.000016	34.66%
Ca 227.546†	3374.1	18.678	mg/L	0.2401	18.678	mg/L	0.2401	1.29%
Na 589.592	65838.9	19.273	mg/L	0.1130	19.273	mg/L	0.1130	0.59%
K 766.490	2080.2	2.5311	mg/L	0.04062	2.5311	mg/L	0.04062	1.60%

Sequence No.: 21

Sample ID: K0943-05A~LMW-20U

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 143

Date Collected: 6/11/2011 5:50:46 PM

Data Type: Reprocessed on 6/12/2011 8:11:47 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0943-05A~LMW-20U

	Mean Corrected		Calib.			Sample		
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 360.073	859156.1	96.840	%	1.1065				1.14%
Lu 261.542	898192.1	99.66	%	0.376				0.38%
Ag 328.068†	-11.8	-0.00012	mg/L	0.000513	-0.00012	mg/L	0.000513	412.76%
Al 308.215†	5660.8	0.30312	mg/L	0.008242	0.30312	mg/L	0.008242	2.72%
As 188.979†	1.9	0.00145	mg/L	0.004473	0.00145	mg/L	0.004473	308.76%
Ba 233.527†	1163.6	0.02700	mg/L	0.000334	0.02700	mg/L	0.000334	1.24%
Be 313.107†	-5.6	0.00002	mg/L	0.000057	0.00002	mg/L	0.000057	235.64%
Co 228.616†	29.7	0.00116	mg/L	0.000190	0.00116	mg/L	0.000190	16.43%
Cr 267.716†	195.6	0.00507	mg/L	0.000075	0.00507	mg/L	0.000075	1.48%
Cu 324.752†	692.2	0.00600	mg/L	0.000098	0.00600	mg/L	0.000098	1.63%
Fe 273.955†	18678.0	0.87916	mg/L	0.001931	0.87916	mg/L	0.001931	0.22%
Mg 279.077†	64620.5	3.7946	mg/L	0.00643	3.7946	mg/L	0.00643	0.17%
Mn 257.610†	6469.2	0.01751	mg/L	0.000053	0.01751	mg/L	0.000053	0.30%
Ni 231.604†	34.7	0.00176	mg/L	0.000290	0.00176	mg/L	0.000290	16.45%
Pb 220.353†	2.4	0.00055	mg/L	0.000639	0.00055	mg/L	0.000639	116.94%
Sb 206.836†	6.4	0.00475	mg/L	0.002790	0.00475	mg/L	0.002790	58.72%
Se 196.026†	-6.9	-0.00657	mg/L	0.004551	-0.00657	mg/L	0.004551	69.28%
Tl 190.801†	3.0	0.00201	mg/L	0.001276	0.00201	mg/L	0.001276	63.62%
V 292.402†	61.4	0.00098	mg/L	0.000235	0.00098	mg/L	0.000235	23.91%
Zn 206.200†	1519.1	0.05246	mg/L	0.000523	0.05246	mg/L	0.000523	1.00%
Cd 226.502†	37.5	0.00081	mg/L	0.000024	0.00081	mg/L	0.000024	2.90%
Ti 334.940†	6218.9	0.01446	mg/L	0.001729	0.01446	mg/L	0.001729	11.96%
Ca 227.546†	1383.5	7.7048	mg/L	0.06520	7.7048	mg/L	0.06520	0.85%
Na 589.592	131096.5	38.375	mg/L	0.2834	38.375	mg/L	0.2834	0.74%
K 766.490	2000.7	2.4343	mg/L	0.12354	2.4343	mg/L	0.12354	5.08%

Sequence No.: 22

Sample ID: K0943-06A~LMW-20F

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 144

Date Collected: 6/11/2011 5:54:23 PM

Data Type: Reprocessed on 6/12/2011 8:11:48 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0943-06A~LMW-20F

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	857305.1	96.632	%	1.4545			1.51%

Lu 261.542	898641.2	99.71 %	0.987			
Ag 328.068†	28.0	0.00030 mg/L	0.000175	0.00030 mg/L	0.000175	58.83%
Al 308.215†	116.1	0.00621 mg/L	0.004125	0.00621 mg/L	0.004125	66.38%
As 188.979†	5.7	0.00405 mg/L	0.001567	0.00405 mg/L	0.001567	38.68%
Ba 233.527†	1092.5	0.02535 mg/L	0.000493	0.02535 mg/L	0.000493	1.95%
Be 313.107†	-39.4	-0.00003 mg/L	0.000028	-0.00003 mg/L	0.000028	93.63%
Co 228.616†	22.8	0.00093 mg/L	0.000052	0.00093 mg/L	0.000052	5.57%
Cr 267.716†	44.5	0.00114 mg/L	0.000174	0.00114 mg/L	0.000174	15.27%
Cu 324.752†	206.6	0.00177 mg/L	0.000226	0.00177 mg/L	0.000226	12.71%
Fe 273.955†	1522.1	0.07166 mg/L	0.001298	0.07166 mg/L	0.001298	1.81%
Mg 279.077†	65848.6	3.8667 mg/L	0.01506	3.8667 mg/L	0.01506	0.39%
Mn 257.610†	1539.9	0.00408 mg/L	0.000040	0.00408 mg/L	0.000040	0.97%
Ni 231.604†	8.6	0.00043 mg/L	0.000283	0.00043 mg/L	0.000283	65.48%
Pb 220.353†	-4.1	-0.00081 mg/L	0.000136	-0.00081 mg/L	0.000136	16.75%
Sb 206.836†	3.8	0.00283 mg/L	0.001668	0.00283 mg/L	0.001668	58.88%
Se 196.026†	1.9	0.00173 mg/L	0.004685	0.00173 mg/L	0.004685	270.37%
Tl 190.801†	0.3	0.00027 mg/L	0.002372	0.00027 mg/L	0.002372	893.47%
V 292.402†	20.9	0.00032 mg/L	0.000277	0.00032 mg/L	0.000277	85.77%
Zn 206.200†	861.2	0.02974 mg/L	0.000385	0.02974 mg/L	0.000385	1.29%
Cd 226.502†	17.8	0.00041 mg/L	0.000044	0.00041 mg/L	0.000044	10.55%
Ti 334.940†	3.0	0.00005 mg/L	0.000054	0.00005 mg/L	0.000054	114.81%
Ca 227.546†	1420.4	7.8660 mg/L	0.06187	7.8660 mg/L	0.06187	0.79%
Na 589.592	137519.8	40.255 mg/L	0.7837	40.255 mg/L	0.7837	1.95%
K 766.490	1692.8	2.0597 mg/L	0.10178	2.0597 mg/L	0.10178	4.94%

Sequence No.: 23

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/11/2011 5:58:00 PM

Data Type: Reprocessed on 6/12/2011 8:11:49 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	840094.8	94.692 %	0.5985			0.63%
Lu 261.542	889928.6	98.74 %	0.577			0.58%
Ag 328.068†	116713.2	1.2383 mg/L	0.00199	1.2383 mg/L	0.00199	0.16%
QC value within limits for Ag 328.068 Recovery = 99.07%						
Al 308.215†	187864.9	10.030 mg/L	0.0237	10.030 mg/L	0.0237	0.24%
QC value within limits for Al 308.215 Recovery = 100.30%						
As 188.979†	695.5	0.48745 mg/L	0.003363	0.48745 mg/L	0.003363	0.69%
QC value within limits for As 188.979 Recovery = 97.49%						
Ba 233.527†	436301.2	10.127 mg/L	0.0797	10.127 mg/L	0.0797	0.79%
QC value within limits for Ba 233.527 Recovery = 101.27%						
Be 313.107†	328189.7	0.24660 mg/L	0.000607	0.24660 mg/L	0.000607	0.25%
QC value within limits for Be 313.107 Recovery = 98.64%						
Co 228.616†	63039.9	2.5616 mg/L	0.00341	2.5616 mg/L	0.00341	0.13%
QC value within limits for Co 228.616 Recovery = 102.46%						
Cr 267.716†	38548.3	1.0024 mg/L	0.00277	1.0024 mg/L	0.00277	0.28%
QC value within limits for Cr 267.716 Recovery = 100.24%						
Cu 324.752†	146304.3	1.2633 mg/L	0.00517	1.2633 mg/L	0.00517	0.41%
QC value within limits for Cu 324.752 Recovery = 101.07%						
Fe 273.955†	106006.4	5.0687 mg/L	0.00518	5.0687 mg/L	0.00518	0.10%
QC value within limits for Fe 273.955 Recovery = 101.37%						
Mg 279.077†	426702.8	25.068 mg/L	0.0104	25.068 mg/L	0.0104	0.04%
QC value within limits for Mg 279.077 Recovery = 100.27%						
Mn 257.610†	918707.4	2.5032 mg/L	0.00987	2.5032 mg/L	0.00987	0.39%
QC value within limits for Mn 257.610 Recovery = 100.13%						
Ni 231.604†	48808.4	2.5159 mg/L	0.00420	2.5159 mg/L	0.00420	0.17%
QC value within limits for Ni 231.604 Recovery = 100.64%						
Pb 220.353†	2415.8	0.50325 mg/L	0.000416	0.50325 mg/L	0.000416	0.08%
QC value within limits for Pb 220.353 Recovery = 100.65%						
Sb 206.836†	670.2	0.49957 mg/L	0.004205	0.49957 mg/L	0.004205	0.84%
QC value within limits for Sb 206.836 Recovery = 99.91%						
Se 196.026†	508.4	0.49384 mg/L	0.005450	0.49384 mg/L	0.005450	1.10%
QC value within limits for Se 196.026 Recovery = 98.77%						
Tl 190.801†	851.4	0.50898 mg/L	0.003398	0.50898 mg/L	0.003398	0.67%
QC value within limits for Tl 190.801 Recovery = 101.80%						

V 292.402† 163789.9 2.4828 mg/L 0.00807 2.4828 mg/L 0.00807 0.33%
 QC value within limits for V 292.402 Recovery = 99.31%
 Zn 206.200† 72509.7 2.5063 mg/L 0.00496 2.5063 mg/L 0.00496 0.20%
 QC value within limits for Zn 206.200 Recovery = 100.25%
 Cd 226.502† 10352.4 0.24396 mg/L 0.000747 0.24396 mg/L 0.000747 0.31%
 QC value within limits for Cd 226.502 Recovery = 97.58%
 Ti 334.940† 217129.1 0.50329 mg/L 0.001855 0.50329 mg/L 0.001855 0.37%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 4622.2 25.698 mg/L 0.0189 25.698 mg/L 0.0189 0.07%
 QC value within limits for Ca 227.546 Recovery = 102.79%
 Na 589.592 85653.9 25.073 mg/L 0.2539 25.073 mg/L 0.2539 1.01%
 QC value within limits for Na 589.592 Recovery = 100.29%
 K 766.490 20482.8 24.922 mg/L 0.2860 24.922 mg/L 0.2860 1.15%
 QC value within limits for K 766.490 Recovery = 99.69%
 All analyte(s) passed QC.

Sequence No.: 24

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 6/11/2011 6:01:35 PM

Data Type: Reprocessed on 6/12/2011 8:11:50 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	867142.5	97.740	%	1.4357			1.47%
Lu 261.542	896823.7	99.51	%	0.912			0.92%
Ag 328.068†	70.4	0.00075	mg/L	0.000213	0.00075 mg/L	0.000213	28.57%
Al 308.215†	345.2	0.01847	mg/L	0.001448	0.01847 mg/L	0.001448	7.84%
As 188.979†	3.4	0.00238	mg/L	0.001954	0.00238 mg/L	0.001954	81.95%
Ba 233.527†	61.6	0.00143	mg/L	0.000434	0.00143 mg/L	0.000434	30.33%
Be 313.107†	-0.1	0.00000	mg/L	0.000037	0.00000 mg/L	0.000037	>999.9%
Co 228.616†	9.2	0.00037	mg/L	0.000061	0.00037 mg/L	0.000061	16.32%
Cr 267.716†	-0.4	-0.00001	mg/L	0.000153	-0.00001 mg/L	0.000153	>999.9%
Cu 324.752†	-8.0	-0.00007	mg/L	0.000436	-0.00007 mg/L	0.000436	632.08%
Fe 273.955†	46.8	0.00223	mg/L	0.000563	0.00223 mg/L	0.000563	25.30%
Mg 279.077†	24.2	0.00142	mg/L	0.008507	0.00142 mg/L	0.008507	597.17%
Mn 257.610†	169.3	0.00046	mg/L	0.000118	0.00046 mg/L	0.000118	25.49%
Ni 231.604†	7.6	0.00039	mg/L	0.000288	0.00039 mg/L	0.000288	73.01%
Pb 220.353†	-2.8	-0.00059	mg/L	0.000867	-0.00059 mg/L	0.000867	146.75%
Sb 206.836†	9.8	0.00749	mg/L	0.005033	0.00749 mg/L	0.005033	67.24%
Se 196.026†	-0.8	-0.00077	mg/L	0.002815	-0.00077 mg/L	0.002815	363.31%
Tl 190.801†	-0.6	-0.00033	mg/L	0.001272	-0.00033 mg/L	0.001272	379.88%
V 292.402†	53.8	0.00082	mg/L	0.000550	0.00082 mg/L	0.000550	67.51%
Zn 206.200†	31.8	0.00110	mg/L	0.000194	0.00110 mg/L	0.000194	17.62%
Cd 226.502†	1.1	0.00002	mg/L	0.000108	0.00002 mg/L	0.000108	437.02%
Ti 334.940†	104.3	0.00024	mg/L	0.000034	0.00024 mg/L	0.000034	14.10%
Ca 227.546†	19.0	0.10506	mg/L	0.065117	0.10506 mg/L	0.065117	61.98%
Na 589.592	107.8	0.03157	mg/L	0.026028	0.03157 mg/L	0.026028	82.45%
K 766.490	-35.5	-0.04321	mg/L	0.048352	-0.04321 mg/L	0.048352	111.89%

Sequence No.: 25

Sample ID: K0943-07A-LMW-21U

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 145

Date Collected: 6/11/2011 6:05:10 PM

Data Type: Reprocessed on 6/12/2011 8:11:50 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0943-07A-LMW-21U

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	868265.1	97.867	%	0.5664			0.58%
Lu 261.542	913846.4	101.4	%	0.20			0.20%
Ag 328.068†	68.7	0.00073	mg/L	0.000727	0.00073 mg/L	0.000727	99.77%
Al 308.215†	5958.9	0.31908	mg/L	0.001328	0.31908 mg/L	0.001328	0.42%
As 188.979†	5.9	0.00435	mg/L	0.001672	0.00435 mg/L	0.001672	38.46%

Ba 233.527†	3393.8	0.07875 mg/L	0.000606	0.07875 mg/L	0.000606	0.77%
Be 313.107†	97.3	0.00010 mg/L	0.000025	0.00010 mg/L	0.000025	25.33%
Co 228.616†	16.5	0.00063 mg/L	0.000051	0.00063 mg/L	0.000051	8.04%
Cr 267.716†	240.9	0.00623 mg/L	0.000173	0.00623 mg/L	0.000173	2.78%
Cu 324.752†	985.7	0.00852 mg/L	0.000264	0.00852 mg/L	0.000264	3.09%
Fe 273.955†	14737.3	0.69371 mg/L	0.005123	0.69371 mg/L	0.005123	0.74%
Mg 279.077†	118596.0	6.9641 mg/L	0.01608	6.9641 mg/L	0.01608	0.23%
Mn 257.610†	13322.9	0.03610 mg/L	0.000218	0.03610 mg/L	0.000218	0.60%
Ni 231.604†	64.2	0.00328 mg/L	0.000347	0.00328 mg/L	0.000347	10.59%
Pb 220.353†	14.5	0.00311 mg/L	0.000386	0.00311 mg/L	0.000386	12.42%
Sb 206.836†	8.9	0.00655 mg/L	0.001505	0.00655 mg/L	0.001505	22.97%
Se 196.026†	-9.8	-0.00964 mg/L	0.001398	-0.00964 mg/L	0.001398	14.51%
Tl 190.801†	2.5	0.00176 mg/L	0.001497	0.00176 mg/L	0.001497	85.01%
V 292.402†	94.8	0.00148 mg/L	0.000280	0.00148 mg/L	0.000280	18.92%
Zn 206.200†	1885.9	0.06513 mg/L	0.000432	0.06513 mg/L	0.000432	0.66%
Cd 226.502†	51.9	0.00117 mg/L	0.000169	0.00117 mg/L	0.000169	14.47%
Ti 334.940†	5483.5	0.01283 mg/L	0.000166	0.01283 mg/L	0.000166	1.29%
Ca 227.546†	3071.5	17.039 mg/L	0.1545	17.039 mg/L	0.1545	0.91%
Na 589.592	83176.7	24.348 mg/L	0.1988	24.348 mg/L	0.1988	0.82%
K 766.490	10235.4	12.454 mg/L	0.1868	12.454 mg/L	0.1868	1.50%

Sequence No.: 26

Sample ID: K0943-08A~LMW-21F

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 146

Date Collected: 6/11/2011 6:08:47 PM

Data Type: Reprocessed on 6/12/2011 8:11:51 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0943-08A~LMW-21F

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	856714.6	96.565 %	0.9123			0.94%
Lu 261.542	901540.5	100.0 %	0.81			0.81%
Ag 328.068†	-7.9	-0.00008 mg/L	0.000537	-0.00008 mg/L	0.000537	644.53%
Al 308.215†	222.8	0.01192 mg/L	0.004065	0.01192 mg/L	0.004065	34.10%
As 188.979†	3.6	0.00268 mg/L	0.003173	0.00268 mg/L	0.003173	118.24%
Ba 233.527†	3282.9	0.07618 mg/L	0.000493	0.07618 mg/L	0.000493	0.65%
Be 313.107†	52.5	0.00004 mg/L	0.000054	0.00004 mg/L	0.000054	138.65%
Co 228.616†	9.3	0.00038 mg/L	0.000111	0.00038 mg/L	0.000111	29.47%
Cr 267.716†	128.1	0.00329 mg/L	0.000266	0.00329 mg/L	0.000266	8.07%
Cu 324.752†	175.7	0.00150 mg/L	0.000324	0.00150 mg/L	0.000324	21.67%
Fe 273.955†	687.6	0.03240 mg/L	0.000530	0.03240 mg/L	0.000530	1.64%
Mg 279.077†	123257.5	7.2378 mg/L	0.01186	7.2378 mg/L	0.01186	0.16%
Mn 257.610†	7315.0	0.01972 mg/L	0.000138	0.01972 mg/L	0.000138	0.70%
Ni 231.604†	25.5	0.00129 mg/L	0.000378	0.00129 mg/L	0.000378	29.26%
Pb 220.353†	-7.5	-0.00149 mg/L	0.000700	-0.00149 mg/L	0.000700	47.02%
Sb 206.836†	5.7	0.00419 mg/L	0.002501	0.00419 mg/L	0.002501	59.72%
Se 196.026†	-1.9	-0.00214 mg/L	0.005269	-0.00214 mg/L	0.005269	246.63%
Tl 190.801†	0.9	0.00076 mg/L	0.000261	0.00076 mg/L	0.000261	34.54%
V 292.402†	35.1	0.00054 mg/L	0.000500	0.00054 mg/L	0.000500	92.46%
Zn 206.200†	884.3	0.03054 mg/L	0.000226	0.03054 mg/L	0.000226	0.74%
Cd 226.502†	22.8	0.00054 mg/L	0.000024	0.00054 mg/L	0.000024	4.45%
Ti 334.940†	-45.2	0.00000 mg/L	0.000136	0.00000 mg/L	0.000136	>999.9%
Ca 227.546†	3058.9	16.934 mg/L	0.1308	16.934 mg/L	0.1308	0.77%
Na 589.592	74121.8	21.697 mg/L	0.2327	21.697 mg/L	0.2327	1.07%
K 766.490	7618.4	9.2694 mg/L	0.19061	9.2694 mg/L	0.19061	2.06%

Sequence No.: 27

Sample ID: K0943-09A~LMW-16U

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 147

Date Collected: 6/11/2011 6:12:24 PM

Data Type: Reprocessed on 6/12/2011 8:11:52 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0943-09A~LMW-16U

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD

Y 360.073	880745.4	99.274 %	0.6120			0.62%
Lu 261.542	895482.7	99.36 %	0.810			0.81%
Ag 328.068†	-11.0	-0.00012 mg/L	0.000511	-0.00012 mg/L	0.000511	438.28%
Al 308.215†	21430.0	1.1476 mg/L	0.00104	1.1476 mg/L	0.00104	0.09%
As 188.979†	5.1	0.00374 mg/L	0.002883	0.00374 mg/L	0.002883	77.15%
Ba 233.527†	12893.8	0.29919 mg/L	0.001776	0.29919 mg/L	0.001776	0.59%
Be 313.107†	2611.3	0.00196 mg/L	0.000036	0.00196 mg/L	0.000036	1.83%
Co 228.616†	10.8	0.00043 mg/L	0.000133	0.00043 mg/L	0.000133	31.04%
Cr 267.716†	454.5	0.01169 mg/L	0.000095	0.01169 mg/L	0.000095	0.81%
Cu 324.752†	1091.5	0.00942 mg/L	0.000405	0.00942 mg/L	0.000405	4.29%
Fe 273.955†	2445.6	0.11517 mg/L	0.001039	0.11517 mg/L	0.001039	0.90%
Mg 279.077†	39995.0	2.3514 mg/L	0.01236	2.3514 mg/L	0.01236	0.53%
Mn 257.610†	219102.4	0.59713 mg/L	0.002162	0.59713 mg/L	0.002162	0.36%
Ni 231.604†	270.5	0.01393 mg/L	0.000184	0.01393 mg/L	0.000184	1.32%
Pb 220.353†	-3.0	-0.00060 mg/L	0.001169	-0.00060 mg/L	0.001169	194.78%
Sb 206.836†	2.8	0.00183 mg/L	0.002596	0.00183 mg/L	0.002596	141.74%
Se 196.026†	-5.0	-0.00534 mg/L	0.002923	-0.00534 mg/L	0.002923	54.69%
Tl 190.801†	2.3	0.00149 mg/L	0.000886	0.00149 mg/L	0.000886	59.47%
V 292.402†	28.5	0.00050 mg/L	0.000008	0.00050 mg/L	0.000008	1.66%
Zn 206.200†	1952.8	0.06746 mg/L	0.000431	0.06746 mg/L	0.000431	0.64%
Cd 226.502†	223.4	0.00526 mg/L	0.000092	0.00526 mg/L	0.000092	1.76%
Ti 334.940†	872.4	0.00210 mg/L	0.000386	0.00210 mg/L	0.000386	18.34%
Ca 227.546†	1668.7	9.2432 mg/L	0.07973	9.2432 mg/L	0.07973	0.86%
Na 589.592	50059.2	14.653 mg/L	0.0508	14.653 mg/L	0.0508	0.35%
K 766.490	4054.6	4.9333 mg/L	0.18667	4.9333 mg/L	0.18667	3.78%

Sequence No.: 28

Sample ID: K0943-10A~LMW-16F

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 148

Date Collected: 6/11/2011 6:16:02 PM

Data Type: Reprocessed on 6/12/2011 8:11:53 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0943-10A~LMW-16F

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	895030.7	100.88 %		0.394			0.39%
Lu 261.542	912245.2	101.2 %		1.06			1.05%
Ag 328.068†	22.5	0.00024 mg/L		0.000411	0.00024 mg/L	0.000411	172.48%
Al 308.215†	10944.6	0.58607 mg/L		0.004226	0.58607 mg/L	0.004226	0.72%
As 188.979†	1.7	0.00136 mg/L		0.001890	0.00136 mg/L	0.001890	139.34%
Ba 233.527†	15147.6	0.35149 mg/L		0.001985	0.35149 mg/L	0.001985	0.56%
Be 313.107†	2446.8	0.00183 mg/L		0.000038	0.00183 mg/L	0.000038	2.10%
Co 228.616†	5.6	0.00022 mg/L		0.000058	0.00022 mg/L	0.000058	26.00%
Cr 267.716†	348.6	0.00893 mg/L		0.000101	0.00893 mg/L	0.000101	1.13%
Cu 324.752†	1306.5	0.01127 mg/L		0.000417	0.01127 mg/L	0.000417	3.70%
Fe 273.955†	320.9	0.01514 mg/L		0.001073	0.01514 mg/L	0.001073	7.09%
Mg 279.077†	43651.4	2.5662 mg/L		0.00222	2.5662 mg/L	0.00222	0.09%
Mn 257.610†	228627.3	0.62308 mg/L		0.001960	0.62308 mg/L	0.001960	0.31%
Ni 231.604†	274.1	0.01412 mg/L		0.000254	0.01412 mg/L	0.000254	1.80%
Pb 220.353†	-4.0	-0.00082 mg/L		0.001297	-0.00082 mg/L	0.001297	158.26%
Sb 206.836†	0.7	0.00029 mg/L		0.001369	0.00029 mg/L	0.001369	469.00%
Se 196.026†	0.3	-0.00022 mg/L		0.005159	-0.00022 mg/L	0.005159	>999.9%
Tl 190.801†	-0.4	-0.00017 mg/L		0.000677	-0.00017 mg/L	0.000677	402.23%
V 292.402†	-0.5	0.00006 mg/L		0.000107	0.00006 mg/L	0.000107	189.77%
Zn 206.200†	1998.8	0.06904 mg/L		0.000681	0.06904 mg/L	0.000681	0.99%
Cd 226.502†	209.3	0.00494 mg/L		0.000028	0.00494 mg/L	0.000028	0.58%
Ti 334.940†	-50.6	-0.00003 mg/L		0.000030	-0.00003 mg/L	0.000030	94.72%
Ca 227.546†	1786.8	9.8914 mg/L		0.14044	9.8914 mg/L	0.14044	1.42%
Na 589.592	49499.5	14.490 mg/L		0.2152	14.490 mg/L	0.2152	1.49%
K 766.490	4011.2	4.8805 mg/L		0.02271	4.8805 mg/L	0.02271	0.47%

Sequence No.: 29

Sample ID: K0943-11A~LMW-02U

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 149

Date Collected: 6/11/2011 6:19:40 PM

Data Type: Reprocessed on 6/12/2011 8:11:54 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0943-11A~LMW-02U

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	859191.6	96.844	%	0.3610				0.37%
Lu 261.542	897866.6	99.62	%	0.495				0.50%
Ag 328.068†	36.9	0.00039	mg/L	0.000531	0.00039	mg/L	0.000531	135.89%
Al 308.215†	2201.0	0.11786	mg/L	0.005485	0.11786	mg/L	0.005485	4.65%
As 188.979†	2.9	0.00247	mg/L	0.004426	0.00247	mg/L	0.004426	179.31%
Ba 233.527†	1920.5	0.04456	mg/L	0.000372	0.04456	mg/L	0.000372	0.84%
Be 313.107†	-1.8	0.00001	mg/L	0.000029	0.00001	mg/L	0.000029	383.05%
Co 228.616†	6.9	0.00027	mg/L	0.000076	0.00027	mg/L	0.000076	27.91%
Cr 267.716†	1997.3	0.05191	mg/L	0.000330	0.05191	mg/L	0.000330	0.63%
Cu 324.752†	2777.8	0.02398	mg/L	0.000254	0.02398	mg/L	0.000254	1.06%
Fe 273.955†	4341.9	0.20460	mg/L	0.002256	0.20460	mg/L	0.002256	1.10%
Mg 279.077†	54154.5	3.1800	mg/L	0.00891	3.1800	mg/L	0.00891	0.28%
Mn 257.610†	2641.9	0.00710	mg/L	0.000075	0.00710	mg/L	0.000075	1.06%
Ni 231.604†	106.6	0.00548	mg/L	0.000053	0.00548	mg/L	0.000053	0.96%
Pb 220.353†	18.4	0.00390	mg/L	0.001155	0.00390	mg/L	0.001155	29.59%
Sb 206.836†	3.3	0.00147	mg/L	0.003911	0.00147	mg/L	0.003911	265.82%
Se 196.026†	-3.0	-0.00323	mg/L	0.004010	-0.00323	mg/L	0.004010	124.22%
Tl 190.801†	0.9	0.00075	mg/L	0.002122	0.00075	mg/L	0.002122	283.57%
V 292.402†	37.6	0.00066	mg/L	0.000189	0.00066	mg/L	0.000189	28.82%
Zn 206.200†	840.4	0.02916	mg/L	0.000137	0.02916	mg/L	0.000137	0.47%
Cd 226.502†	361.0	0.00851	mg/L	0.000108	0.00851	mg/L	0.000108	1.26%
Ti 334.940†	1940.2	0.00465	mg/L	0.000245	0.00465	mg/L	0.000245	5.27%
Ca 227.546†	2948.4	16.332	mg/L	0.0621	16.332	mg/L	0.0621	0.38%
Na 589.592	72908.9	21.342	mg/L	0.1319	21.342	mg/L	0.1319	0.62%
K 766.490	2232.4	2.7162	mg/L	0.09862	2.7162	mg/L	0.09862	3.63%

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Sequence No.: 30
Sample ID: K0943-12A~LMW-02F
Analyst:
Logged In Analyst (Original) : mitOptima3
Initial Sample Wt:
Dilution:

Autosampler Location: 150
Date Collected: 6/11/2011 6:23:17 PM
Data Type: Reprocessed on 6/12/2011 8:11:54 AM
Initial Sample Vol:
Sample Prep Vol:

Mean Data: K0943-12A~LMW-02F

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	850288.9	95.841	%	0.3516				0.37%
Lu 261.542	897856.2	99.62	%	0.440				0.44%
Ag 328.068†	5.7	0.00006	mg/L	0.000227	0.00006	mg/L	0.000227	376.20%
Al 308.215†	53.1	0.00284	mg/L	0.005206	0.00284	mg/L	0.005206	183.24%
As 188.979†	0.1	0.00052	mg/L	0.001628	0.00052	mg/L	0.001628	310.70%
Ba 233.527†	1935.7	0.04492	mg/L	0.000539	0.04492	mg/L	0.000539	1.20%
Be 313.107†	10.9	0.00001	mg/L	0.000025	0.00001	mg/L	0.000025	317.34%
Co 228.616†	-0.5	-0.00002	mg/L	0.000283	-0.00002	mg/L	0.000283	>999.9%
Cr 267.716†	1855.1	0.04822	mg/L	0.000598	0.04822	mg/L	0.000598	1.24%
Cu 324.752†	346.3	0.00298	mg/L	0.000143	0.00298	mg/L	0.000143	4.81%
Fe 273.955†	148.4	0.00720	mg/L	0.000268	0.00720	mg/L	0.000268	3.73%
Mg 279.077†	55308.1	3.2477	mg/L	0.00908	3.2477	mg/L	0.00908	0.28%
Mn 257.610†	1038.2	0.00273	mg/L	0.000017	0.00273	mg/L	0.000017	0.60%
Ni 231.604†	52.5	0.00270	mg/L	0.000193	0.00270	mg/L	0.000193	7.16%
Pb 220.353†	-4.7	-0.00090	mg/L	0.000529	-0.00090	mg/L	0.000529	58.68%
Sb 206.836†	2.0	0.00061	mg/L	0.002741	0.00061	mg/L	0.002741	447.26%
Se 196.026†	2.3	0.00189	mg/L	0.004434	0.00189	mg/L	0.004434	235.12%
Tl 190.801†	0.8	0.00062	mg/L	0.001740	0.00062	mg/L	0.001740	282.47%
V 292.402†	25.2	0.00046	mg/L	0.000297	0.00046	mg/L	0.000297	64.87%
Zn 206.200†	715.7	0.02484	mg/L	0.000218	0.02484	mg/L	0.000218	0.88%
Cd 226.502†	234.7	0.00554	mg/L	0.000041	0.00554	mg/L	0.000041	0.73%
Ti 334.940†	-93.7	-0.00006	mg/L	0.000047	-0.00006	mg/L	0.000047	79.03%
Ca 227.546†	3021.2	16.724	mg/L	0.2176	16.724	mg/L	0.2176	1.30%
Na 589.592	76435.9	22.375	mg/L	0.1531	22.375	mg/L	0.1531	0.68%
K 766.490	2147.6	2.6131	mg/L	0.11511	2.6131	mg/L	0.11511	4.40%

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Sequence No.: 31

Autosampler Location: 151

Sample ID: K0943-13A~LMW-04U

Date Collected: 6/11/2011 6:26:54 PM

Analyst:

Data Type: Reprocessed on 6/12/2011 8:11:55 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0943-13A~LMW-04U

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	863573.9	97.338	%	1.1807				1.21%
Lu 261.542	913980.1	101.4	%	0.79				0.78%
Ag 328.068†	84.3	0.00089	mg/L	0.000777	0.00089	mg/L	0.000777	86.99%
Al 308.215†	47738.1	2.5563	mg/L	0.01502	2.5563	mg/L	0.01502	0.59%
As 188.979†	5.1	0.00481	mg/L	0.003046	0.00481	mg/L	0.003046	63.35%
Ba 233.527†	1165.5	0.02705	mg/L	0.000284	0.02705	mg/L	0.000284	1.05%
Be 313.107†	32.9	0.00020	mg/L	0.000025	0.00020	mg/L	0.000025	12.41%
Co 228.616†	85.3	0.00327	mg/L	0.000248	0.00327	mg/L	0.000248	7.58%
Cr 267.716†	6780.8	0.17628	mg/L	0.002684	0.17628	mg/L	0.002684	1.52%
Cu 324.752†	15855.2	0.13698	mg/L	0.000553	0.13698	mg/L	0.000553	0.40%
Fe 273.955†	56481.1	2.6593	mg/L	0.01404	2.6593	mg/L	0.01404	0.53%
Mg 279.077†	29185.9	1.7140	mg/L	0.00775	1.7140	mg/L	0.00775	0.45%
Mn 257.610†	17298.5	0.04708	mg/L	0.000092	0.04708	mg/L	0.000092	0.20%
Ni 231.604†	845.6	0.04353	mg/L	0.000397	0.04353	mg/L	0.000397	0.91%
Pb 220.353†	206.8	0.04321	mg/L	0.000734	0.04321	mg/L	0.000734	1.70%
Sb 206.836†	6.4	0.00141	mg/L	0.003412	0.00141	mg/L	0.003412	241.13%
Se 196.026†	4.2	0.00471	mg/L	0.005123	0.00471	mg/L	0.005123	108.66%
Tl 190.801†	-0.0	0.00081	mg/L	0.002094	0.00081	mg/L	0.002094	260.02%
V 292.402†	438.8	0.00700	mg/L	0.000089	0.00700	mg/L	0.000089	1.28%
Zn 206.200†	18243.1	0.63035	mg/L	0.002570	0.63035	mg/L	0.002570	0.41%
Cd 226.502†	2307.2	0.05425	mg/L	0.000434	0.05425	mg/L	0.000434	0.80%
Ti 334.940†	38852.3	0.09025	mg/L	0.000039	0.09025	mg/L	0.000039	0.04%
Ca 227.546†	2542.6	14.215	mg/L	0.0510	14.215	mg/L	0.0510	0.36%
Na 589.592	89022.9	26.059	mg/L	0.4369	26.059	mg/L	0.4369	1.68%
K 766.490	5424.0	6.5994	mg/L	0.17951	6.5994	mg/L	0.17951	2.72%

Sequence No.: 32

Autosampler Location: 152

Sample ID: K0943-14A~LMW-04F

Date Collected: 6/11/2011 6:30:32 PM

Analyst:

Data Type: Reprocessed on 6/12/2011 8:11:56 AM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: K0943-14A~LMW-04F

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 360.073	867960.2	97.833	%	1.3676				1.40%
Lu 261.542	913844.0	101.4	%	1.16				1.15%
Ag 328.068†	59.6	0.00063	mg/L	0.000079	0.00063	mg/L	0.000079	12.53%
Al 308.215†	825.9	0.04421	mg/L	0.005770	0.04421	mg/L	0.005770	13.05%
As 188.979†	1.2	0.00173	mg/L	0.003981	0.00173	mg/L	0.003981	230.44%
Ba 233.527†	569.5	0.01321	mg/L	0.000232	0.01321	mg/L	0.000232	1.76%
Be 313.107†	-0.6	0.00000	mg/L	0.000020	0.00000	mg/L	0.000020	932.36%
Co 228.616†	63.8	0.00260	mg/L	0.000110	0.00260	mg/L	0.000110	4.24%
Cr 267.716†	5464.0	0.14205	mg/L	0.000359	0.14205	mg/L	0.000359	0.25%
Cu 324.752†	5041.9	0.04353	mg/L	0.000585	0.04353	mg/L	0.000585	1.34%
Fe 273.955†	2295.8	0.10870	mg/L	0.001711	0.10870	mg/L	0.001711	1.57%
Mg 279.077†	21648.3	1.2712	mg/L	0.00562	1.2712	mg/L	0.00562	0.44%
Mn 257.610†	4531.7	0.01231	mg/L	0.000151	0.01231	mg/L	0.000151	1.23%
Ni 231.604†	247.6	0.01276	mg/L	0.000261	0.01276	mg/L	0.000261	2.05%
Pb 220.353†	1.2	0.00030	mg/L	0.000847	0.00030	mg/L	0.000847	284.82%
Sb 206.836†	5.8	0.00182	mg/L	0.002534	0.00182	mg/L	0.002534	138.87%
Se 196.026†	2.3	0.00197	mg/L	0.002485	0.00197	mg/L	0.002485	126.12%
Tl 190.801†	-0.6	-0.00027	mg/L	0.002783	-0.00027	mg/L	0.002783	>999.9%
V 292.402†	67.4	0.00124	mg/L	0.000720	0.00124	mg/L	0.000720	57.83%
Zn 206.200†	3147.0	0.10905	mg/L	0.000997	0.10905	mg/L	0.000997	0.91%
Cd 226.502†	839.3	0.01981	mg/L	0.000282	0.01981	mg/L	0.000282	1.42%
Ti 334.940†	554.8	0.00141	mg/L	0.000177	0.00141	mg/L	0.000177	12.57%
Ca 227.546†	2221.6	12.303	mg/L	0.0972	12.303	mg/L	0.0972	0.79%

Na 589.592	99554.2	29.142 mg/L	0.1472	29.142 mg/L	0.1472	0.51%
K 766.490	5579.0	6.7881 mg/L	0.04929	6.7881 mg/L	0.04929	0.73%

Sequence No.: 33

Sample ID: K0943-15A~LMW-03U

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 153

Date Collected: 6/11/2011 6:34:10 PM

Data Type: Reprocessed on 6/12/2011 8:11:57 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0943-15A~LMW-03U

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	866172.8	97.631	%	1.0982			1.12%
Lu 261.542	909850.5	101.0	%	1.49			1.48%
Ag 328.068†	32.9	0.00035	mg/L	0.000510	0.00035 mg/L	0.000510	146.66%
Al 308.215†	6468.8	0.34639	mg/L	0.004657	0.34639 mg/L	0.004657	1.34%
As 188.979†	3.8	0.00318	mg/L	0.002684	0.00318 mg/L	0.002684	84.53%
Ba 233.527†	823.4	0.01911	mg/L	0.000471	0.01911 mg/L	0.000471	2.47%
Be 313.107†	-1.8	0.00003	mg/L	0.000033	0.00003 mg/L	0.000033	128.94%
Co 228.616†	8.9	0.00033	mg/L	0.000192	0.00033 mg/L	0.000192	57.93%
Cr 267.716†	2291.3	0.05956	mg/L	0.001091	0.05956 mg/L	0.001091	1.83%
Cu 324.752†	5271.9	0.04552	mg/L	0.000086	0.04552 mg/L	0.000086	0.19%
Fe 273.955†	9806.4	0.46185	mg/L	0.002205	0.46185 mg/L	0.002205	0.48%
Mg 279.077†	46158.8	2.7105	mg/L	0.00526	2.7105 mg/L	0.00526	0.19%
Mn 257.610†	4368.8	0.01182	mg/L	0.000207	0.01182 mg/L	0.000207	1.75%
Ni 231.604†	130.6	0.00672	mg/L	0.000228	0.00672 mg/L	0.000228	3.39%
Pb 220.353†	67.5	0.01413	mg/L	0.000541	0.01413 mg/L	0.000541	3.83%
Sb 206.836†	0.2	-0.00100	mg/L	0.002028	-0.00100 mg/L	0.002028	202.42%
Se 196.026†	-9.4	-0.00934	mg/L	0.007666	-0.00934 mg/L	0.007666	82.10%
Tl 190.801†	-0.7	-0.00017	mg/L	0.003120	-0.00017 mg/L	0.003120	>999.9%
V 292.402†	87.3	0.00143	mg/L	0.000891	0.00143 mg/L	0.000891	62.47%
Zn 206.200†	1586.2	0.05493	mg/L	0.000868	0.05493 mg/L	0.000868	1.58%
Cd 226.502†	280.5	0.00658	mg/L	0.000092	0.00658 mg/L	0.000092	1.39%
Ti 334.940†	5864.4	0.01377	mg/L	0.000137	0.01377 mg/L	0.000137	1.00%
Ca 227.546†	3051.7	16.917	mg/L	0.3066	16.917 mg/L	0.3066	1.81%
Na 589.592	42462.1	12.430	mg/L	0.0851	12.430 mg/L	0.0851	0.68%
K 766.490	1603.9	1.9515	mg/L	0.17865	1.9515 mg/L	0.17865	9.15%

Sequence No.: 34

Sample ID: K0943-16A~LMW-03F

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 154

Date Collected: 6/11/2011 6:37:47 PM

Data Type: Reprocessed on 6/12/2011 8:11:57 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: K0943-16A~LMW-03F

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	862013.7	97.162	%	1.5880			1.63%
Lu 261.542	905531.8	100.5	%	1.75			1.74%
Ag 328.068†	18.3	0.00019	mg/L	0.000580	0.00019 mg/L	0.000580	299.59%
Al 308.215†	151.8	0.00813	mg/L	0.004847	0.00813 mg/L	0.004847	59.65%
As 188.979†	-0.2	0.00020	mg/L	0.000892	0.00020 mg/L	0.000892	442.02%
Ba 233.527†	778.2	0.01806	mg/L	0.000136	0.01806 mg/L	0.000136	0.75%
Be 313.107†	1.0	0.00000	mg/L	0.000025	0.00000 mg/L	0.000025	>999.9%
Co 228.616†	6.1	0.00025	mg/L	0.000118	0.00025 mg/L	0.000118	47.50%
Cr 267.716†	1253.0	0.03257	mg/L	0.000548	0.03257 mg/L	0.000548	1.68%
Cu 324.752†	1354.1	0.01168	mg/L	0.000211	0.01168 mg/L	0.000211	1.81%
Fe 273.955†	203.3	0.00972	mg/L	0.000248	0.00972 mg/L	0.000248	2.55%
Mg 279.077†	47016.6	2.7608	mg/L	0.01020	2.7608 mg/L	0.01020	0.37%
Mn 257.610†	705.7	0.00184	mg/L	0.000037	0.00184 mg/L	0.000037	1.99%
Ni 231.604†	84.3	0.00434	mg/L	0.000385	0.00434 mg/L	0.000385	8.88%
Pb 220.353†	-0.9	-0.00011	mg/L	0.000345	-0.00011 mg/L	0.000345	303.07%
Sb 206.836†	4.7	0.00291	mg/L	0.001730	0.00291 mg/L	0.001730	59.43%
Se 196.026†	-2.2	-0.00250	mg/L	0.001499	-0.00250 mg/L	0.001499	59.96%
Tl 190.801†	7.7	0.00472	mg/L	0.001244	0.00472 mg/L	0.001244	26.34%

V 292.402†	15.9	0.00029 mg/L	0.000402	0.00029 mg/L	0.000402	137.73%
Zn 206.200†	1167.1	0.04038 mg/L	0.000607	0.04038 mg/L	0.000607	1.50%
Cd 226.502†	193.2	0.00456 mg/L	0.000138	0.00456 mg/L	0.000138	3.02%
Ti 334.940†	-64.0	0.00002 mg/L	0.000008	0.00002 mg/L	0.000008	42.08%
Ca 227.546†	3026.4	16.753 mg/L	0.3052	16.753 mg/L	0.3052	1.82%
Na 589.592	45236.6	13.242 mg/L	0.1541	13.242 mg/L	0.1541	1.16%
K 766.490	1457.7	1.7736 mg/L	0.02347	1.7736 mg/L	0.02347	1.32%

Sequence No.: 35

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 6/11/2011 6:41:24 PM

Data Type: Reprocessed on 6/12/2011 8:11:58 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	826163.0	93.121 %	0.9176			0.99%
Lu 261.542	880847.9	97.73 %	0.645			0.66%
Ag 328.068†	116913.9	1.2405 mg/L	0.01271	1.2405 mg/L	0.01271	1.02%
QC value within limits for Ag 328.068 Recovery = 99.24%						
Al 308.215†	189805.3	10.134 mg/L	0.0222	10.134 mg/L	0.0222	0.22%
QC value within limits for Al 308.215 Recovery = 101.34%						
As 188.979†	694.3	0.48667 mg/L	0.007463	0.48667 mg/L	0.007463	1.53%
QC value within limits for As 188.979 Recovery = 97.33%						
Ba 233.527†	443417.6	10.292 mg/L	0.0979	10.292 mg/L	0.0979	0.95%
QC value within limits for Ba 233.527 Recovery = 102.92%						
Be 313.107†	329785.0	0.24780 mg/L	0.000634	0.24780 mg/L	0.000634	0.26%
QC value within limits for Be 313.107 Recovery = 99.12%						
Co 228.616†	63648.3	2.5864 mg/L	0.00904	2.5864 mg/L	0.00904	0.35%
QC value within limits for Co 228.616 Recovery = 103.45%						
Cr 267.716†	38596.3	1.0036 mg/L	0.01387	1.0036 mg/L	0.01387	1.38%
QC value within limits for Cr 267.716 Recovery = 100.36%						
Cu 324.752†	148324.5	1.2808 mg/L	0.01069	1.2808 mg/L	0.01069	0.83%
QC value within limits for Cu 324.752 Recovery = 102.46%						
Fe 273.955†	106964.5	5.1141 mg/L	0.01870	5.1141 mg/L	0.01870	0.37%
QC value within limits for Fe 273.955 Recovery = 102.28%						
Mg 279.077†	429964.5	25.260 mg/L	0.0817	25.260 mg/L	0.0817	0.32%
QC value within limits for Mg 279.077 Recovery = 101.04%						
Mn 257.610†	929402.3	2.5323 mg/L	0.00983	2.5323 mg/L	0.00983	0.39%
QC value within limits for Mn 257.610 Recovery = 101.29%						
Ni 231.604†	48878.5	2.5195 mg/L	0.02921	2.5195 mg/L	0.02921	1.16%
QC value within limits for Ni 231.604 Recovery = 100.78%						
Pb 220.353†	2414.7	0.50303 mg/L	0.003485	0.50303 mg/L	0.003485	0.69%
QC value within limits for Pb 220.353 Recovery = 100.61%						
Sb 206.836†	668.9	0.49860 mg/L	0.007527	0.49860 mg/L	0.007527	1.51%
QC value within limits for Sb 206.836 Recovery = 99.72%						
Se 196.026†	511.0	0.49635 mg/L	0.006222	0.49635 mg/L	0.006222	1.25%
QC value within limits for Se 196.026 Recovery = 99.27%						
Tl 190.801†	849.9	0.50815 mg/L	0.007056	0.50815 mg/L	0.007056	1.39%
QC value within limits for Tl 190.801 Recovery = 101.63%						
V 292.402†	164529.7	2.4940 mg/L	0.02304	2.4940 mg/L	0.02304	0.92%
QC value within limits for V 292.402 Recovery = 99.76%						
Zn 206.200†	73353.6	2.5354 mg/L	0.00406	2.5354 mg/L	0.00406	0.16%
QC value within limits for Zn 206.200 Recovery = 101.42%						
Cd 226.502†	10428.9	0.24576 mg/L	0.000188	0.24576 mg/L	0.000188	0.08%
QC value within limits for Cd 226.502 Recovery = 98.30%						
Ti 334.940†	219140.9	0.50795 mg/L	0.001221	0.50795 mg/L	0.001221	0.24%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	4620.5	25.690 mg/L	0.1564	25.690 mg/L	0.1564	0.61%
QC value within limits for Ca 227.546 Recovery = 102.76%						
Na 589.592	84427.3	24.714 mg/L	0.2492	24.714 mg/L	0.2492	1.01%
QC value within limits for Na 589.592 Recovery = 98.86%						
K 766.490	20103.3	24.460 mg/L	0.2311	24.460 mg/L	0.2311	0.94%
QC value within limits for K 766.490 Recovery = 97.84%						

All analyte(s) passed QC.

Sequence No.: 36

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 6/11/2011 6:44:59 PM

Data Type: Reprocessed on 6/12/2011 8:11:59 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	852477.0	96.087	%	1.5501			1.61%
Lu 261.542	882392.6	97.90	%	1.131			1.16%
Ag 328.068†	26.3	0.00028	mg/L	0.000399	0.00028 mg/L	0.000399	142.69%
Al 308.215†	413.1	0.02211	mg/L	0.003681	0.02211 mg/L	0.003681	16.65%
As 188.979†	4.8	0.00333	mg/L	0.002718	0.00333 mg/L	0.002718	81.50%
Ba 233.527†	69.6	0.00162	mg/L	0.000456	0.00162 mg/L	0.000456	28.21%
Be 313.107†	20.5	0.00002	mg/L	0.000036	0.00002 mg/L	0.000036	227.12%
Co 228.616†	12.1	0.00049	mg/L	0.000064	0.00049 mg/L	0.000064	13.04%
Cr 267.716†	1.0	0.00003	mg/L	0.000171	0.00003 mg/L	0.000171	662.99%
Cu 324.752†	23.8	0.00021	mg/L	0.000231	0.00021 mg/L	0.000231	112.53%
Fe 273.955†	52.4	0.00250	mg/L	0.000449	0.00250 mg/L	0.000449	17.99%
Mg 279.077†	132.0	0.00775	mg/L	0.001956	0.00775 mg/L	0.001956	25.23%
Mn 257.610†	178.1	0.00049	mg/L	0.000112	0.00049 mg/L	0.000112	23.03%
Ni 231.604†	2.8	0.00014	mg/L	0.000250	0.00014 mg/L	0.000250	174.34%
Pb 220.353†	-2.4	-0.00050	mg/L	0.001140	-0.00050 mg/L	0.001140	229.27%
Sb 206.836†	10.5	0.00804	mg/L	0.002632	0.00804 mg/L	0.002632	32.75%
Se 196.026†	-1.7	-0.00165	mg/L	0.001726	-0.00165 mg/L	0.001726	104.46%
Tl 190.801†	-2.3	-0.00133	mg/L	0.003508	-0.00133 mg/L	0.003508	263.28%
V 292.402†	63.7	0.00096	mg/L	0.000248	0.00096 mg/L	0.000248	25.66%
Zn 206.200†	34.5	0.00119	mg/L	0.000211	0.00119 mg/L	0.000211	17.73%
Cd 226.502†	-1.6	-0.00004	mg/L	0.000125	-0.00004 mg/L	0.000125	336.59%
Ti 334.940†	64.6	0.00015	mg/L	0.000188	0.00015 mg/L	0.000188	122.88%
Ca 227.546†	40.4	0.22358	mg/L	0.054164	0.22358 mg/L	0.054164	24.23%
Na 589.592	5.0	0.00145	mg/L	0.019005	0.00145 mg/L	0.019005	>999.9%
K 766.490	-98.7	-0.12004	mg/L	0.123399	-0.12004 mg/L	0.123399	102.80%

=====

Sequence No.: 37

Sample ID: MB-59735~PBW

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 14

Date Collected: 6/11/2011 6:48:34 PM

Data Type: Reprocessed on 6/12/2011 8:12:00 AM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: MB-59735~PBW

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	865126.5	97.513	%	0.5268			0.54%
Lu 261.542	899456.6	99.80	%	0.628			0.63%
Ag 328.068†	45.1	0.00048	mg/L	0.000542	0.00048 mg/L	0.000542	113.59%
Al 308.215†	-44.1	-0.00236	mg/L	0.003436	-0.00236 mg/L	0.003436	145.44%
As 188.979†	7.2	0.00498	mg/L	0.000564	0.00498 mg/L	0.000564	11.32%
Ba 233.527†	17.2	0.00040	mg/L	0.000079	0.00040 mg/L	0.000079	19.81%
Be 313.107†	13.3	0.00001	mg/L	0.000035	0.00001 mg/L	0.000035	345.66%
Co 228.616†	4.6	0.00019	mg/L	0.000031	0.00019 mg/L	0.000031	16.38%
Cr 267.716†	3.2	0.00008	mg/L	0.000244	0.00008 mg/L	0.000244	291.80%
Cu 324.752†	-70.1	-0.00060	mg/L	0.000123	-0.00060 mg/L	0.000123	20.28%
Fe 273.955†	60.0	0.00282	mg/L	0.000465	0.00282 mg/L	0.000465	16.48%
Mg 279.077†	-15.1	-0.00089	mg/L	0.004807	-0.00089 mg/L	0.004807	540.71%
Mn 257.610†	39.8	0.00011	mg/L	0.000035	0.00011 mg/L	0.000035	31.90%
Ni 231.604†	1.1	0.00005	mg/L	0.000450	0.00005 mg/L	0.000450	828.58%
Pb 220.353†	-4.5	-0.00094	mg/L	0.001130	-0.00094 mg/L	0.001130	120.74%
Sb 206.836†	8.7	0.00669	mg/L	0.003289	0.00669 mg/L	0.003289	49.17%
Se 196.026†	-5.8	-0.00565	mg/L	0.005398	-0.00565 mg/L	0.005398	95.56%
Tl 190.801†	-0.2	-0.00014	mg/L	0.003189	-0.00014 mg/L	0.003189	>999.9%
V 292.402†	0.2	0.00000	mg/L	0.000564	0.00000 mg/L	0.000564	>999.9%
Zn 206.200†	2.5	0.00009	mg/L	0.000099	0.00009 mg/L	0.000099	114.61%
Cd 226.502†	-2.4	-0.00006	mg/L	0.000158	-0.00006 mg/L	0.000158	277.35%
Ti 334.940†	25.8	0.00006	mg/L	0.000193	0.00006 mg/L	0.000193	314.93%

Method Name: comm hg
 Method Description: Hg Analysis by Cold Vapor AA
 Element: Hg

Date: 06/10/2011
 Technique: FI-MHS
 Calibration Type:
 Hg, Zero Intercept: Linear
 Wavelength: 253.7 nm

Sample Info Name: 59655M~1.SIF Results Data Set Name: H11061001

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 06/10/2011
 Sample ID: S0

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0003	0.0035	0.0003	09:00:53	Yes
2			0.0002	0.0018	0.0002	09:01:27	Yes
Mean:			0.0002				
SD :			0.0001				
%RSD:			48.1427				

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 06/10/2011
 Sample ID: S0.2

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0027	0.0131	0.0029	09:02:23	Yes
2			0.0026	0.0135	0.0028	09:02:57	Yes
Mean:			0.0026				
SD :			0.0000				
%RSD:			1.7880				

[Hg] Standard number 1 applied. [0.200]
 Correlation Coefficient: 1.00000 Slope: 0.01312

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 06/10/2011
 Sample ID: S1.0

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0135	0.0736	0.0138	09:03:52	Yes
2			0.0135	0.0688	0.0138	09:04:25	Yes
Mean:			0.0135				
SD :			0.0000				
%RSD:							

[Hg] Standard number 2 applied. [1.000]
 Correlation Coefficient: 0.99995 Slope: 0.01350

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 06/10/2011
 Sample ID: S2.0

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0276	0.1450	0.0279	09:05:20	Yes
2			0.0280	0.1356	0.0282	09:05:54	Yes
Mean:			0.0278				
SD :			0.0003				
%RSD:			0.9218				

[Hg] Standard number 3 applied. [2.000]
 Correlation Coefficient: 0.99978 Slope: 0.01381

=====

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 06/10/2011

Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0682	0.3619	0.0684	09:06:51	Yes
2			0.0669	0.3473	0.0671	09:07:25	Yes
Mean:			0.0675				
SD :			0.0009				
%RSD:			1.3914				
[Hg] Standard number 4 applied. [5.000]							
Correlation Coefficient: 0.99989				Slope: 0.01356			

=====

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 06/10/2011

Sample ID: S10.0

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.1363	0.7102	0.1366	09:08:19	Yes
2			0.1243	0.6317	0.1246	09:08:53	Yes
Mean:			0.1303				
SD :			0.0085				
%RSD:			6.5236				
[Hg] Standard number 5 applied. [10.00]							
Correlation Coefficient: 0.99969				Slope: 0.01316			

Calibration data for Hg

Standard ID	Mean Signal (Peak Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
S0	0.0002	---	----	----	----
S0.2	0.0026	0.200	0.199	0.0000	1.8
S1.0	0.0135	1.000	1.027	0.0000	----
S2.0	0.0278	2.000	2.112	0.0003	0.9
S5.0	0.0675	5.000	5.133	0.0009	1.4
S10.0	0.1303	10.000	9.905	0.0085	6.5
Correlation Coefficient: 0.99969		Slope: 0.01316		----	

=====

Element: Hg Seq. No.: 7 AS Loc.: 7 Date: 06/10/2011

Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.284	5.284	0.0695	0.3695	0.0698	09:09:49	Yes
2	4.587	4.587	0.0603	0.3056	0.0606	09:10:23	Yes
Mean:	4.935	4.935	0.0649				
SD :	0.4934	0.4934	0.0065				
%RSD:	10.0	10.0	9.9970				
QC value within specified limits.							

=====

Element: Hg Seq. No.: 8 AS Loc.: 1 Date: 06/10/2011

Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0002	-0.0010	0.0001	09:11:20	Yes
2	-0.007	-0.007	-0.0001	0.0003	0.0002	09:11:53	Yes
Mean:	-0.010	-0.010	-0.0001				
SD :	0.0039	0.0039	0.0001				
%RSD:	40.2	40.2	40.1936				
QC value within specified limits.							

=====
 Element: Hg Seq. No.: 9 AS Loc.: 17 Date: 06/10/2011
 Sample ID: MB-59655~BW

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.020	-0.020	-0.0003	-0.0025	0.0000	09:12:49	Yes
2	-0.018	-0.018	-0.0002	-0.0013	0.0000	09:13:22	Yes
Mean:	-0.019	-0.019	-0.0002				
SD :	0.0016	0.0016	0.0000				
%RSD:	8.5	8.5	8.4528				

=====
 Element: Hg Seq. No.: 10 AS Loc.: 18 Date: 06/10/2011
 Sample ID: LCS-59655~LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.928	4.928	0.0648	0.3335	0.0651	09:14:17	Yes
2	4.521	4.521	0.0595	0.2952	0.0597	09:14:51	Yes
Mean:	4.724	4.724	0.0622				
SD :	0.2872	0.2872	0.0038				
%RSD:	6.1	6.1	6.0792				

=====
 Element: Hg Seq. No.: 11 AS Loc.: 19 Date: 06/10/2011
 Sample ID: K0888-02E~MW-5D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0002	-0.0004	0.0001	09:15:46	Yes
2	-0.016	-0.016	-0.0002	-0.0007	0.0000	09:16:20	Yes
Mean:	-0.014	-0.014	-0.0002				
SD :	0.0024	0.0024	0.0000				
%RSD:	16.9	16.9	16.8927				

=====
 Element: Hg Seq. No.: 12 AS Loc.: 20 Date: 06/10/2011
 Sample ID: K0888-03E~MW-5S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.015	-0.015	-0.0002	-0.0006	0.0001	09:17:15	Yes
2	-0.017	-0.017	-0.0002	-0.0008	0.0000	09:17:49	Yes
Mean:	-0.016	-0.016	-0.0002				
SD :	0.0012	0.0012	0.0000				
%RSD:	7.9	7.9	7.8645				

=====
 Element: Hg Seq. No.: 13 AS Loc.: 21 Date: 06/10/2011
 Sample ID: K0888-04E~MW-5I

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	-0.0002	-0.0011	0.0000	09:18:43	Yes
2	-0.007	-0.007	-0.0001	0.0012	0.0002	09:19:17	Yes
Mean:	-0.012	-0.012	-0.0002				
SD :	0.0064	0.0064	0.0001				
%RSD:	53.6	53.6	53.6175				

=====
 Element: Hg Seq. No.: 14 AS Loc.: 22 Date: 06/10/2011
 Sample ID: K0888-06E~MW-6S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	-0.0002	-0.0019	0.0000	09:20:10	Yes
2	-0.018	-0.018	-0.0002	-0.0027	0.0000	09:20:44	Yes
Mean:	-0.018	-0.018	-0.0002				

SD : 0.0005 0.0005 0.0000
 %RSD: 3.0 3.0 3.0346

=====
 Element: Hg Seq. No.: 15 AS Loc.: 23 Date: 06/10/2011
 Sample ID: K0888-07E~BLIND DUP 1
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.006	-0.006	-0.0001	0.0012	0.0002	09:21:39	Yes
2	-0.019	-0.019	-0.0002	-0.0026	0.0000	09:22:13	Yes
Mean:	-0.012	-0.012	-0.0002				
SD :	0.0091	0.0091	0.0001				
%RSD:	73.6	73.6	73.5889				

=====
 Element: Hg Seq. No.: 16 AS Loc.: 24 Date: 06/10/2011
 Sample ID: K0888-08E~72816
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.020	-0.020	-0.0003	-0.0046	0.0000	09:23:08	Yes
2	-0.014	-0.014	-0.0002	-0.0014	0.0001	09:23:42	Yes
Mean:	-0.017	-0.017	-0.0002				
SD :	0.0041	0.0041	0.0001				
%RSD:	24.6	24.6	24.6051				

=====
 Element: Hg Seq. No.: 17 AS Loc.: 25 Date: 06/10/2011
 Sample ID: K0888-09E~MRF-4
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	-0.0001	0.0002	0.0002	09:24:36	Yes
2	-0.006	-0.006	-0.0001	0.0017	0.0002	09:25:10	Yes
Mean:	-0.007	-0.007	-0.0001				
SD :	0.0011	0.0011	0.0000				
%RSD:	16.5	16.5	16.4734				

=====
 Element: Hg Seq. No.: 18 AS Loc.: 26 Date: 06/10/2011
 Sample ID: K0888-10E~MW-3S
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.009	-0.009	-0.0001	0.0004	0.0001	09:26:04	Yes
2	-0.017	-0.017	-0.0002	-0.0013	0.0000	09:26:38	Yes
Mean:	-0.013	-0.013	-0.0002				
SD :	0.0058	0.0058	0.0001				
%RSD:	43.2	43.2	43.2036				

=====
 Element: Hg Seq. No.: 19 AS Loc.: 7 Date: 06/10/2011
 Sample ID: CCV
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.491	5.491	0.0722	0.3656	0.0725	09:27:33	Yes
2	4.832	4.832	0.0636	0.3292	0.0638	09:28:07	Yes
Mean:	5.161	5.161	0.0679				
SD :	0.4661	0.4661	0.0061				
%RSD:	9.0	9.0	9.0298				

QC value within specified limits.

=====
 Element: Hg Seq. No.: 20 AS Loc.: 1 Date: 06/10/2011
 Sample ID: CCB
 =====

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-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Peak      Time      Peak
#      µg/L       µg/L       Signal    Area      Height    Height    Stored
1      -0.004     -0.004     -0.0001   0.0001    0.0002    09:29:04  Yes
2      -0.016     -0.016     -0.0002   -0.0016   0.0000    09:29:38  Yes
Mean:   -0.010     -0.010     -0.0001
SD :     0.0087     0.0087     0.0001
%RSD:    85.9       85.9       85.8815
QC value within specified limits.

```

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=====
Element: Hg      Seq. No.: 21      AS Loc.: 27      Date: 06/10/2011
Sample ID: K0888-11E~FIELD BLANK 1

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Repl  SampleConc  StndConc  BlnkCorr  Peak      Peak      Time      Peak
#      µg/L       µg/L       Signal    Area      Height    Height    Stored
1      -0.018     -0.018     -0.0002   -0.0017   0.0000    09:30:49  Yes
2      -0.014     -0.014     -0.0002   -0.0003   0.0001    09:31:23  Yes
Mean:   -0.016     -0.016     -0.0002
SD :     0.0025     0.0025     0.0000
%RSD:    15.3       15.3       15.3252

```

```

=====
Element: Hg      Seq. No.: 22      AS Loc.: 28      Date: 06/10/2011
Sample ID: K0888-13E~MW-10I (R)

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Peak      Time      Peak
#      µg/L       µg/L       Signal    Area      Height    Height    Stored
1      -0.017     -0.017     -0.0002   -0.0015   0.0000    09:32:17  Yes
2      -0.015     -0.015     -0.0002   -0.0012   0.0001    09:32:52  Yes
Mean:   -0.016     -0.016     -0.0002
SD :     0.0016     0.0016     0.0000
%RSD:    10.1       10.1       10.0570

```

```

=====
Element: Hg      Seq. No.: 23      AS Loc.: 29      Date: 06/10/2011
Sample ID: K0888-14E~MW-10S (R)

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Peak      Time      Peak
#      µg/L       µg/L       Signal    Area      Height    Height    Stored
1      -0.017     -0.017     -0.0002   -0.0025   0.0000    09:33:47  Yes
2      -0.017     -0.017     -0.0002   -0.0019   0.0000    09:34:21  Yes
Mean:   -0.017     -0.017     -0.0002
SD :     0.0001     0.0001     0.0000
%RSD:     0.7       0.7       0.6908

```

```

=====
Element: Hg      Seq. No.: 24      AS Loc.: 30      Date: 06/10/2011
Sample ID: K0888-16E~MW-2D

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Peak      Time      Peak
#      µg/L       µg/L       Signal    Area      Height    Height    Stored
1      -0.015     -0.015     -0.0002   -0.0017   0.0000    09:35:15  Yes
2      -0.016     -0.016     -0.0002   -0.0015   0.0000    09:35:49  Yes
Mean:   -0.016     -0.016     -0.0002
SD :     0.0003     0.0003     0.0000
%RSD:     1.8       1.8       1.7952

```

```

=====
Element: Hg      Seq. No.: 25      AS Loc.: 31      Date: 06/10/2011
Sample ID: K0888-16EDUP~MW-2DD

```

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Peak      Time      Peak
#      µg/L       µg/L       Signal    Area      Height    Height    Stored
1      -0.013     -0.013     -0.0002   -0.0004   0.0001    09:36:43  Yes
2      -0.016     -0.016     -0.0002   -0.0015   0.0000    09:37:17  Yes
Mean:   -0.015     -0.015     -0.0002

```

SD : 0.0021 0.0021 0.0000
 %RSD: 14.3 14.3 14.2877

=====

Element: Hg Seq. No.: 26 AS Loc.: 32 Date: 06/10/2011
 Sample ID: K0888-16EMS~MW-2DS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.752	4.752	0.0625	0.3273	0.0628	09:38:15	Yes
2	4.584	4.584	0.0603	0.2993	0.0606	09:38:49	Yes
Mean:	4.668	4.668	0.0614				
SD :	0.1187	0.1187	0.0016				
%RSD:	2.5	2.5	2.5436				

=====

Element: Hg Seq. No.: 27 AS Loc.: 33 Date: 06/10/2011
 Sample ID: K0888-17E~MW-2S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.019	-0.019	-0.0002	-0.0028	0.0000	09:39:42	Yes
2	-0.017	-0.017	-0.0002	-0.0024	0.0000	09:40:16	Yes
Mean:	-0.018	-0.018	-0.0002				
SD :	0.0009	0.0009	0.0000				
%RSD:	5.1	5.1	5.0962				

=====

Element: Hg Seq. No.: 28 AS Loc.: 34 Date: 06/10/2011
 Sample ID: K0888-18E~MW-4D

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.008	-0.008	-0.0001	-0.0014	0.0001	09:41:10	Yes
2	-0.016	-0.016	-0.0002	-0.0046	0.0000	09:41:44	Yes
Mean:	-0.012	-0.012	-0.0002				
SD :	0.0056	0.0056	0.0001				
%RSD:	46.9	46.9	46.9263				

=====

Element: Hg Seq. No.: 29 AS Loc.: 35 Date: 06/10/2011
 Sample ID: K0888-19E~MW-4S

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.018	-0.018	-0.0002	-0.0026	0.0000	09:42:39	Yes
2	-0.017	-0.017	-0.0002	-0.0031	0.0000	09:43:12	Yes
Mean:	-0.017	-0.017	-0.0002				
SD :	0.0003	0.0003	0.0000				
%RSD:	1.7	1.7	1.7416				

=====

Element: Hg Seq. No.: 30 AS Loc.: 36 Date: 06/10/2011
 Sample ID: K0888-20E~73767

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0001	0.0004	0.0001	09:44:08	Yes
2	-0.012	-0.012	-0.0002	0.0003	0.0001	09:44:42	Yes
Mean:	-0.011	-0.011	-0.0001				
SD :	0.0012	0.0012	0.0000				
%RSD:	10.9	10.9	10.9183				

=====

Element: Hg Seq. No.: 31 AS Loc.: 7 Date: 06/10/2011
 Sample ID: CCV

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.418	5.418	0.0713	0.3650	0.0715	09:45:39	Yes
2	5.202	5.202	0.0684	0.3436	0.0687	09:46:13	Yes
Mean:	5.310	5.310	0.0699				
SD :	0.1532	0.1532	0.0020				
%RSD:	2.9	2.9	2.8850				

QC value within specified limits.

=====
 Element: Hg Seq. No.: 32 AS Loc.: 1 Date: 06/10/2011
 Sample ID: CCB
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0000	-0.0002	0.0002	09:47:10	Yes
2	-0.018	-0.018	-0.0002	-0.0039	0.0000	09:47:45	Yes
Mean:	-0.011	-0.011	-0.0001				
SD :	0.0098	0.0098	0.0001				
%RSD:	93.0	93.0	92.9958				

QC value within specified limits.

=====
 Element: Hg Seq. No.: 33 AS Loc.: 37 Date: 06/10/2011
 Sample ID: K0942-25A~DMW-18U
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.005	-0.005	-0.0001	-0.0002	0.0002	09:48:42	Yes
2	-0.012	-0.012	-0.0002	-0.0018	0.0001	09:49:15	Yes
Mean:	-0.009	-0.009	-0.0001				
SD :	0.0047	0.0047	0.0001				
%RSD:	53.2	53.2	53.1587				

=====
 Element: Hg Seq. No.: 34 AS Loc.: 38 Date: 06/10/2011
 Sample ID: K0942-26A~DMW-18F
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.008	-0.008	-0.0001	-0.0001	0.0001	09:50:09	Yes
2	0.002	0.002	0.0000	0.0024	0.0003	09:50:43	Yes
Mean:	-0.003	-0.003	0.0000				
SD :	0.0071	0.0071	0.0001				
%RSD:	227.4	227.4	227.4404				

=====
 Element: Hg Seq. No.: 35 AS Loc.: 39 Date: 06/10/2011
 Sample ID: K0942-27A~DMW-23BU
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.017	0.017	0.0002	0.0038	0.0005	09:51:38	Yes
2	0.004	0.004	0.0001	0.0014	0.0003	09:52:12	Yes
Mean:	0.011	0.011	0.0001				
SD :	0.0092	0.0092	0.0001				
%RSD:	85.6	85.6	85.5580				

=====
 Element: Hg Seq. No.: 36 AS Loc.: 40 Date: 06/10/2011
 Sample ID: K0942-28A~DMW-23BF
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0002	-0.0011	0.0001	09:53:07	Yes
2	-0.003	-0.003	0.0000	0.0016	0.0002	09:53:41	Yes
Mean:	-0.009	-0.009	-0.0001				

SD : 0.0075 0.0075 0.0001
 %RSD: 88.3 88.3 88.2773

=====

Element: Hg Seq. No.: 37 AS Loc.: 41 Date: 06/10/2011
 Sample ID: MB-59656~BW

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0002	-0.0003	0.0001	09:54:36	Yes
2	-0.015	-0.015	-0.0002	-0.0013	0.0001	09:55:10	Yes
Mean:	-0.013	-0.013	-0.0002				
SD :	0.0022	0.0022	0.0000				
%RSD:	16.9	16.9	16.8703				

=====

Element: Hg Seq. No.: 38 AS Loc.: 42 Date: 06/10/2011
 Sample ID: LCS-59656~LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.100	5.100	0.0671	0.3364	0.0673	09:56:05	Yes
2	4.314	4.314	0.0568	0.2917	0.0570	09:56:38	Yes
Mean:	4.707	4.707	0.0619				
SD :	0.5551	0.5551	0.0073				
%RSD:	11.8	11.8	11.7936				

=====

Element: Hg Seq. No.: 39 AS Loc.: 43 Date: 06/10/2011
 Sample ID: K0942-01A~DMW-02U

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	-0.0020	0.0003	09:57:46	Yes
2	0.017	0.017	0.0002	0.0030	0.0005	09:58:20	Yes
Mean:	0.009	0.009	0.0001				
SD :	0.0119	0.0119	0.0002				
%RSD:	137.3	137.3	137.3465				

=====

Element: Hg Seq. No.: 40 AS Loc.: 44 Date: 06/10/2011
 Sample ID: K0942-02A~DMW-02F

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.009	-0.009	-0.0001	0.0000	0.0001	09:59:14	Yes
2	-0.016	-0.016	-0.0002	-0.0027	0.0000	09:59:48	Yes
Mean:	-0.013	-0.013	-0.0002				
SD :	0.0045	0.0045	0.0001				
%RSD:	35.4	35.4	35.3904				

=====

Element: Hg Seq. No.: 41 AS Loc.: 45 Date: 06/10/2011
 Sample ID: K0942-03A~DMW-03U

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.064	0.064	0.0008	0.0052	0.0011	10:00:43	Yes
2	0.051	0.051	0.0007	0.0044	0.0009	10:01:17	Yes
Mean:	0.057	0.057	0.0008				
SD :	0.0091	0.0091	0.0001				
%RSD:	15.9	15.9	15.8731				

=====

Element: Hg Seq. No.: 42 AS Loc.: 46 Date: 06/10/2011
 Sample ID: K0942-04A~DMW-03F

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0002	-0.0029	0.0001	10:02:13	Yes
2	0.009	0.009	0.0001	0.0039	0.0004	10:02:47	Yes
Mean:	-0.002	-0.002	0.0000				
SD :	0.0156	0.0156	0.0002				
%RSD:	842.4	842.4	842.4357				

=====
 Element: Hg Seq. No.: 43 AS Loc.: 7 Date: 06/10/2011
 Sample ID: CCV
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.491	5.491	0.0722	0.3633	0.0725	10:03:43	Yes
2	4.744	4.744	0.0624	0.3239	0.0627	10:04:17	Yes
Mean:	5.118	5.118	0.0673				
SD :	0.5279	0.5279	0.0069				
%RSD:	10.3	10.3	10.3157				

QC value within specified limits.

=====
 Element: Hg Seq. No.: 44 AS Loc.: 1 Date: 06/10/2011
 Sample ID: CCB
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0001	-0.0035	0.0001	10:05:13	Yes
2	0.011	0.011	0.0002	0.0031	0.0004	10:05:47	Yes
Mean:	0.001	0.001	0.0000				
SD :	0.0154	0.0154	0.0002				
%RSD:	2798	2798	2798.0701				

QC value within specified limits.

=====
 Element: Hg Seq. No.: 45 AS Loc.: 47 Date: 06/10/2011
 Sample ID: K0942-05A~DMW-09U
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.020	0.020	0.0003	0.0012	0.0005	10:06:47	Yes
2	0.028	0.028	0.0004	0.0042	0.0006	10:07:20	Yes
Mean:	0.024	0.024	0.0003				
SD :	0.0055	0.0055	0.0001				
%RSD:	23.2	23.2	23.2448				

=====
 Element: Hg Seq. No.: 46 AS Loc.: 48 Date: 06/10/2011
 Sample ID: K0942-06A~DMW-09F
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0002	-0.0027	0.0001	10:08:19	Yes
2	0.007	0.007	0.0001	0.0035	0.0003	10:08:53	Yes
Mean:	-0.003	-0.003	0.0000				
SD :	0.0155	0.0155	0.0002				
%RSD:	446.7	446.7	446.7473				

=====
 Element: Hg Seq. No.: 47 AS Loc.: 49 Date: 06/10/2011
 Sample ID: K0942-07A~DMW-09BU
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0011	0.0002	10:09:48	Yes
2	0.001	0.001	0.0000	0.0010	0.0003	10:10:22	Yes
Mean:	0.000	0.000	0.0000				

SD : 0.0008 0.0008 0.0000
 %RSD: 274.3 274.3 274.2932

=====
 Element: Hg Seq. No.: 48 AS Loc.: 50 Date: 06/10/2011
 Sample ID: K0942-08A~DMW-09BF
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0001	0.0004	0.0002	10:11:17	Yes
2	0.000	0.000	0.0000	0.0013	0.0002	10:11:51	Yes
Mean:	-0.002	-0.002	0.0000				
SD :	0.0027	0.0027	0.0000				
%RSD:	137.8	137.8	137.7843				

=====
 Element: Hg Seq. No.: 49 AS Loc.: 51 Date: 06/10/2011
 Sample ID: K0942-09A~DMW-59U
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0002	0.0008	0.0004	10:12:46	Yes
2	0.008	0.008	0.0001	-0.0004	0.0004	10:13:20	Yes
Mean:	0.012	0.012	0.0002				
SD :	0.0046	0.0046	0.0001				
%RSD:	39.1	39.1	39.1011				

=====
 Element: Hg Seq. No.: 50 AS Loc.: 52 Date: 06/10/2011
 Sample ID: K0942-10A~DMW-59F
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	-0.0002	-0.0026	0.0000	10:14:15	Yes
2	-0.001	-0.001	0.0000	0.0019	0.0002	10:14:49	Yes
Mean:	-0.009	-0.009	-0.0001				
SD :	0.0118	0.0118	0.0002				
%RSD:	130.8	130.8	130.7565				

=====
 Element: Hg Seq. No.: 51 AS Loc.: 53 Date: 06/10/2011
 Sample ID: K0942-11A~DMW-22AU
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0000	-0.0003	0.0003	10:15:43	Yes
2	-0.009	-0.009	-0.0001	0.0001	0.0001	10:16:17	Yes
Mean:	-0.003	-0.003	0.0000				
SD :	0.0086	0.0086	0.0001				
%RSD:	343.6	343.6	343.5601				

=====
 Element: Hg Seq. No.: 52 AS Loc.: 54 Date: 06/10/2011
 Sample ID: K0942-12A~DMW-22AF
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0001	0.0012	0.0002	10:17:12	Yes
2	-0.010	-0.010	-0.0001	-0.0015	0.0001	10:17:45	Yes
Mean:	-0.007	-0.007	-0.0001				
SD :	0.0039	0.0039	0.0001				
%RSD:	56.7	56.7	56.7386				

=====
 Element: Hg Seq. No.: 53 AS Loc.: 55 Date: 06/10/2011
 Sample ID: K0942-13A~DMW-22BU
 =====

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.009	-0.009	-0.0001	0.0000	0.0001	10:18:41	Yes
2	-0.005	-0.005	-0.0001	0.0006	0.0002	10:19:15	Yes
Mean:	-0.007	-0.007	-0.0001				
SD :	0.0032	0.0032	0.0000				
%RSD:	45.2	45.2	45.1519				

=====

Element: Hg Seq. No.: 54 AS Loc.: 56 Date: 06/10/2011

Sample ID: K0942-14A~DMW-22BF

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0002	-0.0007	0.0001	10:20:28	Yes
2	-0.018	-0.018	-0.0002	-0.0036	0.0000	10:21:02	Yes
Mean:	-0.016	-0.016	-0.0002				
SD :	0.0033	0.0033	0.0000				
%RSD:	20.7	20.7	20.7247				

=====

Element: Hg Seq. No.: 55 AS Loc.: 7 Date: 06/10/2011

Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.146	5.146	0.0677	0.3629	0.0680	10:21:58	Yes
2	4.624	4.624	0.0608	0.3184	0.0611	10:22:32	Yes
Mean:	4.885	4.885	0.0643				
SD :	0.3693	0.3693	0.0049				
%RSD:	7.6	7.6	7.5586				

QC value within specified limits.

=====

Element: Hg Seq. No.: 56 AS Loc.: 1 Date: 06/10/2011

Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.013	0.013	0.0002	0.0018	0.0004	10:23:29	Yes
2	-0.012	-0.012	-0.0002	-0.0023	0.0001	10:24:02	Yes
Mean:	0.001	0.001	0.0000				
SD :	0.0180	0.0180	0.0002				
%RSD:	2940	2940	2939.9695				

QC value within specified limits.

=====

Element: Hg Seq. No.: 57 AS Loc.: 57 Date: 06/10/2011

Sample ID: K0942-15A~DMW-23AU

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.040	0.040	0.0005	0.0028	0.0008	10:25:01	Yes
2	0.030	0.030	0.0004	0.0028	0.0006	10:25:35	Yes
Mean:	0.035	0.035	0.0005				
SD :	0.0076	0.0076	0.0001				
%RSD:	21.6	21.6	21.5749				

=====

Element: Hg Seq. No.: 58 AS Loc.: 58 Date: 06/10/2011

Sample ID: K0942-15ADUP~DMW-23AUD

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.029	0.029	0.0004	0.0033	0.0006	10:26:29	Yes
2	0.027	0.027	0.0004	0.0038	0.0006	10:27:03	Yes
Mean:	0.028	0.028	0.0004				

SD : 0.0017 0.0017 0.0000
 %RSD: 5.9 5.9 5.9275

=====
 Element: Hg Seq. No.: 59 AS Loc.: 59 Date: 06/10/2011
 Sample ID: K0942-15AMS~DMW-23AUS
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.539	4.539	0.0597	0.3199	0.0600	10:27:58	Yes
2	3.944	3.944	0.0519	0.2799	0.0521	10:28:32	Yes
Mean:	4.242	4.242	0.0558				
SD :	0.4210	0.4210	0.0055				
%RSD:	9.9	9.9	9.9261				

=====
 Element: Hg Seq. No.: 60 AS Loc.: 60 Date: 06/10/2011
 Sample ID: K0942-17A~DMW-13AU
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.035	0.035	0.0005	0.0009	0.0007	10:29:27	Yes
2	0.004	0.004	0.0001	0.0013	0.0003	10:30:01	Yes
Mean:	0.020	0.020	0.0003				
SD :	0.0222	0.0222	0.0003				
%RSD:	113.0	113.0	112.9991				

=====
 Element: Hg Seq. No.: 61 AS Loc.: 61 Date: 06/10/2011
 Sample ID: K0942-18A~DMW-13AF
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0001	-0.0010	0.0001	10:30:56	Yes
2	0.004	0.004	0.0001	0.0021	0.0003	10:31:30	Yes
Mean:	-0.004	-0.004	0.0000				
SD :	0.0110	0.0110	0.0001				
%RSD:	306.7	306.7	306.6898				

=====
 Element: Hg Seq. No.: 62 AS Loc.: 62 Date: 06/10/2011
 Sample ID: K0942-19A~DMW-13BU
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.015	-0.015	-0.0002	-0.0018	0.0001	10:32:24	Yes
2	-0.005	-0.005	-0.0001	-0.0001	0.0002	10:32:58	Yes
Mean:	-0.010	-0.010	-0.0001				
SD :	0.0067	0.0067	0.0001				
%RSD:	67.0	67.0	67.0049				

=====
 Element: Hg Seq. No.: 63 AS Loc.: 63 Date: 06/10/2011
 Sample ID: K0942-20A~DMW-13BF
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0017	0.0003	10:33:56	Yes
2	-0.014	-0.014	-0.0002	-0.0017	0.0001	10:34:30	Yes
Mean:	-0.007	-0.007	-0.0001				
SD :	0.0101	0.0101	0.0001				
%RSD:	151.8	151.8	151.7864				

=====
 Element: Hg Seq. No.: 64 AS Loc.: 64 Date: 06/10/2011
 Sample ID: K0942-21A~DMW-15AU
 =====

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0022	0.0003	10:35:25	Yes
2	0.002	0.002	0.0000	0.0027	0.0003	10:35:59	Yes
Mean:	0.001	0.001	0.0000				
SD :	0.0012	0.0012	0.0000				
%RSD:	88.8	88.8	88.8238				

=====

Element: Hg Seq. No.: 65 AS Loc.: 65 Date: 06/10/2011
Sample ID: MB-59657~BW

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.010	-0.010	-0.0001	0.0005	0.0001	10:36:54	Yes
2	-0.014	-0.014	-0.0002	-0.0017	0.0001	10:37:28	Yes
Mean:	-0.012	-0.012	-0.0002				
SD :	0.0028	0.0028	0.0000				
%RSD:	22.7	22.7	22.6796				

=====

Element: Hg Seq. No.: 66 AS Loc.: 66 Date: 06/10/2011
Sample ID: LCS-59657~LCS

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.973	4.973	0.0654	0.3449	0.0657	10:38:23	Yes
2	4.606	4.606	0.0606	0.3108	0.0608	10:38:58	Yes
Mean:	4.790	4.790	0.0630				
SD :	0.2601	0.2601	0.0034				
%RSD:	5.4	5.4	5.4296				

=====

Element: Hg Seq. No.: 67 AS Loc.: 7 Date: 06/10/2011
Sample ID: CCV

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.348	5.348	0.0704	0.3672	0.0706	10:39:56	Yes
2	4.846	4.846	0.0638	0.3218	0.0640	10:40:30	Yes
Mean:	5.097	5.097	0.0671				
SD :	0.3553	0.3553	0.0047				
%RSD:	7.0	7.0	6.9699				

QC value within specified limits.

=====

Element: Hg Seq. No.: 68 AS Loc.: 1 Date: 06/10/2011
Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.018	0.018	0.0002	0.0025	0.0005	10:41:27	Yes
2	0.006	0.006	0.0001	0.0013	0.0003	10:42:01	Yes
Mean:	0.012	0.012	0.0002				
SD :	0.0087	0.0087	0.0001				
%RSD:	73.9	73.9	73.9283				

QC value within specified limits.

=====

Element: Hg Seq. No.: 69 AS Loc.: 67 Date: 06/10/2011
Sample ID: K0942-16A~DMW-23AF

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	-0.0001	-0.0001	0.0002	10:42:58	Yes
2	-0.011	-0.011	-0.0001	-0.0017	0.0001	10:43:31	Yes
Mean:	-0.009	-0.009	-0.0001				

SD : 0.0023 0.0023 0.0000
 %RSD: 25.9 25.9 25.8995

=====
 Element: Hg Seq. No.: 70 AS Loc.: 68 Date: 06/10/2011
 Sample ID: K0942-16ADUP~DMW-23AFD
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0001	-0.0001	0.0002	10:44:27	Yes
2	-0.009	-0.009	-0.0001	-0.0008	0.0001	10:45:01	Yes
Mean:	-0.007	-0.007	-0.0001				
SD :	0.0030	0.0030	0.0000				
%RSD:	45.7	45.7	45.7265				

=====
 Element: Hg Seq. No.: 71 AS Loc.: 69 Date: 06/10/2011
 Sample ID: K0942-16AMS~DMW-23AFS
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.426	4.426	0.0582	0.3112	0.0585	10:45:55	Yes
2	4.082	4.082	0.0537	0.2766	0.0540	10:46:29	Yes
Mean:	4.254	4.254	0.0560				
SD :	0.2429	0.2429	0.0032				
%RSD:	5.7	5.7	5.7109				

=====
 Element: Hg Seq. No.: 72 AS Loc.: 70 Date: 06/10/2011
 Sample ID: K0942-22A~DMW-15AF
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0003	0.0002	10:47:23	Yes
2	-0.005	-0.005	-0.0001	0.0009	0.0002	10:47:57	Yes
Mean:	-0.003	-0.003	0.0000				
SD :	0.0036	0.0036	0.0000				
%RSD:	139.6	139.6	139.6215				

=====
 Element: Hg Seq. No.: 73 AS Loc.: 71 Date: 06/10/2011
 Sample ID: K0942-23A~DMW-15BU
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0017	0.0002	10:48:51	Yes
2	-0.003	-0.003	0.0000	0.0009	0.0002	10:49:25	Yes
Mean:	-0.002	-0.002	0.0000				
SD :	0.0020	0.0020	0.0000				
%RSD:	95.3	95.3	95.3380				

=====
 Element: Hg Seq. No.: 74 AS Loc.: 72 Date: 06/10/2011
 Sample ID: K0942-24A~DMW-15BF
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0001	-0.0005	0.0001	10:50:20	Yes
2	-0.007	-0.007	-0.0001	0.0000	0.0001	10:50:54	Yes
Mean:	-0.009	-0.009	-0.0001				
SD :	0.0027	0.0027	0.0000				
%RSD:	28.5	28.5	28.5061				

=====
 Element: Hg Seq. No.: 75 AS Loc.: 73 Date: 06/10/2011
 Sample ID: K0943-01A~FB-U
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.009	-0.009	-0.0001	-0.0001	0.0001	10:51:49	Yes
2	-0.011	-0.011	-0.0001	0.0001	0.0001	10:52:23	Yes
Mean:	-0.010	-0.010	-0.0001				
SD :	0.0014	0.0014	0.0000				
%RSD:	14.3	14.3	14.2599				

=====
 Element: Hg Seq. No.: 76 AS Loc.: 74 Date: 06/10/2011
 Sample ID: K0943-02A~FB-F
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0016	0.0003	10:53:24	Yes
2	0.001	0.001	0.0000	0.0021	0.0003	10:53:58	Yes
Mean:	0.001	0.001	0.0000				
SD :	0.0004	0.0004	0.0000				
%RSD:	36.6	36.6	36.5774				

=====
 Element: Hg Seq. No.: 77 AS Loc.: 75 Date: 06/10/2011
 Sample ID: K0943-03A~LMW-10U
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.012	0.012	0.0002	0.0038	0.0004	10:54:53	Yes
2	-0.003	-0.003	0.0000	0.0017	0.0002	10:55:27	Yes
Mean:	0.004	0.004	0.0001				
SD :	0.0100	0.0100	0.0001				
%RSD:	224.7	224.7	224.6861				

=====
 Element: Hg Seq. No.: 78 AS Loc.: 76 Date: 06/10/2011
 Sample ID: K0943-04A~LMW-10F
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0032	0.0003	10:56:22	Yes
2	-0.011	-0.011	-0.0001	-0.0007	0.0001	10:56:56	Yes
Mean:	-0.002	-0.002	0.0000				
SD :	0.0119	0.0119	0.0002				
%RSD:	487.2	487.2	487.1713				

=====
 Element: Hg Seq. No.: 79 AS Loc.: 7 Date: 06/10/2011
 Sample ID: CCV
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.348	5.348	0.0704	0.3675	0.0706	10:57:52	Yes
2	4.800	4.800	0.0632	0.3226	0.0634	10:58:25	Yes
Mean:	5.074	5.074	0.0668				
SD :	0.3878	0.3878	0.0051				
%RSD:	7.6	7.6	7.6432				

QC value within specified limits.

=====
 Element: Hg Seq. No.: 80 AS Loc.: 1 Date: 06/10/2011
 Sample ID: CCB
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.055	0.055	0.0007	0.0046	0.0010	10:59:22	Yes
2	0.014	0.014	0.0002	0.0038	0.0004	10:59:57	Yes
Mean:	0.035	0.035	0.0005				
SD :	0.0289	0.0289	0.0004				

%RSD: 83.0 83.0 83.0487
QC value within specified limits.

=====
Element: Hg Seq. No.: 81 AS Loc.: 77 Date: 06/10/2011
Sample ID: K0943-05A~LMW-20U
=====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	0.0007	0.0002	11:00:56	Yes
2	-0.006	-0.006	-0.0001	-0.0005	0.0002	11:01:30	Yes
Mean:	-0.004	-0.004	-0.0001				
SD :	0.0029	0.0029	0.0000				
%RSD:	70.0	70.0	69.9578				

=====
Element: Hg Seq. No.: 82 AS Loc.: 78 Date: 06/10/2011
Sample ID: K0943-06A~LMW-20F
=====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.005	-0.005	-0.0001	0.0014	0.0002	11:02:28	Yes
2	-0.005	-0.005	-0.0001	0.0017	0.0002	11:03:02	Yes
Mean:	-0.005	-0.005	-0.0001				
SD :	0.0004	0.0004	0.0000				
%RSD:	8.0	8.0	8.0257				

=====
Element: Hg Seq. No.: 83 AS Loc.: 79 Date: 06/10/2011
Sample ID: K0943-07A~LMW-21U
=====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	-0.0001	-0.0002	0.0002	11:03:56	Yes
2	0.000	0.000	0.0000	0.0018	0.0002	11:04:30	Yes
Mean:	-0.003	-0.003	0.0000				
SD :	0.0047	0.0047	0.0001				
%RSD:	141.3	141.3	141.3174				

=====
Element: Hg Seq. No.: 84 AS Loc.: 80 Date: 06/10/2011
Sample ID: K0943-08A~LMW-21F
=====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	-0.0001	0.0003	0.0002	11:05:24	Yes
2	0.005	0.005	0.0001	0.0033	0.0003	11:05:58	Yes
Mean:	-0.001	-0.001	0.0000				
SD :	0.0085	0.0085	0.0001				
%RSD:	712.4	712.4	712.3710				

=====
Element: Hg Seq. No.: 85 AS Loc.: 81 Date: 06/10/2011
Sample ID: K0943-09A~LMW-16U
=====

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.006	-0.006	-0.0001	0.0010	0.0002	11:06:52	Yes
2	-0.018	-0.018	-0.0002	-0.0026	0.0000	11:07:26	Yes
Mean:	-0.012	-0.012	-0.0002				
SD :	0.0087	0.0087	0.0001				
%RSD:	72.4	72.4	72.4464				

=====
Element: Hg Seq. No.: 86 AS Loc.: 82 Date: 06/10/2011
Sample ID: K0943-10A~LMW-16F
=====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0002	0.0001	0.0001	11:08:21	Yes
2	-0.009	-0.009	-0.0001	0.0007	0.0001	11:08:55	Yes
Mean:	-0.010	-0.010	-0.0001				
SD :	0.0014	0.0014	0.0000				
%RSD:	13.8	13.8	13.8060				

=====
 Element: Hg Seq. No.: 87 AS Loc.: 83 Date: 06/10/2011
 Sample ID: K0943-11A~LMW-02U
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.000	0.000	0.0000	0.0017	0.0002	11:09:50	Yes
2	-0.002	-0.002	0.0000	0.0025	0.0002	11:10:24	Yes
Mean:	-0.001	-0.001	0.0000				
SD :	0.0013	0.0013	0.0000				
%RSD:	147.6	147.6	147.6075				

=====
 Element: Hg Seq. No.: 88 AS Loc.: 84 Date: 06/10/2011
 Sample ID: K0943-12A~LMW-02F
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.008	-0.008	-0.0001	0.0006	0.0001	11:11:18	Yes
2	-0.008	-0.008	-0.0001	0.0005	0.0001	11:11:52	Yes
Mean:	-0.008	-0.008	-0.0001				
SD :	0.0005	0.0005	0.0000				
%RSD:	6.8	6.8	6.8195				

=====
 Element: Hg Seq. No.: 89 AS Loc.: 85 Date: 06/10/2011
 Sample ID: K0943-13A~LMW-04U
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.039	0.039	0.0005	0.0028	0.0008	11:12:47	Yes
2	0.033	0.033	0.0004	0.0015	0.0007	11:13:21	Yes
Mean:	0.036	0.036	0.0005				
SD :	0.0041	0.0041	0.0001				
%RSD:	11.3	11.3	11.3205				

=====
 Element: Hg Seq. No.: 90 AS Loc.: 86 Date: 06/10/2011
 Sample ID: K0943-14A~LMW-04F
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0001	0.0012	0.0002	11:14:15	Yes
2	-0.008	-0.008	-0.0001	0.0004	0.0001	11:14:49	Yes
Mean:	-0.006	-0.006	-0.0001				
SD :	0.0028	0.0028	0.0000				
%RSD:	47.9	47.9	47.8628				

=====
 Element: Hg Seq. No.: 91 AS Loc.: 7 Date: 06/10/2011
 Sample ID: CCV
 =====

Repl #	SampleConc µg/L	StndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.376	5.376	0.0707	0.3707	0.0710	11:15:46	Yes
2	4.846	4.846	0.0638	0.3247	0.0640	11:16:20	Yes
Mean:	5.111	5.111	0.0672				
SD :	0.3752	0.3752	0.0049				
%RSD:	7.3	7.3	7.3420				

QC value within specified limits.

=====

Element: Hg Seq. No.: 92 AS Loc.: 1 Date: 06/10/2011

Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.079	0.079	0.0010	0.0054	0.0013	11:17:17	Yes
2	0.008	0.008	0.0001	0.0014	0.0004	11:17:51	Yes
Mean:	0.043	0.043	0.0006				
SD :	0.0502	0.0502	0.0007				
%RSD:	115.9	115.9	115.9203				

QC value within specified limits.

=====

Element: Hg Seq. No.: 93 AS Loc.: 87 Date: 06/10/2011

Sample ID: K0943-15A~LMW-03U

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	0.0000	0.0014	0.0002	11:18:49	Yes
2	-0.019	-0.019	-0.0002	-0.0053	0.0000	11:19:23	Yes
Mean:	-0.010	-0.010	-0.0001				
SD :	0.0124	0.0124	0.0002				
%RSD:	126.9	126.9	126.9191				

=====

Element: Hg Seq. No.: 94 AS Loc.: 88 Date: 06/10/2011

Sample ID: K0943-16A~LMW-03F

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	0.0024	0.0002	11:20:18	Yes
2	-0.006	-0.006	-0.0001	0.0011	0.0002	11:20:52	Yes
Mean:	-0.004	-0.004	-0.0001				
SD :	0.0029	0.0029	0.0000				
%RSD:	71.0	71.0	71.0121				

=====

Element: Hg Seq. No.: 95 AS Loc.: 7 Date: 06/10/2011

Sample ID: CCV

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.266	5.266	0.0693	0.3640	0.0695	11:21:48	Yes
2	4.868	4.868	0.0640	0.3155	0.0643	11:22:22	Yes
Mean:	5.067	5.067	0.0667				
SD :	0.2818	0.2818	0.0037				
%RSD:	5.6	5.6	5.5616				

QC value within specified limits.

=====

Element: Hg Seq. No.: 96 AS Loc.: 1 Date: 06/10/2011

Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.080	0.080	0.0011	0.0055	0.0013	11:23:19	Yes
2	-0.001	-0.001	0.0000	-0.0009	0.0002	11:23:53	Yes
Mean:	0.039	0.039	0.0005				
SD :	0.0580	0.0580	0.0008				
%RSD:	146.7	146.7	146.7353				

QC value within specified limits.

Prep Logbooks

☒ ICP

☒ Mercury

☐ Cyanide

☐ Percent Solids

Saturday, June 11, 2011 09:57

Page 02 of 02

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division PREP BATCH REPORT

Prep Start Date: 6/11/2011 8:40:00

Prep End Date: 6/11/2011 11:40:00

Prep Batch ID: 59733

Prep Code: ICP_W_PR

Technician: Gary M Appolonia

Prep Type: 3005A/SW3005A

Prep Factor Units:
mL / mL

QC Matrix: N/A
QC Matrix Lot: N/A
Filter?: N/A
Filter Lot: N/A

Conc HNO3 N/A
Conc HNO3 (mL): N/A

Conc HCl N/A
Conc HCl (mL): N/A

Reagent 3 Lot: N/A
Reagent 3 (mL): N/A

Reagent 4 Lot: N/A
Reagent 4 (mL): N/A

Reagent 5 Lot: N/A
Reagent 5 (mL): N/A

Reagent 6 Lot: N/A
Reagent 6 (mL): N/A

Start Time: N/A
End Time: N/A

Bath Temp1 (C): N/A

Therm ID1: N/A
Corr Fac N/A

Mikem Sample ID	Client Samp ID	Test	M	Initial (mL/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11 <2	HOT BLOCK
K0943-16A	SW6010	SW6010	A	50	50	--	--	--	--	06/21/11	01	06/11/11	GMA				HB-B
LCSD-59733	Batch QC	Batch QC		50	50	--	--	--	--			06/11/11	GMA				HB-B
Gary M Appolonia				06/11/2011		HZA		6/13/11									H6-B
Analyst Reviewed				Date		Manager Reviewed		Date									

Comments:

HZA 6/13/11

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Comp 6/11/11

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Spectrum Analytical, Inc. RI Division

Mercury Digestion Logbook

Date	Bottle No.	Sample ID	Initial pH	Reagents Added					Analyst: AED	
				Conc. H ₂ SO ₄ (ml)	Conc. HNO ₃ (ml)	5% KMnO ₄ (ml)	5% K ₂ S ₂ O ₈ (ml)	Aqua-regia (ml)	Final Volume (ml)	Comments
6/9/11	C1	SO	<2	5.0	2.5	15.0	8.0	—	100	
	1322	SO.2							100	II 110516A
	C9	S1.0							100	
	C12	S2.0							100	
	15	S5.0							100	
	11R	S10.0							100	II 110516A
	12	ICV							100	II 110516B
	1326	MIB-59655							100	
	108	LCS-59655							100	II 110516C
	336V	K0888 02E							100	
	1335	03E							100	
	314	04E							100	
	332Z	06E							100	
	1334	07E							100	
	67	08E							100	
6/9/11	335X	K0888 09E	<2	5.0	2.5	15.0	8.0	—	100	

Waters

In: 12.45

Out: 14.45

Matrix: Aqueous

Method # SW3470A

Soils

In: Out: 2/6

In: Out: 2/6

Matrix: Soil/Solid

Hotblock ID: H8-A

LCSS ID II 110516C

LCSS volume: 1 ml

Spike ID II 110516C

Spike volume: 1 ml

Temp: T/V = 99 °C MT: 47.665

H₂SO₄ Lot # 3110020HNO₃ Lot # 1110120

HCl Lot #

KMnO₄ ID # 1211050904K₂S₂O₈ ID # 1211050902

Digestate Relinquished to:

KZA

Reviewed by: KZA

6/9/11

Mercury Digestion Logbook

Spectrum Analytical, Inc. RI Division

Date	Bottle No.	Sample ID	Initial pH	Reagents Added					Aqua-regia (ml)	Final Volume (ml)	Comments
				Conc. H ₂ SO ₄ (ml)	Conc. HNO ₃ (ml)	5% KMnO ₄ (ml)	5% K ₂ S ₂ O ₈ (ml)	Sample Vol (ml)/Wt (g)			
6/9/11	33408	K0942	2.2	5.0	2.5	15.0	8.0	100	✓	100	
	318	15A DUP						100		100	II 110516C
	612	17A						100		100	
	32608T	18A						100		100	
	C2	19A						100		100	
	C6	20A						100		100	
	232	21A						100		100	
	1314	MB-59657						—		100	
	336T	LCS-59657						1/100		100	II 110516C
	G1D	K0942						100		100	
	73XY	16A DUP						100		100	
	12B	16A MS						100		100	II 110516C
	G1	22A						100		100	
	24J	23A						100		100	
→	325	K0942	→	→	→	→	→	100	→	100	
6/9/11	18	01A	2.2	5.0	2.5	15.0	8.0	100	✓	100	

Waters In: 12:45 Out: 14:45
 Matrix: Aqueous
 Method # 563470A
 Digestate Relinquished to: HZA
 Reviewed by: HZA 6/9/11
 Hotblock ID: HB-5 LCSS ID: LCSS volume: Spike ID: Spike volume:
 Temp: TV=99 °C MT-101 CF=1
 H₂SO₄ Lot # HNO₃ Lot # HCl Lot # KMnO₄ ID # K₂S₂O₈ ID #

Mercury Digestion Logbook

Spectrum Analytical, Inc. RI Division

Date	Bottle No.	Sample ID	Initial pH	Reagents Added						Aqua-regia (ml)	Final Volume (ml)	Comments
				Conc. H ₂ SO ₄ (ml)	Conc. HNO ₃ (ml)	5% KMnO ₄ (ml)	5% K ₂ S ₂ O ₈ (ml)	Sample Vol (ml)/ Wt (g)				
6/9/11	241	K0943	22	5.0	2.5	15.0	8.0	100		—	100	
	325V							100			100	
	G3							100			100	
	318V							100			100	
	G5							100			100	
	225							100			100	
	1327							100			100	
	210							100			100	
	G4							100			100	
	323V							100			100	
	330A							100			100	
	3130							100			100	
	G8							100			100	
	324V							100			100	
6/9/11	331B	K0943	22	5.0	2.5	15.0	8.0	100		—	100	

Analyst: ABD

Temp: TV=99 °C/ MT-47 CF-1

H₂SO₄ Lot # _____

HNO₃ Lot # _____

HCl Lot # _____

KMnO₄ ID # _____

K₂S₂O₈ ID # _____

Hotblock ID: AB-4

LCSS ID _____

LCSS volume: _____

Spike ID _____

Spike volume: _____

6/9/11

Soils

In: 21A Out: _____

In: _____ Out: _____

Matrix: Soil/Solid

Waters

In: 14:45

Out: 16:45

Matrix: Aqueous

Method # SW7490A

Digestate Relinquished to: _____

NZA

Reviewed by: NZA 6/9/11

see page 1

Client: AECOM_CHSNTRDG

Work Order: K0943

Profile Name: MULTI_SITE

MATRIX Aqueous

Samp #	Bottle	Test	Status	Received	Date
01A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
01A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
02A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
02A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
03A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
03A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
04A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
04A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
05A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
05A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
06A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
06A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
07A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
07A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
08A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
08A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
09A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
09A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
10A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
10A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
11A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
11A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
12A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
12A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
13A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
13A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
14A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
14A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
15A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
15A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM
16A	001	SW6010_W	In	LOGIN: esmith	5/31/2011 12:29:00 PM
16A	001	SW7470	In	LOGIN: esmith	5/31/2011 12:29:00 PM

Last Page of Data Report