



Environment

Prepared for:
Superfund Standby Program
NYSDEC
Albany, NY

Prepared by:
AECOM
Chestnut Ridge, NY
60277021
January 2013

Groundwater Sampling Report
(August 2012 Sampling Event)
ServAll Laundry Site
Site #1-52-077
Work Assignment No. D007626-17

Draft



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A handwritten signature in black ink, reading "Paul Kareth", is positioned above a horizontal line.

Prepared By: Paul Kareth

A handwritten signature in blue ink, reading "Robert Montione", is positioned above a horizontal line.

Reviewed By: Robert Montione, Quality Assurance Officer



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1.0 Introduction

AECOM Technical Services Northeast, Inc (AECOM) has prepared this Groundwater Monitoring Report for the ServAll Laundry site (Site) in the Bay Shore, New York (Site No. 1-52-077). This work was performed for the New York State Department of Environmental Conservation (NYSDEC) under Work Assignment D007626-17. Previous long term monitoring was performed under Work Assignment D004445-14. As part of the long-term monitoring plan for the Site, groundwater samples are collected from selected monitoring wells once every five quarters. This groundwater monitoring report provides the results of the groundwater sampling data collected in August 2012.

To date, six sampling events have been conducted under AECOM's long-term monitoring work assignments:

- The first round of samples (Round 1) was collected in June 2006.
- A abbreviated round of groundwater sampling (Round 1A) was conducted in April 2007 to confirm the concentration of tetrachloroethene (PCE) detected in monitoring well MW-6A; samples were collected from monitoring wells MW-4, MW-5, MW-6A and MW-6B.
- The second full round of samples (Round 2) was collected in August 2007.
- The third full round of samples (Round 3) was collected in November 2008.
- The fourth round of samples (Round 4) was collected in February 2010.
- The fifth round of samples (Round 5) was collected in May 2011.
- The sixth round of samples (Round 6) was collected in August 2012.

2.0 Background Information

The Site is located at 8 Drayton Avenue in Bay Shore, New York (Figure 1) in a mixed use industrial/residential area. The ServAll Laundry facility was located on a 20,000 square foot property. The ServAll Uniform Rental, Inc. operated as a commercial laundry from 1969 to 1972, and as dry cleaner/laundry from 1972 to 1984. During this time, unknown quantities of wash water overflow containing PCE and heavy metals were pumped to, and occasionally overflowed from, onsite cesspools.

In 1978 and 1983, the Suffolk County Department of Health Services (SCDHS) conducted an on-site sampling of cesspools and storm drains. Results from some of the samples showed detections of PCE, trichloroethene (TCE), vinyl chloride (VC), chloroform, methylbenzenes, and a number of TAL metals. As indicated in the Record of Decision (ROD) (NYSDEC, 1992), ServAll Uniform cleaned the on-site storm drains and an unknown number of cesspools in 1981 removing sludge and contaminated water. In 1983, SCDHS performed an investigation in which a VOC plume was located southeast of the Site. The plume was found to extend 0.3 miles upgradient from the Suffolk County Water Authority (SCWA) Thomas Avenue Wellfield (located 1 mile south of the site). Subsequently, in 1984 the area behind the building was backfilled and paved over. The US Geological Survey (USGS) drilled and sampled a second series of wells in 1987 to better define the ServAll plume profile. The distal end of the plume was estimated at that time to be approximately 100 feet south of the Thomas Avenue Wellfield. The Thomas Avenue Wellfield is located off Thomas Avenue, near the Bay Shore Middle School and northwest of MW-11 (see Figure 2).

A State-funded RI/FS was completed at the site, in which field work was completed from November 1990 through December 1991. The results of the investigation were documented in the final report dated January 1992 (E.C. Jordan Co.). The remedial investigation (RI)/feasibility study (FS) confirmed the presence of 1,2-dichloroethene (1,2-DCE), dichloroethane (DCA), TCE, PCE and VC in groundwater; delineated the groundwater plume, and quantified on-site contamination. Target clean-up levels for groundwater were set equal to New York State's groundwater quality standards. Surface soil target clean-up levels were risk-based and developed to protect a site worker exposed by direct contact and incidental ingestion. Subsurface soil target clean-up levels were developed for PCE (PCE was the only chemical that presents a risk greater than the New York State Department of Health [NYSDOH] target level of 10^{-6}).

The plume is located in the upper glacial aquifer, which consists of coarsely stratified, fine to medium sand with trace amounts of gravel, cobbles, coarse sand, and silt. The aquifer ranges in thickness from 120 feet at the site to 86 feet 1.5 miles downgradient of the Site. Groundwater flows to the southeast towards Penataquit Creek, at about 910 feet per year (fpy). The RI concluded that the plume appeared to be moving at approximately 443 to 484 fpy from 1974 to 1988, and 355 fpy since 1988 (E.C. Jordan, October 1991).

A ROD was issued by the NYSDEC for the site on March 31, 1992. The remedy presented in the ROD was in-situ source soil treatment/source area groundwater extraction. This remedy was to consist of the following components:

- Remedial Design Program;
- In-situ soil vapor/vacuum extraction;
- Groundwater extraction (plume source control: at the site and three blocks downgradient), followed by air stripping or ultraviolet/oxidation, and discharge of treated water;
- Monitoring program;
- Discharge Study conducted on the front end of the plume; and
- Institutional controls.

The following compounds were listed in the ROD as contaminants of concern (COCs):

- Surface soil – PCE and TCE
- Subsurface soil – PCE, TCE, 1,1-dichloroethene, toluene and bis(2-ethylhexyl)phthalate
- Groundwater – PCE, TCE, 1,2-DCE (total), 1,1-dichloroethene, 1,1-dichloroethane and vinyl chloride

The ROD listed the cleanup criteria for PCE in soil as 40 mg/kg. The cleanup criteria for the six groundwater COCs were set to the NYS groundwater standards of 5 µg/L, except for vinyl chloride where the target cleanup level is 2 µg/L.

The ROD stated that treatment of the entire plume emanating from the Site was not found to be practical, and therefore the selected remedy would not satisfy the statutory preference for complete treatment as a principal element. Determination of the ultimate fate of the untreated portion of the plume was determined by the ROD directed discharge study, which was conducted on the leading edge (hydraulically downgradient) of the plume.

A Discharge Study was conducted to determine the fate of the portion of the groundwater plume that the remedial alternative specified in the ROD did not address. The Discharge Study was completed by ABB Environmental Services (December, 1995). The discharge study concluded that groundwater would migrate approximately 1.3 miles from the site toward Penataquit Creek (the predicted discharge point was between piezometers PZ-94-19 and PZ-94-14). The Discharge Study predicted that the plume would reach Penataquit Creek by the year 2000, with maximum concentrations estimated to reach Penataquit Creek in 15 to 20 years. Modeling was done using steady-state conditions (assumed to represent average conditions). Based on the data available at the time of the Discharge Study, discharge of the plume into saltwater estuaries and the Great South Bay was considered unlikely. Additionally, the study concluded that aquatic organisms would not likely experience adverse effects from exposure to any of the expected discharge concentrations of contaminants evaluated.

The ROD specified source removal work consisting of a soil vapor extraction (SVE) system. The SVE system was in operation from the Spring of 1996 to the Spring of 1998 and removed approximately 2,800 pounds of PCE from soil on the property. Prior to the ROD being issued, additional source removal work was completed when ServAll Uniform cleaned the on-site storm drains and eight cesspools in 1984 by removing sludge and contaminated water.

The groundwater pump and treat remedial system operated from March 1998 through November 2001. Task management of plant operations was provided by NYSDEC subcontractors under various work assignments. The operation of the remedial system was terminated in November 2001 when NYSDEC determined further operations were not necessary as stated in a letter dated October 18, 2001 from NYSDEC to Earth Tech.

The ROD also called for institutional controls (ICs), including property owner notification and a private well survey for properties over the present and projected plume path as well as prohibition of new production wells in the plume area. The ROD also stated that funding for a treatment system for the Thomas Avenue Well Field is available from the Environmental Quality Bond Act (1986), assuming that monitoring shows the necessity for such installation. No further information was found regarding the necessity for implementation of this institutional control.

The site specific remedial goals as specified in the March 1992 ROD are as follows (NYSDEC, 1992):

- Soil:
 - Reduce the concentration of PCE and TCE so that the presence of these chemicals at the Site do not present an added risk of cancer of more than one in one million under the most conservative exposure scenario.
 - Reduce the concentrations of organic contaminants in soils so that, to the extent feasible, contaminants do not leach from soils and contaminant groundwater to levels above standards.
- Groundwater:
 - Reduce the concentrations of contaminants in groundwater to below NYS groundwater standards, to the extent technically feasible.

Per NYSDEC Guidance Document DER-10, site closure will be considered, when:

- Monitoring results demonstrate contaminant concentrations along the centerline of the plume have sufficiently decreased,
- The contaminant plume length has been demonstrated to be stable or shrinking; and,
- Contaminant levels in the sentinel wells have not exceeded groundwater cleanup levels at any time during the monitoring program.

Fifteen monitoring wells were identified for sampling including MW-2, MW-3A, MW-3B, MW-4, MW-5, MW-6A, MW-6B, MW-9, MW-11, MW-12, MW-13, MW-14, MW-16, MW-23S and MW-23D (see Figure 2). Monitoring wells MW-2, MW-3B, and MW-9 could not be located during the first two full sampling events (June 2006 and August 2007). MW-2 and MW-3B were located during Round 3, and these two wells have been included in subsequent sampling events; however, MW-9 cannot be located and has not been sampled in any of the six events. Monitoring well MW-11, located on the Bay Shore school athletic fields, could not be sampled during the February 2010, May 2011 and August 2012 sampling events. The well has been vandalized and could not be sampled.

3.0 Field Activities

The sixth sampling event occurred August 21, 22, 27 and 29, 2012. Sampling was conducted in accordance with the Sampling and Analysis Plan (SAP) prepared by AECOM, dated June 2007 (as part of Amendment 14.1). 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 personnel protection.

3.1 Water Level Survey

Prior to the start of the August 2012 groundwater sampling event, water table measurements were collected from the 14 monitoring wells included in the sampling event. A summary of well data is included on Table 1. Water level measurements were recorded NYSDEC Monitoring Well Field Inspection Forms in Appendix A. A summary of groundwater elevations in selected monitoring wells is presented in Table 2. A groundwater contour map was prepared using data from the August 2012 sampling event and is presented in Figure 3. As shown on the map, groundwater flow is to the south-southeast. The gradient was calculated for the Site. North of the Southern State Parkway (near the Site), the gradient is approximately 0.0009. At the southern end of the study area (near the Sunrise Highway), the gradient increases to approximately 0.0015. Both of these numbers represent fairly shallow gradients.

3.2 May 2011 Groundwater Sampling Event

Fifteen monitoring wells were identified for long-term monitoring at the Site. The selected wells included MW-2, MW-3A, MW-3B, MW-4, MW-5, MW-6A, MW-6B, MW-9, MW-11, MW-12, MW-13, MW-14, MW-16, MW-23S and MW-23D. Monitoring well MW-9 could not be located in the field and is presumed destroyed, reducing the number of available wells to 14. Monitoring well MW-1 was located during Round 4 and sampled; this well was also sampled during Round 6. During the first two long-term monitoring sampling events (2006 and 2007), monitoring wells MW-2 and MW-3A could not be located and were not sampled. During the November 2008 sampling event, these two wells were located and subsequently sampled. Each location was photo-documented and a hand-held GPS unit was used to record the coordinates. Monitoring well MW-11 has only been sampled twice in the six rounds of sampling, June 2006 and November 2008. The well could not be sampled in August 2007 due to an obstruction in the well. In February 2010, the well was found to be full of bottles, cans and other debris, and has not been sampled since. In summary, a total of 14 monitoring wells were sampled during the August 2012 sampling event (the 15 long-term monitoring wells, less MW-9 and MW-11, and MW-1).

During the first five sampling rounds, a Grundfos electric submersible pump with polyethylene tubing was used to purge each monitoring well prior to sampling. Monitoring wells were purged of at least three casing volumes of water prior to sampling. Once the minimum volume of water had been evacuated, a dedicated Teflon bailer was used to collect a groundwater sample. For the August 2012 sampling event, NYSDEC requested that all monitoring wells be sampled using low flow techniques. A QED bladder pump with Teflon discharge tubing was used to purge each monitoring well. The flow rate was typically set between 300 and 500 milliliters per minute. Measurements of pH, specific

conductance, temperature and turbidity were recorded on the Well Sampling Forms during purging at five minute intervals. Well Sampling Forms are provided in Appendix B. A NYSDEC Monitoring Well Field Inspection Log was also completed for each well sampled and is included in Appendix A. The sample was carefully poured into laboratory supplied containers and placed in an ice-filled cooler. Both unfiltered and filtered metals samples were collected during the Round 5 sampling event. Samples were filtered in the field using 0.45 micron filters. The samples were then transported to Spectrum Analytical (formerly Mitkem) via their courier. Proper chain-of-custody procedures and requirements were maintained throughout the sampling event in accordance with the QAPP.

4.0 Sampling Results

Groundwater samples were analyzed by Spectrum Analytical (formerly Mitkem Laboratory) of Warwick, Rhode Island. Samples were analyzed for volatile organic compounds (VOCs) using SW-846 Method 8260B and for target analyte list (TAL) metals by SW-846 Method 6010B and Method 7470A for mercury. Data packages consisted of a full NYS ASP Category B deliverable. As this is a long-term monitoring project, data was not validated. An AECOM chemist provided a limited review of the data packages for completeness and readily apparent anomalies (see section 4.4, below). The laboratory Data Summary Packages are in Appendix C.

A summary of the VOC detections and criteria exceedances is presented in Table 3 and the metals data and exceedances are shown on Table 4. A summary of the VOC exceedances is presented on Figure 4 and the metals exceedances are shown on Figure 8. The sampling results are described below in Sections 4.1 and 4.2.

4.1 Volatile Organic Compounds

VOC data for the five long term sampling events are summarized in Table 3. VOCs exceedances are shown on Figure 4. During the six sampling events conducted to date, 17 target analyte list VOCs have been detected in the long term monitoring wells. Of these 17 compounds, only nine have exceeded their Class GA criterion. Of these nine compounds, only three, cis-1,2-DCE, TCE and PCE, have been detected three or more times in any one monitoring well. These three compounds (as well 1,1-DCE, 1,1-DCA and vinyl chloride) as listed as COCs in the ROD (NYSDEC, 1992). Summaries of detections for these three compounds are presented in Figure 5 (PCE), Figure 6 (TCE) and Figure 7 (cis-1,2-DCE). On each of these three figures, monitoring wells were selected based on the presence of the COC at or above its criterion. As shown on Figure 5, PCE has been detected in seven monitoring wells at or above the 5 µg/L criterion. TCE concentrations have only exceeded the 5 µg/L criterion in three monitoring wells as shown on Figure 6. Cis-1,2-DCE concentrations have only exceeded the 5 µg/L criterion in three monitoring wells as shown on Figure 7. 1,1-DCE and 1,1-DCA have not been detected above the criterion in any monitoring well during the long-term sampling (2006 through 2012). Vinyl chloride was detected above its criterion (2 µg/L) for the first time during Round 6 at MW-16 at an estimated 2.1 µg/L.

VOCs were not detected in monitoring wells MW-3B and MW-4 during any of the six long-term monitoring sampling events conducted at the ServAll Site between 2006 and 2012. Monitoring Well MW-1 was located during the fourth sampling event. PCE was detected at a concentration of 50 µg/L (exceeding the Class GA criterion of 5 µg/L). Cis-1,2-DCE, TCE, and total xylenes were also detected but at concentrations below their Class GA criteria. MW-1 was not sampled during May 2011 sampling event. During the August 2012 sampling event, PCE was detected at a concentration of 18 µg/L, exceeding the Class GA criterion. Cis-1,2-DCE and TCE were also detected but at concentrations below their Class GA criteria.

Monitoring well MW-2 was not located until the November 2008 sampling event. Benzene was detected above the Class GA criterion of 1 µg/L in monitoring well MW-2 at an estimated concentration of 1.7 µg/L during the November 2008 sampling event. Toluene was also detected at

an estimated concentration of 1.4 µg/L (below the Class GA criterion of 5 µg/L). No VOCs were detected during the February 2010 sampling event. PCE was detected at an estimate concentration of 2.1 µg/L during the May 2011 sampling event. No VOCs were detected during the August 2012 sampling event.

VOCs were not detected in monitoring well MW-3A during any of the long-term monitoring events with one exception. During the August 2012 sampling event, chloroform was detected at an estimated concentration of 0.53 µg/L (Class GA criterion of 7 µg/L).

VOCs were not detected above the Class GA criterion during the first three sampling events (June 2006 and April and August 2007) at monitoring well MW-5. Estimated concentrations of cis-1,2-DCE (3 µg/L and 2 µg/L) were detected during the June 2006 and April 2007 sampling events (Round 1 and 1A) but have not been detected since. PCE was detected at an estimated concentration of 2 µg/L only during the August 2007 sampling event (less than the Class GA criterion of 5 µg/L). Acetone was detected at a concentration of 170 µg/L (exceeding the Class GA criterion of 50 µg/L) only during the November 2008 sampling event. 2-Butanone was detected only during the November 2008 sampling event at an estimated concentration of 38 µg/L (less than the Class GA criterion of 50 µg/L). During the Round 3 event in November 2008, toluene was detected at a concentration of 1,200 µg/L and was detected again during the February 2010 sampling event at a concentration of 230 µg/L (Class GA criterion of 5 µg/L) but was not detected in May 2011 or August 2012. NO VOCs were detected at MW-5 during the August 2012 sampling event.

VOCs were not detected in monitoring well MW-6A during any of the long-term monitoring events with one exception. During the February 2010 sampling event, PCE was detected at an estimated concentration of 1.2 µg/L (Class GA criterion of 5 µg/L).

Three VOCs were detected in monitoring well MW-6B above the Class GA criteria. Cis-1,2-DCE was detected above the Class GA criterion of 5 µg/L during five of six sampling events at concentrations ranging from 44 µg/L to 210 µg/L. TCE was detected above the Class GA criterion of 5 µg/L during five of six sampling events at concentrations ranging from 7.3 µg/L to 85 µg/L. PCE was detected above the Class GA criterion of 5 µg/L during all six sampling events at concentrations ranging from 23 µg/L to 2,000 µg/L.

PCE was detected at a concentration of 56 µg/L in monitoring well MW-11 above its Class GA criterion of 5 µg/L during the June 2006 sampling event. An obstruction in MW-11 prevented the collection of a groundwater sample during the August 2007 sampling event. During the November 2008 sampling event, PCE was detected at a concentration of 60 µg/L and cis-1,2-DCE was detected at a concentration of 13 µg/L, both of which exceed the applicable Class GA groundwater criterion. Toluene was also detected at a concentration of 63 µg/L (greater than the Class GA criterion of 5 µg/L). Chlorobenzene and methyl tert butyl ether (MTBE) were also detected but at concentrations below the Class GA criteria. An obstruction in the well prevented collection of a sample during the February 2010, May 2011 and August 2012 sampling events.

Two VOCs were detected above the Class GA criterion in monitoring well MW-12. PCE was detected during all six sampling events with concentrations ranging from an estimated 0.8 µg/L to 60 µg/L; concentrations detected in the first four sampling events exceeded the Class GA criterion of 5 µg/L. 1,2-Dichlorobenzene was detected at a concentration of 9 µg/L (Class GA criterion of 4.7 µg/L) during the June 2006 sampling event only. cis-1,2-DCE was detected in four of six sampling events but only

exceed the Class GA criterion of 5 µg/L during Round 6. Several compounds, including MTBE, TCE and chlorobenzene, have been sporadically detected in MW-12 at concentrations below their respective Class GA criteria.

At MW-13, PCE had been detected at a concentration of 5 µg/L during the June 2006 sampling event and at an estimated 1 µg/L during the November 2008 and August 2012 sampling events (Class GA criterion of 5 µg/L). No other VOCs were detected in monitoring well MW-13 above the Class GA criteria during the five sampling events. Several compounds, including acetone, chloroform MTBE, and TCE, have been sporadically detected in MW-13 at concentrations below their respective Class GA criteria.

No VOCs were detected above the Class GA criteria in MW-14 during any of the six sampling events. PCE was detected at an estimated concentration of 2 µg/L during the August 2007 sampling event. MTBE was detected during the last three sampling events at concentrations ranging from an estimated 1.1 µg/L to 8 µg/L.

Five VOCs have been detected in monitoring well MW-16 at concentrations at or above the Class GA criteria during the six sampling events. Vinyl chloride has been detected in two of six sampling events at estimated concentrations of 1.2 µg/L and 2.1 µg/L, one of which exceeded the Class GA criterion of 2 µg/L. PCE was detected during all six sampling events at concentrations ranging from an estimate 2 µg/L to 100 µg/L, five of which exceeded the Class GA criterion of 5 µg/L. TCE was detected in five of six sampling events at concentrations ranging from an estimated 1.1 µg/L to 16 µg/L, four of which exceeded the Class GA criterion of 5 µg/L. 1,1,1-Trichloroethane (1,1,1-TCA) was detected in three of six sampling events at concentrations ranging from and estimated 1.7 µg/L to 5 µg/L, with one sample equaling the Class GA criterion of 5 µg/L. Cis-1,2-DCE was detected during five of the six sampling events at concentrations ranging from an estimated 2.1 µg/L to 20 µg/L, four of which exceeded the Class GA criterion of 5 µg/L. Two other VOCs, MTBE and 1,1-dichloroethene, have been sporadically detected in samples from MW-16 but at concentrations below their Class GA criteria.

Three VOCs have been detected in monitoring well MW-23S above the Class GA criteria. Cis-1,2-DCE was detected above the Class GA criterion of 5 µg/L during all six sampling events at concentrations ranging from 38 µg/L to 360 µg/L. TCE was detected above the Class GA criterion of 5 µg/L during all six sampling events at concentrations ranging from 15 µg/L to 220 µg/L. PCE was detected above the Class GA criterion of 5 µg/L during all six sampling events at concentrations ranging from 500 µg/L to 5,200 µg/L. Four other VOCs, including 1,1-dichloroethene, 1,1-dichloroethane, trans-1,2-dichloroethene, MTBE, and 1,1,1-TCA, have been sporadically detected in samples from MW-23S at concentrations below their respective Class GA criterion.

PCE has been detected during all six sampling events at MW-23D at concentrations ranging from an estimated 4 µg/L to 57 µg/L, five of which exceeded the Class GA criterion of 5 µg/L. cis-1,2-DCE was detected during the last two sampling events at and estimated concentration of 3 µg/L and 5.5 µg/L, which exceeded the Class GA criterion of 5 µg/L. TCE and MTBE were detected in MW-23D at concentrations below the Class GA criteria only during Round 5.

4.2 TAL Metals

Groundwater samples were collected from 14 monitoring wells during the August 2012 sampling event. As noted earlier, well MW-9 has been destroyed, and MW-11 was vandalized rendering it

inaccessible during this event. Monitoring well MW-1 was only sampled during the March 2010 and August 2012 sampling events. The monitoring well locations are presented on Figure 2. The laboratory data summary packages are included in Appendix C. A summary of the detections from all three sampling events is presented in Table 4. A summary of the exceedances from all five sampling events is presented on Figure 8.

Concentrations of 11 metals have been detected above their Class GA criteria at least once during the six rounds of groundwater sampling at the Site. These metals are antimony, beryllium, cadmium, chromium, copper, iron, lead, manganese, nickel, sodium, and thallium.

Antimony – Class GA criterion of 3 µg/L

June 2006 – Detected in five of 12 monitoring wells. One exceedance: 6.3 µg/L in MW-13.

April 2007 – Detected in three of four monitoring wells. Three exceedances, maximum 37.1 µg/L in MW-6A.

August 2007 – Detected in two of 11 monitoring wells; two exceedances: maximum 7.5 µg/L in MW-23S.

November 2008 – Detected in two of 14 monitoring wells; two exceedances: maximum of 6.2 µg/L in MW-12.

February 2010 – Not detected in any of the 14 monitoring wells sampled.

May 2011 – Not detected in any of the 13 monitoring wells sampled, unfiltered or filtered.

August 2012 - Not detected in any of the 14 monitoring wells sampled, unfiltered or filtered.

Beryllium – Class GA criterion of 3 µg/L

June 2006 – Detected in one of 12 monitoring wells; no exceedances.

April 2007 – Detected in one of four monitoring wells; no exceedances.

August 2007 – Detected in six of 11 monitoring wells; no exceedances.

November 2008 – Detected in two of 14 monitoring wells; no exceedances.

February 2010 – Detected in eight of 14 monitoring wells; no exceedances.

May 2011 – Detected in five of 13 unfiltered samples with one exceedance of 5.7 µg/L in MW-6B. Not detected in any of the filtered samples.

August 2012 – Not detected in any of the 14 monitoring wells sampled, unfiltered or filtered.

Cadmium – Class GA criterion of 5 µg/L

June 2006 – Detected in nine of 12 monitoring wells; no exceedances.

April 2007 – detected in all four monitoring wells; no exceedances.

August 2007 – Detected in all 11 monitoring wells. One exceedance: 48.1 µg/L in MW-13.

November 2008 – Detected in all 14 monitoring wells. Five exceedances: maximum of 53.6 µg/L in MW-13.

February 2010 – Detected in 11 of 14 monitoring wells. Three exceedances: maximum of 43.7 µg/L in MW-2.

May 2011 – Detected in ten of 13 monitoring wells (unfiltered) and in three of 13 filtered samples. Three unfiltered exceedances: maximum of 96.4 µg/L (MW-13); one filtered exceedance, 77 µg/L in MW-13.

August 2012 – Not detected in 13 of 14 unfiltered samples and all 14 filtered samples. No exceedances, unfiltered or filtered.

Chromium – Class GA criterion of 50 µg/L

June 2006 – Detected in all 12 monitoring wells. Eight exceedances: maximum of 1,660 µg/L in MW-16.

April 2007 – Detected in all four monitoring wells. Four exceedances, maximum 1,280 µg/L in MW-06A

August 2007 – Detected all 11 monitoring wells. Nine exceedances: maximum of 1,730 µg/L in MW-12.

November 2008 – Detected in 12 of 14 monitoring wells. Nine exceedances: maximum of 1,170 µg/L in MW-12.

February 2010 – Detected in 11 of 14 monitoring wells. Eleven exceedances: maximum of 901 µg/L in MW-3B.

May 2011 – Detected in all 13 unfiltered monitoring well samples and nine of 13 unfiltered samples. Eleven exceedances in unfiltered samples, maximum of 1,520 µg/L (MW-6B), no exceedances in filtered samples.

August 2012 - Detected in 13 of 14 unfiltered monitoring well samples and nine of 14 unfiltered samples. Seven exceedances in unfiltered samples, maximum of 1,520 µg/L (MW-3A), no exceedances in filtered samples.

Copper – Class GA criterion of 200 µg/L

June 2006 – Detected in 11 of 12 monitoring wells; no exceedances.

April 2007 – Detected in all four monitoring wells; no exceedances.

August 2007 – Detected all 11 monitoring wells; no exceedances.

November 2008 – Detected in 11 of 14 monitoring wells; no exceedances.

February 2010 – Detected in all 14 monitoring wells; no exceedances.

May 2011 – Detected in all 13 unfiltered monitoring well samples and five of 13 unfiltered samples. One exceedance of 500 µg/L in unfiltered sample MW-6B; no exceedances in filtered samples.

August 2012 - Detected in 10 of 14 unfiltered monitoring well samples and one of 14 unfiltered samples. No exceedances in unfiltered or filtered samples.

Iron – Class GA criterion of 300 µg/L

June 2006 – Detected in 12 of 13 monitoring wells. Ten exceedances: maximum 7,270 µg/L in MW-16.

April 2007 – Detected in all four monitoring wells. Four exceedances: maximum 6,330 in MW-6A.

August 2007 – Detected in all 11 monitoring wells. Ten exceedances: maximum 9,130 µg/L in MW-6B.

November 2008 – Detected in all 14 monitoring wells. 13 exceedances: maximum 49,400 µg/L in MW-5.

February 2010 – Detected in all 14 monitoring wells. 13 exceedances: maximum of 28,500 in MW-6B.

May 2011 – detected in all 13 unfiltered monitoring well samples and six of 13 filtered samples. 13 unfiltered exceedances, maximum of 146,000 µg/L in MW-6B, two filtered exceedances, maximum of 31,100 µg/L in MW-5.

August 2012– detected in 11 of 14 unfiltered monitoring well samples and three of 14 filtered samples. 11 unfiltered exceedances, maximum of 9,190 µg/L in MW-4, one filtered exceedance of 8,930 µg/L in MW-4.

Lead – Class GA criterion of 25 µg/L

June 2006 – Detected in eight 12 monitoring wells; no exceedances.

April 2007 – Detected in all four monitoring wells; no exceedances.

August 2007 – Detected in eight of 11 monitoring wells; no exceedances.

November 2008 – Detected in 11 of 14 monitoring wells. Two exceedances: maximum of 33.1 µg/L in MW-3A.

February 2010 – Detected in ten of 14 monitoring wells. Four exceedances: maximum of 83.9 µg/L in MW-6B.

May 2011 – Detected in 11 of 13 unfiltered samples. Four exceedances: maximum of 316 µg/L in MW-6B. Not detected in any of the 13 filtered samples.

August 2012– Detected in four of 14 unfiltered samples. One exceedance of 25.2 µg/L in MW-3B. Not detected in any of the 14 filtered samples.

Manganese – Class GA criterion of 300 µg/L

June 2006 – Detected in all 12 monitoring wells. Three exceedances: maximum of 7,140 µg/L in MW-6A.

April 2007 – Detected in all four monitoring wells. Three exceedances: maximum of 3,890 µg/L in MW-6A.

August 2007 – Detected in all 11 monitoring wells. Six exceedances: maximum of 6,140 µg/L in MW-6A.

November 2008 – Detected in all 14 monitoring wells. Ten exceedances: maximum 3,250 µg/L in MW-6A.

February 2010 – Detected in all 14 monitoring wells. Eight exceedances: maximum of 2,580 µg/L in MW-3A.

May 2011 – Detected in all 13 unfiltered samples. Nine exceedances: maximum of 1,540 µg/L in MW-4. Detected in 11 of 13 filtered samples. Four exceedances, maximum of 1,130 µg/L in MW-23S.

August 2012 – Detected in all 14 unfiltered samples. Six exceedances: maximum of 4780 µg/L in MW-5. Detected in 11 of 14 filtered samples. Five exceedances, maximum of 4,630 µg/L in MW-5.

Nickel – Class GA criterion of 100 µg/L

June 2006 – Detected in all 12 monitoring wells. Four exceedances: maximum of 1,290 µg/L in MW-12.

April 2007 – Detected in all four monitoring wells. Three exceedances: maximum of 565 µg/L in MW-4.

August 2007 – Detected in all 11 monitoring wells. Five exceedances: maximum of 1,130 µg/L in MW-6A.

November 2008 – Detected in 13 of 14 monitoring wells. Five exceedances: maximum 1,860 µg/L in MW-4.

February 2010 – Detected in all 14 monitoring wells. Three exceedances: maximum of 452 µg/L in MW-13.

May 2011 – Detected in all 13 unfiltered samples. Four exceedances: maximum of 345 µg/L in MW-13. Detected in 12 of 13 filtered samples. One exceedance of 309 µg/L in MW-13.

August 2012 – Detected in 13 of 14 unfiltered samples. One exceedance: 226 µg/L in MW-3A. Detected in 12 of 13 filtered samples. One exceedance of 158 µg/L in MW-3A.

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

June 2006 – Detected in all 12 monitoring wells. Eight exceedances: maximum 129,200 µg/L in MW-3A.

April 2007- Detected in all four monitoring wells. Three exceedances: maximum 39,600 µg/L in MW-6A

August 2007 – Detected in all 11 monitoring wells. Eight exceedances: maximum 43,300 µg/L in MW-5.

November 2008 – Detected in all 14 monitoring wells. Eight exceedances: maximum 59,000 µg/L in MW-5.

February 2010 – Detected in all 14 monitoring wells. 13 exceedances: maximum 92,200 µg/L in MW-6A.

May 2011 – Detected in all 13 unfiltered and filtered samples. Ten exceedances in both unfiltered and filtered samples: maximum of 133,000 in MW-3A (unfiltered), 128,000 µg/L in MW-3A (filtered).

August 2012 – Detected in all 14 unfiltered and filtered samples. Ten exceedances in unfiltered samples: maximum of 129,000 in MW-5. 11 exceedances in filtered samples: maximum concentration of 124,000 µg/L in MW-5.

Thallium – Class GA criterion of 0.5 µg/L

June 2006 – Detected in seven of 12 monitoring wells. Seven exceedances: maximum 32.3 µg/L in MW-6A.

April 2007 – Not detected in any of the four monitoring wells.

August 2007 – Detected in one of 11 monitoring wells, one exceedance 2.8 µg/L in MW-14.

November 2008 – Not detected in any of the 14 monitoring wells.

February 2010 – Detected in three of 14 monitoring wells. Three exceedances: maximum 16.7 in MW-3A.

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

May 2011 – Not detected in 13 of 14 unfiltered or filtered monitoring well samples: one unfiltered exceedance 7.0 µg/L in MW-5 and 11.1 µg/L filtered in MW-5.

4.3 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 the time of sample collection. Turbidity is typically correlated with the presence of suspended matter (e.g., entrained soil particles in the sample). Therefore, both total metals (unfiltered) samples and dissolved metals (field filtered) groundwater samples were collected as part of the August 2012 sampling even to evaluate the effect of turbidity on the metals concentrations – only unfiltered samples were collected during sampling events prior to May 2011.

The NYSDEC criterion for groundwater samples is to develop the well to a turbidity of 50 nephelometric turbidity units (NTU) or less (NYSDEC, 1988). At the ServAll Laundry Site, the turbidity was below 50 NTU at the time of sampling in ten of the 14 samples; the turbidity exceeded the criterion in MW-3B (143 NTU), MW-13 (53.4), MW-23S, (58.3) and MW-23D (289) NTU (see the bottom row of Table 5).

Table 5 presents a comparison of the total metals and the dissolved metals data for the 14 filtered/unfiltered sample pairs collected at the ServAll Site. The “percent dissolved” shown on the table is the ratio of the filtered sample concentration to the total (unfiltered) sample concentration. Where a metal was not detected in the filtered sample, no calculation was made.

It was expected that the concentrations of total metals that are highly associated with particles (e.g., aluminum) would tend to be higher in the more turbid samples. However, this was not consistently the case. While some of the samples appeared to follow this pattern, there was no clear relationship between turbidity (ranging from 0 to 289 NTUs) and total metals concentrations.

Following the same line of reasoning that higher turbidity reflects higher concentrations of suspended sediments, it would be expected that there would be only small differences between the total metals and dissolved metals concentrations in samples with low turbidity. Again this appeared to be true for

some samples (MW-1, MW-4, and MW-5 all had less than 5 NTUs with no detectable aluminum in either unfiltered or filtered), yet all of the other seven samples with turbidity under 50 NTU had aluminum ranging from 241 to 4030 µg/L in the unfiltered sample and no detectable aluminum in the filtered samples except MW-6 which still showed only 2% for the filtered/unfiltered ratio. As expected, wells with higher turbidities had consistently lower concentrations of metals associated with particles in the filtered samples.

As expected, concentrations of metals that typically exist primarily in the dissolved phase (sodium, potassium, and calcium) were generally similar in the filtered and unfiltered samples, regardless of the sample turbidity. Then exception was in the samples from MW-6B; the concentration of calcium was 47 percent higher in the filtered sample and the concentration of sodium was 218 percent higher.

4.4 Round 6 (August 2012) 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.

4.4.1 Round 6 Volatile Organic Compound Data Quality

Samples from 14 monitoring wells were prepared by SW-846 method 5030C and analyzed for target compound list (TCL) VOCs by SW-846 method 8260C and reported as sample delivery group (SDG) L1820 and L1786. Four trip blanks were collected and submitted for VOC analysis. As samples were collected in dedicated Teflon bailers, field rinsate blank samples were not required, as specified in the site-specific SAP (Earth Tech, 2007). Sample MW-16 was designated as the QC sample (matrix spike and spike duplicate analysis) for the Round 6 sampling event. Samples were collected in four rounds; sampled on August 21 received in good condition at the lab on August 22; sampled August 22 and received on August 23, sampled August 27 and received on August 28, and sampled August 29 and received on August 30. Samples were properly preserved ($\text{pH} \leq 2$) and properly cooled (temperature between 0 and 6° C).

Laboratory QC limits were met for initial and continuing calibrations, blanks, surrogates, internal standards, laboratory control sample (LCS) recovery, matrix spike recovery, and matrix spike duplicate precision with the exceptions provided below. No target or non-target compounds were detected in the trip blank.

In SDG L1786 LCS recovery for 1,4 dioxane was below criteria. In the matrix spike for MW-16, recoveries for 1,1 dichloroethene and 2,2, dichloropropane were below criteria. In the matrix spike duplicate the recoveries for 1,2,3, trichloropropane and 2,2, dichloropropane were below criteria. In the matrix spike duplicate for MW-16, the RPD for 1,1 dichloroethene exceeded criteria.

One filtered/unfiltered site-specific field duplicate groundwater sample pair (MW-23D/ MW-73) was collected for VOC analysis from the ServAll site in Round 6. Precision for the field duplicate (see Table 6) was very good both qualitatively (the same three target compounds were detected in the sample and the duplicate and qualitatively (even at the low concentrations detected – less than 1 µg/L to 53 µg/L – all relative percent differences [RPDs] were less than 8 percent). Due to high

concentrations (exceeding the calibration range) of one target compound (PCE), one sample (MW-23S) required dilution (at a dilution factor of 20). The result from the dilution analysis is shown for PCE (flagged “D”); for all other analytes, the tabulated data are from the undiluted (initial) analysis.

4.4.2 Round 6 Metals Data Quality

Filtered and unfiltered groundwater samples were collected from 14 monitoring wells on the same dates as the volatiles and received in good condition by the laboratory (Spectrum Analytical [formerly Mitkem], Warwick RI). Filtered and unfiltered samples were analyzed for target analyte list (TAL) metals by SW-846 method 6010C (mercury by SW-846 7470A) and reported as sample delivery group (SDG), L1820 and L1786. Somewhat confusingly, the laboratory did not assign unique numbers differentiating between the filtered and unfiltered samples at each location; rather, the laboratory reported the results in two sub-SDGs, L1820 and L1786 for the total metals, and L1820D and L1786D for the dissolved metals. As samples were collected in dedicated Teflon bailers, field rinsate blank samples were not required, as specified in the site-specific SAP (Earth Tech, 2007). Sample MW-16 (filtered and unfiltered) (unfiltered) were designated as the QC samples (spike and duplicate analysis) for the Round 6 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 for the filtered (dissolved metals) samples. Laboratory QC limits were met for the total metals. No unusual occurrences were noted by the laboratory during the analysis of filtered or unfiltered samples from either SDG.

One filtered/unfiltered site-specific field duplicate groundwater sample pair (MW-23DU and 23F/MW-73U and 73F) was collected from the ServAll site in Round 6. Precision for the field duplicates (see Table 7) was good. In the unfiltered sample pair, relative percent difference (RPD) ranged from 0.0 to 7.2 percent for the 12 detected metals. Precision was very good in the filtered duplicate pair for the nine detected metals, with RPDs ranging from 1.9 to 7.1 percent.

The filtered/unfiltered data pairs (see Table 5) were reviewed for anomalies, using the USEPA Region II metals validation criteria (USEPA HW-2, revision 13; USEPA, 2006). Based on these criteria, if the dissolved (filtered sample) result exceeds the total (unfiltered) sample by more than 20 percent, the accuracy of the quantitation is suspect (i.e., the data would be flagged “J”, for estimated), and if the filtered sample result exceeds the unfiltered sample result by more than 50 percent, the data may be unusable (flagged “R”, rejected). The exceedances of the 20 percent threshold in the 14 Round 6 filtered/unfiltered sample pairs analyzed included magnesium in MW-6B (39%), and calcium (47%), both of which were well above the laboratory’s detection limit. The exceedances of the 50 percent threshold included thallium in MW-5 (58% - results were less than twice the detection limit and less than the contract required detection) and sodium in MW-6B (118% - with results well above the laboratory’s detection limit),.

5.0 Summary and Recommendations for Future Site Remediation Activities

5.1 Summary of VOCs

No VOCs were detected in monitoring wells MW-3B, and MW-4 in any of the six sampling events. VOCs were detected in MW-3A, MW-6A, MW-14, but no exceedances were noted. Monitoring well MW-2 was sampled for the first time during November 2008 and a slight exceedance of benzene was noted; there were no further exceedances noted in February 2010, May 2011 or August 2012. Concentrations of detected VOCs were below the NYSDEC Class GA Groundwater Criteria in monitoring well MW-5 (excluding the acetone and toluene as discussed in section 4.1).

PCE has been detected in six monitoring wells at concentrations that exceed the Class GA criterion of 5 µg/L. These wells include MW-1, MW-6B, MW-11, MW-12, MW-13, MW-16, MW-23S and MW-23D as shown on Figure 5.

A summary of historic PCE concentration data for selected monitoring wells is shown on Table 8. The data presented on this table is a compilation of data available for review during the preparation of this report. A graph of the historic PCE concentrations is also illustrated on Figure 9. PCE concentrations show a significant increase in monitoring wells MW-6B and MW-23S during the June 2006 event but appear to be decreasing through the two subsequent sampling events. At MW-6B, PCE concentrations had decreased through the 1990s to a low of 22 µg/L by January 1999. There was an increase noted in July 2000 to 160 µg/L followed by an order of magnitude increase in the June 2006 sampling event to 1,100 µg/L followed by a significant drop to 480 µg/L by August 2007. The concentration remained constant through the November 2008 sampling event; however, the concentration increased significantly to 2,000 µg/L in the February 2010 event but dropped significantly (to 150 µg/L) in the May 2011 event. A bar chart of the PCE concentrations at MW-6B for the six long term sampling events (2006 – 2012), is shown on Figure 5.

PCE concentrations have also significantly increased in monitoring well MW-23S. Historically, PCE concentrations at this location were less than 30 µg/L (between 1995 and 2004) and was below the Class GA criterion of 5 µg/L during the May 2004 sampling event. During the June 2006 sampling event, the PCE concentration at this location was 5,200 µg/L. The concentration has decreased significantly since that time to 1,700 µg/L in August 2007 and 500 µg/L in November 2008, and held fairly constant in the February 2010 event (590 µg/L). However, the PCE concentration rebounded to 1,500 µg/L in the May 2011 event. A bar chart of the PCE concentrations at MW-23S for the six long-term sampling events (2006 – 2012) is shown on Figure 5.

Isoconcentration maps were prepared for PCE and are shown on Figure 10A (June 2006 data), Figure 10B (November 2008 data), Figure 10C (May 2011 data) and Figure 10D (August 2012 data). As shown on these maps, the PCE plume appears to have separated into two non-contiguous plumes starting with the May 2011 sampling event and continuing through the August 2012 sampling event: one near the Site and a second centered near MW-23S (immediately south of the Sunrise Highway). PCE concentrations in wells near the Site appear to be decreasing as is the PCE concentration in

MW-12 (adjacent to the Southern State Parkway). Further downgradient, near the Bay Shore High School, the PCE concentrations appear to be increasing at MW-16 and MW-23S.

Three of the monitoring wells sampled as part of the long-term monitoring program are located approximately halfway between the Site and the Bay Shore Middle School (MW-12, MW-13 and MW-14) along the Southern State Parkway. PCE was detected above the criterion in MW-12, (in each event between 2006 and 2010 at, but was detected below the criterion (at 1.6 µg/L) in the May 2011 sampling event. In Round 5, PCE was not detected in monitoring wells MW-13 or MW-14, similar to previous sampling events. Of the two monitoring wells near the Bay Shore Middle School, the PCE concentrations at MW-11 were 56 µg/L and 60 µg/L for the June 2006 and November 2008 sampling events (an obstruction prevented the collection of a sample in August 2007, February 2010, and May 2011). At MW-16, the other well near the school, the concentrations of VOCs have all increased since November 2008; the concentrations of cis-1,2-DCE, TCE and PCE all exceeded the criterion. A bar chart of the PCE concentrations at MW-11, MW-12 and MW-16 for the five long-term sampling events is shown on Figure 5.

The two most downgradient wells sampled (MW-23S and MW-23D) are located near the Sunrise Highway. PCE was detected in MW-23S at a concentration of 1,700 µg/L along with high concentrations of two daughter products, TCE and cis-1,2-DCE in the August 2007 event, and PCE was detected above the criterion in MW-23D at a concentration of 6 µg/L. In two recent events (November 2008 and February 2010), concentrations of PCE, cis-1,2-DCE and TCE have decreased significantly (PCE at 500 µg/L and 590 µg/L; cis-1,2-DCE at 45 µg/L and 38 µg/L; and TCE at 18 µg/L and 15 µg/L); however, PCE concentrations rebounded to 1,500 µg/L in May 2011. A graph of the PCE concentrations at MW-23S for the five long-term sampling events is shown on Figure 5. The PCE concentrations (other analytes being not detected) have remained fairly constant at MW-23D, with concentrations of 7.7 and 8.3 µg/L detected in November 2008 and February 2010, respectively. However, in Round 5 (May 2011) the PCE concentration spiked to 25 µg/L, and cis-1,2-DCE and TCE were detected for the first time in MW-23D, albeit at low concentrations (less than the Class GA criterion). A graph of the PCE concentrations from the five long-term sampling events at MW-23D is included on Figure 5.

TCE has been detected above the Class GA criterion of 5 µg/L in three monitoring wells, MW-6B, MW-16 and MW-23S. The TCE concentration may be decreasing in MW-6B near the Site, similar to the trend shown for PCE at this location. There does not appear to any discernible trend in TCE for the other two wells as shown on Figure 6.

Cis-1,2-DCE has been detected above the Class GA criterion of 5 µg/L in four monitoring wells, MW-6B, MW-12, MW-16 and MW-23S. As shown on Figure 7, there does not appear to be any discernible trend in concentration.

5.2 Summary of TAL Metals

Of the 23 TAL metals, 11 metals have been detected at least once at concentrations above their Class GA criteria. These exceedances included antimony, beryllium, cadmium, chromium, copper, iron, lead, manganese, nickel, sodium, and thallium. Three of these metals – iron, manganese, and sodium – are naturally occurring elements in Long Island groundwater and will not be discussed further.

Four metals, including antimony, beryllium, copper and thallium, have been detected sporadically during the six long-term sampling events. Although antimony has been detected in several wells, no well have had more than one exceedance during the six sampling events. Beryllium detections have also been sporadic and only one sample has exceeded the criterion during the six sampling events. Copper has been noted in numerous samples but has only exceeded its criterion once during the six sampling events. Thallium has been detected sporadically in eight of the 14 long-term monitoring wells and each detection was above the criterion: two wells have had two exceedances and one well has had three exceedances during the six sampling events.

Cadmium has been detected in most of the samples collected at the Site during the six long-term sampling events. Cadmium concentrations have exceeded the criterion once in monitoring wells MW-4, MW-6B and MW-23S, and twice in monitoring well MW-3A. Cadmium concentrations have consistently exceeded the criterion in two monitoring wells. Well MW-2 has been sampled in four events and exceeded the criterion in three of four events, including the dissolved sample in May 2011. Cadmium concentrations exceeded the criterion in well MW-13 during four of six sampling events, including the dissolved sample in May 2011. Cadmium isoconcentration maps (unfiltered data) are presented in Figure 11A (November 2008), Figure 11B (May 2011) and Figure 11C (August 2012, note there were no cadmium exceedances during this event). The cadmium results are also presented graphically in Figure 12.

Chromium was detected in all but one sample during the six sampling events to date and exceeded the criterion in a majority of the samples. The only exceptions are MW-23S and MW-23D, where chromium concentrations have not exceeded the criterion in any sampling event. The chromium results are also presented graphically on Figure 13. Results from the filtered metals data from May 2011 and August 2012 indicate that chromium is not present in the dissolved phase.

Nickel has exceeded the Class GA criterion of 100 µg/L at least once in ten wells: MW-2, MW-3B, MW-4, MW-5, MW-6, MW-6A, MW-6B, MW-12, MW-13, and MW-16. In the February 2010 event, nickel concentrations greater than 100 µg/L were detected in three monitoring wells (MW-3B, MW-4, and MW-13). In May 2011, nickel concentration exceeded the criterion in five unfiltered samples but only one filtered sample. In August 2012, nickel concentrations only exceeded the criterion at MW-3A. The nickel results are presented on Figure 14. There is not a good correlation between wells to indicate whether nickel is present in the dissolved phase; some samples indicate a significant percent in the dissolved phase while other samples indicate a low percentage in the dissolved phase.

Lead has been detected in a majority of samples collected during the six sampling events but has only exceeded the criterion in four wells as shown on Figure 15. Results of the filtered metals analyses indicate that lead is not present in the dissolved phase.

5.3 Future Recommendations

Future recommendations for the ServAll Laundry Site are continued monitoring of selected monitoring wells for VOCs and TAL metals. Chromium concentrations continue to exceed the criterion in most of the monitoring wells (all except MW-23S and MW-23D). However, May 2011 and August 2012 data from the filtered samples indicate that the high concentrations are likely a result of suspended material and are not present in the dissolved phase. Further filtered sampling will confirm this observation. Cadmium concentrations have exceeded the Class GA criterion more frequently in the last three sampling events (relative to the one exceedance in 2007 and no exceedances in 2006).

Monitoring well MW-11, located in the Bay Shore High School athletic field, has been vandalized and should be cleared of debris or properly abandoned.

Paired filtered/unfiltered groundwater sample for metals analysis were collected from all wells sampled in the May 2011 sampling event for the first time. It is recommended that at least one additional round of paired filtered/unfiltered groundwater samples be collected for comparison purposes 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 (May 2011) 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 why there is so little apparent 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 round of groundwater sampling is scheduled for November 2013.

Tables

TABLE 1
SERVALL LAUNDRY SITE (1-52-077)
MONITORING WELL DATA

Well ID	NY State Plane Coordinates ¹		Well Screen Depth (ft bgs)	Top of Riser Elevation ¹	Comments
	Northing	Easting			
MW-1	193,973.43	2,204,502.95	76.5 - 86.5	64.79	Behind Servall Building
MW-2	194,178.63	2,204,535.21	71.8 - 81.8	64.47	Well could not be located prior to the November 2008 event
MW-3A	194,188.77	2,204,423.40	110.0 - 120.0	64.37	Well could not be located prior to the November 2008 event
MW-3B	198,189.80	2,204,411.51	78.0 - 88.0	64.54	West of the building on the north side of Drayton Avenue
MW-4	193,713.55	2,204,672.09	74.0 - 84.0	63.11	On north side of Frederick Avenue
MW-5	193,738.12	2,204,418.09	74.0 - 84.0	64.06	On north side of Frederick Avenue
MW-6A	193,723.62	2,204,573.71	53.0 - 63.0	63.87	On north side of Frederick Avenue
MW-6B	193,722.77	2,204,566.29	25.0 - 35.0	63.83	On north side of Frederick Avenue
MW-7	193,247.00	2,204,841.62	102.0 - 112.0	60.79	Well appears to be missing
MW-8	192,291.45	2,205,304.27	94.0 - 104.0	54.6	Well appears to be missing
MW-9	189,214.07	2,206,683.24	78.0 - 88.0	40.91	Well appears to have been paved over or removed
MW-10	188,924.35	2,207,905.95	78.7 - 88.7	40.22	Well appears to be missing
MW-11	188,889.82	2,207,272.76	80.0 - 90.0	37.07	In grass on field at Bay Shore Middle School
MW-12	191,051.70	2,205,475.34	78.8 - 88.8	50.61	In woods along Southern State Parkway near light pole
MW-13	190,990.06	2,205,989.11	88.0 - 98.0	50.33	In woods along Southern State Parkway near light pole
MW-14	191,009.26	2,206,506.46	83.3 - 93.3	49.98	In woods along Southern State Parkway near light pole
MW-15	190,264.25	2,206,372.05	87.0 - 97.0	48.78	Well appears to be missing
MW-16	188,111.44	2,207,779.29	84.0 - 94.0	36.50	South side of Abrew Street in roadway
MW-23S	187,099.54	2,208,295.49	66.0 - 69.0	24.38	In roadway on Cul-de-sac on Perkel Street
MW-23D	187,101.72	2,208,276.17	83.0 - 88.0	24.45	In roadway on Cul-de-sac on Perkel Street

Bolded monitoring wells are severely damaged and require repairs to the road box

1 - Coordinates and elevations taken from E.C. Jordan RI/FS Report, January 1992 and ABB Plume Discharge Study, December 1995.

TABLE 2
SERVALL LAUNDRY SITE (SITE 1-52-077)
GROUNDWATER ELEVATIONS

Well #	Reference Elevation	Date	Depth To Water	Water Table Elevation	Comments
MW-1S	64.79	2/1/10	22.87	41.92	February 2010 sampling event
		5/9/11			not collected
		8/20/12	24.65	40.14	August 2012 sampling event
MW-2	64.47	6/6/06	--	--	could not locate
		8/20/07	--	--	could not locate
		11/11/08	23.82	40.65	November 2008 sampling event
		2/1/10	22.27	42.20	February 2010 sampling event
		5/9/11	23.19	41.28	May 2011 sampling event
		8/20/12	24.00	40.47	August 2012 sampling event
MW-3A	64.37	6/6/06	20.68	43.69	June 2006 sampling event
		8/20/07	22.00	42.37	August 2007 sampling event
		11/11/08	23.61	40.76	November 2008 sampling event
		2/1/10	22.07	42.30	February 2010 sampling event
		5/9/11	23.02	41.35	May 2011 sampling event
		8/20/12	23.81	40.56	August 2012 sampling event
MW-3B	64.54	6/6/06	--	--	could not locate
		8/20/07	--	--	could not locate
		11/11/08	23.81	40.73	November 2008 sampling event
		2/1/10	22.29	42.25	February 2010 sampling event
		5/9/11	23.20	41.34	May 2011 sampling event
		8/20/12	24.02	40.52	August 2012 sampling event
MW-4	63.11	6/16/06	20.34	42.77	June 2006 sampling event
		8/20/07	21.50	41.61	August 2007 sampling event
		11/11/08	23.35	39.76	November 2008 sampling event
		2/1/10	21.77	41.34	February 2010 sampling event
		5/9/11	22.57	40.54	May 2011 sampling event
		8/20/12	24.13	38.98	August 2012 sampling event
MW-5	64.06	6/15/06	20.98	43.08	June 2006 sampling event
		8/20/07	22.20	41.86	August 2007 sampling event
		11/11/08	23.99	40.07	November 2008 sampling event
		2/1/10	22.42	41.64	February 2010 sampling event
		5/9/11	23.29	40.77	May 2011 sampling event
		8/20/12	23.47	40.59	August 2012 sampling event
MW-6A	63.87	6/15/06	20.93	42.94	June 2006 sampling event
		8/20/07	22.41	41.46	August 2007 sampling event
		11/11/08	24.01	39.86	November 2008 sampling event
		2/1/10	22.49	41.38	February 2010 sampling event
		5/9/11	23.28	40.59	May 2011 sampling event
		8/20/12	24.15	39.72	August 2012 sampling event

TABLE 2
SERVALL LAUNDRY SITE (SITE 1-52-077)
GROUNDWATER ELEVATIONS

Well #	Reference Elevation	Date	Depth To Water	Water Table Elevation	Comments
MW-6B	63.83	6/15/06	20.89	42.94	June 2006 sampling event
		8/20/07	22.16	41.67	August 2007 sampling event
		11/11/08	23.95	39.88	November 2008 sampling event
		2/1/10	22.36	41.47	February 2010 sampling event
		5/9/11	23.62	40.21	May 2011 sampling event
		8/20/12	24.17	39.66	August 2012 sampling event
MW-11	37.07	6/8/06	8.80	28.27	June 2006 sampling event
		8/20/07	6.57	30.50	August 2007 sampling event
		11/11/08	10.13	26.94	November 2008 sampling event
		2/1/10	9.13	27.94	February 2010 sampling event
		5/9/11	NA		vandalized, filled with debris
		8/20/12	NA		vandalized, filled with debris
MW-12	50.61	6/15/06	14.15	36.46	June 2006 sampling event
		8/20/07	15.42	35.19	August 2007 sampling event
		11/11/08	16.74	33.87	November 2008 sampling event
		2/1/10	15.14	35.47	February 2010 sampling event
		5/9/11	15.60	35.01	May 2011 sampling event
		8/20/12	16.62	33.99	August 2012 sampling event
MW-13	50.33	6/15/06	18.51	31.82	June 2006 sampling event
		8/20/07	15.87	34.46	August 2007 sampling event
		11/11/08	17.10	33.23	November 2008 sampling event
		2/1/10	15.54	34.79	February 2010 sampling event
		5/9/11	15.97	34.36	May 2011 sampling event
		8/20/12	16.93	33.40	August 2012 sampling event
MW-14	49.98	6/15/06	15.01	34.97	June 2006 sampling event
		8/20/07	16.26	33.72	August 2007 sampling event
		11/11/08	17.29	32.69	November 2008 sampling event
		2/1/10	15.84	34.14	February 2010 sampling event
		5/9/11	16.25	33.73	May 2011 sampling event
		8/20/12	17.14	32.84	August 2012 sampling event
MW-16	36.50	6/15/06	10.52	25.98	June 2006 sampling event
		8/20/07	12.76	23.74	August 2007 sampling event
		11/11/08	12.35	24.15	November 2008 sampling event
		2/1/10	11.52	24.98	February 2010 sampling event
		5/9/11	11.68	24.82	May 2011 sampling event
		8/20/12	11.82	24.68	August 2012 sampling event

TABLE 2
SERVALL LAUNDRY SITE (SITE 1-52-077)
GROUNDWATER ELEVATIONS

Well #	Reference Elevation	Date	Depth To Water	Water Table Elevation	Comments
MW-23S	24.38	6/8/06	5.25	19.13	June 2006 sampling event
		8/20/07	6.22	18.16	August 2007 sampling event
		11/11/08	6.09	18.29	November 2008 sampling event
		2/1/10	5.78	18.60	February 2010 sampling event
		5/9/11	5.62	18.76	May 2011 sampling event
		8/20/12	5.61	18.77	August 2012 sampling event
MW-23D	24.45	6/8/06	5.15	19.30	June 2006 sampling event
		8/20/07	6.14	18.31	August 2007 sampling event
		11/11/08	6.00	18.45	November 2008 sampling event
		2/1/10	5.62	18.83	February 2010 sampling event
		5/9/11	5.67	18.78	May 2011 sampling event
		8/20/12	5.56	18.89	August 2012 sampling event

All measurements and elevations are in feet, MSL.

All measurements were taken from the top of PVC casing.

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-1	MW-1
Sample ID	Class GA	SL-MW-1	SL-MW-1
Laboratory ID	Ground	J0196-01	L1786-10
Sample Date	Water	2/3/10	08/22/12
	Criteria	conc. Q	conc. Q
Vinyl Chloride	2	ND	ND
1,1-Dichloroethene	5	ND	ND
Acetone	50	ND	ND
Benzene	1	ND	ND
2-Butanone	50	ND	ND
trans-1,2-Dichloroethene	5	ND	ND
Methyl tert-butyl ether	10	ND	ND
1,1-Dichloroethane	5	ND	ND
cis-1,2-Dichloroethene	5	2.3 J	1.2 J
Chloroform	7	ND	ND
1,1,1-Trichloroethane	5	ND	ND
Trichloroethene	5	1.8 J	0.81 J
Tetrachloroethene	5	50	18
Xylenes (Total)	5	1.1 J	ND
Toluene	5	ND	ND
Chlorobenzene	5	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND
Number of TICs			
Total TIC concentration			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2
Sample ID	Class GA	Can't	Can't	SL-MW-2	SL-MW-2	SL-MW-2	SL-MW-2
Laboratory ID	Ground	Locate	Locate	G2115-14	J0196-06	K0834-09	L1786-11
Sample Date	Water	6/6/06	8/21/07	11/14/08	2/4/10	5/11/11	08/22/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2	NA	NA	ND	ND	ND	ND
1,1-Dichloroethene	5	NA	NA	ND	ND	ND	ND
Acetone	50	NA	NA	ND	ND	ND	ND
Benzene	1	NA	NA	1.7 J	ND	ND	ND
2-Butanone	50	NA	NA	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	NA	NA	ND	ND	ND	ND
Methyl tert-butyl ether	10	NA	NA	ND	ND	ND	ND
1,1-Dichloroethane	5	NA	NA	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	NA	NA	ND	ND	ND	ND
Chloroform	7	NA	NA	ND	ND	ND	ND
1,1,1-Trichloroethane	5	NA	NA	ND	ND	ND	ND
Trichloroethene	5	NA	NA	ND	ND	ND	ND
Tetrachloroethene	5	NA	NA	ND	ND	2.1 J	ND
Xylenes (Total)	5	NA	NA	ND	ND	ND	ND
Toluene	5	NA	NA	1.4 J	ND	ND	ND
Chlorobenzene	5	NA	NA	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	NA	NA	ND	ND	ND	ND
Number of TICs				1			
Total TIC concentration				38 J			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-3A	MW-3A	MW-3A	MW-3A	MW-3A	MW-3A
Sample ID	Class GA	SMW-3A	SMW-3A	SL-MW-3A	SL-MW-3A	SL-MW-3A	SL-MW-3A
Laboratory ID	Ground	E0773-18	F1174-02C	G2115-16	J0196-02	K0834-10	L1820-01
Sample Date	Water	6/6/06	8/21/07	11/14/08	2/3/10	5/11/11	08/27/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND
2-Butanone	50	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	0.53 J
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND
Xylenes (Total)	5	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND	ND	ND
Number of TICs		0	0	1			
Total TIC concentration		ND	ND	19 J			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-3B	MW-3B	MW-3B	MW-3B	MW-3B	MW-3B
Sample ID	Class GA	Can't	Can't	SL-MW-3B	SL-MW-3B	SL-MW-3B	SL-MW-3B
Laboratory ID	Ground	Locate	Locate	G2115-17	J0196-07	K0834-11	L1820-02
Sample Date	Water	6/6/06	8/21/07	11/14/08	2/4/10	5/11/11	08/27/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2	NA	NA	ND	ND	ND	ND
1,1-Dichloroethene	5	NA	NA	ND	ND	ND	ND
Acetone	50	NA	NA	ND	ND	ND	ND
Benzene	1	NA	NA	ND	ND	ND	ND
2-Butanone	50	NA	NA	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	NA	NA	ND	ND	ND	ND
Methyl tert-butyl ether	10	NA	NA	ND	ND	ND	ND
1,1-Dichloroethane	5	NA	NA	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	NA	NA	ND	ND	ND	ND
Chloroform	7	NA	NA	ND	ND	ND	ND
1,1,1-Trichloroethane	5	NA	NA	ND	ND	ND	ND
Trichloroethene	5	NA	NA	ND	ND	ND	ND
Tetrachloroethene	5	NA	NA	ND	ND	ND	ND
Xylenes (Total)	5	NA	NA	ND	ND	ND	ND
Toluene	5	NA	NA	ND	ND	ND	ND
Chlorobenzene	5	NA	NA	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	NA	NA	ND	ND	ND	ND
Number of TICs				1			
Total TIC concentration				19 J			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sample ID	Class GA	SMW-4	SMW-4	SMW-4	SL-MW-4	SL-MW-4	SL-MW-4	SL-MW-4
Laboratory ID	Ground	E0832-10	F0495-02B	F1174-03C	G2115-09	J0196-08	K0834-12	L1820-07
Sample Date	Water	6/16/06	4/20/07	8/21/07	11/13/08	2/4/10	5/12/11	08/29/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	5	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND	ND	ND	ND
Number of TICs		0	0	0	1			
Total TIC concentration		ND	ND	ND	28 J			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
Sample ID	Class GA	SMW-5	SMW-5	SMW-5	SL-MW-5	SL-MW-5	SL-MW-5	SL-MW-5
Laboratory ID	Ground	E0832-05	F0495-04B	F1174-13B	G2115-13	J0196-09	K0834-15	L1820-06
Sample Date	Water	6/15/06	4/20/07	8/27/07	11/13/08	2/4/10	5/12/11	08/29/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	ND	170	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50	ND	ND	ND	38 J	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	3.0 J	2.0 J	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	1.5 J	ND
Tetrachloroethene	5	ND	ND	2.0 J	ND	ND	ND	ND
Xylenes (Total)	5	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	1,200	230 D	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND	ND	ND	ND
Number of TICs		0	0	0	1			
Total TIC concentration		ND	ND	ND	330 J			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-6A	MW-6A	MW-6A	MW-6A	MW-6A	MW-6A	MW-6A
Sample ID	Class GA	SMW-6A	SMW-6A	SMW-6A	SMW-6A	SMW-6A	SMW-6A	SL-MW-6A
Laboratory ID	Ground	E0832-06	F0495-01B	F1174-04C	G2115-10	J0196-10	K0834-13	L1820-03
Sample Date	Water	6/15/06	4/20/07	8/21/07	11/13/08	2/4/10	5/12/11	08/27/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	1.2 J	ND	ND
Xylenes (Total)	5	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND	ND	ND	ND
Number of TICs		0	0	0	1			
Total TIC concentration		ND	ND	ND	28 J			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-6B	MW-6B	MW-6B	MW-6B	MW-6B	MW-6B	MW-6B
Sample ID	Class GA	SMW-6B	SMW-6B	SMW-6B	SMW-6B	SMW-6B	SMW-6B	SL-MW-6B
Laboratory ID	Ground	E0832-07	F0495-03B	F1174-05C	G2115-12	J0196-11	K0834-14	L1820-04
Sample Date	Water	6/15/06	4/20/07	8/21/07	11/13/08	2/4/10	5/12/11	08/27/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND	ND	ND	3.7 J
Benzene	1	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	210 D	120	130	140	190	44	0.50 J
Chloroform	7	ND	ND	ND	2.0 J	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	85	27	26	30	40	7.3	ND
Tetrachloroethene	5	1,100 D	650	480 D	470 D	2,000 D	150	23
Xylenes (Total)	5	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND	ND	ND	ND
Number of TICs		0	0	0	1			
Total TIC concentration		ND	ND	ND	28 J			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-9	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11
Sample ID	Class GA		SMW-11	SMW-11	SL-MW-11	SL-MW-11	SL-MW-11	SL-MW-11
Laboratory ID	Ground	Destroyed	E0773-19		G2115-01			
Sample Date	Water	6/09/06	6/8/06	8/20/07	11/11/08	2/1/10	5/10/11	08/22/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2		ND	NA	ND	NA	NA	NA
1,1-Dichloroethene	5		ND	NA	ND	NA	NA	NA
Acetone	50		ND	NA	ND	NA	NA	NA
Benzene	1		ND	NA	ND	NA	NA	NA
2-Butanone	50		ND	NA	ND	NA	NA	NA
trans-1,2-Dichloroethene	5		ND	NA	ND	NA	NA	NA
Methyl tert-butyl ether	10		ND	NA	1.8 J	NA	NA	NA
1,1-Dichloroethane	5		ND	ND	ND	NA	NA	NA
cis-1,2-Dichloroethene	5		3.0 J	NA	13	NA	NA	NA
Chloroform	7		ND	NA	ND	NA	NA	NA
1,1,1-Trichloroethane	5		ND	NA	ND	NA	NA	NA
Trichloroethene	5		4.0 J	NA	ND	NA	NA	NA
Tetrachloroethene	5		56	NA	60	NA	NA	NA
Xylenes (Total)	5		ND	NA	ND	NA	NA	NA
Toluene	5		ND	NA	63	NA	NA	NA
Chlorobenzene	5		ND	NA	4.8 J	NA	NA	NA
1,2-Dichlorobenzene	4.7		ND	NA	ND	NA	NA	NA
Number of TICs			1		1			
Total TIC concentration			6 J	NA	22 J			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12
Sample ID	Class GA	SMW-12	SMW-12	SL-MW-12	SL-MW-12	SL-MW-12	SL-MW-12
Laboratory ID	Ground	E0832-01	F1174-08C	G2115-06	J0189-01	K0834-01	L1786-07
Sample Date	Water	6/15/06	8/22/07	11/12/08	2/2/10	5/10/11	08/22/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND
2-Butanone	50	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	ND	ND	ND	1.7 J	0.68 J
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	2.0 J	3.1 J	ND	1.8 J	5.6
Chloroform	7	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	1.0 J	ND	ND	ND	1.1 J
Tetrachloroethene	5	17	17	60	10	1.6 J	0.80 J
Xylenes (Total)	5	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	4.0 J	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	9.0	ND	ND	ND	ND	ND
Number of TICs		0	0	1			
Total TIC concentration		ND	ND	26			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13
Sample ID	Class GA	SMW-13	SMW-13	SL-MW-13	SL-MW-13	SL-MW-13	SL-MW-13
Laboratory ID	Ground	E0832-02	F1174-07C	G2115-07	J0189-02	K0834-02	L1786-04
Sample Date	Water	6/15/06	8/22/07	11/12/08	2/2/10	5/10/11	8/21/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Acetone	50	4.0 J	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND
2-Butanone	50	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	ND	ND	ND	ND	6.7
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	6.0	2.7 J	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND
Trichloroethene	5	3.0 J	ND	ND	ND	ND	0.71 J
Tetrachloroethene	5	5.0	ND	1.0 J	ND	ND	1.0 J
Xylenes (Total)	5	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND	ND	ND
Number of TICs		0	0	1			
Total TIC concentration		ND	ND	26 J			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14
Sample ID	Class GA	SMW-14	SMW-14	SL-MW-14	SL-MW-14	SL-MW-14	SL-MW-14
Laboratory ID	Ground	E0832-03	F1174-06C	G2115-18	J0189-04	K0834-05	L1786-08
Sample Date	Water	6/15/06	8/22/07	11/14/08	2/2/10	5/10/11	08/22/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND
2-Butanone	50	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	ND	ND	1.1 J	8.0	4.6 J
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	2.0 J	ND	ND	ND	ND
Xylenes (Total)	5	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND	ND	ND
Number of TICs		0	0	1			
Total TIC concentration		ND	ND	20 J			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16
Sample ID	Class GA	SMW-16	SMW-16	SL-MW-16	SL-MW-16	SL-MW-16	SL-MW-16
Laboratory ID	Ground	E0832-04	F1174-12B	G2115-05	J0189-05	K0834-08	L1786-09
Sample Date	Water	6/15/06	8/27/07	11/12/08	2/2/10	5/11/11	08/22/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2	ND	ND	ND	1.2 J	ND	2.1 J
1,1-Dichloroethene	5	4.0 J	ND	ND	2.4 J	ND	1.1 J
Acetone	50	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND
2-Butanone	50	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	2.0 J	ND	ND	ND	ND	1.4 J
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	15	ND	2.1 J	16	8.0	20
Chloroform	7	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	5.0	ND	ND	2.8 J	ND	1.7 J
Trichloroethene	5	16	ND	1.1 J	11	7.5	9.5
Tetrachloroethene	5	25	2.0 J	6.9	48	95	100
Xylenes (Total)	5	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND	ND	ND
Number of TICs		0	0	1			
Total TIC concentration		ND	ND	23 J			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-23S	MW-23S	MW-23S	MW-23S	MW-23S	MW-23S
Sample ID	Class GA	SMW-23S	SMW-23S	SL-MW-23S	SL-MW-23S	SL-MW-23S	SL-MW-23S
Laboratory ID	Ground	E0773-20	F1174-11B	G2115-03	J0196-03	K0834-06	L1786-03
Sample Date	Water	6/8/06	8/27/07	11/12/08	2/3/10	5/11/11	8/21/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	2.5 J	2.2 J
Acetone	50	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND
2-Butanone	50	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	1.0 J	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	1.0 J	ND	5.4	3.9 J	9.5
1,1-Dichloroethane	5	ND	ND	ND	ND	1.6 J	ND
cis-1,2-Dichloroethene	5	360 D	180 D	45	38	83	47
Chloroform	7	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	1.6 J	1.3 J	3.8 J	3.5 J
Trichloroethene	5	220 D	99	18	15	46	28
Tetrachloroethene	5	5,200 D	1,700 D	500 D	590 D	1,500 D	1,800 D
Xylenes (Total)	5	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND	ND	ND
Number of TICs		2	0	1			
Total TIC concentration		1,250 JD	ND	21 J			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 3
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF VOCs IN GROUNDWATER

Sample Location	NYSDEC	MW-23D	MW-23D	MW-23D	MW-23D	MW-23D	MW-23D
Sample ID	Class GA	SMW-23D	SMW-23D	SL-MW-23D	SL-MW-23D	SL-MW-23D	SL-MW-23D
Laboratory ID	Ground	E0773-21	F1174-09B	G2115-04	J0196-04	K0834-07	L1786-01
Sample Date	Water	6/8/06	8/27/07	11/12/08	2/3/10	5/11/11	8/21/12
	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Vinyl Chloride	2	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND	ND
2-Butanone	50	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	10	ND	ND	ND	ND	ND	0.97 J
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	3.0 J	5.5
Chloroform	7	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	1.2 J	2.8 J
Tetrachloroethene	5	4.0 J	6.0	7.7	8.3	25	57
Xylenes (Total)	5	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	4.7	ND	ND	ND	ND	ND	ND
Number of TICs		1	0	1			
Total TIC concentration		6 J	ND	25 J			

Notes:

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

ND - Not detected

D - Dilution

J - Estimated value, VOCs

NA - Not analyzed

BOLD/ITALICS - exceeds criterion

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-1	MW-1	MW-1	MW-1
Sample ID	Class GA	SL-MW-1	SL-MW-1	SL-MW-1	SL-MW-1
Laboratory ID	Ground	J0196-01		L1786-10	L1786-10
Sample Date	Water	2/3/10	5/11/11	8/22/12	8/22/12
Filtered / Unfiltered	Criteria	Unfiltered conc. Q	Unfiltered conc. Q	Unfiltered conc. Q	Filtered conc. Q
Aluminum	NC	167 B	NA	ND	ND
Antimony	3	ND	NA	ND	ND
Arsenic	25	ND	NA	4.7 B	ND
Barium	1,000	69.4 B	NA	34.2 B	31.5 B
Beryllium	3	ND	NA	ND	ND
Cadmium	5	1.3 B	NA	ND	ND
Calcium	NC	40,600	NA	30,400	30,000
Chromium	50	2.1 B	NA	1.4 B	1.0 B
Cobalt	NC	ND	NA	ND	ND
Copper	200	9.2 B	NA	ND	ND
Iron	300	673	NA	132 B	ND
Lead	25	ND	NA	ND	ND
Magnesium	35,000	1,470	NA	4,830	4,650
Manganese	300	264	NA	164	ND
Mercury	0.7	ND	NA	ND	0.14 B
Nickel	100	3.6 B	NA	ND	ND
Potassium	NC	2,040	NA	1,360	1,390
Selenium	10	ND	NA	ND	ND
Silver	50	ND	NA	ND	ND
Sodium	20,000	47,400	NA	31,900	31,700
Thallium	0.5	ND	NA	ND	ND
Vanadium	NC	0.70 B	NA	ND	ND
Zinc	2,000	42.6 B	NA	7.2 B	ND

Notes: All values are in micrograms per liter (µg/L)
NC - No criterion
ND - Not detected
B - Estimated value, metals
D - Dilution

N - Matrix spike recovery falls outside of the control limit
NA - Data not available
BOLD/ITALICS - exceeds criterion
* - Estimated value, duplicate out of range
E - Estimated value due to interference

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2
Sample ID	Class GA	Can't	Can't	SL-MW-2	SL-MW-2	SL-MW-2	SL-MW-2	SL-MW-2	SL-MW-2
Laboratory ID	Ground	Locate	Locate	G2115-14	J0196-06	K0834-09	K0834-09	L1786-11	L1786-11
Sample Date	Water	6/6/06	8/21/07	11/14/08	2/4/10	5/11/11	5/11/11	8/22/12	8/22/12
Filtered / Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NA	NA	266	466	937	ND	241	ND
Antimony	3	NA	NA	ND	ND	ND	ND	ND	ND
Arsenic	25	NA	NA	ND	ND	ND	ND	ND	ND
Barium	1,000	NA	NA	17.5 B	31.7 B	37.1 B	24.8 B	24.3 B	23.6 B
Beryllium	3	NA	NA	ND	ND	ND	ND	ND	ND
Cadmium	5	NA	NA	8.8 *E	43.7	17.3	8.8	1.5 B	ND
Calcium	NC	NA	NA	15,300	18,500	18,900	17,600	19,800	19,700
Chromium	50	NA	NA	113 *	326	434	7.3 B	127	0.91 B
Cobalt	NC	NA	NA	20.4 B	2.4 B	3.4 B	0.98 B	1.1 B	ND
Copper	200	NA	NA	18.4 B	28.7 B	28.3 B	ND	5.5 B	ND
Iron	300	NA	NA	3,120	2,030	2,790	ND	889	ND
Lead	25	NA	NA	3.3 B	6.8 B	7.4 B	ND	ND	ND
Magnesium	35,000	NA	NA	1,250	2,610	3,180	2,610	4,010	3,930
Manganese	300	NA	NA	396	325	465	88.4	84.0	ND
Mercury	0.7	NA	NA	ND	ND	0.029 BN	ND	ND	ND
Nickel	100	NA	NA	1,390	72	70 E	21 B	4.9 B	1.4 B
Potassium	NC	NA	NA	1,980	2,290	2,380	2,270	1,860	1,990
Selenium	10	NA	NA	ND	ND	ND	ND	13.5 B	ND
Silver	50	NA	NA	ND	ND	ND	ND	ND	ND
Sodium	20,000	NA	NA	14,600	30,200	29,900	27,800	19,600	20,000
Thallium	0.5	NA	NA	ND	ND	ND	ND	ND	ND
Vanadium	NC	NA	NA	2.8 B	3.9 B	5.6 B	ND	1.3 B	ND
Zinc	2,000	NA	NA	44.4 B	155	84.3	34.1 B	6.7 B	ND

Notes: All values are in micrograms per liter (µg/L)
NC - No criterion
ND - Not detected
B - Estimated value, metals
D - Dilution

N - Matrix spike recovery falls outside of the control limit
NA - Data not available
BOLD/ITALICS - exceeds criterion
* - Estimated value, duplicate out of range
E - Estimated value due to interference

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-3A	MW-3A	MW-3A	MW-3A	MW-3A	MW-3A	MW-3A	MW-3A
Sample ID	Class GA	SMW-3A	SMW-3A	SL-MW-3A	SL-MW-3A	SL-MW-3A	SL-MW-3A	SL-MW-3A	SL-MW-3A
Laboratory ID	Ground	E0773-18	F1174-02C	G2115-16	J0196-02	K0834-10	K0834-10	L1820-01	L1820-01
Sample Date	Water	6/6/06	8/21/07	11/14/08	2/3/10	5/11/11	5/11/11	8/27/12	8/27/12
Filtered / Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	749	817	1,630	7,870	10,800	ND	3,910	ND
Antimony	3	ND	ND	5.1 B	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	7.8 B	6.7 B	ND	11.0 B	ND
Barium	1,000	67.3 B	ND	83.9 B	134 B	101 B	14 B	42.0 B	22.1 B
Beryllium	3	ND	ND	ND	0.34 B	0.35 B	ND	ND	ND
Cadmium	5	ND	1.4 B	5.9 *E	6.8	3.3 B	ND	ND	ND
Calcium	NC	10,800	5,740	15,000	14,100	30,200	19,000	21,500	20,600
Chromium	50	55.8	92.9	36.3 *	169	166	2.5 B	1,520	19.8 B
Cobalt	NC	2.4 B	1.8 B	7.3 B	15.8 B	10.9 B	ND	5.0 B	1.8 B
Copper	200	13.0 B	20.0 B	66.2	118	139	12.5 B	44.9	ND
Iron	300	1,070	911	3,040	13,900	14,100	40.4 B	6,990	33.3 B
Lead	25	ND	3.6 B	33.1	79.8	84.0	ND	22.2	ND
Magnesium	35,000	4,290	686	2,130	3,240	4,230	800	5,070	4,270
Manganese	300	143	264	1,840	2,580	1,040	39.0 B	103	39.5 B
Mercury	0.7	ND	ND	ND	0.11 B	0.15 BN	ND	ND	ND
Nickel	100	23.6 B	20.7 B	22.1 B	77.2	60.0 E	4.9 B	226	158
Potassium	NC	2,170	1,010	2,550	2,150	4,000	2,880	2,930	2,510
Selenium	10	ND	ND	ND	ND	ND	ND	ND	17.6 B
Silver	50	ND	1.2 B	ND	ND	ND	ND	ND	ND
Sodium	20,000	129,000	1,610	9,900	64,700	60,000	54,400	22,600	22,600
Thallium	0.5	ND	ND	ND	16.7 B	ND	ND	ND	ND
Vanadium	NC	1.4 B	1.1 B	8 B	23.2 B	27.9 B	ND	15.6 B	ND
Zinc	2,000	53.7	46.6 B	594	1,040	865	104	137	12.5 B

Notes: All values are in micrograms per liter (µg/L)
NC - No criterion
ND - Not detected
B - Estimated value, metals
D - Dilution

N - Matrix spike recovery falls outside of the control limit
NA - Data not available
BOLD/ITALICS - exceeds criterion
* - Estimated value, duplicate out of range
E - Estimated value due to interference

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location Sample ID Laboratory ID Sample Date Filtered / Unfiltered	NYSDEC Class GA Ground Water Criteria	MW-3B Can't Locate 6/6/06 Unfiltered conc. Q	MW-3B Can't Locate 8/21/07 Unfiltered conc. Q	MW-3B SL-MW-3B G2115-17 11/14/08 Unfiltered conc. Q	MW-3B SL-MW-3B J0196-07 2/4/10 Unfiltered conc. Q	MW-3B SL-MW-3B K0834-11 5/11/11 Unfiltered conc. Q	MW-3B SL-MW-3B K0834-11 5/11/11 Filtered conc. Q	MW-3B SL-MW-3B L1820-02 8/27/12 Unfiltered conc. Q	MW-3B SL-MW-3B L1820-02 8/27/12 Filtered conc. Q
Aluminum	NC	NA	NA	2,030	2,430	3,950	ND	4,150	ND
Antimony	3	NA	NA	ND	ND	ND	ND	ND	ND
Arsenic	25	NA	NA	ND	ND	ND	ND	10.4 B	ND
Barium	1,000	NA	NA	31.5 B	35.2	32.7 B	7.0 B	64.5 B	26.7 B
Beryllium	3	NA	NA	ND	0.085 B	ND	ND	ND	ND
Cadmium	5	NA	NA	2.2 B*E	1.1 B	ND	ND	ND	ND
Calcium	NC	NA	NA	9,700	6,930	12,900	10,100	10,000	8,230
Chromium	50	NA	NA	624 *	901	595	17.4 B	939	3.1 B
Cobalt	NC	NA	NA	14.9 B	5.1 B	6.5 B	ND	2.4 B	ND
Copper	200	NA	NA	74.7	49.1	50.5	11.1 B	55.7	ND
Iron	300	NA	NA	4,610	4,800	6,160	81 B	6,690	ND
Lead	25	NA	NA	14.4	29.3	29.8	ND	25.2	ND
Magnesium	35,000	NA	NA	1,490	1,280	1,700	622	4,010	3,080
Manganese	300	NA	NA	447	128	121	ND	303	26.6 B
Mercury	0.7	NA	NA	0.051 B	0.064 B	0.058 BN	ND	ND	ND
Nickel	100	NA	NA	540	121	110 E	55.7	28.8 B	5.8 B
Potassium	NC	NA	NA	3,040	1,170	1,910	1,450	2,660	2,120
Selenium	10	NA	NA	ND	ND	ND	ND	ND	15.5 B
Silver	50	NA	NA	ND	ND	ND	ND	ND	ND
Sodium	20,000	NA	NA	6,730	22,300	8,260	7,560	61,900	64,000
Thallium	0.5	NA	NA	ND	ND	ND	ND	ND	ND
Vanadium	NC	NA	NA	5.9 B	10.3 B	13.2 B	ND	15.5 B	ND
Zinc	2,000	NA	NA	191	189	245	67.7	205	18.3 B

Notes: All values are in micrograms per liter (µg/L)

NC - No criterion

ND - Not detected

B - Estimated value, metals

D - Dilution

N - Matrix spike recovery falls outside of the control limit

NA - Data not available

BOLD/ITALICS - exceeds criterion

* - Estimated value, duplicate out of range

E - Estimated value due to interference

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4
Sample ID	Class GA	SMW-4	SMW-4	SMW-4	SL-MW-4	SL-MW-4	SL-MW-4	SL-MW-4	SL-MW-4	SL-MW-4
Laboratory ID	Ground	E0832-10	F0495-02	F1174-03	G2115-09	J0196-08	K0834-12	K0834-12	L1820-07	L1820-07
Sample Date	Water	6/16/06	4/20/07	8/21/07	11/13/08	2/4/10	5/12/11	5/12/11	8/29/12	8/29/12
Filtered / Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	82.5 B	271	721	1,450	13,500	11,200	ND	ND	ND
Antimony	3	ND	9.4 B	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	2.2 B	ND	6.2 B	ND	ND	ND	ND	6.8 B	7.3 B
Barium	1,000	16.7 B	46.4 B	50.3 B	46.7 B	36.5 B	45.2 B	26.3 B	15.1 B	15.0 B
Beryllium	3	ND	ND	0.061 B	ND	0.11 B	ND	ND	ND	ND
Cadmium	5	0.73 B	1.4 B	2.6 B	6.1 *E	2.6 B	1.3 B	ND	ND	ND
Calcium	NC	13,600	18,700	19,600	52,000	15,400	20,400	19,200	6,940	6,910
Chromium	50	534	337	382	321 *	343	552	33.2	ND	ND
Cobalt	NC	1.6 B	6.5 B	8.9 B	21.4 B	6.6 B	7.4 B	ND	9.9 B	9.8 B
Copper	200	33.6	16 B	21.5 B	28.6 B	159	124	7.7 B	ND	ND
Iron	300	1,710	1,970	2,970	3,280	3,150	5,060	ND	9,190	8,930
Lead	25	1.6 B	0.99 B	2.4 B	5.2 B	7.5 B	20.4	ND	ND	ND
Magnesium	35,000	3,310	4,910	5,130	3,820	3,470	4,010	3,310	1,110	1,090
Manganese	300	181	1,280	1,240	1,390	599	1,540	417	560	545
Mercury	0.7	ND	0.057 B	ND	ND	0.072 B	0.062 BN	ND	ND	ND
Nickel	100	240	565	702	1,860	103	147 E	9.8 B	3.2 B	3.2 B
Potassium	NC	2,710	4,690	4,930	4,170	2,540	3,320	2,960	2,590	2,570
Selenium	10	ND	5.3 B	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	0.95 B	1.9 B	ND	ND	ND	ND	ND	ND
Sodium	20,000	13,400	33,800	39,300	39,000	85,500	133,000	128,000	9,660	9,660
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	1.4 B	1.4 B	1.8 B	1.9 B	4.3 B	8.0 B	ND	ND	ND
Zinc	2,000	17.7 B	31.0 B	44.0 B	63.4	155	154	29.3 B	12.2 B	7.4 B

Notes: All values are in micrograms per liter (µg/L)

NC - No criterion

ND - Not detected

B - Estimated value, metals

D - Dilution

N - Matrix spike recovery falls outside of the control limit

NA - Data not available

BOLD/ITALICS - exceeds criterion

* - Estimated value, duplicate out of range

E - Estimated value due to interference

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
Sample ID	Class GA	SMW-5	SMW-5	SMW-5	SL-MW-5	SL-MW-5	SL-MW-5	SL-MW-5	SL-MW-5	SL-MW-5
Laboratory ID	Ground	E0832-05	F0495-04	F1174-13	G2115-13	J0196-09	K0834-15	K0834-15	L1820-06	L1820-06
Sample Date	Water	6/15/06	4/20/07	8/27/07	11/13/08	2/4/10	5/12/11	5/12/11	8/29/12	8/29/12
Filtered / Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	391	264	2,740	383	4,640	6,060	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	1.7 B	ND	20.9	8.0 B	10.7 B	20.4	11.6 B	ND	ND
Barium	1,000	17.9 B	10.9 B	65.2 B	233	95.8 B	51 B	33.3 B	39.7 B	38.6 B
Beryllium	3	ND	ND	0.26 B	ND	0.26 B	0.44 B	ND	ND	ND
Cadmium	5	2.4 B	2.1 B	1.3 B	0.41 B*E	1.7 B	1.4 B	ND	ND	ND
Calcium	NC	20,700	20,400	18,700	31,400	17,900	9,790	8,520	19,100	18,500
Chromium	50	80.5	79.8	1,370	116 *	201	437	ND	35.9	2.2 B
Cobalt	NC	1.3 B	0.93 B	14.1 B	24.6 B	26.8 B	43.8 B	17.7 B	ND	ND
Copper	200	6.8 B	6.4 B	34.9	10.3 B	74.2	146	ND	ND	ND
Iron	300	934	483	7,140	49,400	26,900	37,600	31,100	188 B	ND
Lead	25	3.6 B	1.4 B	2.3 B	ND	7.5 B	12.8	ND	ND	ND
Magnesium	35,000	3,420	3,230	3,380	5,590	2,900	2,100	1,340	2,480	2,430
Manganese	300	209	219	3,550	1,830	2,410	1,290	1,000	4,780	4,630
Mercury	0.7	ND	0.05 B	ND	ND	0.12 B	0.39 N	ND	ND	ND
Nickel	100	39.1 B	127	135	49.0 B	37.5 B	59.9 E	6.7 B	5.4 B	3.9 B
Potassium	NC	2,490	1,960	5,000	13,900	10,300	7,470	8,510	1,880	1,940
Selenium	10	ND	1.2 B	ND	ND	ND	ND	ND	12.0 B	ND
Silver	50	ND	1.3 B	1.3 B	ND	ND	ND	ND	ND	ND
Sodium	20,000	13,400	14,700	43,300	59,200	32,900	31,800	35,600	129,000	124,000
Thallium	0.5	1.4 B	ND	ND	ND	14.0 B	ND	ND	7.0 B	11.1 B
Vanadium	NC	0.89 B	0.79 B	13.1 B	3.5 B	5.3 B	9.6 B	ND	ND	ND
Zinc	2,000	29.2 B	30.1 B	51.4	35.2 B	91.5	152	16.5 B	ND	ND

Notes: All values are in micrograms per liter (µg/L)

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ND - Not detected

B - Estimated value, metals

D - Dilution

N - Matrix spike recovery falls outside of the control limit

NA - Data not available

BOLD/ITALICS - exceeds criterion

* - Estimated value, duplicate out of range

E - Estimated value due to interference

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-6A	MW-6A	MW-6A	MW-6A	MW-6A	MW-6A	MW-6A	MW-6A	MW-6A
Sample ID	Class GA	SMW-6A	SMW-6A	SMW-6A	SMW-6A	SMW-6A	SMW-6A	SMW-6A	SL-MW-6A	SL-MW-6A
Laboratory ID	Ground	E0832-06	F0495-01B	F1174-04C	G2115-10	J0196-10	K0834-13	K0834-13	L1820-03	L1820-03
Sample Date	Water	6/15/06	4/20/07	8/21/07	11/13/08	2/4/10	5/12/11	5/12/11	8/27/12	8/27/12
Filtered / Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	527	3,300	855	2,390	2,840	14,700	76.6 B	1,650	ND
Antimony	3	ND	37.1	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	3.5 B	ND	8.2 B	ND	ND	6.3 B	ND	ND	ND
Barium	1,000	72.2 B	52.9 B	33.4 B	57.7 B	27.7 B	57.8 B	7.1 B	72.2 B	73.0 B
Beryllium	3	ND	ND	ND	ND	0.13 B	0.45 B	ND	ND	ND
Cadmium	5	1.5 B	4.3 B	2.2 B	1.9 B*E	1.1 B	2.7 B	ND	ND	ND
Calcium	NC	33,800	17,400	15,800	15,600	8,730	8,280	4,570	22,600	23,500
Chromium	50	607	1,280	639	88.8 *	340	775	12.8 B	68.1	ND
Cobalt	NC	11.3 B	16.8 B	13.6 B	28.2 B	4.7 B	12 B	0.8 B	1.4 B	ND
Copper	200	16.0 B	53.3	37.6	65.3	45.5	155	17.1 B	25.7 B	ND
Iron	300	3,780	6,330	4,410	4,200	4,380	28,500	117 B	1,440	ND
Lead	25	4.1 B	16.7	4.3 B	25.9	27.8	78.9	ND	12.7	ND
Magnesium	35,000	5,070	2,870	2,660	2,870	1,990	3,020	968	3,690	3,610
Manganese	300	7,140	3,890	6,410	3,250	346	381	43.5 B	303	317
Mercury	0.7	ND	0.098 B	ND	ND	0.38	0.51 N	ND	ND	ND
Nickel	100	160	273	1,130	196	83.1	237 E	31.5 B	14.7 B	3.4 B
Potassium	NC	2,390	2,110	2490	9900	2,580	3,410	2,230	4,190	3,590
Selenium	10	1.7 B	9.8 B	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	3.3 B	ND	ND	ND	ND	ND	ND
Sodium	20,000	59,600	39,600	31,600	8,730	92,200	63,400	62,000	51,500	57,600
Thallium	0.5	32.3	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	2.6 B	7.2 B	2.8 B	5.3 B	6.8 B	32.2 B	1.2 B	3.5 B	ND
Zinc	2,000	45.6 B	115	53.6	125	111	315	55.1	74.6	17.0 B

Notes: All values are in micrograms per liter (µg/L)

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ND - Not detected

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D - Dilution

N - Matrix spike recovery falls outside of the control limit

NA - Data not available

BOLD/ITALICS - exceeds criterion

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E - Estimated value due to interference

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-6B	MW-6B	MW-6B	MW-6B	MW-6B	MW-6B	MW-6B	MW-6B	MW-6B
Sample ID	Class GA	SMW-6B	SMW-6B	SMW-6B	SMW-6B	SMW-6B	SMW-6B	SMW-6B	SL-MW-6B	SL-MW-6B
Laboratory ID	Ground	E0832-07	F0495-03	F1174-05	G2115-12	J0196-11	K0834-14	K0834-14	L1820-04	L1820-04
Sample Date	Water	6/15/06	4/20/07	8/21/07	11/13/08	2/4/10	5/12/11	5/12/11	8/27/12	8/27/12
Filtered / Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	2,000	3,780	14,500	7,500	18,000	80,900	167 B	4,030	86.7 B
Antimony	3	2.7 B	7.9 B	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	4.6 B	ND	6.8 B	40.6	ND	8.7 B	ND
Barium	1,000	19.3 B	27.7 B	33.1 B	24.6 B	90.7 B	308	21.6 B	30.2 B	14.6 B
Beryllium	3	ND	0.24 B	0.35 B	0.37 B	1.5 B	5.7	ND	ND	ND
Cadmium	5	0.75 B	0.91 B	2.6 B	0.88 B*E	1.7 B	5.2	ND	ND	ND
Calcium	NC	19,600	25,100	24,400	22,500	26,900	29,800	17,800	11,800	17,400
Chromium	50	62.2	133	143	46.6 *	225	1,520	ND	13.3 B	ND
Cobalt	NC	2.2 B	11.6 B	9.6 B	8.6 B	12.3 B	62.5	ND	1.2 B	ND
Copper	200	17.5 B	37.2	150	96.6	143	500	ND	39.2	5.3 B
Iron	300	1,950	5,500	9,130	5,950	28,500	146,000	ND	3,080	ND
Lead	25	2.8 B	9.1 B	18.5	9.0 B	83.9	316	ND	22.0	ND
Magnesium	35,000	3,430	4,520	5,030	3,600	5,840	12,800	2,700	1,810	2,520
Manganese	300	81.6	344	429	540	269	1,500	ND	69.2	11.8 B
Mercury	0.7	ND	0.065 B	ND	ND	0.39	1.3 N	ND	ND	ND
Nickel	100	46.1 B	51.3	47.0 B	12.5 B	70.4	186 E	3.3 B	8.3 B	2.2 B
Potassium	NC	2,210	2,510	2,460	1,740	3,220	6,530	1,810	3,080	2,260
Selenium	10	ND	ND	ND	ND	ND	ND	ND	14.5 B	ND
Silver	50	ND	1.3 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	17,800	28,200	25,900	15,100	17,400	18,200	19,500	3,360	10,700
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	1.1 B	3.7 B	7.9 B	3.3 B	29.7 B	169	ND	8.1 B	ND
Zinc	2,000	53.6	80.4	240	100	325	1,310	20.7 B	80.8	9.4 B

Notes: All values are in micrograms per liter (µg/L)

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ND - Not detected

B - Estimated value, metals

D - Dilution

N - Matrix spike recovery falls outside of the control limit

NA - Data not available

BOLD/ITALICS - exceeds criterion

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E - Estimated value due to interference

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-9	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11
Sample ID	Class GA		SMW-11	SMW-11	SL-MW-11	SL-MW-11	SL-MW-11	SL-MW-11
Laboratory ID	Ground	Destroyed	E0773-19		G2115-01			
Sample Date	Water	6/09/06	6/8/06	8/20/07	11/11/08	2/1/10	5/10/11	8/21/12
Filtered / Unfiltered	Criteria	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NA	1,440	NA	494	NA	NA	NA
Antimony	3	NA	ND	NA	ND	NA	NA	NA
Arsenic	25	NA	1.7 B	NA	ND	NA	NA	NA
Barium	1,000	NA	46.1 B	NA	29.3 B	NA	NA	NA
Beryllium	3	NA	ND	NA	ND	NA	NA	NA
Cadmium	5	NA	4.4 B	NA	0.71 B*E	NA	NA	NA
Calcium	NC	NA	11,100	NA	10,100	NA	NA	NA
Chromium	50	NA	50.1	NA	8.9 B*	NA	NA	NA
Cobalt	NC	NA	2.7 B	NA	ND	NA	NA	NA
Copper	200	NA	18.5 B	NA	ND	NA	NA	NA
Iron	300	NA	1,510	NA	1,440	NA	NA	NA
Lead	25	NA	ND	NA	6.5 B	NA	NA	NA
Magnesium	35,000	NA	3,560	NA	2,920	NA	NA	NA
Manganese	300	NA	30.7 B	NA	201	NA	NA	NA
Mercury	0.7	NA	ND	NA	ND	NA	NA	NA
Nickel	100	NA	22.4 B	NA	7.7 B	NA	NA	NA
Potassium	NC	NA	1,940	NA	2,560	NA	NA	NA
Selenium	10	NA	ND	NA	ND	NA	NA	NA
Silver	50	NA	ND	NA	ND	NA	NA	NA
Sodium	20,000	NA	23,700	NA	15,500	NA	NA	NA
Thallium	0.5	NA	ND	NA	ND	NA	NA	NA
Vanadium	NC	NA	2.7 B	NA	2.2 B	NA	NA	NA
Zinc	2,000	NA	80.9	NA	46.9 B	NA	NA	NA

Notes: All values are in micrograms per liter (µg/L)

NC - No criterion

ND - Not detected

B - Estimated value, metals

D - Dilution

N - Matrix spike recovery falls outside of the control limit

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BOLD/ITALICS - exceeds criterion

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TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12
Sample ID	Class GA	SMW-12	SMW-12	SL-MW-12	SL-MW-12	SL-MW-12	SL-MW-12	SL-MW-12	SL-MW-12
Laboratory ID	Ground	E0832-01	F1174-08C	G2115-06	J0189-01	K0834-01	K0834-01	L1786-07	L1786-07
Sample Date	Water	6/15/06	8/22/07	11/12/08	2/2/10	5/10/11	5/10/11	8/22/12	8/22/12
Filtered / Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	369	257	377	294	697	ND	364	ND
Antimony	3	1.8 B	ND	6.2 B	ND	ND	ND	ND	ND
Arsenic	25	8.2 B	20.2	ND	ND	ND	ND	ND	ND
Barium	1,000	67.6 B	81.8 B	163 B	94.9	77.3 B	55.0 B	65.0 B	58.9 B
Beryllium	3	ND	ND	ND	0.049 B	ND	ND	ND	ND
Cadmium	5	2.8 B	0.92 B	0.83 B*E	ND	1.6 B	ND	ND	ND
Calcium	NC	17,000	17,600	19,500	17,500	14,900	14,000	16,100	16,400
Chromium	50	1,130	1,730	1,170 *	723	1,070	6.8 B	208	0.88 B
Cobalt	NC	24.3 B	3.9 B	6.2 B	0.89 B	1.6 B	ND	ND	ND
Copper	200	67.9	59.1	33.9	15.7 B	19.4 B	ND	5.4 B	ND
Iron	300	2,810	7,040	4,720	3,730	6,020	ND	1,160	ND
Lead	25	4.9 B	ND	4.4 B	ND	5.7 B	ND	ND	ND
Magnesium	35,000	3,050	2,270	2,930	2,820	2,590	2,410	3,100	3,110
Manganese	300	746	512	600	498	375	298	319	314
Mercury	0.7	ND	ND	ND	ND	0.066 BN	ND	0.10 B	ND
Nickel	100	1,290	130	519	53.2	31.1 BE	13.3 B	6.6 B	1.2 B
Potassium	NC	2,980	5,700	5,020	3,820	3,150	3,010	2,750	2,720
Selenium	10	3.1 B	7.3 B	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	62,500	42,000	40,100	62,700	41,800	40,000	37,500	37,900
Thallium	0.5	5.0 B	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	2.1 B	4.2 B	4.6 B	2.0 B	2.7 B	ND	ND	ND
Zinc	2,000	35.2 B	22.9 B	38.0 B	25.7 B	40.0 B	33.9 B	ND	ND

Notes: All values are in micrograms per liter (µg/L)
NC - No criterion
ND - Not detected
B - Estimated value, metals
D - Dilution

N - Matrix spike recovery falls outside of the control limit
NA - Data not available
BOLD/ITALICS - exceeds criterion
* - Estimated value, duplicate out of range
E - Estimated value due to interference

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13	MW-13
Sample ID	Class GA	SMW-13	SMW-13	SL-MW-13	SL-MW-13	SL-MW-13	SL-MW-13	SL-MW-13	SL-MW-13
Laboratory ID	Ground	E0832-02	F1174-07C	G2115-07	J0189-02	K0834-03	K0834-03	L1786-04	L1786-04
Sample Date	Water	6/15/06	8/22/07	11/12/08	2/2/10	5/10/11	5/10/11	8/21/12	8/21/12
Filtered / Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	38.5 B	328	417	565	558	107 B	279	ND
Antimony	3	6.3 B	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	1.7 B	5.2 B	ND	ND	ND	ND	ND	ND
Barium	1,000	55.5 B	43.6 B	47.3 B	33.6 B	48.8 B	40.9 B	17.3 B	14.2 B
Beryllium	3	ND	0.13 B	0.30 B	0.33 B	0.30 B	ND	ND	ND
Cadmium	5	3.8 B	48.1	53.6 *E	42.4	96.4	77.0	ND	ND
Calcium	NC	18,200	10,900	10,500	6,050	8,570	7,920	3,950	3,750
Chromium	50	12.2 B	263	90.0 *	330	819	39.5	40.2	ND
Cobalt	NC	1.3 B	5.7 B	5.7 B	9.1 B	6.1 B	4.5 B	1.1 B	0.75 B
Copper	200	8.3 B	48.9	25.7 B	31.8	38.7	14.9 B	3.7 B	ND
Iron	300	153 B	1,470	1,140	2,150	4,840	178 B	376	ND
Lead	25	2.1 B	3.4 B	5.8 B	5.9 B	5.1 B	ND	ND	ND
Magnesium	35,000	8,570	3,470	2,840	2,070	2,130	2,090	1,900	1,760
Manganese	300	108	272	343	446	294	241	26.5 B	13.4 B
Mercury	0.7	ND	ND	ND	ND	0.11 BN	ND	0.043 B	ND
Nickel	100	12.0 B	80.0	95.4	452	345 E	309	3.6 B	1.5 B
Potassium	NC	1,310	2,480	3,060	2,680	3,480	3,480	927 B	935 B
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	35,700	41,000	34,300	36,800	36,000	36,400	70,900	68,000
Thallium	0.5	1.7 B	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.6 B	1.4 B	1.4 B	1.5 B	9.4 B	ND	1.5 B	ND
Zinc	2,000	28.9 B	115	106	109	98.2	77.8	ND	ND

Notes: All values are in micrograms per liter (µg/L)

NC - No criterion

ND - Not detected

B - Estimated value, metals

D - Dilution

N - Matrix spike recovery falls outside of the control limit

NA - Data not available

BOLD/ITALICS - exceeds criterion

* - Estimated value, duplicate out of range

E - Estimated value due to interference

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14
Sample ID	Class GA	SMW-14	SMW-14	SL-MW-14	SL-MW-14	SL-MW-14	SL-MW-14	SL-MW-14	SL-MW-14
Laboratory ID	Ground	E0832-03	F1174-06C	G2115-18	J0189-04	K0834-05	K0834-05	L1786-08	L1786-08
Sample Date	Water	6/15/06	8/22/07	11/14/08	2/2/10	5/10/11	5/10/11	8/22/12	8/22/12
Filtered / Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	139 B	360	209	259	1,250	ND	103 B	ND
Antimony	3	2.7 B	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	3.2 B	ND	ND	ND	ND	ND	ND
Barium	1,000	48.6 B	55.3 B	58 B	35.9 B	36.5 B	24.3 B	23.8 B	23.0 B
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	1.3 B	1.8 B	2.8 B*E	ND	2.2 B	1.0 B	ND	ND
Calcium	NC	7,550	19,300	16,700	5,990	8,210	9,190	3,510	3,590
Chromium	50	49.9	100	59.6 *	196	153	0.64 B	363	2.8 B
Cobalt	NC	1.3 B	2.1 B	ND	2.2 B	3.6 B	2.0 B	3.8 B	2.3 B
Copper	200	ND	29.9 B	8.5 B	9.1 B	9.0 B	ND	4.5 B	ND
Iron	300	449	1,170	821	1,200	1,730	ND	2,000	ND
Lead	25	1.7 B	ND	ND	ND	4.8 B	ND	ND	ND
Magnesium	35,000	3,540	2,780	2,630	2,000	2,330	2,250	1,350	1,340
Manganese	300	25.6 B	33.4 B	35.0 B	134	101	13.9 B	52.2	17.4 B
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	24.3 B	68.8	79.9	27.7 B	28.3 BE	4.4 B	29.4 B	20.8 B
Potassium	NC	1,550	1,240	2,150	2,020	1,550	1,520	1,650	1,670
Selenium	10	1.4 B	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	1.4 B	ND	ND	ND	ND	ND	ND
Sodium	20,000	60,500	31,700	70,400	76,300	82,800	84,400	91,500	96,000
Thallium	0.5	1.3 B	2.8	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	1.2 B	ND	4.1 B	3.2 B	ND	1.7 B	ND
Zinc	2,000	22.2 B	16.1 B	24.7 B	26.6 B	36.2 B	21.8 B	ND	ND

Notes: All values are in micrograms per liter (µg/L)
NC - No criterion
ND - Not detected
B - Estimated value, metals
D - Dilution

N - Matrix spike recovery falls outside of the control limit
NA - Data not available
BOLD/ITALICS - exceeds criterion
* - Estimated value, duplicate out of range
E - Estimated value due to interference

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16
Sample ID	Class GA	SMW-16	SMW-16	SL-MW-16	SL-MW-16	SL-MW-16	SL-MW-16	SL-MW-16	SL-MW-16
Laboratory ID	Ground	E0832-04	F1174-12B	G2115-05	J0189-05	K0834-08	K0834-08	L1786-09	L1786-09
Sample Date	Water	6/15/06	8/27/07	11/12/08	2/2/10	5/11/11	5/11/11	8/22/12	8/22/12
Filtered / Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	534	453	672	1,090	819	ND	300	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	7.0 B	9.0 B	ND	ND	ND	ND	ND	ND
Barium	1,000	13.6 B	ND	17.9 B	12.6 B	15.1 B	11.6 B	9.7 B	9.2 B
Beryllium	3	ND	0.064 B	ND	ND	ND	ND	ND	ND
Cadmium	5	0.71 B	1.0 B	0.54 B*E	ND	ND	ND	ND	ND
Calcium	NC	9,750	2,220	10,000	12,700	17,300	16,100	10,300	9,970
Chromium	50	1,660	666	184 *	326	320	38.5	60.1	4.1 B
Cobalt	NC	4.0 B	2.7 B	1.8 B	1.8 B	1.9 B	1.4 B	1.4 B	1.6 B
Copper	200	8.6 B	24 B	9.0 B	46.5	45.6	ND	13.2 B	ND
Iron	300	7,270	5,520	2,440	1,460	2,670	1,350	351	157 B
Lead	25	2.8 B	1.2 B	4.3 B	3.6 B	ND	ND	ND	ND
Magnesium	35,000	4,790	628	3,530	5,950	8,150	7,700	4,920	4,630
Manganese	300	51.8	39.7 B	46.3 B	80.8	47.3 B	33.2 B	24.0 B	22.9 B
Mercury	0.7	ND	ND	0.018 B	ND	ND	ND	ND	ND
Nickel	100	125	110	90.1	62.8	73.4 E	64.1	44.1 B	43.1 B
Potassium	NC	1,040	1,330	2,530	1,510	1,980	1,730	1,470	1,480
Selenium	10	2.2 B	ND	ND	ND	ND	ND	ND	12.5 B
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	24,500	3,080	33,600	34,300	91,300	85,200	26,300	25,400
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	6.4 B	5.2 B	6.0 B	3.9 B	4.0 B	ND	2.2 B	1.2 B
Zinc	2,000	25.9 B	37.2 B	68.8	51.0	34.0 B	18.1 B	9.0 B	5.5 B

Notes: All values are in micrograms per liter (µg/L)

NC - No criterion

ND - Not detected

B - Estimated value, metals

D - Dilution

N - Matrix spike recovery falls outside of the control limit

NA - Data not available

BOLD/ITALICS - exceeds criterion

* - Estimated value, duplicate out of range

E - Estimated value due to interference

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-23S	MW-23S	MW-23S	MW-23S	MW-23S	MW-23S	MW-23S	MW-23S
Sample ID	Class GA	SMW-23S	SMW-23S	SL-MW-23S	SL-MW-23S	SL-MW-23S	SL-MW-23S	SL-MW-23S	SL-MW-23S
Laboratory ID	Ground	E0773-20	F1174-11B	G2115-03	J0196-03	K0834-06	K0834-06	L1786-03	L1786-03
Sample Date	Water	6/8/06	8/27/07	11/12/08	2/3/10	5/11/11	5/11/11	8/21/12	8/21/12
Filtered / Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	253	83.7 B	109 B	126 B	354	ND	504	ND
Antimony	3	ND	7.5 B	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	25.6 B	15 B	15.2 B	12.5 B	14.6 B	10.1 B	15.6 B	13.8 B
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	3.3 B	9.4 *E	1.9 B	2 B	ND	ND	ND
Calcium	NC	17,800	18,300	12,400	13,600	14,700	14,700	17,500	17,800
Chromium	50	0.66 B	3.6 B	ND	1.3 B	2.1 B	ND	1.2 B	0.98 B
Cobalt	NC	2 B	2.2 B	ND	ND	ND	ND	ND	ND
Copper	200	8.5 B	20.1 B	ND	6.7 B	6.1 B	ND	ND	ND
Iron	300	133 B	247	544	272	462	ND	182 B	ND
Lead	25	ND	ND	2.3 B	ND	ND	ND	ND	ND
Magnesium	35,000	6,830	6,950	4,920	5,420	5,900	5,820	7,320	7,460
Manganese	300	1,570	1,370	1,230	1,420	1,490	1,130	1,500	1,510
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	15 B	18.3 B	14.7 B	13.7 B	14.4 BE	7.8 B	7.4 B	7.1 B
Potassium	NC	1,340	1,500	1,240	1,100	1,310	1,300	1,330	1,230
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	2.4 B	ND	ND	ND	ND	ND	ND
Sodium	20,000	28,700	35,200	25,500	23,500	29,900	30,100	36,700	36,900
Thallium	0.5	7.8 B	ND	ND	8.6 B	ND	ND	ND	ND
Vanadium	NC	ND	0.44 B	1.0 B	0.71 B	ND	ND	ND	ND
Zinc	2,000	15.2 B	105	71.9	45.5 B	49.5 B	34.4 B	16.5 B	16.6 B

Notes: All values are in micrograms per liter (µg/L)
NC - No criterion
ND - Not detected
B - Estimated value, metals
D - Dilution

N - Matrix spike recovery falls outside of the control limit
NA - Data not available
BOLD/ITALICS - exceeds criterion
* - Estimated value, duplicate out of range
E - Estimated value due to interference

TABLE 4
SERVALL LAUNDRY SITE (SITE 1-52-077)
PERIODIC SAMPLING - 2006 THROUGH 2012 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-23D	MW-23D	MW-23D	MW-23D	MW-23D	MW-23D	MW-23D	MW-23D
Sample ID	Class GA	SMW-23D	SMW-23D	SL-MW-23D	SL-MW-23D	SL-MW-23D	SL-MW-23D	SL-MW-23D	SL-MW-23D
Laboratory ID	Ground	E0773-21	F1174-09B	G2115-04	J0196-04	K0834-07	K0834-07	L1786-01	L1786-01
Sample Date	Water	6/8/06	8/27/07	11/12/08	2/3/10	5/11/11	5/11/11	8/21/12	8/21/12
Filtered / Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	7,130	306	ND	182 B	353	ND	1,590	ND
Antimony	3	1.4 B	4.7 B	ND	ND	ND	ND	ND	ND
Arsenic	25	2.5 B	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	77.8 B	26.0 B	23.9 B	31.7 B	27.2 B	20.9 B	22.9 B	15.8 B
Beryllium	3	0.6 B	0.07 B	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	0.25 B	0.24 B*E	0.54 B	ND	ND	ND	ND
Calcium	NC	14,800	14,100	17,600	16,500	18,800	18,400	15,500	14,500
Chromium	50	12.2 B	3.4 B	ND	1.5 B	1.8 B	ND	3.9 B	ND
Cobalt	NC	5.0 B	2.4 B	ND	1.4 B	0.73 B	ND	ND	ND
Copper	200	27.2 B	22.3 B	ND	7.8 B	12.9 B	ND	7.8 B	ND
Iron	300	3,800	563	82.5 B	576	637	ND	1,340	ND
Lead	25	ND	1.7 B	ND	2.8 B	4.6 B	ND	ND	ND
Magnesium	35,000	2,440	2,570	3,350	3,260	4,080	4,000	3,440	3,140
Manganese	300	109	77.9	15.7 B	33.1 B	1,470	902	85.0	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	7.6 B	3.3 B	ND	2.5 B	1.4 BE	ND	0.93 B	ND
Potassium	NC	3,270	2,930	3,110	3,870	2,840	2,800	2,590	2,320
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	1.9 B	ND	ND	ND	ND	ND	ND
Sodium	20,000	16,200	16,500	16,600	29,200	16,400	16,100	12,600	12,100
Thallium	0.5	1.3 B	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	14.5 B	1.3 B	ND	0.89 B	ND	ND	6.3 B	ND
Zinc	2,000	53.8	30.6 B	17.8 B	35.9 B	41.5 B	24.6 B	6.0 B	ND

Notes: All values are in micrograms per liter (µg/L)
NC - No criterion
ND - Not detected
B - Estimated value, metals
D - Dilution

N - Matrix spike recovery falls outside of the control limit
NA - Data not available
BOLD/ITALICS - exceeds criterion
* - Estimated value, duplicate out of range
E - Estimated value due to interference

TABLE 5
SERVALL LAUNDRY SITE (SITE 1-52-077)
AUGUST 2012 SAMPLING EVENT

COMPARISON OF FILTERED AND UNFILTERED SAMPLE DATA FOR METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-1	MW-1	MW-1	MW-2	MW-2	MW-2	MW-3A	MW-3A	MW-3A
Sample ID	Class GA	SL-MW-1	SL-MW-1	SL-MW-1	SL-MW-2	SL-MW-2	SL-MW-2	SL-MW-3A	SL-MW-3A	SL-MW-3A
Laboratory ID	Ground	L1786-10	L1786-10	L1786-10	L1786-11	L1786-11	L1786-11	L1820-01	L1820-01	L1820-01
Sample Date	Water	8/22/12	8/22/12	8/22/12	8/22/12	8/22/12	8/22/12	8/27/12	8/27/12	8/27/12
Filtered/Unfiltered	Criteria	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved
Aluminum	NC	ND	ND	NC	241	ND	NC	3,910	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	4.7 B	ND	NC	ND	ND	NC	11.0 B	ND	NC
Barium	1,000	34.2 B	31.5 B	92.1%	24.3 B	23.6 B	97.1%	42.0 B	22.1 B	52.6%
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	1.5 B	ND	NC	ND	ND	NC
Calcium	NC	30,400	30,000	98.7%	19,800	19,700	99.5%	21,500	20,600	95.8%
Chromium	50	1.4 B	1.0 B	71.4%	127	0.91 B	0.7%	1,520	19.8 B	1.3%
Cobalt	NC	ND	ND	NC	1.1 B	ND	NC	5.0 B	1.8 B	36.0%
Copper	200	ND	ND	NC	5.5 B	ND	NC	44.9	ND	NC
Iron	300	132 B	ND	NC	889	ND	NC	6,990	33.3 B	0.5%
Lead	25	ND	ND	NC	ND	ND	NC	22.2	ND	NC
Magnesium	35,000	4,830	4,650	96.3%	4,010	3,930	98.0%	5,070	4,270	84.2%
Manganese	300	164	ND	NC	84	ND	NC	103	39.5 B	38.3%
Mercury	0.7	ND	0.14 B	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	4.9 B	1.4 B	28.6%	226	158	69.9%
Potassium	NC	1,360	1,390	102.2%	1,860	1,990	107.0%	2,930	2,510	85.7%
Selenium	10	ND	ND	NC	13.5 B	ND	NC	ND	17.6 B	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	31,900	31,700	99.4%	19,600	20,000	102.0%	22,600	22,600	100.0%
Thallium	0.5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	1.30 B	ND	NC	15.6 B	ND	NC
Zinc	2,000	7.2 B	ND	NC	6.7 B	ND	NC	137	12.5 B	9.1%
Turbidity (NTU)		0.6			7.0			26.5		

Notes: NA - Data not available
NC - No criterion or Not Calculable
ND - Not detected
B - Estimated value, metals

All values except turbidity are in micrograms per liter (µg/L)
E - Estimated value due to interference
% Dissolved = (filtered conc/ unfiltered conc)
BOLD/ITALICS - exceeds criterion

TABLE 5
SERVALL LAUNDRY SITE (SITE 1-52-077)
AUGUST 2012 SAMPLING EVENT

COMPARISON OF FILTERED AND UNFILTERED SAMPLE DATA FOR METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-3B	MW-3B	MW-3B	MW-4	MW-4	MW-4	MW-5	MW-5	MW-5
Sample ID	Class GA	SL-MW-3B	SL-MW-3B	SL-MW-3B	SL-MW-4	SL-MW-4	SL-MW-4	SL-MW-5	SL-MW-5	SL-MW-5
Laboratory ID	Ground	L1820-02	L1820-02	L1820-02	L1820-07	L1820-07	L1820-07	L1820-06	L1820-06	L1820-06
Sample Date	Water	8/27/12	8/27/12	8/27/12	8/29/12	8/29/12	8/29/12	8/29/12	8/29/12	8/29/12
Filtered/Unfiltered	Criteria	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved
Aluminum	NC	4,150	ND	NC	ND	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	10.4 B	ND	NC	6.8 B	7.3 B	107.4%	ND	ND	NC
Barium	1,000	64.5 B	26.7 B	41.4%	15.1 B	15.0 B	99.3%	39.7 B	38.6 B	97.2%
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Calcium	NC	10,000	8,230	82.3%	6,940	6,910	99.6%	19,100	18,500	96.9%
Chromium	50	939	3.1 B	0.3%	ND	ND	NC	35.9	2.2 B	6.1%
Cobalt	NC	2.4 B	ND	NC	9.9 B	9.8 B	99.0%	ND	ND	NC
Copper	200	55.7	ND	NC	ND	ND	NC	ND	ND	NC
Iron	300	6,690	ND	NC	9,190	8,930	97.2%	188 B	ND	NC
Lead	25	25.2	ND	NC	ND	ND	NC	ND	ND	NC
Magnesium	35,000	4,010	3,080	76.8%	1,110	1,090	98.2%	2,480	2,430	98.0%
Manganese	300	303	26.6 B	8.8%	560	545	97.3%	4,780	4,630	96.9%
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	28.8 B	5.8 B	20.1%	3.2 B	3.2 B	100.0%	5.4 B	3.9 B	72.2%
Potassium	NC	2,660	2,120	79.7%	2,590	2,570	99.2%	1,880	1,940	103.2%
Selenium	10	ND	15.5 B	NC	ND	ND	NC	12.0 B	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	61,900	64,000	103.4%	9,660	9,660	100.0%	129,000	124,000	96.1%
Thallium	0.5	ND	ND	NC	ND	ND	NC	7.0 B	11.1 B	158.6%
Vanadium	NC	15.50 B	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	205	18.3 B	8.9%	12.2 B	7.4 B	60.7%	ND	ND	NC
Turbidity (NTU)		143.0			0.0			4.9		

Notes: NA - Data not available
NC - No criterion or Not Calculable
ND - Not detected
B - Estimated value, metals

All values except turbidity are in micrograms per liter (µg/L)
E - Estimated value due to interference
% Dissolved = (filtered conc/ unfiltered conc)
BOLD/ITALICS - exceeds criterion

TABLE 5
SERVALL LAUNDRY SITE (SITE 1-52-077)
AUGUST 2012 SAMPLING EVENT

COMPARISON OF FILTERED AND UNFILTERED SAMPLE DATA FOR METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-6A	MW-6A	MW-6A	MW-6B	MW-6B	MW-6B	MW-12	MW-12	MW-12
Sample ID	Class GA	SL-MW-6A	SL-MW-6A	SL-MW-6A	SL-MW-6B	SL-MW-6B	SL-MW-6B	SL-MW-12	SL-MW-12	SL-MW-12
Laboratory ID	Ground	L1820-03	L1820-03	L1820-03	L1820-04	L1820-04	L1820-04	L1786-07	L1786-07	L1786-07
Sample Date	Water	8/27/12	8/27/12	8/27/12	8/27/12	8/27/12	8/27/12	8/22/12	8/22/12	8/22/12
Filtered/Unfiltered	Criteria	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved
Aluminum	NC	1,650	ND	NC	4,030	86.7 B	2.2%	364	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	8.7 B	ND	NC	ND	ND	NC
Barium	1,000	72.2 B	73.0 B	101.1%	30.2 B	14.6 B	48.3%	65.0 B	58.9 B	90.6%
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Calcium	NC	22,600	23,500	104.0%	11,800	17,400	147.5%	16,100	16,400	101.9%
Chromium	50	68.1	ND	NC	13.3 B	ND	NC	208	0.88 B	0.4%
Cobalt	NC	1.4 B	ND	NC	1.2 B	ND	NC	ND	ND	NC
Copper	200	25.7 B	ND	NC	39.2	5.3 B	13.5%	5.4 B	ND	NC
Iron	300	1,440	ND	NC	3,080	ND	NC	1,160	ND	NC
Lead	25	12.7	ND	NC	22	ND	NC	ND	ND	NC
Magnesium	35,000	3,690	3,610	97.8%	1,810	2,520	139.2%	3,100	3,110	100.3%
Manganese	300	303	317	104.6%	69.2	11.8 B	17.1%	319	314	98.4%
Mercury	0.7	ND	ND	NC	ND	ND	NC	0.10 B	ND	NC
Nickel	100	14.7 B	3.4 B	23.1%	8.3 B	2.2 B	26.5%	6.6 B	1.2 B	18.2%
Potassium	NC	4,190	3,590	85.7%	3,080	2,260	73.4%	2,750	2,720	98.9%
Selenium	10	ND	ND	NC	14.5 B	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	51,500	57,600	111.8%	3,360	10,700	318.5%	37,500	37,900	101.1%
Thallium	0.5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	3.5 B	ND	NC	8.1 B	ND	NC	ND	ND	NC
Zinc	2,000	74.6	17.0 B	22.8%	80.8	9.4 B	11.6%	ND	ND	NC
Turbidity (NTU)		28.6			0.6			14.8		

Notes: NA - Data not available
NC - No criterion or Not Calculable
ND - Not detected
B - Estimated value, metals

All values except turbidity are in micrograms per liter (µg/L)
E - Estimated value due to interference
% Dissolved = (filtered conc/ unfiltered conc)
BOLD/ITALICS - exceeds criterion

TABLE 5
SERVALL LAUNDRY SITE (SITE 1-52-077)
AUGUST 2012 SAMPLING EVENT

COMPARISON OF FILTERED AND UNFILTERED SAMPLE DATA FOR METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-13	MW-13	MW-13	MW-14	MW-14	MW-14	MW-16	MW-16	MW-16
Sample ID	Class GA	SL-MW-13	SL-MW-13	SL-MW-13	SL-MW-14	SL-MW-14	SL-MW-14	SL-MW-16	SL-MW-16	SL-MW-16
Laboratory ID	Ground	L1786-04	L1786-04	L1786-04	L1786-08	L1786-08	L1786-08	L1786-09	L1786-09	L1786-09
Sample Date	Water	8/21/12	8/21/12	8/21/12	8/22/12	8/22/12	8/22/12	8/22/12	8/22/12	8/22/12
Filtered/Unfiltered	Criteria	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved
Aluminum	NC	279	ND	NC	103 B	ND	NC	300	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Barium	1,000	17.3 B	14.2 B	82.1%	23.8 B	23.0 B	96.6%	9.7 B	9.2 B	94.8%
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Calcium	NC	3,950	3,750	94.9%	3,510	3,590	102.3%	10,300	9,970	96.8%
Chromium	50	40.2	ND	NC	363	2.8 B	0.8%	60.1	4.1 B	6.8%
Cobalt	NC	1.1 B	0.75 B	68.2%	3.8 B	2.3 B	60.5%	1.4 B	1.6 B	114.3%
Copper	200	3.7 B	ND	NC	4.5 B	ND	NC	13.2 B	ND	NC
Iron	300	376	ND	NC	2,000	ND	NC	351	157 B	44.7%
Lead	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Magnesium	35,000	1,900	1,760	92.6%	1,350	1,340	99.3%	4,920	4,630	94.1%
Manganese	300	26.5 B	13.4 B	50.6%	52.2	17.4 B	33.3%	24.0 B	22.9 B	95.4%
Mercury	0.7	0.043 B	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	3.6 B	1.5 B	41.7%	29.4 B	20.8 B	70.7%	44.1 B	43.1 B	97.7%
Potassium	NC	927 B	935 B	100.9%	1,650	1,670	101.2%	1,470	1,480	100.7%
Selenium	10	ND	ND	NC	ND	ND	NC	ND	12.5 B	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	70,900	68,000	95.9%	91,500	96,000	104.9%	26,300	25,400	96.6%
Thallium	0.5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	1.5 B	ND	NC	1.7 B	ND	NC	2.2 B	1.2 B	54.5%
Zinc	2,000	ND	ND	NC	ND	ND	NC	9.0 B	5.5 B	61.1%
Turbidity (NTU)		53.4			17.9			29.3		

Notes: NA - Data not available
NC - No criterion or Not Calculable
ND - Not detected
B - Estimated value, metals

All values except turbidity are in micrograms per liter (µg/L)
E - Estimated value due to interference
% Dissolved = (filtered conc/ unfiltered conc)
BOLD/ITALICS - exceeds criterion

TABLE 5
SERVALL LAUNDRY SITE (SITE 1-52-077)
AUGUST 2012 SAMPLING EVENT

COMPARISON OF FILTERED AND UNFILTERED SAMPLE DATA FOR METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-23S	MW-23S	MW-23S	MW-23D	MW-23D	MW-23D
Sample ID	Class GA	SL-MW-23S	SL-MW-23S	SL-MW-23S	SL-MW-23D	SL-MW-23D	SL-MW-23D
Laboratory ID	Ground	L1786-03	L1786-03	L1786-03	L1786-01	L1786-01	L1786-01
Sample Date	Water	8/21/12	8/21/12	8/21/12	8/21/12	8/21/12	8/21/12
Filtered/Unfiltered	Criteria	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved	Unfiltered conc. Q	Filtered conc. Q	Percent Dissolved
Aluminum	NC	504	ND	NC	1,590	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC
Barium	1,000	15.6 B	13.8 B	88.5%	22.9 B	15.8 B	69.0%
Beryllium	3	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC
Calcium	NC	17,500	17,800	101.7%	15,500	14,500	93.5%
Chromium	50	1.2 B	0.98 B	81.7%	3.9 B	ND	NC
Cobalt	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	7.8 B	ND	NC
Iron	300	182 B	ND	NC	1,340	ND	NC
Lead	25	ND	ND	NC	ND	ND	NC
Magnesium	35,000	7,320	7,460	101.9%	3,440	3,140	91.3%
Manganese	300	1,500	1,510	100.7%	85.0	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC
Nickel	100	7.4 B	7.1 B	95.9%	0.93 B	ND	NC
Potassium	NC	1,330	1,230	92.5%	2,590	2,320	89.6%
Selenium	10	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC
Sodium	20,000	36,700	36,900	100.5%	12,600	12,100	96.0%
Thallium	0.5	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	6.3 B	ND	NC
Zinc	2,000	16.5 B	16.6 B	100.6%	6.0 B	ND	NC
Turbidity (NTU)		58.3			289.0		

Notes: NA - Data not available
NC - No criterion or Not Calculable
ND - Not detected
B - Estimated value, metals

All values except turbidity are in micrograms per liter (µg/L)
E - Estimated value due to interference
% Dissolved = (filtered conc/ unfiltered conc)
BOLD/ITALICS - exceeds criterion

TABLE 6
SERVALL LAUNDRY SITE (SITE 1-52-077)
FIELD DUPLICATE DATA - VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER
AUGUST 2012 SAMPLING EVENT

Sample Location Sample ID Laboratory ID Sample Date	MW-23D SL-MW-23D L1786-01 8/21/12 conc. Q	MW-23D SL-MW-73D L1786-02 8/21/12 conc. Q	Precision as Relative Percent Difference (RPD)
Vinyl Chloride	ND	ND	NC
1,1-Dichloroethene	ND	ND	NC
Acetone	ND	ND	NC
Benzene	ND	ND	NC
2-Butanone	ND	ND	NC
trans-1,2-Dichloroethene	ND	ND	NC
Methyl tert-butyl ether	0.97 J	0.92 J	5.3%
1,1-Dichloroethane	ND	ND	NC
cis-1,2-Dichloroethene	5.5	5.5	0.0%
Chloroform	ND	ND	NC
1,1,1-Trichloroethane	ND	ND	NC
Trichloroethene	2.8 J	2.8 J	0.0%
Tetrachloroethene	57	53	7.3%
Xylenes (Total)	ND	ND	NC
Toluene	ND	ND	NC
Chlorobenzene	ND	ND	NC
1,2-Dichlorobenzene	ND	ND	NC

Notes:

Only VOCs ever detected in any Round 1 through Round 6 sample are listed.

All values in µg/L

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

ND - Not Detected

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

TABLE 7
SERVALL LAUNDRY SITE (SITE 1-52-077)
FIELD DUPLICATE DATA - TAL METALS IN GROUNDWATER
AUGUST 2012 SAMPLING EVENT

Sample Location Sample ID Laboratory ID Sample Date Filtered/Unfiltered Metal	MW-23D SL-MW-23D L1786-01 8/21/12 Unfiltered conc. Q	MW-23D SL-MW-73D L1786-02 8/21/12 Unfiltered conc. Q	Precision as Relative Percent Difference (RPD)	MW-23D SL-MW-23D L1786-01 8/21/12 Filtered conc. Q	MW-23D SL-MW-73D L1786-02 8/21/12 Filtered conc. Q	Precision as Relative Percent Difference (RPD)
Aluminum	1,590	1,480	7.2%	ND	ND	NC
Antimony	ND	ND	NC	ND	ND	NC
Arsenic	ND	ND	NC	ND	ND	NC
Barium	22.9 B	22.8 B	0.4%	15.8 B	16.1 B	1.9%
Beryllium	ND	ND	NC	ND	ND	NC
Cadmium	ND	ND	NC	ND	ND	NC
Calcium	15,500	15,900	2.5%	14,500	15,200	4.7%
Chromium	3.9 B	3.7 B	5.3%	ND	ND	NC
Cobalt	ND	ND	NC	ND	ND	NC
Copper	7.8 B	7.3 B	6.6%	ND	ND	NC
Iron	1,340	1,310	2.3%	ND	ND	NC
Lead	ND	ND	NC	ND	ND	NC
Magnesium	3,440	3,500	1.7%	3,140	3,310	5.3%
Manganese	85.0	80.7	5.2%	ND	ND	NC
Mercury	ND	ND	NC	ND	ND	NC
Nickel	0.93 B	ND	NC	ND	ND	NC
Potassium	2,590	2,690	3.8%	2,320	2,490	7.1%
Selenium	ND	ND	NC	ND	ND	NC
Silver	ND	ND	NC	ND	ND	NC
Sodium	12,600	12,900	2.4%	12,100	12,700	4.8%
Thallium	ND	ND	NC	ND	ND	NC
Vanadium	6.3 B	6.2 B	1.6%	ND	ND	NC
Zinc	6.0 B	6.0 B	0.0%	ND	ND	NC

Notes:

All values in µg/L

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

ND - Not Detected

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

N - Laboratory spike recovery outside control limit.

E - Estimated value due to interference.

TABLE 8
SUMMARY OF HISTORIC TETRACHLOROETHENE CONCENTRATIONS IN SELECTED MONITORING WELLS
SERVALL LAUNDRY SITE (SITE 1-52-077)

	MW-1	MW-2	MW-3A	MW-3B	MW-4	MW-5	MW-6A	MW-6B	MW-11	MW-12	MW-13	MW-14	MW-16	MW-23S	MW-23D
Aug 2012	18	ND	ND	ND	ND	ND	ND	23	NA	0.80 J	1.0 J	ND	100	1,800 D	57
May 2011	NA	2.1 J	ND	ND	ND	ND	ND	150	NA	1.6 J	ND	ND	95	1,500 D	25
Feb 2010	50	ND	ND	ND	ND	ND	1.2 J	2,000 D	NA	10	ND	ND	48	590 D	8.3
Nov 2008	NA	ND	ND	ND	ND	ND	ND	470 D	60	60	1 J	ND	6.9	500 D	7.7
Aug 2007	NA	ND	ND	NA	ND	2 J	ND	480 D	NA	17	ND	2 J	2 J	1,700 D	6
Apr 2007	NA	NA	NA	NA	ND	ND	ND	650	NA	NA	NA	NA	NA	NA	NA
June 2006	NA	NA	ND	NA	ND	ND	ND	1,100 D	56	17	5	ND	25	5,200 D	4 J
May 2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	7	0.3 J	ND	410 E	4	0.6 J
July 2000	NA	NA	ND	ND	NA	ND	ND	160	96	820 D	6 J	ND	1,600 D	27	8 J
Jan 1999	NA	ND	NA	ND	ND	3 J	1 J	22 J	290 J	6 J	4 J	ND	NA	29 J	3 J
Jan 1998	NA	NA	ND	NA	4	ND	2	11,000	20	2	ND	ND	450	NA	ND
Dec 1995	NA	NA	0.34 J	ND	ND	NA	ND	8,400 E	800	NA	230	NA	1,700 E	7.8	ND
Mar 1990	NA	1 J	ND	8.1 J	ND	ND	100	13,000 DJ	5,900	ND	4,600 JD	ND	960 JD	NA	NA
Feb 1990	NA	6	ND	6	ND	ND	48	14,000	8,900	ND	5,800 D	ND	260	NA	NA

Notes:

ND - Not detected

NA - Not sampled or data not available

E - Concentration exceeded the QC criterion, no dilution run data found

D - Dilution

J - Estimated concentration

The data presented in this table is a compilation of data available at the time of this report and is not a comprehensive listing of all data collected.

May 2004 - Data is very confusing. It is difficult to establish which well is presented on the Form 1s.

(taken from report.hw152077.2004-05.GW04.pdf)

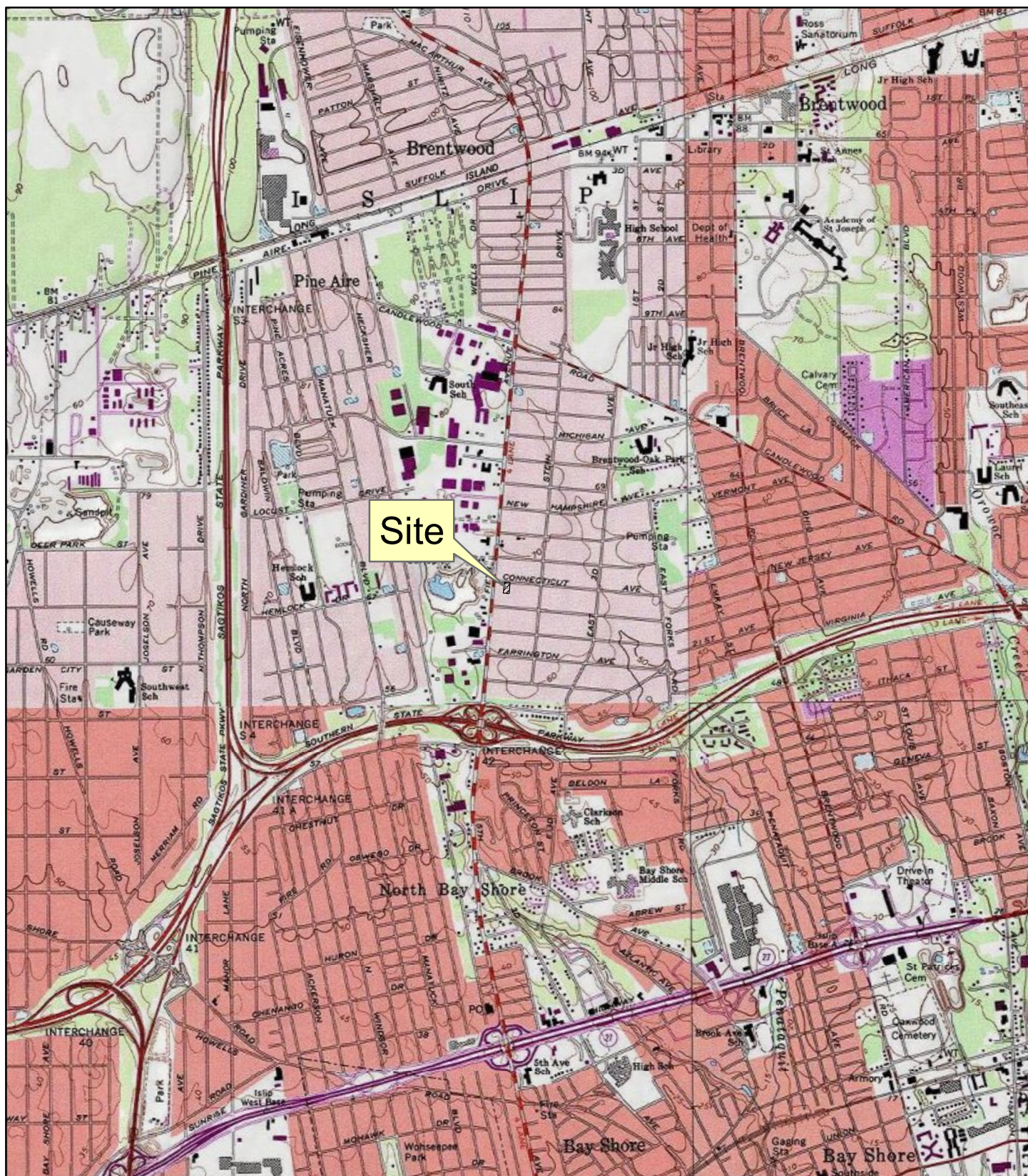
July 2000 data from H2M Labs, (ServAll data Summary July 2000.pdf)

January 1999 & January 1998 (Harding Lawson, 1999 Groundwater Sampling Technical Memorandum (ServAll 1999 gw sampling.pdf)

December 1995 data from Plume Discharge Study (ServAll December 1995.pdf)

February and March 1990 data from E.C. Jordan, RI/FS 1992 (ServAll jan 1992.pdf)

Figures



USGS NY Bay Shore West
and Green Lawn Quadrangles

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

Copyright:© 2011
National Geographic Society
i-cubed

Prepared by:

AECOM

Prepared for:



Multi Site G
Operation, Maintenance & Monitoring

Site Location
ServAll Laundry Site

Date:
January 2013

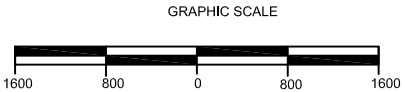
Scale:
1 inch = 2,500 feet

Figure No. :
1

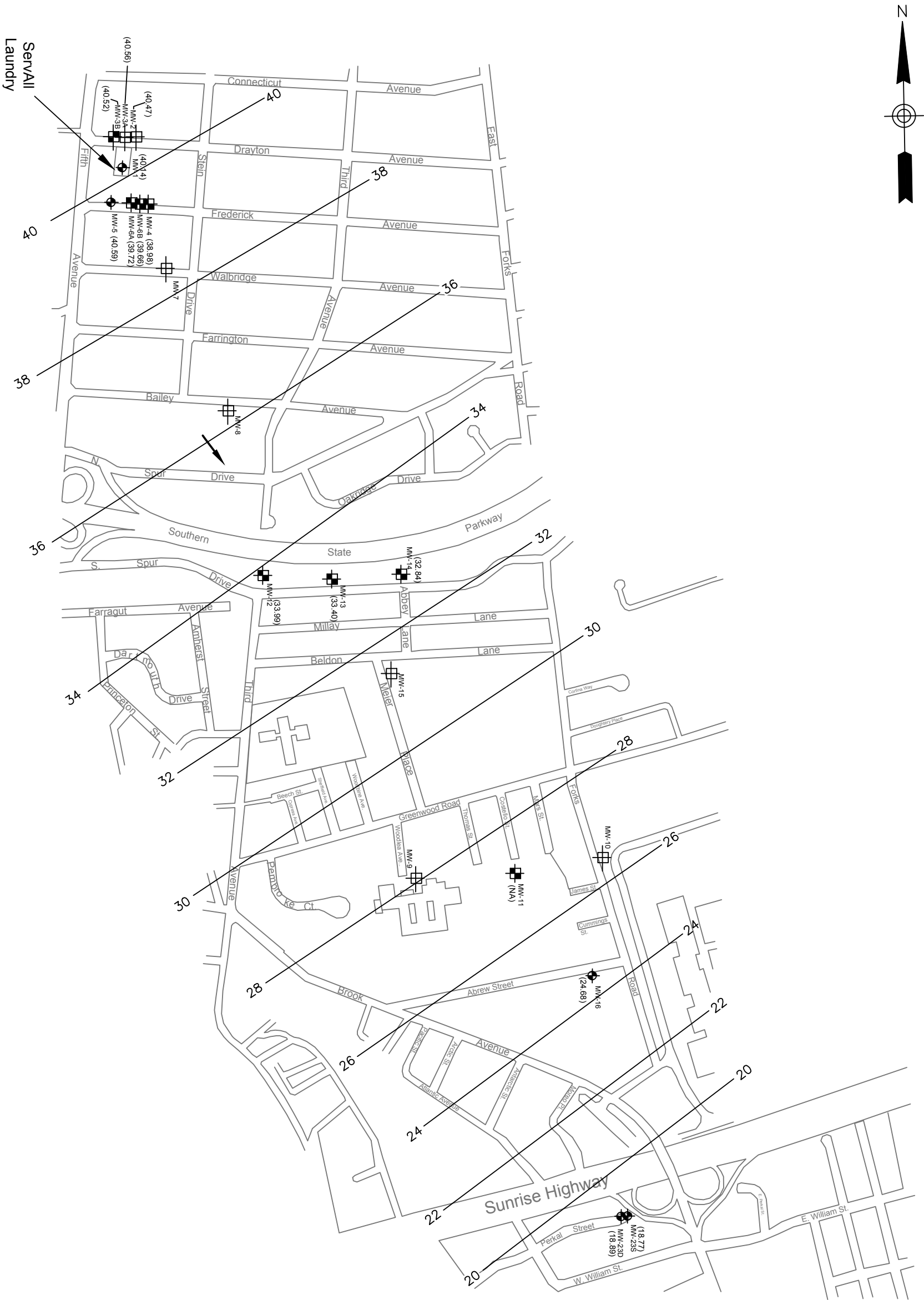


LEGEND:

-  EXISTING MONITORING WELLS
 -  DAMAGED OR MISSING MONITORING WELLS
- MW-16
MW-10



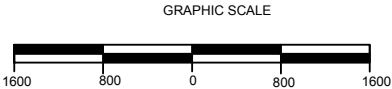
Prepared by :				
				
SUBMITTED BY :		MULTI SITE G - SERVALL LAUNDRY SITE SITE NO. 1-52-026 MONITORING WELL LOCATION MAP		
PK/jk				
DRAWN BY :				
SC				
APPROVED BY :				
PK		DATE : JANUARY 2013	SCALE : AS SHOWN	DRAWING NO. : 2



LEGEND:

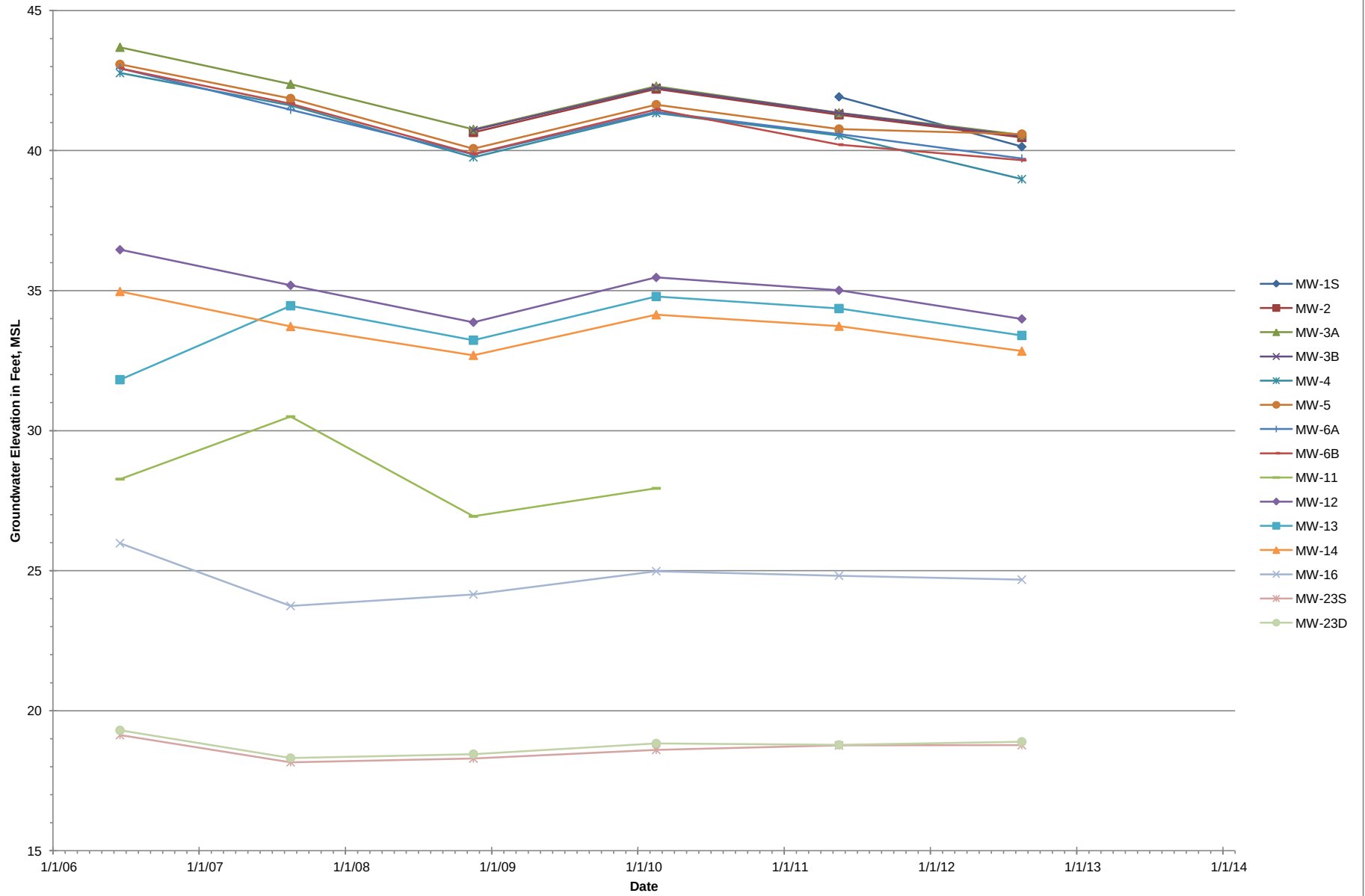
- EXISTING MONITORING WELLS
- DAMAGED OR MISSING MONITORING WELLS
- GROUNDWATER ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL
- GROUNDWATER ISOPLETH, CONTOUR INTERVAL IS 2.0 ft
- DIRECTION OF GROUNDWATER FLOW

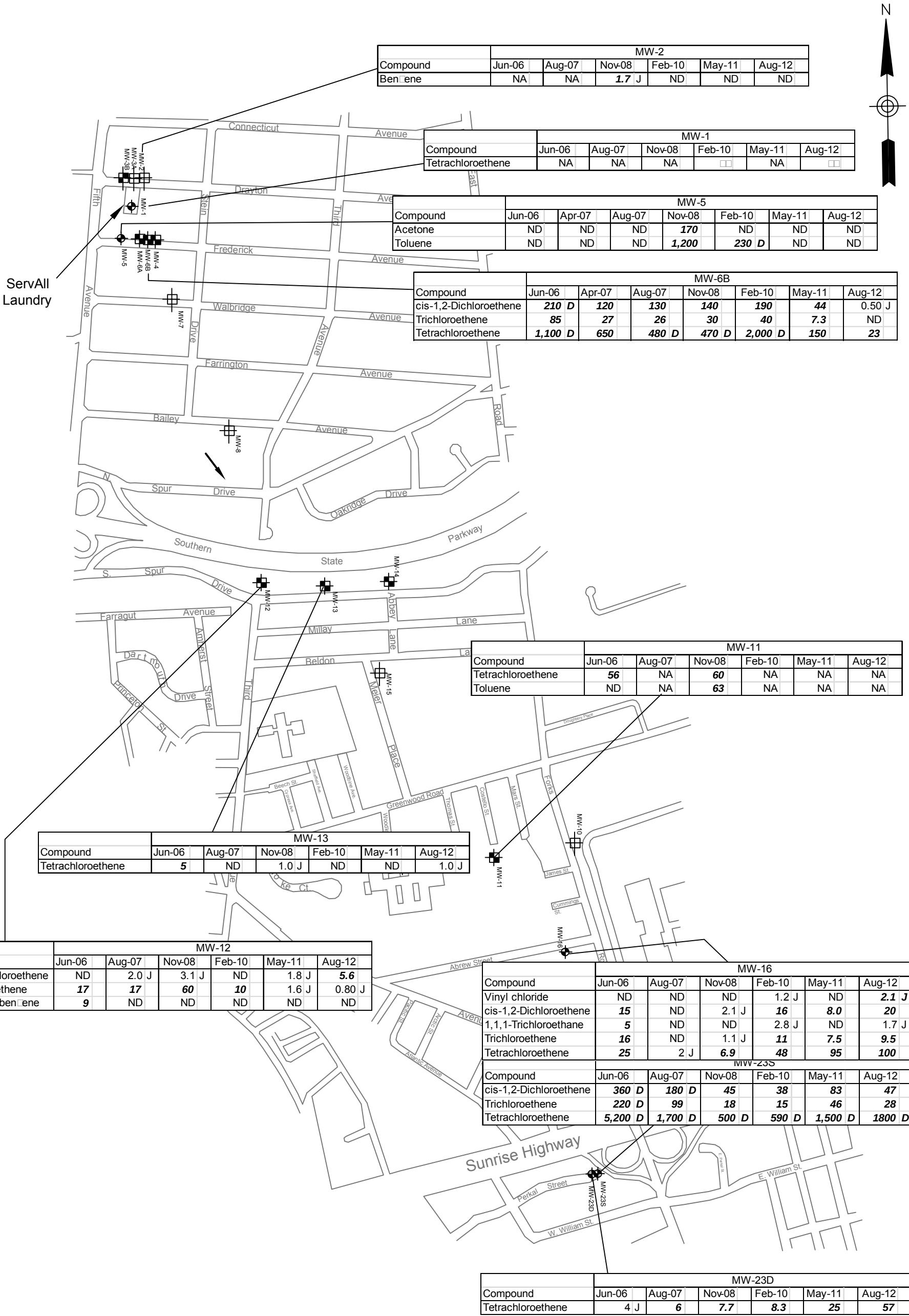
NA: NOT ANALYZED



Prepared by :			
			
SUBMITTED BY :		MULTI SITE G - SERVALL LAUNDRY SITE SITE NO. 1-52-026 GROUNDWATER CONTOUR MAP AUGUST 2012	
PK			
DRAWN BY :			
SC/jk			
APPROVED BY :			
PK		DATE :	SCALE :
		OCTOBER 2012	AS SHOWN
			DRAWING NO. : 3

**FIGURE 3A
SERVALL LAUNDRY (1-52-077)
GROUNDWATER HYDROGRAPH**



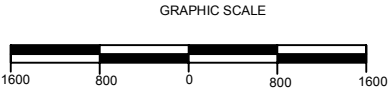


LEGEND:

- EXISTING MONITORING WELLS
- DAMAGED OR MISSING MONITORING WELL

All results are shown in micrograms per liter (ug/L)
BOLD: Results Exceeds Criterion
J: Estimated value
D: Dilution
NA: Not Analyzed
ND: Not Detected

Compound	NYSDEC Criteria
Vinyl Chloride	2
Acetone	50
Benzene	1
cis-1,2-Dichloroethene	5
1,1,1-Trichloroethane	5
Trichloroethene	5
Tetrachloroethene	5
Toluene	5
1,2-Dichlorobenzene	4.7



Prepared by :

SUBMITTED BY :

PK

DRAWN BY :

SC

APPROVED BY :

PK

MULTI SITE G - SERVALL LAUNDRY SITE
SITE NO. 1-52-0□

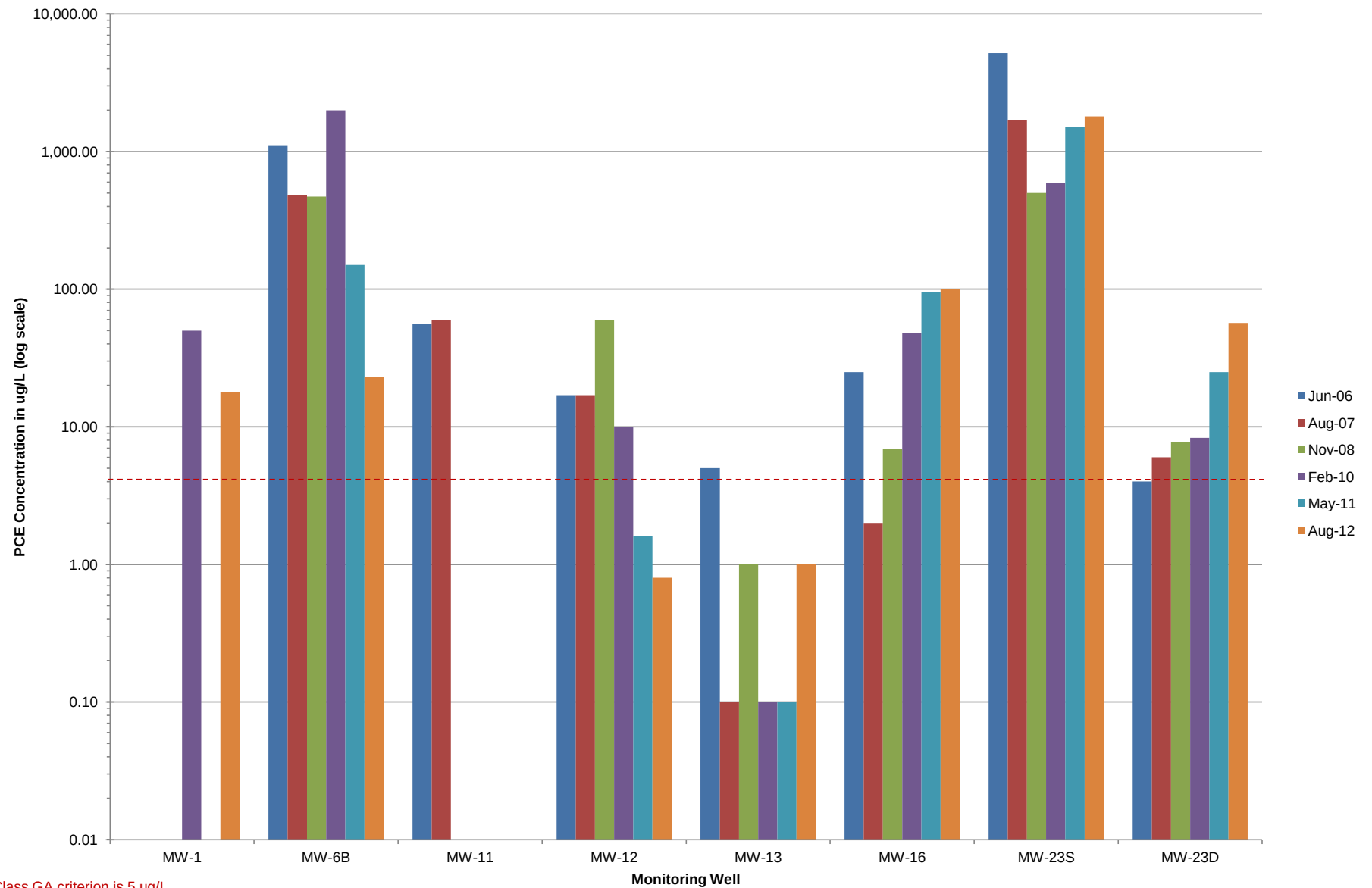
SUMMARY OF VOC IN GROUNDWATER

DATE :
OCTOBER 2012

SCALE :
AS SHOWN

DRAWING NO. :
□

Figure 5
Tetrachloroethene Concentrations in Selected Monitoring Wells
ServAll Laundry Site (1-52-077)



Class GA criterion is 5 ug/L
 ND values set to 0.10 for plotting purposes

Figure 6
Trichloroethene Concentrations in Selected Monitoring Wells
ServAll Laundry Site (1-52-077)

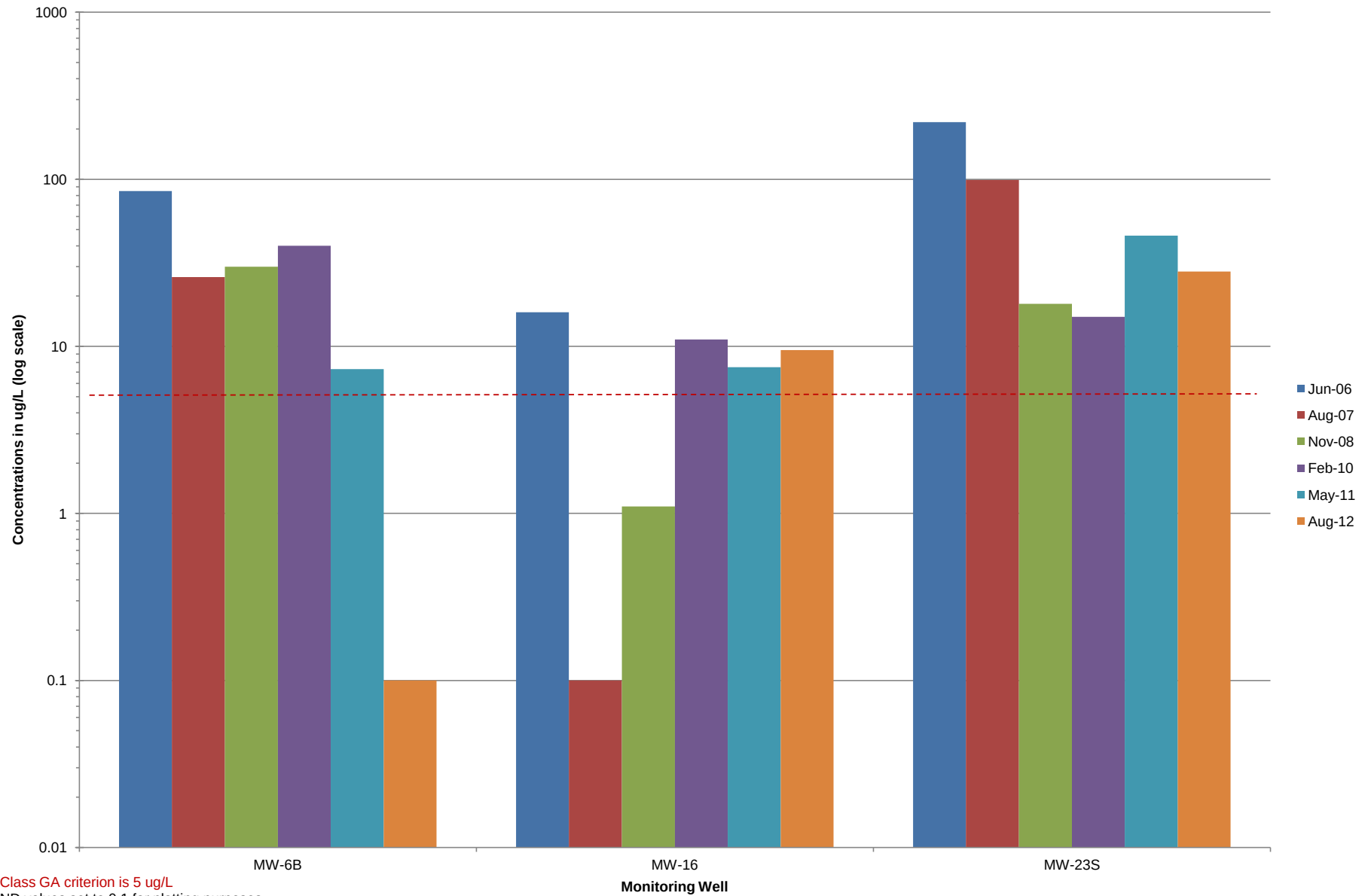
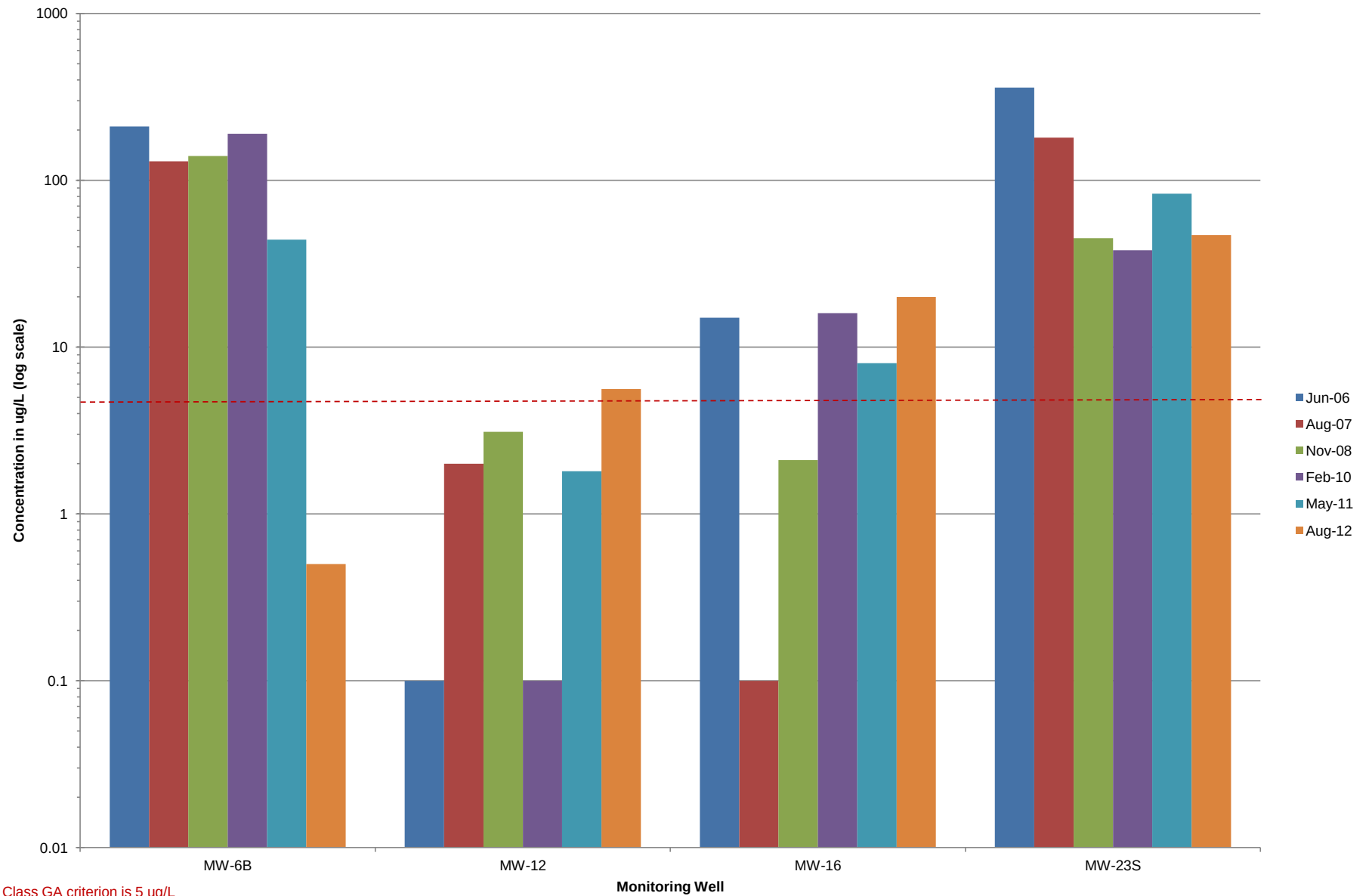
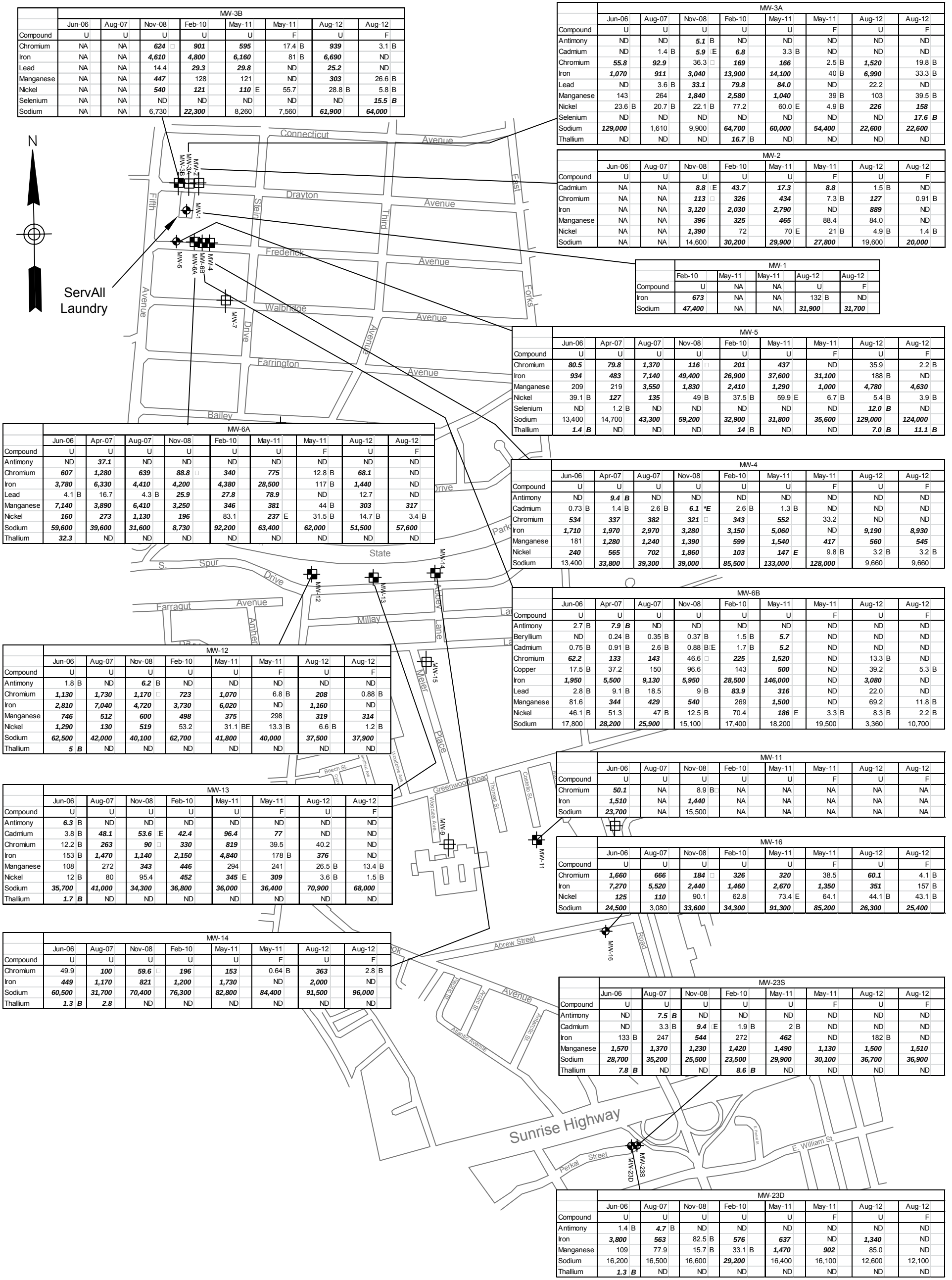


Figure 7
Cis-1,2-Dichloroethene in Selected Monitoring Wells
ServAll Laundry Site (1-52-077)



Class GA criterion is 5 ug/L
ND values set to 0.1 for plotting purposes



LEGEND:

- EXISTING MONITORING WELLS
 DAMAGED OR MISSING MONITORING WELL

N **LD**: Results Exceeds Criterion
All results are shown in micrograms per liter (ug/L)
B: Estimated value, metals
J: Estimated value, VOCs
D: Dilution
ND: Not Detected

Compound	NYSDEC Criteria
Antimony	3
Beryllium	3
Cadmium	5
Chromium	50
Copper	200
Iron	300
Lead	25
Manganese	300
Nickel	100
Sodium	20,000
Thallium	0.5
U - Unfiltered	
F - Filtered	

GRAPHIC SCALE



Prepared by :

AECOM

SUBMITTED BY :

PK

DRAWN BY :

SC

APPROVED BY :

PK

MULTI SITE G - SERVALL LAUNDRY SITE
SITE NO. 1-52-0

**SUMMARY OF
TAL METALS IN
GROUNDWATER**

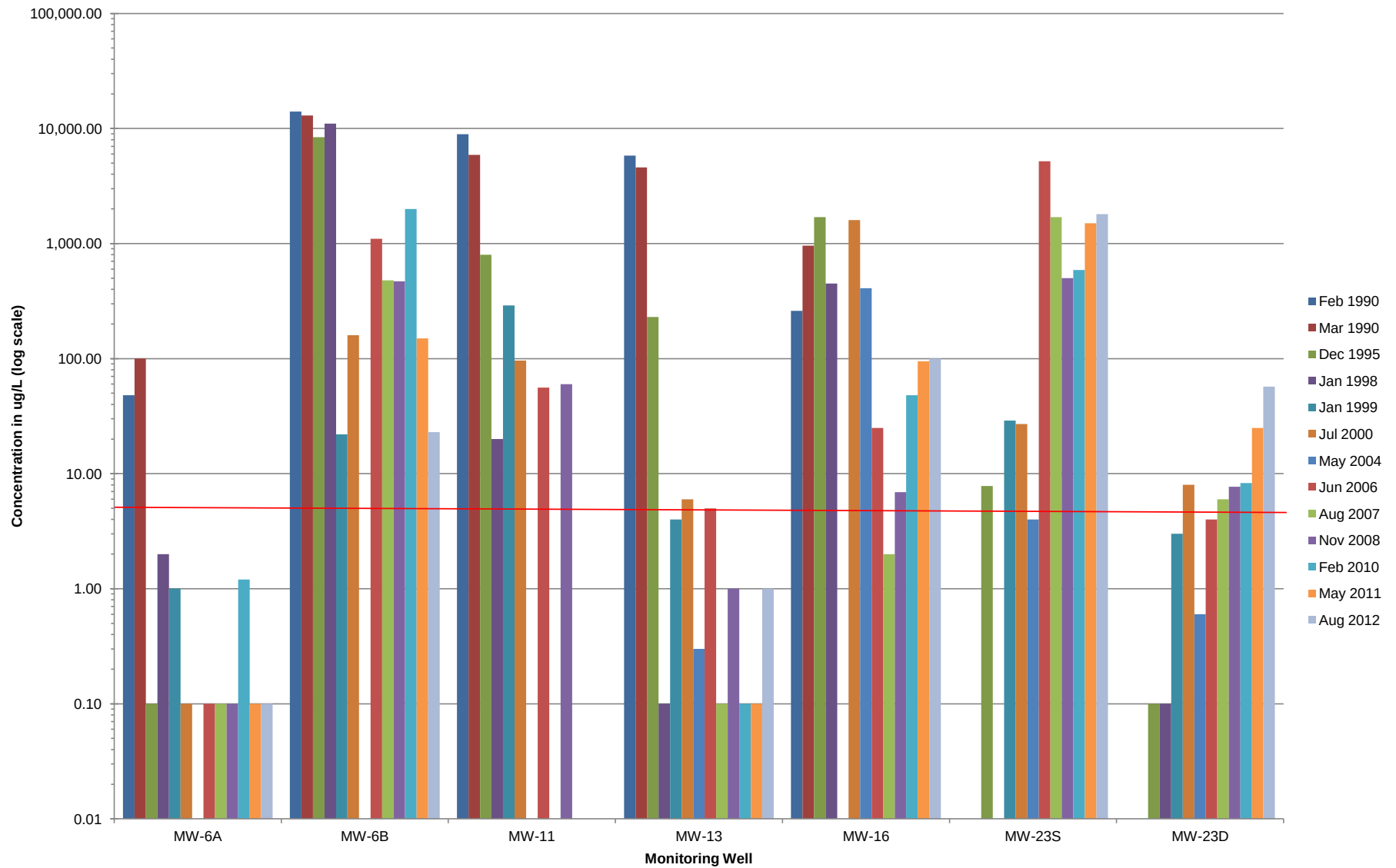
DATE :
OCTOBER 2012

SCALE :
AS SHOWN

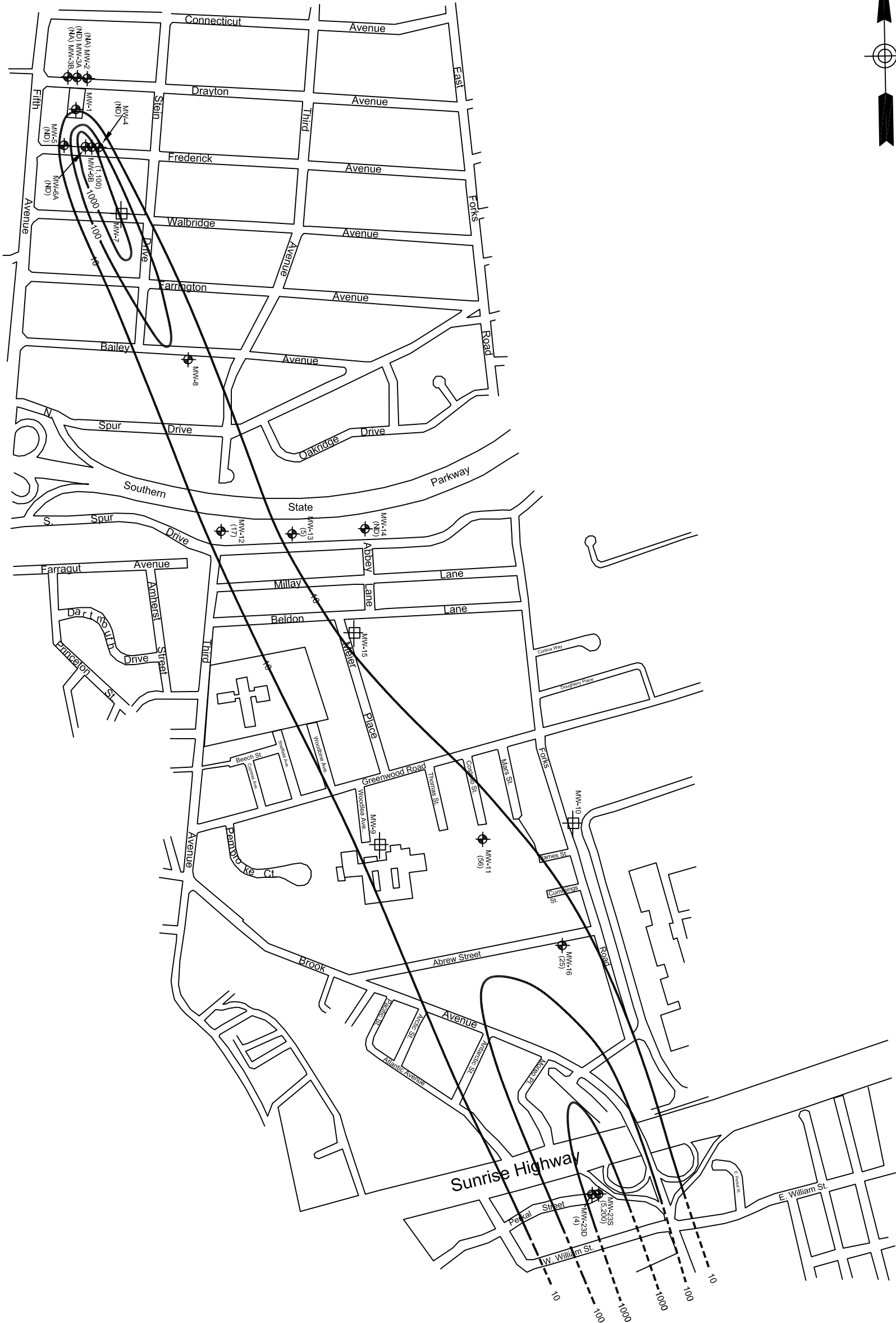
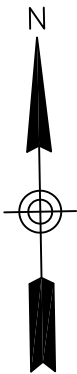
DRAWING NO. :



FIGURE 9
HISTORIC PCE CONCENTRATIONS IN SELECTED MONITORING WELLS
SERVALL LAUNDRY SITE (1-52-077)

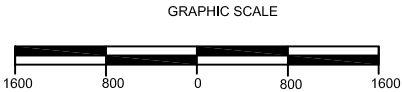


PCE Class GA criterion is 5 ug/L
 ND values set to 0.1 ft to differentiate from "not collected"

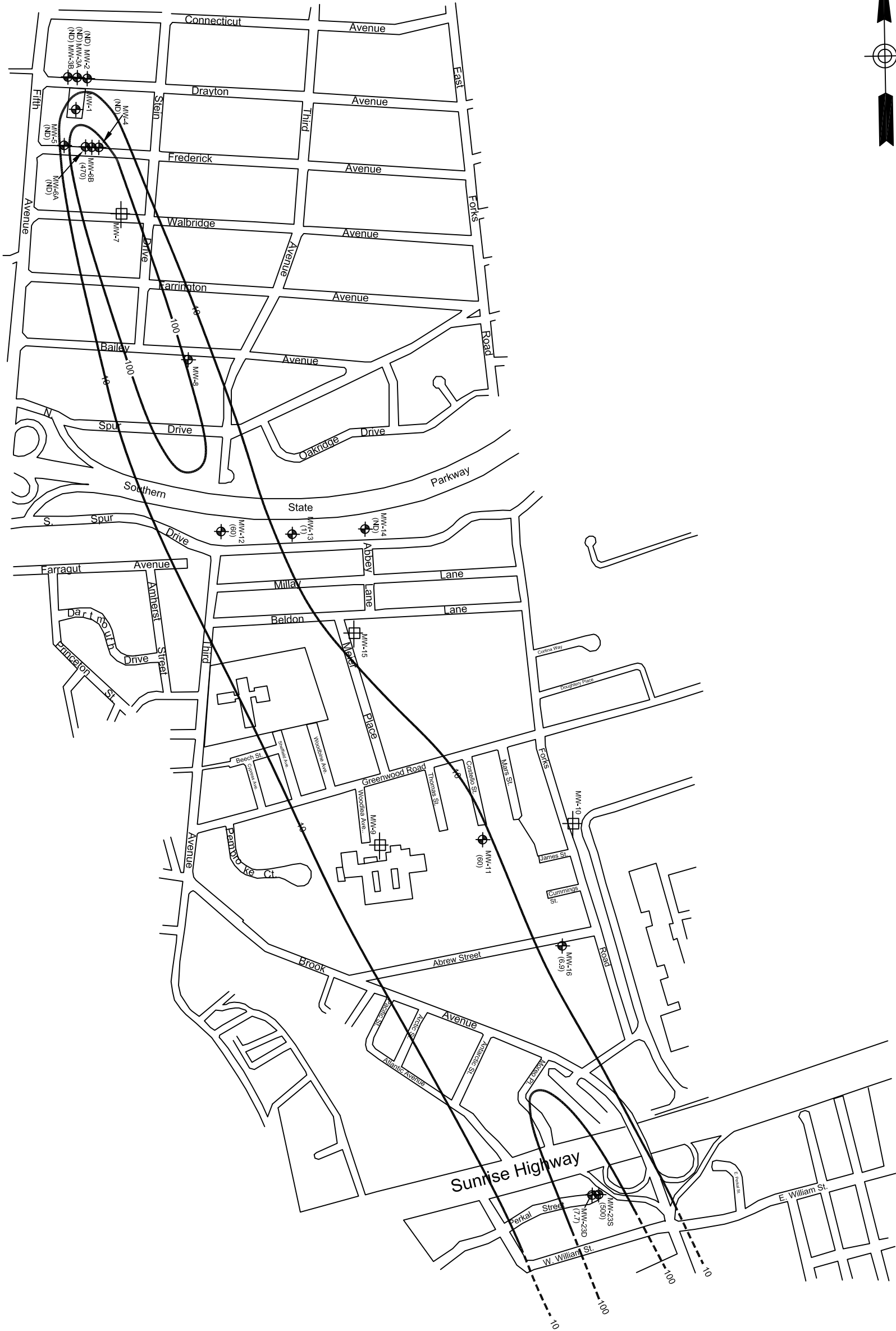
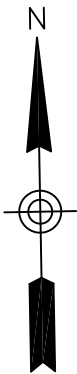


LEGEND:

- MW-16 EXISTING MONITORING WELLS
- MW-10 DAMAGED OR MISSING MONITORING WELL
- (60) PCE CONCENTRATION IN ug/L
- 10 PCE ISOCONCENTRATION LINE (ug/L), BASED ON RESULTS FROM MW-2, MW-3A, MW-3B, MW-4, MW-5, MW-6A, MW-6B, MW-11, MW-12, MW-13, MW-14, MW-16 MW-23S, AND MW-23D
- NA NOT SAMPLED
- ND NOT DETECTED
- PCE CLASS GA CRITERIA IS 5 ug/L



Prepared by :			
			
SUBMITTED BY :		MULTI SITE G - SERVALL LAUNDRY SITE SITE NO. 1-52-026	
PK/jk		PCE ISOCONCENTRATION MAP JUNE 2006	
DRAWN BY :			
SC			
APPROVED BY :			
PK		DATE : JANUARY 2012	SCALE : AS SHOWN
		DRAWING NO. : 10A	



LEGEND:

- MW-16 EXISTING MONITORING WELLS
- MW-10 DAMAGED OR MISSING MONITORING WELL
- (60) PCE CONCENTRATION IN ug/L
- 10 PCE ISOCONCENTRATION LINE (ug/L), BASED ON RESULTS FROM MW-2, MW-3A, MW-3B, MW-4, MW-5, MW-6A, MW-6B, MW-11, MW-12, MW-13, MW-14, MW-16 MW-23S, AND MW-23D
- NA NOT SAMPLED
- ND NOT DETECTED
- PCE CLASS GA CRITERIA IS 5 ug/L

GRAPHIC SCALE



Prepared by :



SUBMITTED BY :

PK/jk

DRAWN BY :

SC

APPROVED BY :

PK

MULTI SITE G - SERVALL LAUNDRY SITE
SITE NO. 1-52-026

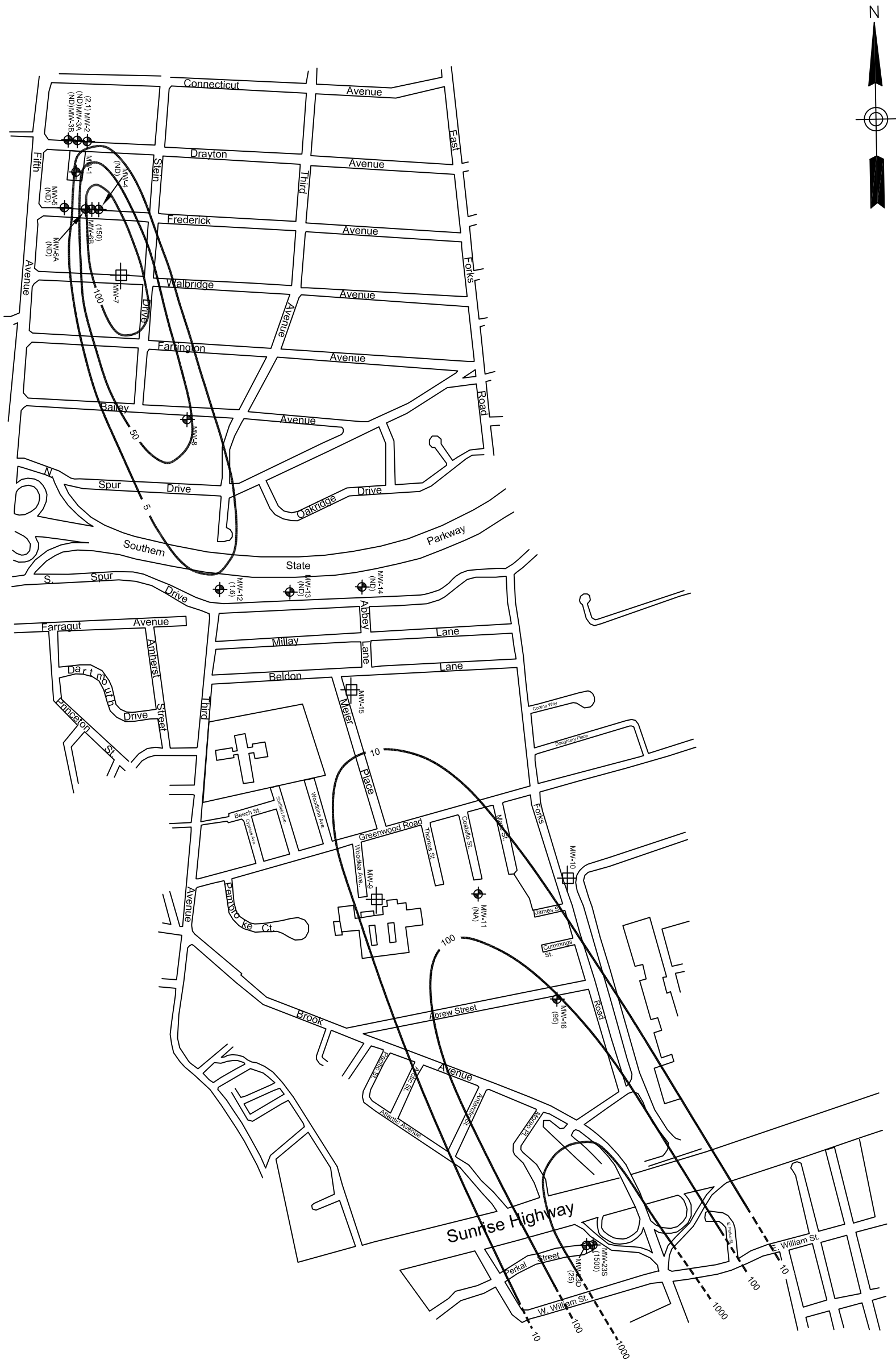
**PCE ISOCONCENTRATION
MAP
NOVEMBER 2008**

DATE :
JANUARY 2012

SCALE :
AS SHOWN

DRAWING NO. :

10B

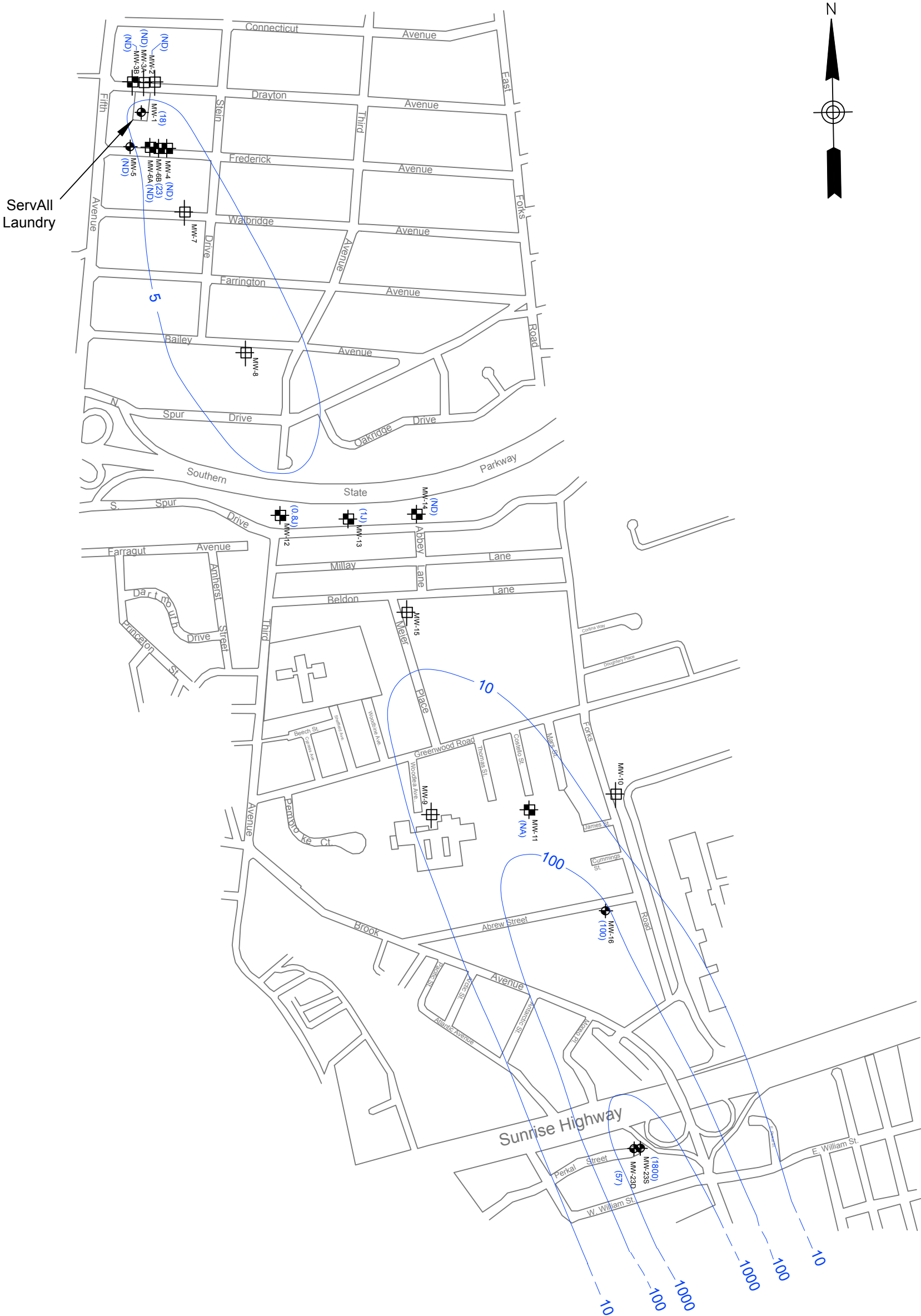


LEGEND:

- MW-16
- EXISTING MONITORING WELLS
- MW-10
- DAMAGED OR MISSING MONITORING WELL
- (60)
- PCE CONCENTRATION IN ug/L
- 10
- PCE ISOCONCENTRATION LINE (ug/L), BASED ON RESULTS FROM MW-2, MW-3A, MW-3B, MW-4, MW-5, MW-6A, MW-6B, MW-11, MW-12, MW-13, MW-14, MW-16 MW-23S, AND MW-23D
- NA
- NOT SAMPLED
- ND
- NOT DETECTED
- PCE
- CLASS GA CRITERIA IS 5 ug/L

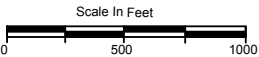


Prepared by :			
SUBMITTED BY : PK		MULTI SITE G - SERVALL LAUNDRY SITE SITE NO. 1-52-026	
DRAWN BY : SC		PCE ISOCONCENTRATION MAP MAY 2011	
APPROVED BY : PK		DATE : JANUARY 2012	DRAWING NO. : 10C
		SCALE : AS SHOWN	



LEGEND:

- EXISTING MONITORING WELLS
MISSING MONITORING WELLS
DAMAGED MONITORING WELLS
PCE PLUME
- Note:
- All results are in micrograms per liter (ug/L)
- J: Estimated value
- NA: Not analyzed
- ND: Non detect
Note: Monitoring wells MW-6B and MW-6A are screened at a higher elevation within the glacial drift sand (not directly on top of the glacial marine clay).



Prepared by :

AECOM

SUBMITTED BY :

PK

DRAWN BY :

VM/jk

APPROVED BY :

PK

SERVALL LAUNDRY SITE
BAY SHORE, NEW YORK

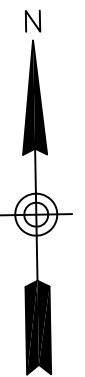
PCE
ISOCONCENTRATION MAP
AUGUST 2012

DATE :
OCTOBER 2012

SCALE :
AS SHOWN

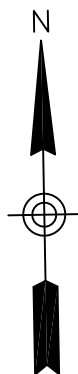
DRAWING NO. :

10D



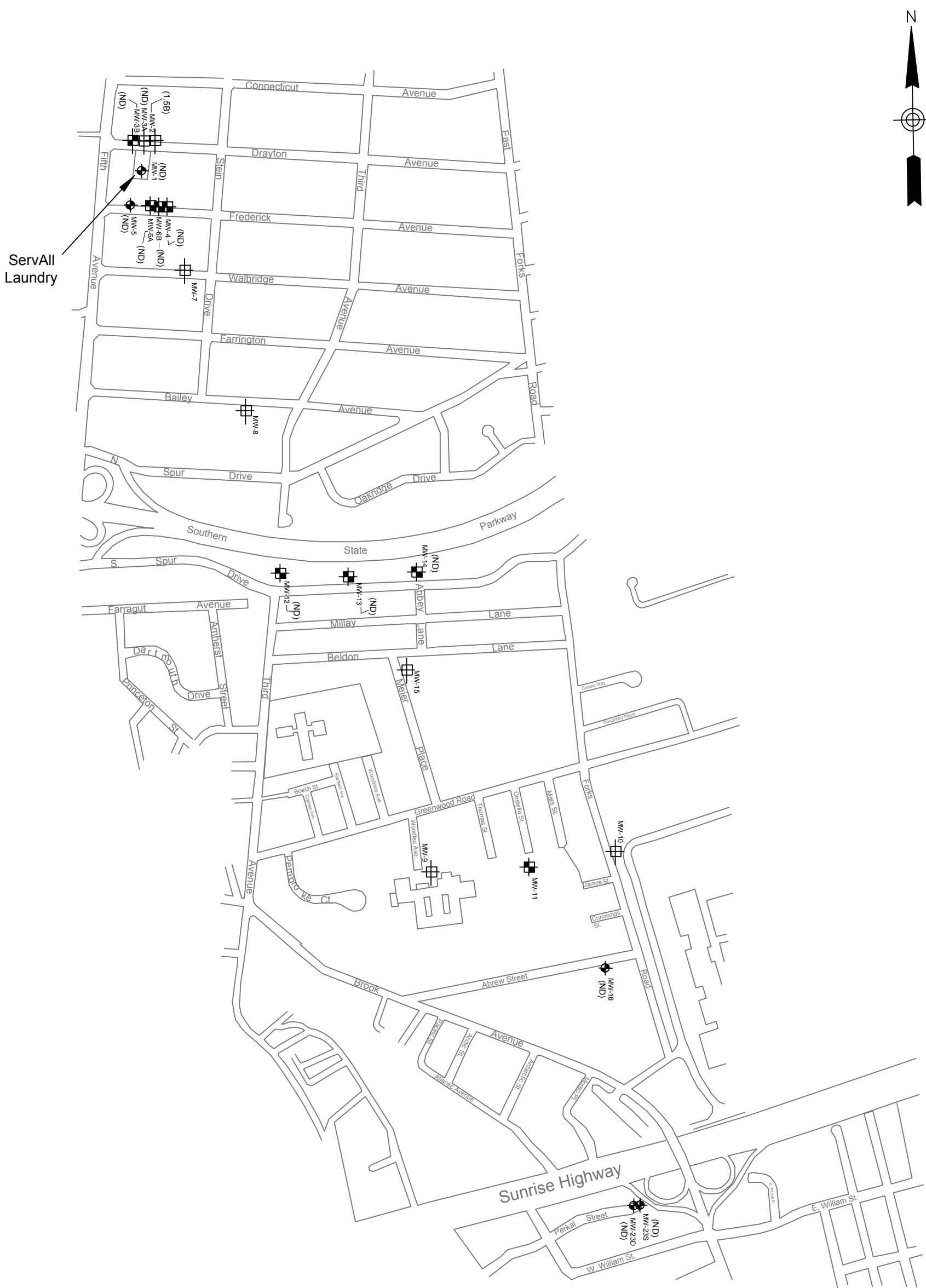
CADMIUM CLASS GA CRITERIA IS 5 ug/L

11A



CADMIUM CLASS GA CRITERIA IS 5 ug/L

11B



MW-16		EXISTING MONITORING WELLS
MW-10		DAMAGED OR MISSING MONITORING WELL
ND		NOT DETECTED

GRAPHIC SCALE



PK/jk

SC

PK

UNFILTERED CADMIUM IN GROUNDWATER ISOCONCENTRATION MAP AUGUST 2012

DATE :
OCTOBER 2012

SCALE :
AS SHOWN

DRAWING NO. :

Figure 12
Cadmium Concentrations in Selected Monitoring Wells
ServAll Laundry Site (1-52-026)

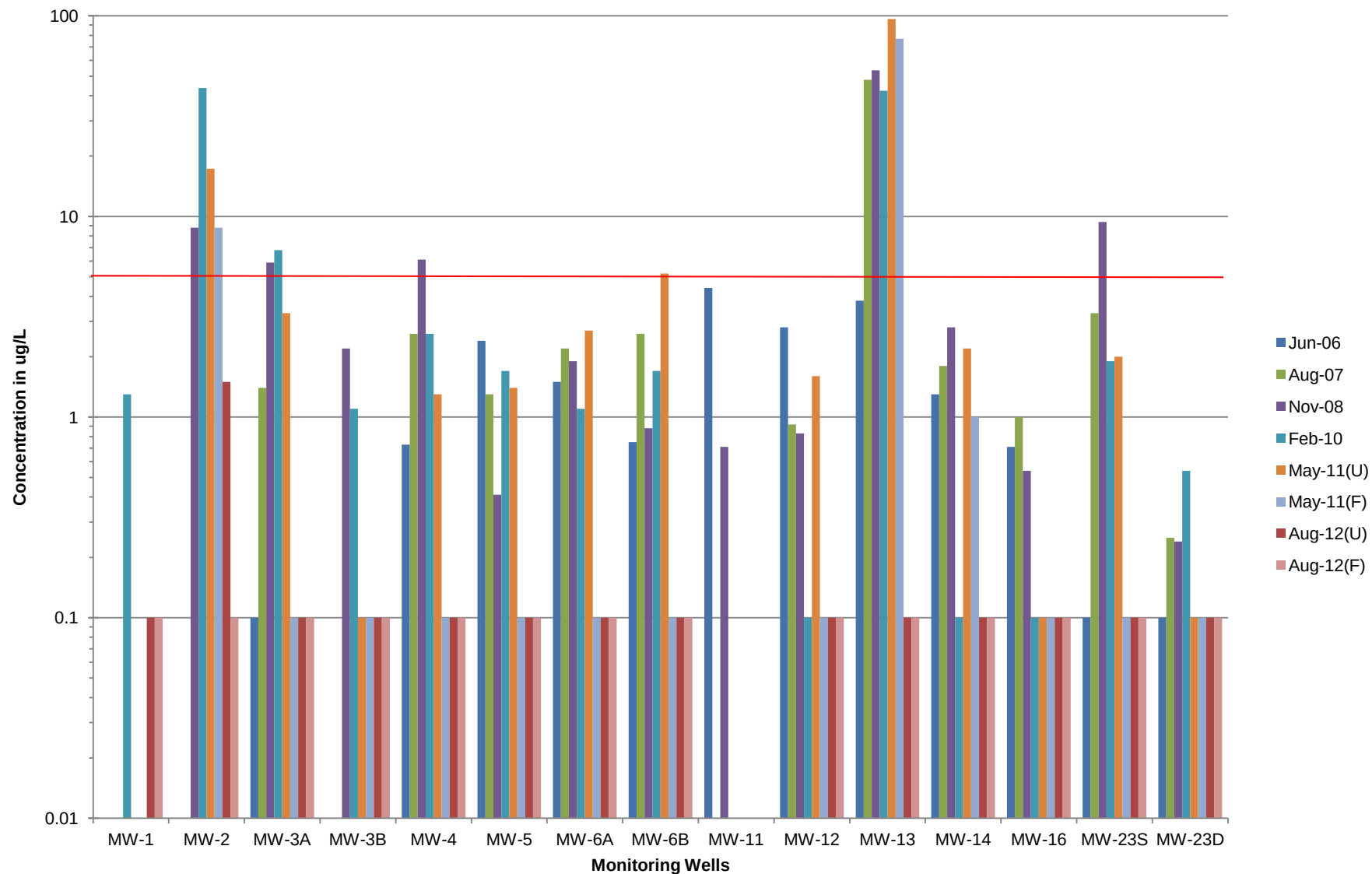
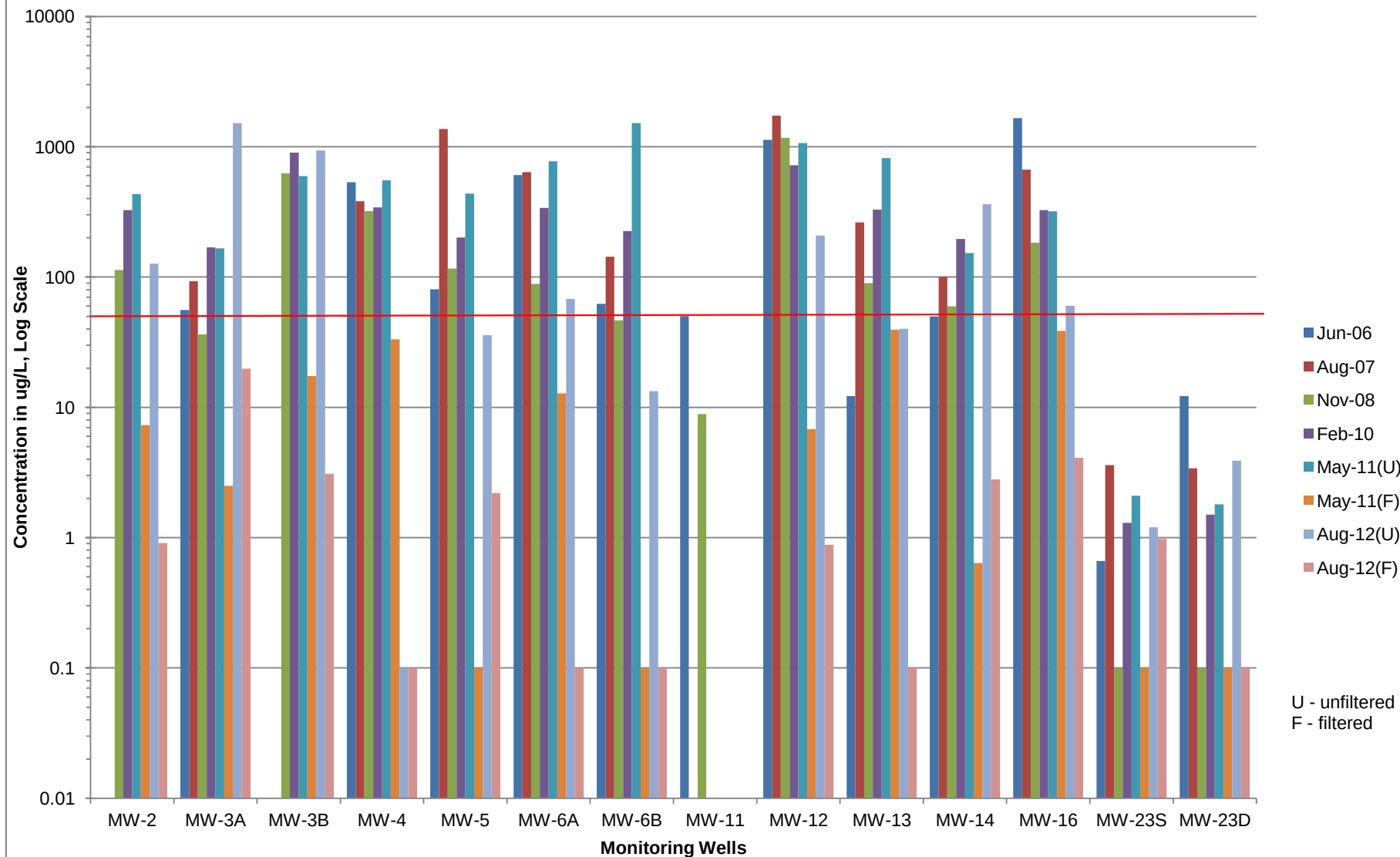
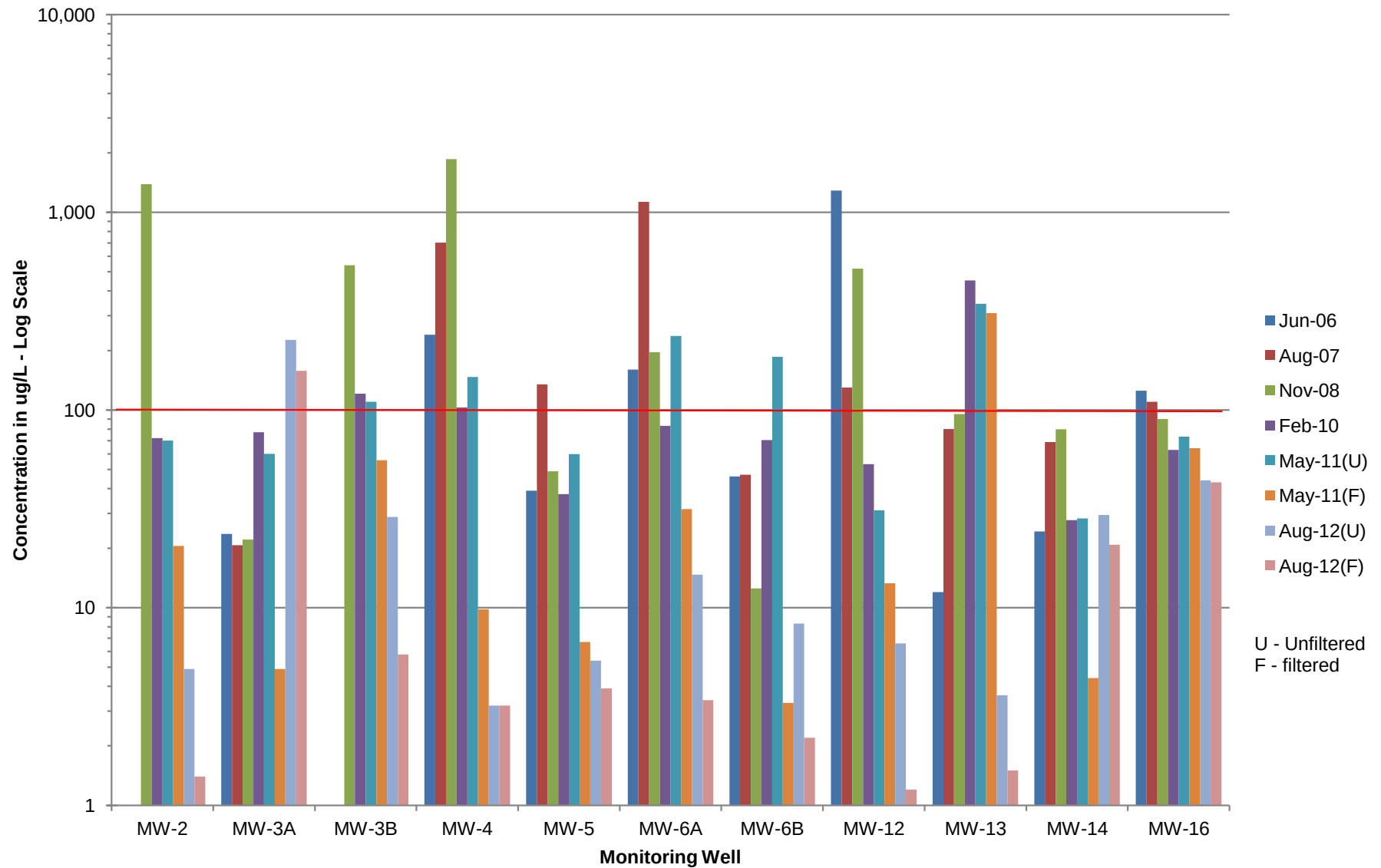


Figure 13
Chromium Concentration in Selected Monitoring Wells
ServAll Laundry Site (1-52-026)



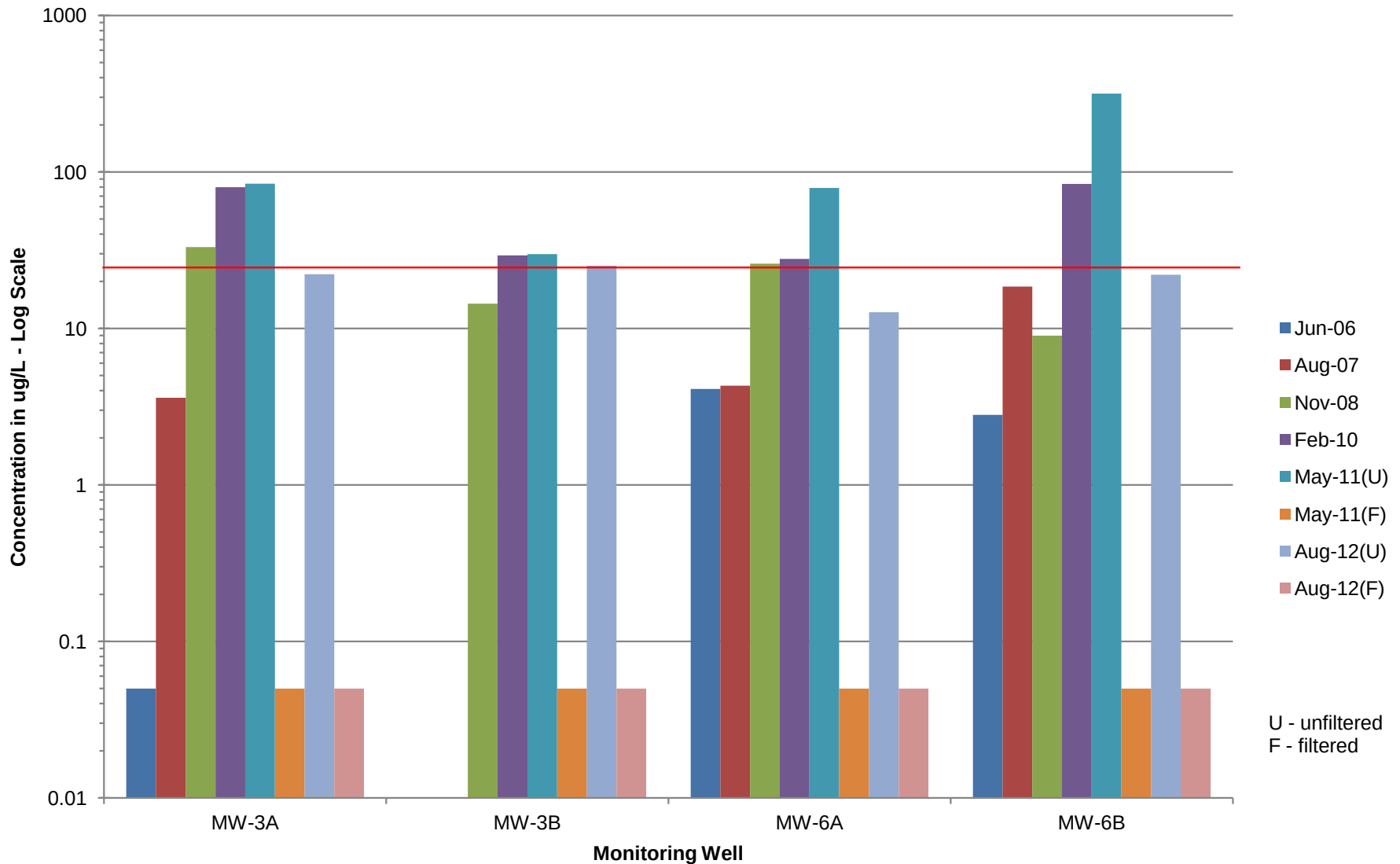
Class GA criterion is 50 ug/L

Figure 14
Nickel Concentrations in Selected Monitoring Wells
ServAll Laundry Site (1-52-026)



Class GA criterion is 100 ug/L

Figure 15
Lead Concentrations in Selected Monitoring Wells
ServAll Laundry Site (1-52-026)



Class GA criterion is 25 ug/L

ND values are set to 0.05 ug/L for plotting purposes, NA values are blank

Appendix A

NYSDEC Monitoring Well Field Inspection Logs

SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077
INSPECTOR: PL, DR
DATE/TIME: 8/22 1500
WELL ID.: MW-1

MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report

PDOP Reading from Trimble pathfinder: _____ Satellites: _____

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X

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

X	
---	--

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

N/A	
-----	--

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	
---	--

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

HEADSPACE READING (ppm) AND INSTRUMENT USED PID 0.0 ppm

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

PROTECTIVE CASING MATERIAL TYPE: STEEL

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6"

LOCK PRESENT?

YES	NO
X	

LOCK FUNCTIONAL?

	X
--	---

DID YOU REPLACE THE LOCK?

	X
--	---

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

	X
--	---

WELL MEASURING POINT VISIBLE?

X	
---	--

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 90.00'

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 24.60'

MEASURE WELL DIAMETER (Inches): 4"

WELL CASING MATERIAL: STEEL

PHYSICAL CONDITION OF VISIBLE WELL CASING: OK

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

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES UNK

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.

In back of ServAll Building (parking lot), near dumpsters.

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.

MW-1 is located in rear parking lot of ServAll property.

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

Fluids from parked cars and salt for winter ice / snow removal are possible sources of contamination.

REMARKS:

MONITORING WELL INSPECTION LOG
PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077
 INSPECTOR: PL, DR
 DATE/TIME: 8/22 1620
 WELL ID.: MW-2

MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report
 PDOP Reading from Trimble pathfinder: _____ Satellites: _____
 GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X

 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	
---	--

Cap does not close properly. Lid is not flush with casing.
 HEADSPACE READING (ppm) AND INSTRUMENT USED PID 0.0 ppm
 TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) Flush
 PROTECTIVE CASING MATERIAL TYPE: STEEL
 MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6"

LOCK PRESENT?

YES	NO
X	

 LOCK FUNCTIONAL?

	X
--	---

 DID YOU REPLACE THE LOCK?

	X
--	---

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

X	
---	--

 WELL MEASURING POINT VISIBLE?

X	
---	--

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 82.16'
 MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 24.08'
 MEASURE WELL DIAMETER (Inches): 4"
 WELL CASING MATERIAL: STEEL
 PHYSICAL CONDITION OF VISIBLE WELL CASING: OK
 ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE N/A
 PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES ~20'

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.

MW-2 is located on the sidewalk along Drayton Rd. It is across from E.K. Display Corp. Building

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.

MW-2 is set in the sidewalk pavement along Drayton Ave.

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

Chemicals / fluids from vehicles. Salt from road salting.

REMARKS:

PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077

INSPECTOR: PL, JB

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 8/27 1200

WELL ID.: MW-3A

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report

PDOP Reading from Trimble pathfinder: _____ Satellites: _____

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

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

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

SURFACE SEAL PRESENT?

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

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED PID

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

PROTECTIVE CASING MATERIAL TYPE:

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

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

WELL MEASURING POINT VISIBLE?

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

MEASURE WELL DIAMETER (Inches):

WELL CASING MATERIAL:

PHYSICAL CONDITION OF VISIBLE WELL CASING:

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

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

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

Between road and sidewalk, west of MW-3B

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.

MW-3A is located on a grassy surface. A new well casing is needed.

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

None

REMARKS:

MONITORING WELL INSPECTION LOG
PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077

INSPECTOR: PL, JB

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 8/27 1400

WELL ID.: MW-3B

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report

PDOP Reading from Trimble pathfinder: _____ Satellites: _____

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

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

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

N/A

SURFACE SEAL PRESENT?

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

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED PID

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

PROTECTIVE CASING MATERIAL TYPE:

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

YES	NO
X	
X	
	X

13.7 ppm

Flush

METAL

6"

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

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

WELL MEASURING POINT VISIBLE?

YES	NO
	X
	X
	X
	X
	X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

MEASURE WELL DIAMETER (Inches):

WELL CASING MATERIAL:

PHYSICAL CONDITION OF VISIBLE WELL CASING:

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

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

85.06'
24.02'
2"
METAL
Broken
N/A
~20'

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.

MW-3B is located on the sidewalk at the end of a building on the corner of 5th Ave and Drayton Ave.

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.

MW-3B is located in a grassy area in the sidewalk. Needs replacement.

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

None present.

REMARKS:

MONITORING WELL INSPECTION LOG
PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077

INSPECTOR: PL, BC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 8/29 1040

WELL ID.: MW-4

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X NYTM Y See Report

PDOP Reading from Trimble pathfinder: Satellites:

GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X

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

X	
---	--

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

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
--	---

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

HEADSPACE READING (ppm) AND INSTRUMENT USED 0.0ppm

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

PROTECTIVE CASING MATERIAL TYPE: Metal

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): N/A

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): 26.47'

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 24.13'

MEASURE WELL DIAMETER (Inches): 2"

WELL CASING MATERIAL: STEEL

PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD

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

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES ~30'

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.

MW-5 is located on the side of Frederick Ave., Overhead lines are across the street and cross at 5th Avenue.

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.

MW-5 is located on the edge of a residential parking spot next to Frederick Ave. While traffic does present some concern, proper cones and usage of vehicle ensures safe work zone.

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

White mold growing inside of casing.

REMARKS:

MONITORING WELL INSPECTION LOG
PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077

INSPECTOR: PL, BC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 8/29 1000

WELL ID.: MW-5

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report
PDOP Reading from Trimble pathfinder: _____ Satellites: _____
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X

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

X	
---	--

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: N/A
SURFACE SEAL PRESENT?

YES	NO
X	
X	
	X

SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)
Cap does not close properly. Lid is not flush with casing.
HEADSPACE READING (ppm) AND INSTRUMENT USED 0.0 ppm
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) Flush
PROTECTIVE CASING MATERIAL TYPE: Metal
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6"

LOCK PRESENT?

YES	NO
	X
	X
	X
	X
	X

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

	X
--	---

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 83.61'
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 23.47'
MEASURE WELL DIAMETER (Inches): 2"
WELL CASING MATERIAL: Metal
PHYSICAL CONDITION OF VISIBLE WELL CASING: Broken
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE N/A
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES ~30'

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.

MW-5 is located on the side of Frederick Ave., Overhead lines are across the street and cross at 5th Avenue.

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.

MW-5 is located on the edge of a residential parking spot next to Frederick Ave. Well lid is broken and missing, Well casing requires replacement.

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

Residents park over well frequently.

REMARKS:

MONITORING WELL INSPECTION LOG
PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077

INSPECTOR: PL, JB

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 8/27 1315

WELL ID.: MW-6A

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report

PDOP Reading from Trimble pathfinder: _____

Satellites: _____

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

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

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

N/A

SURFACE SEAL PRESENT?

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

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED PID

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

PROTECTIVE CASING MATERIAL TYPE:

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

YES	NO
X	
X	
	X

0.0ppm

Flush

N/A

N/A

YES	NO
	X
	X
	X
	X
	X

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

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

WELL MEASURING POINT VISIBLE?

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

MEASURE WELL DIAMETER (Inches):

WELL CASING MATERIAL:

PHYSICAL CONDITION OF VISIBLE WELL CASING:

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

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

59.32'

24.15'

2"

STEEL

Broken

N/A

~30'

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.

MW-6A is located on the side of Frederick Ave., Overhead lines are across the street and cross at 5th Avenue.

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.

MW-6A is located on the edge of a residential parking spot next to Frederick Ave. Well lid is broken and missing, Well casing requires replacement.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

Residents park over well frequently.

REMARKS:

MONITORING WELL INSPECTION LOG
PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077
 INSPECTOR: PL, JB
 DATE/TIME: 8/27 1315
 WELL ID.: MW-6B

MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report
 PDOP Reading from Trimble pathfinder: _____ Satellites: _____
 GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X

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

X	
---	--

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

N/A	
YES	NO
X	
X	
	X

SURFACE SEAL PRESENT?

YES	NO
X	
X	
	X

 SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)
 PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)
 Cap does not close properly. Lid is not flush with casing.
 HEADSPACE READING (ppm) AND INSTRUMENT USED PID 0.0 ppm
 TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) Flush
 PROTECTIVE CASING MATERIAL TYPE: Metal
 MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6"

LOCK PRESENT?

YES	NO
	X
	X
	X
	X
	X

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

YES	NO
	X
	X
	X
	X
	X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 28.48'
 MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 24.17'
 MEASURE WELL DIAMETER (Inches): 2"
 WELL CASING MATERIAL: STEEL
 PHYSICAL CONDITION OF VISIBLE WELL CASING: Broken
 ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE N/A
 PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES ~30'

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.

MW-6B is located on the side of Frederick Ave., Overhead lines are across the street and cross at 5th Avenue.

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.

MW-6B is located on the edge of a residential parking spot next to Frederick Ave. Well lid is broken and missing,
 Well casing requires replacement.

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

Residents park over well frequently.

REMARKS:

MONITORING WELL INSPECTION LOG
PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077

INSPECTOR: PL, DR

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 8/20 1130

WELL ID.: MW-11

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report

PDOP Reading from Trimble pathfinder: _____

Satellites: _____

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

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

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

N/A

YES	NO
	X
	X
	X

SURFACE SEAL PRESENT?

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

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED PID

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

PROTECTIVE CASING MATERIAL TYPE:

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

N/A

Flush

Metal

6"

YES	NO
	X
	X
	X
	X
	X

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

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

WELL MEASURING POINT VISIBLE?

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

MEASURE WELL DIAMETER (Inches):

WELL CASING MATERIAL:

PHYSICAL CONDITION OF VISIBLE WELL CASING:

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

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

-

-

2"

Metal

Broken

N/A

UNK

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.

MW-11 is located in an open field.

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

MW-11 is located in an open field behind a school, it is far enough from the treeline to expect little interference with roots or branches. Well is found at edge of soccer field, lid and surface seal missing, well has been backfilled to grade with soil.

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

Well is located in a school playing field, potential for pesticides or herbicides.

REMARKS:

MONITORING WELL INSPECTION LOG
PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077

INSPECTOR: PL, DR

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 8/22 847

WELL ID.: MW-12

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report

PDOP Reading from Trimble pathfinder: _____

Satellites: _____

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

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

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

N/A

SURFACE SEAL PRESENT?

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

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED PID

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

PROTECTIVE CASING MATERIAL TYPE:

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

YES	NO
X	
X	
	X

0.0 ppm

Flush

Metal

6"

YES	NO
	X
	X
	X
	X
	X

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

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

WELL MEASURING POINT VISIBLE?

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

MEASURE WELL DIAMETER (Inches):

WELL CASING MATERIAL:

PHYSICAL CONDITION OF VISIBLE WELL CASING:

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

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

89.13'

16.67'

2"

Metal

Broken

N/A

~50'

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.

MW-12 is near a treeline. Highway light pole is located near well.

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.

MW-12 is off the side of the highway. Lid is missing, well casing requires replacement.

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

None present.

REMARKS:

PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077

INSPECTOR: PL, DR

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 8/21 1510

WELL ID.: MW-13

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report

PDOP Reading from Trimble pathfinder: _____

Satellites: _____

GPS Method (circle) Trimble And/Or Magellan

YES	NO
	X
X	

WELL I.D. VISIBLE?

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

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

N/A

SURFACE SEAL PRESENT?

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

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED PID

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

PROTECTIVE CASING MATERIAL TYPE:

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

YES	NO
X	
X	
	X

0.0 ppm

Flush

Metal

6"

YES	NO
X	
	X
	X
	X
	X

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

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

WELL MEASURING POINT VISIBLE?

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

MEASURE WELL DIAMETER (Inches):

WELL CASING MATERIAL:

PHYSICAL CONDITION OF VISIBLE WELL CASING:

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

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

96.48'

16.93'

2"

Metal

Broken

N/A

10'

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.

MW-13 is near a treeline. Highway light pole is located near well.

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.

MW-13 is off the side of the highway. Lid is missing, well casing requires replacement.

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

None present.

REMARKS:

PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077
 INSPECTOR: PL, DR
 DATE/TIME: 8/22 1000
 WELL ID.: MW-14

MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below)

YES	NO
	X

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report
 PDOP Reading from Trimble pathfinder: _____ Satellites: _____
 GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X

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

X	
---	--

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

N/A	
YES	NO
X	
X	
	X

SURFACE SEAL PRESENT?

YES	NO
X	
X	
	X

 SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)
 PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)
 Cap does not close properly. Lid is not flush with casing.
 HEADSPACE READING (ppm) AND INSTRUMENT USED PID 0.0 ppm
 TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) Flush
 PROTECTIVE CASING MATERIAL TYPE: Metal
 MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6"

LOCK PRESENT?

YES	NO
	X
	X
	X
	X
	X

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

	X
--	---

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 90.38'
 MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 17.17'
 MEASURE WELL DIAMETER (Inches): 2"
 WELL CASING MATERIAL: Metal
 PHYSICAL CONDITION OF VISIBLE WELL CASING: Broken
 ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE N/A
 PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES 50'

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.

MW-14 is near a treeline. Highway light pole is located near well.

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.

MW-14 is off the side of the highway. Lid is missing, well casing requires replacement.

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

None present.

REMARKS:

PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077
 INSPECTOR: PL, DR
 DATE/TIME: 8/22 1140
 WELL ID.: MW-16

MONITORING WELL FIELD INSPECTION LOG

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report
 PDOP Reading from Trimble pathfinder: _____ Satellites: _____
 GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
	X

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

X	
---	--

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

N/A	
YES	NO
X	
X	
	X

SURFACE SEAL PRESENT?

YES	NO
X	
X	
	X

 SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)
 PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)
 Cap does not close properly. Lid is not flush with casing.
 HEADSPACE READING (ppm) AND INSTRUMENT USED PID 0.0 ppm
 TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) Flush
 PROTECTIVE CASING MATERIAL TYPE: Metal
 MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6"

LOCK PRESENT?

YES	NO
	X
	X
	X
	X
	X

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

YES	NO
	X

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 95.15'
 MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 11.94'
 MEASURE WELL DIAMETER (Inches): 2"
 WELL CASING MATERIAL: Metal
 PHYSICAL CONDITION OF VISIBLE WELL CASING: Broken
 ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE N/A
 PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES ~20

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.

MW-16 is on the side of Abrew St. there are no overhead lines above well.

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.

MW-16 is on the side of Abrew St., periodic traffic is a minor safety concern. Well lid is broken, well casing requires replacement.

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

None present.

REMARKS:

PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077

INSPECTOR: PL, DR

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 8/21 1300

WELL ID.: MW-23S

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report

PDOP Reading from Trimble pathfinder: _____ Satellites: _____

GPS Method (circle) Trimble And/Or Magellan

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:

MW-23S

SURFACE SEAL PRESENT?

YES	NO
X	
X	
X	

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

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

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

HEADSPACE READING (ppm) AND INSTRUMENT USED PID

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

PROTECTIVE CASING MATERIAL TYPE:

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

0.0 ppm

Flush

Metal

6"

LOCK PRESENT?

LOCK FUNCTIONAL?

DID YOU REPLACE THE LOCK?

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

WELL MEASURING POINT VISIBLE?

YES	NO
X	
	X
	X
	X
X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):

MEASURE WELL DIAMETER (Inches):

WELL CASING MATERIAL:

PHYSICAL CONDITION OF VISIBLE WELL CASING:

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

PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

69.25'

5.59'

2"

Metal

New

N/A

~30'

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.

MW-23S is on Perkal St, a Cul de Sac, overhead lines are not in position to interfere with a 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.

MW-23S is on the edge of a low traffic Cul de Sac.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT

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

Multiple cars parked to be repaired next door.

REMARKS:

PHOTO



SITE NAME: ServAll Laundry Site

SITE ID.: 1-52-077

INSPECTOR: PL, DR

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 8/21 1110

WELL ID.: MW-23D

WELL VISIBLE? (If not, provide directions below)

YES	NO
X	

WELL COORDINATES? NYTM X _____ NYTM Y _____ See Report
PDOP Reading from Trimble pathfinder: _____ Satellites: _____
GPS Method (circle) Trimble And/Or Magellan

WELL I.D. VISIBLE?

YES	NO
X	

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

X	
---	--

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: MW-23D

YES	NO
X	
X	
X	

SURFACE SEAL PRESENT?
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)
Cap does not close properly. Lid is not flush with casing.
HEADSPACE READING (ppm) AND INSTRUMENT USED PID 8.6ppm
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) Flush
PROTECTIVE CASING MATERIAL TYPE: Metal
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6"

LOCK PRESENT?

YES	NO
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?

X	
---	--

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 87.68'
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 5.54'
MEASURE WELL DIAMETER (Inches): 2"
WELL CASING MATERIAL: Metal
PHYSICAL CONDITION OF VISIBLE WELL CASING: New
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE N/A
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES 30'

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.

MW-23D is on Perkal St, a Cul de Sac, overhead lines are not in position to interfere with a 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.

MW-23D is on the edge of a low traffic Cul de Sac.

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

Multiple cars parked to be repaired next door.

REMARKS:

PHOTO



Appendix B

Monitoring Well Sampling Forms



Pump Type:	QED 1.75" Bladder Pump
Analytical Parameters:	TCL VOC, TAL Metals (filtered & unfiltered)

[illegible]



Pump Type:	QED 1.75" Bladder Pump
Analytical Parameters:	TCL VOC, TAL Metals (filtered & unfiltered)



Pump Type:	QED 1.75" Bladder Pump
Analytical Parameters:	TCL VOC, TAL Metals (filtered & unfiltered)



Pump Type:	QED 1.75" Bladder Pump
Analytical Parameters:	TCL VOC, TAL Metals (filtered & unfiltered)



Pump Type:	QED 1.75" Bladder Pump
Analytical Parameters:	TCL VOC, TAL Metals (filtered & unfiltered)

[illegible]



Pump Type:	QED 1.75" Bladder Pump
Analytical Parameters:	TCL VOC, TAL Metals (filtered & unfiltered)

[illegible]



Pump Type:	QED 1.75" Bladder Pump
Analytical Parameters:	TCL VOC, TAL Metals (filtered & unfiltered)

[illegible]

[illegible]

[illegible]



Pump Type:	QED 1.75" Bladder Pump
Analytical Parameters:	TCL VOC, TAL Metals (filtered & unfiltered)

Appendix C

Laboratory Data Summary Packages (Form 1s)

Report Date:
13-Sep-12 13:05



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

Laboratory Report

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

Work Order: L1786
Project : Multi Site G, ServAll
Project #: D004445-14.1

Attn: Paul Kareth

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
L1786-01	SL-MW-23D	Aqueous	21-Aug-12 12:25	22-Aug-12 08:38
L1786-02	SL-MW-73D	Aqueous	21-Aug-12 12:30	22-Aug-12 08:38
L1786-03	SL-MW-23S	Aqueous	21-Aug-12 14:35	22-Aug-12 08:38
L1786-04	SL-MW-13	Aqueous	21-Aug-12 16:10	22-Aug-12 08:38
L1786-06	TB-01	Aqueous	21-Aug-12 00:00	22-Aug-12 08:38
L1786-07	SL-MW-12	Aqueous	22-Aug-12 09:25	23-Aug-12 08:50
L1786-08	SL-MW-14	Aqueous	22-Aug-12 10:55	23-Aug-12 08:50
L1786-09	SL-MW-16	Aqueous	22-Aug-12 13:16	23-Aug-12 08:50
L1786-10	SL-MW-1	Aqueous	22-Aug-12 15:45	23-Aug-12 08:50
L1786-11	SL-MW-2	Aqueous	22-Aug-12 17:20	23-Aug-12 08:50
L1786-12	RB-02	Aqueous	22-Aug-12 18:10	23-Aug-12 08:50
L1786-13	TB-02	Aqueous	22-Aug-12 00:00	23-Aug-12 08:50

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 Spectrum Analytical.

All applicable NELAC or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.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
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



Certificate # L2247 Testing

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 -- D004445-14.1

SDG : L1786

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
SL-MW-23D	L1786-01	SW8260_W			SW6010_W	
SL-MW-23D	L1786-01				SW6010_W	
SL-MW-23D	L1786-01				SW7470	
SL-MW-23D	L1786-01				SW7470	
SL-MW-73D	L1786-02	SW8260_W			SW6010_W	
SL-MW-73D	L1786-02				SW6010_W	
SL-MW-73D	L1786-02				SW7470	
SL-MW-73D	L1786-02				SW7470	
SL-MW-23S	L1786-03	SW8260_W			SW6010_W	
SL-MW-23S	L1786-03				SW6010_W	
SL-MW-23S	L1786-03				SW7470	
SL-MW-23S	L1786-03				SW7470	
SL-MW-13	L1786-04	SW8260_W			SW6010_W	
SL-MW-13	L1786-04				SW6010_W	
SL-MW-13	L1786-04				SW7470	
SL-MW-13	L1786-04				SW7470	
TB-01	L1786-06	SW8260_W				
SL-MW-12	L1786-07	SW8260_W			SW6010_W	
SL-MW-12	L1786-07				SW6010_W	
SL-MW-12	L1786-07				SW7470	
SL-MW-12	L1786-07				SW7470	
SL-MW-14	L1786-08	SW8260_W			SW6010_W	
SL-MW-14	L1786-08				SW6010_W	
SL-MW-14	L1786-08				SW7470	
SL-MW-14	L1786-08				SW7470	
SL-MW-16	L1786-09	SW8260_W			SW6010_W	
SL-MW-16	L1786-09				SW6010_W	
SL-MW-16	L1786-09				SW7470	
SL-MW-16	L1786-09				SW7470	
SL-MW-1	L1786-10	SW8260_W			SW6010_W	
SL-MW-1	L1786-10				SW6010_W	
SL-MW-1	L1786-10				SW7470	
SL-MW-1	L1786-10				SW7470	
SL-MW-2	L1786-11	SW8260_W			SW6010_W	
SL-MW-2	L1786-11				SW6010_W	
SL-MW-2	L1786-11				SW7470	
SL-MW-2	L1786-11				SW7470	
RB-02	L1786-12	SW8260_W			SW6010_W	

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 -- D004445-14.1

SDG : L1786

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
RB-02	L1786-12				SW6010_W	
RB-02	L1786-12				SW7470	
RB-02	L1786-12				SW7470	
TB-02	L1786-13	SW8260_W				

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

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

Project Name : Multi Site G -- D004445-14.1

SDG : L1786

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
L1786-01A	AQ	8/21/2012	8/22/2012	NA	8/23/2012
L1786-02A	AQ	8/21/2012	8/22/2012	NA	8/23/2012
L1786-03A	AQ	8/21/2012	8/22/2012	NA	8/23/2012
L1786-03ADL	AQ	8/21/2012	8/22/2012	NA	8/24/2012
L1786-04A	AQ	8/21/2012	8/22/2012	NA	8/24/2012
L1786-06A	AQ	8/21/2012	8/22/2012	NA	8/23/2012
L1786-07A	AQ	8/22/2012	8/23/2012	NA	8/24/2012
L1786-08A	AQ	8/22/2012	8/23/2012	NA	8/24/2012
L1786-09A	AQ	8/22/2012	8/23/2012	NA	8/28/2012
L1786-09AMS	AQ	8/22/2012	8/23/2012	NA	8/29/2012
L1786-09AMSD	AQ	8/22/2012	8/23/2012	NA	8/29/2012
L1786-10A	AQ	8/22/2012	8/23/2012	NA	8/24/2012
L1786-11A	AQ	8/22/2012	8/23/2012	NA	8/24/2012
L1786-12A	AQ	8/22/2012	8/23/2012	NA	8/28/2012
L1786-13A	AQ	8/22/2012	8/23/2012	NA	8/28/2012

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

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

Project Name : Multi Site G -- D004445-14.1

SDG : L1786

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
L1786-01A	AQ	SW8260_W	NA	LOW	1
L1786-02A	AQ	SW8260_W	NA	LOW	1
L1786-03A	AQ	SW8260_W	NA	LOW	1
L1786-03ADL	AQ	SW8260_W	NA	LOW	20
L1786-04A	AQ	SW8260_W	NA	LOW	1
L1786-06A	AQ	SW8260_W	NA	LOW	1
L1786-07A	AQ	SW8260_W	NA	LOW	1
L1786-08A	AQ	SW8260_W	NA	LOW	1
L1786-09A	AQ	SW8260_W	NA	LOW	1
L1786-09AMS	AQ	SW8260_W	NA	LOW	1
L1786-09AMSD	AQ	SW8260_W	NA	LOW	1
L1786-10A	AQ	SW8260_W	NA	LOW	1
L1786-11A	AQ	SW8260_W	NA	LOW	1
L1786-12A	AQ	SW8260_W	NA	LOW	1
L1786-13A	AQ	SW8260_W	NA	LOW	1

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 -- D004445-14.1

SDG : L1786

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
L1786-01B	AQ	SW6010_W	8/22/2012	8/30/2012
L1786-01C	AQ	SW6010_W	8/22/2012	8/30/2012
L1786-02B	AQ	SW6010_W	8/22/2012	8/30/2012
L1786-02C	AQ	SW6010_W	8/22/2012	8/30/2012
L1786-03B	AQ	SW6010_W	8/22/2012	8/30/2012
L1786-03C	AQ	SW6010_W	8/22/2012	8/30/2012
L1786-04B	AQ	SW6010_W	8/22/2012	8/30/2012
L1786-04C	AQ	SW6010_W	8/22/2012	8/30/2012
L1786-07B	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-07C	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-08B	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-08C	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-09B	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-09BDUP	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-09BMS	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-09C	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-09CDUP	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-09CMS	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-10B	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-10C	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-11B	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-11C	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-12B	AQ	SW6010_W	8/23/2012	8/30/2012
L1786-12C	AQ	SW6010_W	8/23/2012	8/30/2012
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 -- D004445-14.1

SDG : L1786

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
L1786-01B	AQ	SW7470	8/22/2012	8/27/2012
L1786-01C	AQ	SW7470	8/22/2012	8/29/2012
L1786-02B	AQ	SW7470	8/22/2012	8/27/2012
L1786-02C	AQ	SW7470	8/22/2012	8/29/2012
L1786-03B	AQ	SW7470	8/22/2012	8/27/2012
L1786-03C	AQ	SW7470	8/22/2012	8/29/2012
L1786-04B	AQ	SW7470	8/22/2012	8/27/2012
L1786-04C	AQ	SW7470	8/22/2012	8/29/2012
L1786-07B	AQ	SW7470	8/23/2012	8/27/2012
L1786-07C	AQ	SW7470	8/23/2012	8/29/2012
L1786-08B	AQ	SW7470	8/23/2012	8/27/2012
L1786-08C	AQ	SW7470	8/23/2012	8/29/2012
L1786-09B	AQ	SW7470	8/23/2012	8/27/2012
L1786-09BDUP	AQ	SW7470	8/23/2012	8/27/2012
L1786-09BMS	AQ	SW7470	8/23/2012	8/27/2012
L1786-09C	AQ	SW7470	8/23/2012	8/29/2012
L1786-09CDUP	AQ	SW7470	8/23/2012	8/29/2012
L1786-09CMS	AQ	SW7470	8/23/2012	8/29/2012
L1786-10B	AQ	SW7470	8/23/2012	8/27/2012
L1786-10C	AQ	SW7470	8/23/2012	8/29/2012
L1786-11B	AQ	SW7470	8/23/2012	8/27/2012
L1786-11C	AQ	SW7470	8/23/2012	8/29/2012
L1786-12B	AQ	SW7470	8/23/2012	8/27/2012
L1786-12C	AQ	SW7470	8/23/2012	8/29/2012

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

WorkOrder: L1786

Client ID: AECOM_CHSNTRDG

Project: Multi Site G

WO Name: Multi Site G, ServAll

Location: MULTI_SITE, D004445-14.1

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

Case:

SDG:

PO: 95900-04

HC Due: 09/11/12

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
L1786-01A	SL-MW-23D	08/21/2012 12:25	08/22/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1786-01B	SL-MW-23D	08/21/2012 12:25	08/22/2012	Aqueous	SW6010_W	TOTAL / TAL			Y		M5
L1786-01B	SL-MW-23D	08/21/2012 12:25	08/22/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1786-01C	SL-MW-23D	08/21/2012 12:25	08/22/2012	Aqueous	SW6010_W	DISSOLVED / TAL			Y		M5
L1786-01C	SL-MW-23D	08/21/2012 12:25	08/22/2012	Aqueous	SW7470	DISSOLVED / TAL					M5
L1786-02A	SL-MW-73D	08/21/2012 12:30	08/22/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1786-02B	SL-MW-73D	08/21/2012 12:30	08/22/2012	Aqueous	SW6010_W	TOTAL / TAL			Y		M5
L1786-02B	SL-MW-73D	08/21/2012 12:30	08/22/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1786-02C	SL-MW-73D	08/21/2012 12:30	08/22/2012	Aqueous	SW6010_W	DISSOLVED / TAL			Y		M5
L1786-02C	SL-MW-73D	08/21/2012 12:30	08/22/2012	Aqueous	SW7470	DISSOLVED / TAL					M5
L1786-03A	SL-MW-23S	08/21/2012 14:35	08/22/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1786-03B	SL-MW-23S	08/21/2012 14:35	08/22/2012	Aqueous	SW6010_W	TOTAL / TAL			Y		M5
L1786-03B	SL-MW-23S	08/21/2012 14:35	08/22/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1786-03C	SL-MW-23S	08/21/2012 14:35	08/22/2012	Aqueous	SW6010_W	DISSOLVED / TAL			Y		M5
L1786-03C	SL-MW-23S	08/21/2012 14:35	08/22/2012	Aqueous	SW7470	DISSOLVED / TAL					M5
L1786-04A	SL-MW-13	08/21/2012 16:10	08/22/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1786-04B	SL-MW-13	08/21/2012 16:10	08/22/2012	Aqueous	SW6010_W	TOTAL / TAL			Y		M5
L1786-04B	SL-MW-13	08/21/2012 16:10	08/22/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1786-04C	SL-MW-13	08/21/2012 16:10	08/22/2012	Aqueous	SW6010_W	DISSOLVED / TAL			Y		M5
L1786-04C	SL-MW-13	08/21/2012 16:10	08/22/2012	Aqueous	SW7470	DISSOLVED / TAL					M5

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

HT = Test logged in but has been placed on hold

08/27/2012 09:49

Lab Client Rep: Agnes R Huntley

Page 01 of 03

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

WorkOrder: L1786

Client ID: AECOM_CHSNTRDG

Project: Multi Site G

WO Name: Multi Site G, ServAll

Location: MULTI_SITE, D004445-14.1

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

Case:

SDG:

PO: 95900-04

HC Due: 09/11/12

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
L1786-05A	RB-01	08/21/2012 17:28	08/22/2012	Aqueous	SW8260_W	/ +TICs		Y	Y		VOA
L1786-05B	RB-01	08/21/2012 17:28	08/22/2012	Aqueous	SW6010_W	TOTAL / TAL		Y	Y	Y	M5
L1786-05B	RB-01	08/21/2012 17:28	08/22/2012	Aqueous	SW7470	TOTAL / TAL		Y	Y	Y	M5
L1786-05C	RB-01	08/21/2012 17:28	08/22/2012	Aqueous	SW6010_W	DISSOLVED / TAL		Y	Y	Y	M5
L1786-05C	RB-01	08/21/2012 17:28	08/22/2012	Aqueous	SW7470	DISSOLVED / TAL		Y	Y	Y	M5
L1786-06A	TB-01	08/21/2012 00:00	08/22/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1786-07A	SL-MW-12	08/22/2012 09:25	08/23/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1786-07B	SL-MW-12	08/22/2012 09:25	08/23/2012	Aqueous	SW6010_W	TOTAL / TAL				Y	M5
L1786-07B	SL-MW-12	08/22/2012 09:25	08/23/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1786-07C	SL-MW-12	08/22/2012 09:25	08/23/2012	Aqueous	SW6010_W	DISSOLVED / TAL				Y	M5
L1786-07C	SL-MW-12	08/22/2012 09:25	08/23/2012	Aqueous	SW7470	DISSOLVED / TAL					M5
L1786-08A	SL-MW-14	08/22/2012 10:55	08/23/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1786-08B	SL-MW-14	08/22/2012 10:55	08/23/2012	Aqueous	SW6010_W	TOTAL / TAL				Y	M5
L1786-08B	SL-MW-14	08/22/2012 10:55	08/23/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1786-08C	SL-MW-14	08/22/2012 10:55	08/23/2012	Aqueous	SW6010_W	DISSOLVED / TAL				Y	M5
L1786-08C	SL-MW-14	08/22/2012 10:55	08/23/2012	Aqueous	SW7470	DISSOLVED / TAL					M5
L1786-09A	SL-MW-16	08/22/2012 13:16	08/23/2012	Aqueous	SW8260_W	/ +TICs				Y	VOA
L1786-09B	SL-MW-16	08/22/2012 13:16	08/23/2012	Aqueous	SW6010_W	TOTAL / TAL				Y	M5
L1786-09B	SL-MW-16	08/22/2012 13:16	08/23/2012	Aqueous	SW7470	TOTAL / TAL				Y	M5
L1786-09C	SL-MW-16	08/22/2012 13:16	08/23/2012	Aqueous	SW6010_W	DISSOLVED / TAL				Y	M5

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N 08/27/2012 09:49

Lab Client Rep: Agnes R Huntley

Page 02 of 03

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

WorkOrder: L1786

Client ID: AECOM_CHSNTRDG

Project: Multi Site G

WO Name: Multi Site G, ServAll

Location: MULTI_SITE, D004445-14.1

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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
L1786-09C	SL-MW-16	08/22/2012 13:16	08/23/2012	Aqueous	SW7470	DISSOLVED / TAL			Y		M5
L1786-10A	SL-MW-1	08/22/2012 15:45	08/23/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1786-10B	SL-MW-1	08/22/2012 15:45	08/23/2012	Aqueous	SW6010_W	TOTAL / TAL			Y		M5
L1786-10B	SL-MW-1	08/22/2012 15:45	08/23/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1786-10C	SL-MW-1	08/22/2012 15:45	08/23/2012	Aqueous	SW6010_W	DISSOLVED / TAL			Y		M5
L1786-10C	SL-MW-1	08/22/2012 15:45	08/23/2012	Aqueous	SW7470	DISSOLVED / TAL					M5
L1786-11A	SL-MW-2	08/22/2012 17:20	08/23/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1786-11B	SL-MW-2	08/22/2012 17:20	08/23/2012	Aqueous	SW6010_W	TOTAL / TAL			Y		M5
L1786-11B	SL-MW-2	08/22/2012 17:20	08/23/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1786-11C	SL-MW-2	08/22/2012 17:20	08/23/2012	Aqueous	SW6010_W	DISSOLVED / TAL			Y		M5
L1786-11C	SL-MW-2	08/22/2012 17:20	08/23/2012	Aqueous	SW7470	DISSOLVED / TAL					M5
L1786-12A	RB-02	08/22/2012 18:10	08/23/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1786-12B	RB-02	08/22/2012 18:10	08/23/2012	Aqueous	SW6010_W	TOTAL / TAL			Y		M5
L1786-12B	RB-02	08/22/2012 18:10	08/23/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1786-12C	RB-02	08/22/2012 18:10	08/23/2012	Aqueous	SW6010_W	DISSOLVED / TAL			Y		M5
L1786-12C	RB-02	08/22/2012 18:10	08/23/2012	Aqueous	SW7470	DISSOLVED / TAL					M5
L1786-13A	TB-02	08/22/2012 00:00	08/23/2012	Aqueous	SW8260_W	/ +TICs					VOA

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



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- TAT- Indicate Date Needed: Standard
 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, STE B-1
Chestnut Ridge, NY 10977-0715
(P) 845-425-1480 x13
(F) 845-425-4989
 Project Mgr.: Paul Karth

Invoice To:

SAA

P.O. No.:

RQN:

Project No.: D004445-14.1

Site Name: Mulk-G : Serv All

Location: Bay Shore State: NY

Sampler(s): Pete Lawler

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
 8=NaHSO₄ 9= 10= 11=

List preservative code below:

2 4

Notes:

DW=Drinking Water GW=Groundwater WW=Wastewater
 O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
 X1= DI water X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix
L1780-01	SL-MW-23D-64-807	8-21-12	1225	G	GW
L1780-02	SL-MW-23D-64-807	8-21-12	1230	G	GW
L1780-03	SL-MW-23D-64-807	8-21-12	1435	G	GW
L1780-04	SL-MW-13	8-21-12	1610	G	GW
L1780-05	RB-01	8-21-12	1728	G	X1
L1780-06	TS-01	8-21-12	—	G	X1

Containers:

of VOA Vials

of Amber Glass

of Clear Glass

of Plastic

Analyses:

TCL VOC

TAL Metals

QA/QC Reporting Level

☐ Level I ☐ Level II

☐ Level III ☐ Level IV

☐ Other

State specific reporting standards:

1 metal filtered, 1 metal unfiltered

Both metals unfiltered

E-mail to Paul.Karth@aecom.com

EDD Format

Relinquished by:

[Signature]

Received by:

FedEx 87538250626

Date:

8-21-12

Time:

1850

Condition upon receipt: ☒ Ficed ☐ Ambient 2°C

8/22/12

8:38

Page 1 of 1

Special Handling:

TAT- Indicate Date Needed: Standard

- 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

Report To: AECom

Red School house Rd STE 31

check + e: 27 10977-6715

(P) 845-425 - 4480, x13

(f) 845-475-4989

Project Mgr.: Paul Kereth

Invoice To:

3

10

2

P.O. No.: _____
RON: _____

1= $\text{Na}_2\text{S}_2\text{O}_3$ 2= HCl 3= H_2SO_4 4= HNO_3 5= NaOH 6=Ascorbic Acid 7= CH_3OH
8= NaHSO_4 9= H_2O 10= H_2O 11= H_2O

DW=Drinking Water GW=Groundwater WW=Wastewater
 O=Oil SW= Surface Water SL=Sludge A=Air
 X1=DI X2= X3=

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:
U786-07	SL-MW-12	8-22-12	0925
- 08	SL-MW-14	8-22-12	1055
- 09	SL-MW-16	8-22-12	1316
- 10	SL-MW-1	8-22-12	1545
- 11	SL-MW-2	8-22-12	1720
- 12	R8-02	8-22-12	1810
U786-13	T3-02	8-22-12	—

Type	Matrix
------	--------

OA Vials	amber Glass	clear Glass	plastic
----------	-------------	-------------	---------

Containers:

List preservative code below:

Notes:

QA/QC Reporting Level

☐ Level I ☐ Level II

☐ Level III ☐ Level IV

☐ Other _____

State specific reporting standards:

E-mail to Paul, Kevin @ aecom.com

EDD Format

Condition upon receipt: ☒ Iced ☐ Ambient ~~°C~~ 4°C

Relinquished by:

Received by:

Time:

FedEx 8753 8250 6575

8-22-12 1840

FedEx	<i>[Signature]</i>
-------	--------------------

8/23/12	8:50
---------	------

Received By: <i>Vernice Brizuela</i>		Page 01 of 00	
Reviewed By: <i>Am</i>		Log-in Date 08/22/2012	
Work Order: L1786		Client Name: AECOM Technical Services, Inc.	
Project Name/Event: Multi Site G			
Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.			

Lab Sample ID	Preservation (pH)					VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
	HNO3	H2SO4	HCl	NaOH	H3PO4		
L1786-01	<2					H	
L1786-02	<2					H	
L1786-03	<2					H	
L1786-04	<2					H	
L1786-05	<2					H	
L1786-06						H	

1. Custody Seal(s)	Present / Absent
	Intact / Broken
2. Custody Seal Nos.	N/A
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent
4. Airbill	AirBill / Sticker
	Present / Absent
5. Airbill No.	FedEx 8753 8250 6526
6. Sample Tags	Present / Absent
Sample Tag Numbers	Listed /
	Not Listed on Chain-of-Custody
7. Sample Condition	Intact / Broken / Leaking
8. Cooler Temperature Indicator Bottle	Present / Absent
9. Cooler Temperature	2 °C
10. Does information on TR/COCs and sample tags agree?	Yes / No
11. Date Received at Laboratory	08/22/2012
12. Time Received	08:38
Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On
IR Temp Gun ID: MT-1	
Coolant Condition: ICE	
Preservative Name/Lot No:	

VOA Matrix Key:

US = Unpreserved Soil A = Air

UA = Unpreserved Aqueous H = HCl

M = MeOH E = Encore

N = NaHSO4 F = Freeze

See Sample Condition Notification/Corrective Action Form Yes / No

Rad OK Yes / No

Received By: <u>Venerica Brizuela</u>		Page 01 of 00	
Reviewed By: <u>JLC</u>		Log-in Date 08/23/2012	
Work Order: L1786		Client Name: AECOM Technical Services, Inc.	
Project Name/Event: Multi Site G, ServAll / D004445-14.1			
Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.			

	Lab Sample ID	Preservation (pH)					VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
		HNO3	H2SO4	HCl	NaOH	H3PO4		
1. Custody Seal(s) <u>Present / Absent</u>	L1786-07	<2					H	
<u>Intact / Broken</u>	L1786-08	<2					H	
2. Custody Seal Nos. N/A	L1786-09	<2					H	
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists <u>Present / Absent</u>	L1786-10	<2					H	
	L1786-11	<2					H	
	L1786-12	<2					H	
	L1786-13						H	

4. Airbill <u>AirBill / Sticker</u>	
<u>Present / Absent</u>	
5. Airbill No. FedEx 8753 8250 6515	
6. Sample Tags <u>Present / Absent</u>	
Sample Tag Numbers Listed /	
<u>Not Listed on Chain-of-Custody</u>	
7. Sample Condition <u>Intact / Broken / Leaking</u>	
8. Cooler Temperature Indicator Bottle <u>Present / Absent</u>	
9. Cooler Temperature 4 °C	
10. Does information on TR/COCs and sample tags agree? <u>Yes / No</u>	
11. Date Received at Laboratory 08/23/2012	
12. Time Received 08:50	

Sample Transfer	
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO
Area #	Area #
By	By
On	On

IR Temp Gun ID: MT-1	VOA Matrix Key: US = Unpreserved Soil A = Air UA = Unpreserved Aqueous H = HCl M = MeOH E = Encore N = NaHSO4 F = Freeze
Coolant Condition: ICE	
Preservative Name/Lot No:	

See Sample Condition Notification/Corrective Action Form Yes <u>/</u> No
Rad OK <u>Yes /</u> No

Agnes Huntley [Warwick]

From: Kareth, Paul [Paul.Kareth@aecom.com]**Sent:** Thursday, August 23, 2012 9:20 AM**To:** Agnes Huntley [Warwick]**Subject:** RE: ServAll Samples

If you haven't already started running the RB-01 sample, yes. I'd prefer to have the rinse blank analyses from the same well, not multiple wells.

From: Agnes Huntley [Warwick] [mailto:ang@spectrum-analytical.com]**Sent:** Thursday, August 23, 2012 9:18 AM**To:** Kareth, Paul**Subject:** RE: ServAll Samples

Including the VOA?

Agnes (Ng) Huntley

CLP Project Manager

Spectrum Analytical, featuring Hanibal Technology

Rhode Island Division

Formerly Mitkem Laboratories

(P) 401-732-3400

(F) 401-732-3499

From: Kareth, Paul [mailto:Paul.Kareth@aecom.com]**Sent:** Thursday, August 23, 2012 9:15 AM**To:** Agnes Huntley [Warwick]**Subject:** RE: ServAll Samples

Agnes

We don't need a RB for each day, so if it's possible to cancel RB-01 and replace it with the one that should arrive today, please do so.

Paul

From: Agnes Huntley [Warwick] [mailto:ang@spectrum-analytical.com]**Sent:** Thursday, August 23, 2012 9:12 AM**To:** Kareth, Paul**Subject:** RE: ServAll Samples

Hi Paul,

Shirley is no longer with Spectrum Analytical.

We received the samples today. Do you need a RB for each day of sampling? If not, then we can just cancel the analysis of RB-01 and just analyze RB-02.

Agnes (Ng) Huntley

CLP Project Manager

Spectrum Analytical, featuring Hanibal Technology

8/27/2012

Rhode Island Division
Formerly Mitkem Laboratories
(P) 401-732-3400
(F) 401-732-3499

From: Kareth, Paul [<mailto:Paul.Kareth@aecom.com>]
Sent: Thursday, August 23, 2012 8:55 AM
To: Shirley Ng [Warwick]
Subject: ServAll Samples

Shirley

I received an update from the YEC field crew. They collected another full set of field blank bottles yesterday (VOCs, unfiltered metals and filtered metals) instead of just a filtered metals bottle. It was included in the shipment you should receive today. I don't know if it's too late to cancel the entire field blank from Tuesday (RB-01) and replace it with this one or whether you just need to run the filtered metals bottle. Let me know how you plan to proceed.

Paul

Paul Kareth, PG

Rusten Corporate Park
100 Red Schoolhouse Road, Suite B-1
Chestnut Ridge, NY 10977-6715
P 845-425-4980, x 13
F 845-425-4989



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** Volatiles ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : AECOM Environment

Project: Multi Site G, ServAll

Laboratory Workorder / SDG #: L1786

SW846 8260C, VOC by GC-MS

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 8260C

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V6

Instrument Type: GCMS-VOA

Description: HP6890 / HP5973

Manufacturer: Hewlett-Packard

Model: 6890 / 5973

GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits with the following exceptions. Please note that most test procedures allow for several compounds outside of the QC limits for the LCS, although this may indicate a bias for this specific compound.

LCS-67875 in batch 67875, Percent Recovery is outside QC Limits, recovery is below criteria for 1,4-Dioxane at 50% with criteria of (70-130).

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

Matrix spikes were performed on samples: SL-MW-16 (L1786-09AMS) and SL-MW-16 (L1786-09AMSD).

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

SL-MW-16 (L1786-09AMS)Percent Recovery is outside QC Limits, recovery is below criteria for 1,1-Dichloroethene at 59% with criteria of (70-130) and 2,2-Dichloropropane at 41% with criteria of (70-135).

SL-MW-16 (L1786-09AMSD)Percent Recovery is outside QC Limits, recovery is below criteria for 1,2,3-Trichloropropane at 69% with criteria of (75-125) and 2,2-Dichloropropane at 42% with criteria of (70-135).

Replicate RPDs were within the advisory QC limits with the exception of the following:

SL-MW-16 (L1786-09AMSD), Relative Percent Difference is greater than RPD limit for 1,1-Dichloroethene.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

The following samples were analyzed at dilution:

SL-MW-23S (L1786-03ADL) : Dilution Factor: 20

G. Samples:

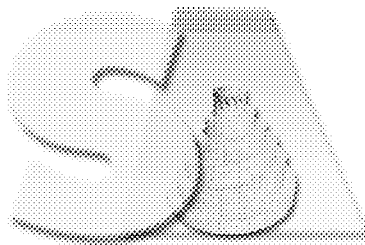
No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, 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: _____

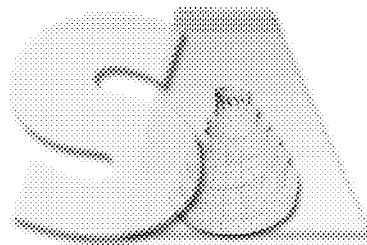
Date: _____ 9/13/2012 _____



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

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
 Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-67814	106	106	101	102				0
02	LCSD-67814	105	106	100	102				0
03	MB-67814	108	99	97	98				0
04	TB-01	107	98	96	98				0
05	SL-MW-23D	107	97	97	99				0
06	SL-MW-73D	107	100	94	95				0
07	SL-MW-23S	108	102	96	98				0
08	LCS-67828	106	107	100	101				0
09	LCSD-67828	104	102	100	99				0
10	MB-67828	106	98	96	96				0
11	SL-MW-23SDL	106	98	97	96				0
12	SL-MW-13	107	98	97	94				0
13	SL-MW-12	108	99	97	96				0
14	SL-MW-14	106	95	97	96				0
15	SL-MW-1	107	101	97	95				0
16	SL-MW-2	105	98	97	96				0
17	LCS-67875	101	91	100	99				0
18	MB-67875	103	99	96	93				0
19	RB-02	102	100	98	94				0
20	TB-02	99	100	98	92				0
21	SL-MW-16	100	98	99	92				0
22	LCS-67894	100	105	99	98				0
23	MB-67894	101	98	99	93				0
24	SL-MW-16MS	101	106	99	98				0
25	SL-MW-16MSD	100	103	99	96				0

QC LIMITS
 (85-115)
 (70-120)
 (85-120)
 (75-120)

VDMC1 (DBFM) Dibromofluoromethane
 VDMC2 (DCE) = 1,2-Dichloroethane-d4
 VDMC3 (TOL) = Toluene-d8
 VDMC4 (BFB) = Bromofluorobenzene
 # Column to be used to flag recovery values
 * Values outside of contract required QC limits

som111.10.27.A

3A - FORM III VOA-1
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
 Matrix Spike - EPA Sample No.: SL-MW-16 Level: (TRACE or LOW) LOW

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	51.1424	102		30-155
Chloromethane	50.0000	0.0000	49.3251	99		40-125
Vinyl chloride	50.0000	2.0761	49.7120	95		50-145
Bromomethane	50.0000	0.0000	42.6991	85		30-145
Chloroethane	50.0000	0.0000	45.8901	92		60-135
Trichlorofluoromethane	50.0000	0.0000	50.8880	102		60-145
1,1-Dichloroethene	50.0000	1.0695	30.4067	59	*	70-130
Acetone	50.0000	0.0000	36.6779	73		40-140
Iodomethane	50.0000	0.0000	43.2416	86		72-121
Carbon disulfide	50.0000	0.0000	46.0536	92		35-160
Methylene chloride	50.0000	0.0000	37.9263	76		55-140
trans-1,2-Dichloroethene	50.0000	0.0000	46.5665	93		60-140
Methyl tert-butyl ether	50.0000	1.4456	48.2083	94		65-125
1,1-Dichloroethane	50.0000	0.0000	46.5963	93		70-135
Vinyl acetate	50.0000	0.0000	35.6152	71		38-163
2-Butanone	50.0000	0.0000	41.9806	84		30-150
cis-1,2-Dichloroethene	50.0000	20.1952	69.4959	99		70-125
2,2-Dichloropropane	50.0000	0.0000	20.6692	41	*	70-135
Bromochloromethane	50.0000	0.0000	48.2256	96		65-130
Chloroform	50.0000	0.0000	47.9348	96		65-135
1,1,1-Trichloroethane	50.0000	1.6971	47.1523	91		65-130
1,1-Dichloropropene	50.0000	0.0000	46.8730	94		75-130
Carbon tetrachloride	50.0000	0.0000	46.3311	93		65-140
1,2-Dichloroethane	50.0000	0.0000	48.4300	97		70-130
Benzene	50.0000	0.0000	47.9847	96		80-120
Trichloroethene	50.0000	9.4501	55.4694	92		70-125
1,2-Dichloropropane	50.0000	0.0000	47.1727	94		75-125
Dibromomethane	50.0000	0.0000	48.9797	98		75-125
Bromodichloromethane	50.0000	0.0000	48.0711	96		75-120
cis-1,3-Dichloropropene	50.0000	0.0000	43.1073	86		70-130
4-Methyl-2-pentanone	50.0000	0.0000	41.9270	84		60-135
Toluene	50.0000	0.0000	47.3656	95		75-120
trans-1,3-Dichloropropene	50.0000	0.0000	43.9269	88		55-140
1,1,2-Trichloroethane	50.0000	0.0000	48.0380	96		75-125
1,3-Dichloropropane	50.0000	0.0000	47.0224	94		75-125
Tetrachloroethene	50.0000	102.3298	141.4930	78		45-150
2-Hexanone	50.0000	0.0000	40.0539	80		55-130
Dibromochloromethane	50.0000	0.0000	46.4231	93		60-135
1,2-Dibromoethane	50.0000	0.0000	47.0529	94		80-120
Chlorobenzene	50.0000	0.0000	46.7274	93		80-120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	45.7307	91		80-130
Ethylbenzene	50.0000	0.0000	45.1424	90		75-125
m,p-Xylene	100.0000	0.0000	91.4564	91		75-130
o-Xylene	50.0000	0.0000	45.9120	92		80-120

3A - FORM III VOA-1
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
 Matrix Spike - EPA Sample No.: SL-MW-16 Level: (TRACE or LOW) LOW

Xylene (Total)	150.0000	0.0000	137.3684	92	81-121
Styrene	50.0000	0.0000	45.5233	91	65-135
Bromoform	50.0000	0.0000	44.8823	90	70-130
Isopropylbenzene	50.0000	0.0000	46.6074	93	75-125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	45.1782	90	65-130
Bromobenzene	50.0000	0.0000	45.9643	92	75-125
1,2,3-Trichloropropane	50.0000	0.0000	37.9436	76	75-125
n-Propylbenzene	50.0000	0.0000	43.9175	88	70-130
2-Chlorotoluene	50.0000	0.0000	43.8842	88	75-125
1,3,5-Trimethylbenzene	50.0000	0.0000	44.1769	88	75-130
4-Chlorotoluene	50.0000	0.0000	45.2753	91	75-130
tert-Butylbenzene	50.0000	0.0000	44.0538	88	70-130
1,2,4-Trimethylbenzene	50.0000	0.0000	44.7642	90	75-130
sec-Butylbenzene	50.0000	0.0000	44.8048	90	70-125
4-Isopropyltoluene	50.0000	0.0000	44.0538	88	75-130
1,3-Dichlorobenzene	50.0000	0.0000	44.7471	89	75-125
1,4-Dichlorobenzene	50.0000	0.0000	43.5213	87	75-125
n-Butylbenzene	50.0000	0.0000	44.5765	89	70-135
1,2-Dichlorobenzene	50.0000	0.0000	45.0417	90	70-120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	41.1931	82	50-130
1,2,4-Trichlorobenzene	50.0000	0.0000	43.5703	87	65-135
Hexachlorobutadiene	50.0000	0.0000	41.0836	82	50-140
1,2,3-Trichlorobenzene	50.0000	0.0000	41.3811	83	55-140
Naphthalene	50.0000	0.0000	41.7850	84	55-140

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
Dichlorodifluoromethane	50.0000	50.7636	102		1		0-40	30-155
Chloromethane	50.0000	49.3724	99		0		0-40	40-125
Vinyl chloride	50.0000	51.0914	98		3		0-40	50-145
Bromomethane	50.0000	43.4446	87		2		0-40	30-145
Chloroethane	50.0000	46.8769	94		2		0-40	60-135
Trichlorofluoromethane	50.0000	52.0265	104		2		0-40	60-145
1,1-Dichloroethene	50.0000	56.0362	110		61	*	0-40	70-130
Acetone	50.0000	36.4699	73		1		0-40	40-140
Iodomethane	50.0000	44.8678	90		4		0-40	72-121
Carbon disulfide	50.0000	46.3723	93		1		0-40	35-160
Methylene chloride	50.0000	37.2666	75		2		0-40	55-140
trans-1,2-Dichloroethene	50.0000	46.7063	93		0		0-40	60-140
Methyl tert-butyl ether	50.0000	47.7792	93		1		0-40	65-125
1,1-Dichloroethane	50.0000	47.6079	95		2		0-40	70-135
Vinyl acetate	50.0000	32.3604	65		10		0-40	38-163
2-Butanone	50.0000	42.4535	85		1		0-40	30-150
cis-1,2-Dichloroethene	50.0000	68.7680	97		1		0-40	70-125
2,2-Dichloropropane	50.0000	21.2210	42	*	3		0-40	70-135
Bromochloromethane	50.0000	47.7052	95		1		0-40	65-130

3A - FORM III VOA-1
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
 Matrix Spike - EPA Sample No.: SL-MW-16 Level: (TRACE or LOW) LOW

Chloroform	50.0000	48.0905	96		0	0-40	65-135
1,1,1-Trichloroethane	50.0000	48.2528	93		2	0-40	65-130
1,1-Dichloropropene	50.0000	47.1717	94		1	0-40	75-130
Carbon tetrachloride	50.0000	47.5879	95		3	0-40	65-140
1,2-Dichloroethane	50.0000	47.7676	96		1	0-40	70-130
Benzene	50.0000	47.7319	95		1	0-40	80-120
Trichloroethene	50.0000	54.7794	91		2	0-40	70-125
1,2-Dichloropropane	50.0000	48.0598	96		2	0-40	75-125
Dibromomethane	50.0000	48.2605	97		1	0-40	75-125
Bromodichloromethane	50.0000	47.7365	95		1	0-40	75-120
cis-1,3-Dichloropropene	50.0000	41.9247	84		3	0-40	70-130
4-Methyl-2-pentanone	50.0000	42.1391	84		1	0-40	60-135
Toluene	50.0000	47.9357	96		1	0-40	75-120
trans-1,3-Dichloropropene	50.0000	43.3805	87		1	0-40	55-140
1,1,2-Trichloroethane	50.0000	47.1093	94		2	0-40	75-125
1,3-Dichloropropane	50.0000	47.5521	95		1	0-40	75-125
Tetrachloroethene	50.0000	143.2627	82		4	0-40	45-150
2-Hexanone	50.0000	39.2412	78		2	0-40	55-130
Dibromochloromethane	50.0000	45.9426	92		1	0-40	60-135
1,2-Dibromoethane	50.0000	46.9437	94		0	0-40	80-120
Chlorobenzene	50.0000	47.9692	96		3	0-40	80-120
1,1,1,2-Tetrachloroethane	50.0000	45.8539	92		0	0-40	80-130
Ethylbenzene	50.0000	46.9455	94		4	0-40	75-125
m,p-Xylene	100.0000	93.1582	93		2	0-40	75-130
o-Xylene	50.0000	47.2820	95		3	0-40	80-120
Xylene (Total)	150.0000	140.4402	94		2	0-40	81-121
Styrene	50.0000	46.9409	94		3	0-40	65-135
Bromoform	50.0000	45.1801	90		1	0-40	70-130
Isopropylbenzene	50.0000	47.4502	95		2	0-40	75-125
1,1,2,2-Tetrachloroethane	50.0000	46.3784	93		3	0-40	65-130
Bromobenzene	50.0000	46.7030	93		2	0-40	75-125
1,2,3-Trichloropropane	50.0000	34.3803	69	*	10	0-40	75-125
n-Propylbenzene	50.0000	45.0849	90		3	0-40	70-130
2-Chlorotoluene	50.0000	45.6814	91		4	0-40	75-125
1,3,5-Trimethylbenzene	50.0000	45.5848	91		3	0-40	75-130
4-Chlorotoluene	50.0000	45.0440	90		1	0-40	75-130
tert-Butylbenzene	50.0000	45.6356	91		4	0-40	70-130
1,2,4-Trimethylbenzene	50.0000	46.0823	92		3	0-40	75-130
sec-Butylbenzene	50.0000	45.9220	92		2	0-40	70-125
4-Isopropyltoluene	50.0000	45.6356	91		4	0-40	75-130
1,3-Dichlorobenzene	50.0000	45.9823	92		3	0-40	75-125
1,4-Dichlorobenzene	50.0000	43.9360	88		1	0-40	75-125
n-Butylbenzene	50.0000	45.9544	92		3	0-40	70-135
1,2-Dichlorobenzene	50.0000	45.8703	92		2	0-40	70-120
1,2-Dibromo-3-chloropropan	50.0000	41.7991	84		1	0-40	50-130
1,2,4-Trichlorobenzene	50.0000	45.7730	92		5	0-40	65-135
Hexachlorobutadiene	50.0000	42.8724	86		4	0-40	50-140

3A - FORM III VOA-1
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix Spike - EPA Sample No.: SL-MW-16 Level: (TRACE or LOW) LOW

1,2,3-Trichlorobenzene	50.0000	43.7773	88		6		0-40	55-140
Naphthalene	50.0000	43.4075	87		4		0-40	55-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 68 outside limits

Spike Recovery: 4 out of 136 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-67814

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab Sample ID: LCS-67814 LCS Lot No.: _____
Date Extracted: 08/23/2012 Date Analyzed (1): 08/23/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	49.4935	99		30 - 155
Chloromethane	50.0000	0.0000	43.8280	88		40 - 125
Vinyl chloride	50.0000	0.0000	48.5907	97		50 - 145
Bromomethane	50.0000	0.0000	49.6756	99		30 - 145
Chloroethane	50.0000	0.0000	47.5927	95		60 - 135
Trichlorofluoromethane	50.0000	0.0000	58.7413	117		60 - 145
1,1-Dichloroethene	50.0000	0.0000	56.8060	114		70 - 130
Acetone	50.0000	0.0000	44.4768	89		40 - 140
Iodomethane	50.0000	0.0000	54.6032	109		72 - 121
Carbon disulfide	50.0000	0.0000	32.8114	66		35 - 160
Methylene chloride	50.0000	0.0000	52.6366	105		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	52.7585	106		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	47.4492	95		65 - 125
1,1-Dichloroethane	50.0000	0.0000	50.0946	100		70 - 135
Vinyl acetate	50.0000	0.0000	47.0121	94		38 - 163
2-Butanone	50.0000	0.0000	41.5055	83		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	47.6749	95		70 - 125
2,2-Dichloropropane	50.0000	0.0000	59.2081	118		70 - 135
Bromochloromethane	50.0000	0.0000	51.4159	103		65 - 130
Chloroform	50.0000	0.0000	52.6070	105		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	51.4199	103		65 - 130
1,1-Dichloropropene	50.0000	0.0000	50.9518	102		75 - 130
Carbon tetrachloride	50.0000	0.0000	53.6947	107		65 - 140
1,2-Dichloroethane	50.0000	0.0000	52.5156	105		70 - 130
Benzene	50.0000	0.0000	50.2620	101		80 - 120
Trichloroethene	50.0000	0.0000	52.9826	106		70 - 125
1,2-Dichloropropane	50.0000	0.0000	50.1782	100		75 - 125
Dibromomethane	50.0000	0.0000	51.5105	103		75 - 125
Bromodichloromethane	50.0000	0.0000	52.1646	104		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	53.3729	107		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	40.8616	82		60 - 135
Toluene	50.0000	0.0000	50.2830	101		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	52.7014	105		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	49.1819	98		75 - 125
1,3-Dichloropropane	50.0000	0.0000	50.6241	101		75 - 125
Tetrachloroethene	50.0000	0.0000	50.4271	101		45 - 150
2-Hexanone	50.0000	0.0000	40.6663	81		55 - 130
Dibromochloromethane	50.0000	0.0000	51.9731	104		60 - 135
1,2-Dibromoethane	50.0000	0.0000	51.9763	104		80 - 120
Chlorobenzene	50.0000	0.0000	50.1650	100		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	50.0440	100		80 - 130
Ethylbenzene	50.0000	0.0000	49.1745	98		75 - 125
m,p-Xylene	100.0000	0.0000	98.4214	98		75 - 130
o-Xylene	50.0000	0.0000	49.9072	100		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-67814

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab Sample ID: LCS-67814 LCS Lot No.: _____
Date Extracted: 08/23/2012 Date Analyzed (1): 08/23/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	148.3287	99		81 - 121
Styrene	50.0000	0.0000	50.1621	100		65 - 135
Bromoform	50.0000	0.0000	52.1049	104		70 - 130
Isopropylbenzene	50.0000	0.0000	49.3749	99		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	48.7404	97		65 - 130
Bromobenzene	50.0000	0.0000	48.8434	98		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	41.1301	82		75 - 125
n-Propylbenzene	50.0000	0.0000	49.1947	98		70 - 130
2-Chlorotoluene	50.0000	0.0000	47.9777	96		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	46.3615	93		75 - 130
4-Chlorotoluene	50.0000	0.0000	47.2660	95		75 - 130
tert-Butylbenzene	50.0000	0.0000	47.4003	95		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	47.1840	94		75 - 130
sec-Butylbenzene	50.0000	0.0000	47.4185	95		70 - 125
4-Isopropyltoluene	50.0000	0.0000	47.4003	95		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	47.8681	96		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	47.7490	95		75 - 125
n-Butylbenzene	50.0000	0.0000	49.7215	99		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	48.3667	97		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	42.9689	86		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	51.4637	103		65 - 135
Hexachlorobutadiene	50.0000	0.0000	55.7403	111		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	50.0256	100		55 - 140
Naphthalene	50.0000	0.0000	45.5113	91		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-67828

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab Sample ID: LCS-67828 LCS Lot No.: _____
Date Extracted: 08/24/2012 Date Analyzed (1): 08/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	49.7430	99		30 - 155
Chloromethane	50.0000	0.0000	43.1170	86		40 - 125
Vinyl chloride	50.0000	0.0000	48.5022	97		50 - 145
Bromomethane	50.0000	0.0000	48.8963	98		30 - 145
Chloroethane	50.0000	0.0000	47.5989	95		60 - 135
Trichlorofluoromethane	50.0000	0.0000	56.3104	113		60 - 145
1,1-Dichloroethene	50.0000	0.0000	57.1497	114		70 - 130
Acetone	50.0000	0.0000	47.8808	96		40 - 140
Iodomethane	50.0000	0.0000	51.7074	103		72 - 121
Carbon disulfide	50.0000	0.0000	31.1654	62		35 - 160
Methylene chloride	50.0000	0.0000	52.8594	106		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	51.0934	102		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	47.1304	94		65 - 125
1,1-Dichloroethane	50.0000	0.0000	49.4925	99		70 - 135
Vinyl acetate	50.0000	0.0000	46.5218	93		38 - 163
2-Butanone	50.0000	0.0000	42.2216	84		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	47.2056	94		70 - 125
2,2-Dichloropropane	50.0000	0.0000	55.3826	111		70 - 135
Bromochloromethane	50.0000	0.0000	49.1131	98		65 - 130
Chloroform	50.0000	0.0000	51.4858	103		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	49.0252	98		65 - 130
1,1-Dichloropropene	50.0000	0.0000	49.7152	99		75 - 130
Carbon tetrachloride	50.0000	0.0000	51.0594	102		65 - 140
1,2-Dichloroethane	50.0000	0.0000	50.3948	101		70 - 130
Benzene	50.0000	0.0000	48.7264	97		80 - 120
Trichloroethene	50.0000	0.0000	50.5839	101		70 - 125
1,2-Dichloropropane	50.0000	0.0000	49.6452	99		75 - 125
Dibromomethane	50.0000	0.0000	51.1445	102		75 - 125
Bromodichloromethane	50.0000	0.0000	51.1559	102		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	52.0702	104		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	40.2931	81		60 - 135
Toluene	50.0000	0.0000	48.6558	97		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	50.9938	102		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	48.3546	97		75 - 125
1,3-Dichloropropane	50.0000	0.0000	49.6657	99		75 - 125
Tetrachloroethene	50.0000	0.0000	48.5438	97		45 - 150
2-Hexanone	50.0000	0.0000	42.3803	85		55 - 130
Dibromochloromethane	50.0000	0.0000	49.7223	99		60 - 135
1,2-Dibromoethane	50.0000	0.0000	50.4271	101		80 - 120
Chlorobenzene	50.0000	0.0000	48.8594	98		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	48.0812	96		80 - 130
Ethylbenzene	50.0000	0.0000	48.2729	97		75 - 125
m,p-Xylene	100.0000	0.0000	97.3014	97		75 - 130
o-Xylene	50.0000	0.0000	48.0930	96		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-67828

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab Sample ID: LCS-67828 LCS Lot No.: _____
Date Extracted: 08/24/2012 Date Analyzed (1): 08/24/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	145.3944	97		81 - 121
Styrene	50.0000	0.0000	48.4123	97		65 - 135
Bromoform	50.0000	0.0000	51.6911	103		70 - 130
Isopropylbenzene	50.0000	0.0000	48.0539	96		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	50.0007	100		65 - 130
Bromobenzene	50.0000	0.0000	49.1902	98		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	42.6916	85		75 - 125
n-Propylbenzene	50.0000	0.0000	47.8109	96		70 - 130
2-Chlorotoluene	50.0000	0.0000	48.0811	96		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	46.6682	93		75 - 130
4-Chlorotoluene	50.0000	0.0000	46.8320	94		75 - 130
tert-Butylbenzene	50.0000	0.0000	47.2075	94		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	46.9965	94		75 - 130
sec-Butylbenzene	50.0000	0.0000	48.0966	96		70 - 125
4-Isopropyltoluene	50.0000	0.0000	47.2075	94		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	47.2784	95		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	47.1015	94		75 - 125
n-Butylbenzene	50.0000	0.0000	50.8368	102		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	47.9345	96		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	43.2113	86		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	51.4282	103		65 - 135
Hexachlorobutadiene	50.0000	0.0000	55.6310	111		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	48.6296	97		55 - 140
Naphthalene	50.0000	0.0000	45.9026	92		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-67875

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab Sample ID: LCS-67875 LCS Lot No.: _____
Date Extracted: 08/28/2012 Date Analyzed (1): 08/28/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	45.8543	92		30 - 155
Chloromethane	50.0000	0.0000	45.9565	92		40 - 125
Vinyl chloride	50.0000	0.0000	44.2965	89		50 - 145
Bromomethane	50.0000	0.0000	42.0420	84		30 - 145
Chloroethane	50.0000	0.0000	44.4041	89		60 - 135
Trichlorofluoromethane	50.0000	0.0000	48.3456	97		60 - 145
1,1-Dichloroethene	50.0000	0.0000	53.4958	107		70 - 130
Acetone	50.0000	0.0000	53.4575	107		40 - 140
Iodomethane	50.0000	0.0000	47.1794	94		72 - 121
Carbon disulfide	50.0000	0.0000	46.2177	92		35 - 160
Methylene chloride	50.0000	0.0000	40.6078	81		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	46.7776	94		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	49.6075	99		65 - 125
1,1-Dichloroethane	50.0000	0.0000	46.8098	94		70 - 135
Vinyl acetate	50.0000	0.0000	49.0193	98		38 - 163
2-Butanone	50.0000	0.0000	55.2064	110		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	47.7313	95		70 - 125
2,2-Dichloropropane	50.0000	0.0000	46.5263	93		70 - 135
Bromochloromethane	50.0000	0.0000	47.7319	95		65 - 130
Chloroform	50.0000	0.0000	47.4764	95		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	44.8880	90		65 - 130
1,1-Dichloropropene	50.0000	0.0000	46.4933	93		75 - 130
Carbon tetrachloride	50.0000	0.0000	45.7054	91		65 - 140
1,2-Dichloroethane	50.0000	0.0000	47.5712	95		70 - 130
Benzene	50.0000	0.0000	46.5119	93		80 - 120
Trichloroethene	50.0000	0.0000	45.0571	90		70 - 125
1,2-Dichloropropane	50.0000	0.0000	47.6736	95		75 - 125
Dibromomethane	50.0000	0.0000	48.6515	97		75 - 125
Bromodichloromethane	50.0000	0.0000	47.4453	95		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	48.8069	98		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	50.0596	100		60 - 135
Toluene	50.0000	0.0000	46.6555	93		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	51.1966	102		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	48.8363	98		75 - 125
1,3-Dichloropropane	50.0000	0.0000	48.6779	97		75 - 125
Tetrachloroethene	50.0000	0.0000	42.5932	85		45 - 150
2-Hexanone	50.0000	0.0000	53.0145	106		55 - 130
Dibromochloromethane	50.0000	0.0000	49.2757	99		60 - 135
1,2-Dibromoethane	50.0000	0.0000	49.8610	100		80 - 120
Chlorobenzene	50.0000	0.0000	45.8441	92		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	46.5925	93		80 - 130
Ethylbenzene	50.0000	0.0000	46.4988	93		75 - 125
m,p-Xylene	100.0000	0.0000	92.7743	93		75 - 130
o-Xylene	50.0000	0.0000	46.7516	94		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-67875

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
 Lab Sample ID: LCS-67875 LCS Lot No.: _____
 Date Extracted: 08/28/2012 Date Analyzed (1): 08/28/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	139.5259	93		81 - 121
Styrene	50.0000	0.0000	47.3130	95		65 - 135
Bromoform	50.0000	0.0000	51.6923	103		70 - 130
Isopropylbenzene	50.0000	0.0000	47.2252	94		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	48.5440	97		65 - 130
Bromobenzene	50.0000	0.0000	47.8880	96		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	42.2697	85		75 - 125
n-Propylbenzene	50.0000	0.0000	46.1714	92		70 - 130
2-Chlorotoluene	50.0000	0.0000	46.5367	93		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	46.4669	93		75 - 130
4-Chlorotoluene	50.0000	0.0000	46.3489	93		75 - 130
tert-Butylbenzene	50.0000	0.0000	46.6525	93		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	46.2716	93		75 - 130
sec-Butylbenzene	50.0000	0.0000	45.8569	92		70 - 125
4-Isopropyltoluene	50.0000	0.0000	46.6525	93		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	46.8163	94		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	45.4693	91		75 - 125
n-Butylbenzene	50.0000	0.0000	46.9078	94		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	47.0937	94		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	52.9813	106		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	45.6111	91		65 - 135
Hexachlorobutadiene	50.0000	0.0000	45.0139	90		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	45.2140	90		55 - 140
Naphthalene	50.0000	0.0000	47.7695	96		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-67894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab Sample ID: LCS-67894 LCS Lot No.: _____
Date Extracted: 08/29/2012 Date Analyzed (1): 08/29/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	50.6872	101		30 - 155
Chloromethane	50.0000	0.0000	56.0727	112		40 - 125
Vinyl chloride	50.0000	0.0000	53.4353	107		50 - 145
Bromomethane	50.0000	0.0000	53.6764	107		30 - 145
Chloroethane	50.0000	0.0000	53.6162	107		60 - 135
Trichlorofluoromethane	50.0000	0.0000	55.2800	111		60 - 145
1,1-Dichloroethene	50.0000	0.0000	62.7900	126		70 - 130
Acetone	50.0000	0.0000	37.5762	75		40 - 140
Iodomethane	50.0000	0.0000	53.6679	107		72 - 121
Carbon disulfide	50.0000	0.0000	54.3861	109		35 - 160
Methylene chloride	50.0000	0.0000	46.2695	93		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	54.7898	110		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	52.2577	105		65 - 125
1,1-Dichloroethane	50.0000	0.0000	55.2404	110		70 - 135
Vinyl acetate	50.0000	0.0000	53.8406	108		38 - 163
2-Butanone	50.0000	0.0000	42.1403	84		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	56.6559	113		70 - 125
2,2-Dichloropropane	50.0000	0.0000	56.2077	112		70 - 135
Bromochloromethane	50.0000	0.0000	56.1515	112		65 - 130
Chloroform	50.0000	0.0000	55.6091	111		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	52.2176	104		65 - 130
1,1-Dichloropropene	50.0000	0.0000	55.1525	110		75 - 130
Carbon tetrachloride	50.0000	0.0000	53.6328	107		65 - 140
1,2-Dichloroethane	50.0000	0.0000	54.5538	109		70 - 130
Benzene	50.0000	0.0000	56.0682	112		80 - 120
Trichloroethene	50.0000	0.0000	53.6072	107		70 - 125
1,2-Dichloropropane	50.0000	0.0000	55.8755	112		75 - 125
Dibromomethane	50.0000	0.0000	54.5511	109		75 - 125
Bromodichloromethane	50.0000	0.0000	56.2203	112		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	57.9256	116		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	44.6298	89		60 - 135
Toluene	50.0000	0.0000	54.8930	110		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	58.8539	118		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	53.5747	107		75 - 125
1,3-Dichloropropane	50.0000	0.0000	53.4792	107		75 - 125
Tetrachloroethene	50.0000	0.0000	49.7531	100		45 - 150
2-Hexanone	50.0000	0.0000	41.6864	83		55 - 130
Dibromochloromethane	50.0000	0.0000	54.0911	108		60 - 135
1,2-Dibromoethane	50.0000	0.0000	53.2127	106		80 - 120
Chlorobenzene	50.0000	0.0000	55.8579	112		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	54.8025	110		80 - 130
Ethylbenzene	50.0000	0.0000	55.2791	111		75 - 125
m,p-Xylene	100.0000	0.0000	108.8688	109		75 - 130
o-Xylene	50.0000	0.0000	54.4998	109		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-67894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab Sample ID: LCS-67894 LCS Lot No.: _____
Date Extracted: 08/29/2012 Date Analyzed (1): 08/29/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	163.3686	109		81 - 121
Styrene	50.0000	0.0000	54.3876	109		65 - 135
Bromoform	50.0000	0.0000	54.4238	109		70 - 130
Isopropylbenzene	50.0000	0.0000	54.3770	109		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	54.2373	108		65 - 130
Bromobenzene	50.0000	0.0000	55.7411	111		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	43.4000	87		75 - 125
n-Propylbenzene	50.0000	0.0000	52.8949	106		70 - 130
2-Chlorotoluene	50.0000	0.0000	53.6632	107		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	52.8834	106		75 - 130
4-Chlorotoluene	50.0000	0.0000	54.0266	108		75 - 130
tert-Butylbenzene	50.0000	0.0000	53.1462	106		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	53.2470	106		75 - 130
sec-Butylbenzene	50.0000	0.0000	51.7209	103		70 - 125
4-Isopropyltoluene	50.0000	0.0000	53.1462	106		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	53.4414	107		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	51.3719	103		75 - 125
n-Butylbenzene	50.0000	0.0000	53.1130	106		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	53.2553	107		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	44.1514	88		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	51.7572	104		65 - 135
Hexachlorobutadiene	50.0000	0.0000	50.6290	101		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	48.7398	97		55 - 140
Naphthalene	50.0000	0.0000	46.3201	93		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-67814

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: L1786

Mod. Ref No.:

SDG No.: SL1786

Lab Sample ID: LCSD-67814

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
Dichlorodifluoromethane	50.0000	47.6285	95		4		40	30 - 155
Chloromethane	50.0000	41.0154	82		7		40	40 - 125
Vinyl chloride	50.0000	47.7172	95		2		40	50 - 145
Bromomethane	50.0000	48.9176	98		1		40	30 - 145
Chloroethane	50.0000	45.8376	92		3		40	60 - 135
Trichlorofluoromethane	50.0000	56.7831	114		3		40	60 - 145
1,1-Dichloroethene	50.0000	55.3857	111		3		40	70 - 130
Acetone	50.0000	44.4095	89		0		40	40 - 140
Iodomethane	50.0000	51.7638	104		5		40	72 - 121
Carbon disulfide	50.0000	30.9887	62		6		40	35 - 160
Methylene chloride	50.0000	51.1307	102		3		40	55 - 140
trans-1,2-Dichloroethene	50.0000	51.2229	102		4		40	60 - 140
Methyl tert-butyl ether	50.0000	46.6113	93		2		40	65 - 125
1,1-Dichloroethane	50.0000	48.8978	98		2		40	70 - 135
Vinyl acetate	50.0000	46.6839	93		1		40	38 - 163
2-Butanone	50.0000	43.1221	86		4		40	30 - 150
cis-1,2-Dichloroethene	50.0000	48.2425	96		1		40	70 - 125
2,2-Dichloropropane	50.0000	57.5320	115		3		40	70 - 135
Bromochloromethane	50.0000	51.4840	103		0		40	65 - 130
Chloroform	50.0000	51.7111	103		2		40	65 - 135
1,1,1-Trichloroethane	50.0000	51.1199	102		1		40	65 - 130
1,1-Dichloropropene	50.0000	50.1466	100		2		40	75 - 130
Carbon tetrachloride	50.0000	52.0292	104		3		40	65 - 140
1,2-Dichloroethane	50.0000	51.7369	103		2		40	70 - 130
Benzene	50.0000	49.5540	99		2		40	80 - 120
Trichloroethene	50.0000	51.3341	103		3		40	70 - 125
1,2-Dichloropropane	50.0000	50.0492	100		0		40	75 - 125
Dibromomethane	50.0000	51.6003	103		0		40	75 - 125
Bromodichloromethane	50.0000	52.5957	105		1		40	75 - 120
cis-1,3-Dichloropropene	50.0000	52.0832	104		3		40	70 - 130
4-Methyl-2-pentanone	50.0000	40.8555	82		0		40	60 - 135
Toluene	50.0000	49.8777	100		1		40	75 - 120
trans-1,3-Dichloropropene	50.0000	50.5383	101		4		40	55 - 140
1,1,2-Trichloroethane	50.0000	48.5146	97		1		40	75 - 125
1,3-Dichloropropane	50.0000	49.9601	100		1		40	75 - 125
Tetrachloroethene	50.0000	49.0857	98		3		40	45 - 150
2-Hexanone	50.0000	40.1559	80		1		40	55 - 130
Dibromochloromethane	50.0000	51.4342	103		1		40	60 - 135
1,2-Dibromoethane	50.0000	51.5422	103		1		40	80 - 120
Chlorobenzene	50.0000	49.7862	100		0		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	49.6406	99		1		40	80 - 130
Ethylbenzene	50.0000	48.4008	97		1		40	75 - 125
m,p-Xylene	100.0000	99.3488	99		1		40	75 - 130
o-Xylene	50.0000	48.7884	98		2		40	80 - 120
Xylene (Total)	150.0000	148.1371	99		0		40	81 - 121
Styrene	50.0000	50.2280	100		0		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-67814

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: L1786

Mod. Ref No.:

SDG No.: SL1786

Lab Sample ID: LCSD-67814

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
Bromoform	50.0000	51.9194	104		0		40	70 - 130
Isopropylbenzene	50.0000	48.8509	98		1		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	47.9556	96		1		40	65 - 130
Bromobenzene	50.0000	47.8830	96		2		40	75 - 125
1,2,3-Trichloropropane	50.0000	40.9531	82		0		40	75 - 125
n-Propylbenzene	50.0000	47.1325	94		4		40	70 - 130
2-Chlorotoluene	50.0000	46.8043	94		2		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	45.5805	91		2		40	75 - 130
4-Chlorotoluene	50.0000	46.5663	93		2		40	75 - 130
tert-Butylbenzene	50.0000	46.4341	93		2		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	46.0291	92		2		40	75 - 130
sec-Butylbenzene	50.0000	47.2284	94		1		40	70 - 125
4-Isopropyltoluene	50.0000	46.4341	93		2		40	75 - 130
1,3-Dichlorobenzene	50.0000	46.4168	93		3		40	75 - 125
1,4-Dichlorobenzene	50.0000	46.2351	92		3		40	75 - 125
n-Butylbenzene	50.0000	49.6045	99		0		40	70 - 135
1,2-Dichlorobenzene	50.0000	47.1377	94		3		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	44.3964	89		3		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	51.6115	103		0		40	65 - 135
Hexachlorobutadiene	50.0000	53.6558	107		4		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	50.2754	101		1		40	55 - 140
Naphthalene	50.0000	46.2770	93		2		40	55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-67828

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: L1786

Mod. Ref No.:

SDG No.: SL1786

Lab Sample ID: LCSD-67828

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
Dichlorodifluoromethane	50.0000	49.1028	98		1		40	30 - 155
Chloromethane	50.0000	44.1314	88		2		40	40 - 125
Vinyl chloride	50.0000	47.6048	95		2		40	50 - 145
Bromomethane	50.0000	50.3451	101		3		40	30 - 145
Chloroethane	50.0000	46.2333	92		3		40	60 - 135
Trichlorofluoromethane	50.0000	56.3087	113		0		40	60 - 145
1,1-Dichloroethene	50.0000	56.7999	114		0		40	70 - 130
Acetone	50.0000	49.3768	99		3		40	40 - 140
Iodomethane	50.0000	49.5988	99		4		40	72 - 121
Carbon disulfide	50.0000	29.9199	60		3		40	35 - 160
Methylene chloride	50.0000	53.1024	106		0		40	55 - 140
trans-1,2-Dichloroethene	50.0000	52.9253	106		4		40	60 - 140
Methyl tert-butyl ether	50.0000	47.7865	96		2		40	65 - 125
1,1-Dichloroethane	50.0000	50.8538	102		3		40	70 - 135
Vinyl acetate	50.0000	47.6310	95		2		40	38 - 163
2-Butanone	50.0000	46.5107	93		10		40	30 - 150
cis-1,2-Dichloroethene	50.0000	49.7310	99		5		40	70 - 125
2,2-Dichloropropane	50.0000	57.4360	115		4		40	70 - 135
Bromochloromethane	50.0000	54.1453	108		10		40	65 - 130
Chloroform	50.0000	52.8116	106		3		40	65 - 135
1,1,1-Trichloroethane	50.0000	49.2561	99		1		40	65 - 130
1,1-Dichloropropene	50.0000	51.1390	102		3		40	75 - 130
Carbon tetrachloride	50.0000	51.1971	102		0		40	65 - 140
1,2-Dichloroethane	50.0000	52.0154	104		3		40	70 - 130
Benzene	50.0000	50.7541	102		5		40	80 - 120
Trichloroethene	50.0000	52.4655	105		4		40	70 - 125
1,2-Dichloropropane	50.0000	50.9442	102		3		40	75 - 125
Dibromomethane	50.0000	52.7480	105		3		40	75 - 125
Bromodichloromethane	50.0000	52.6581	105		3		40	75 - 120
cis-1,3-Dichloropropene	50.0000	54.2959	109		5		40	70 - 130
4-Methyl-2-pentanone	50.0000	42.9296	86		6		40	60 - 135
Toluene	50.0000	51.1656	102		5		40	75 - 120
trans-1,3-Dichloropropene	50.0000	52.0851	104		2		40	55 - 140
1,1,2-Trichloroethane	50.0000	49.6348	99		2		40	75 - 125
1,3-Dichloropropane	50.0000	52.7224	105		6		40	75 - 125
Tetrachloroethene	50.0000	49.4668	99		2		40	45 - 150
2-Hexanone	50.0000	44.8933	90		6		40	55 - 130
Dibromochloromethane	50.0000	52.5159	105		6		40	60 - 135
1,2-Dibromoethane	50.0000	53.4322	107		6		40	80 - 120
Chlorobenzene	50.0000	51.3390	103		5		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	49.8333	100		4		40	80 - 130
Ethylbenzene	50.0000	49.9841	100		3		40	75 - 125
m,p-Xylene	100.0000	100.8544	101		4		40	75 - 130
o-Xylene	50.0000	50.4151	101		5		40	80 - 120
Xylene (Total)	150.0000	151.2695	101		4		40	81 - 121
Styrene	50.0000	51.2806	103		6		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-67828

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: L1786

Mod. Ref No.:

SDG No.: SL1786

Lab Sample ID: LCSD-67828

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
Bromoform	50.0000	53.6677	107		4		40	70 - 130
Isopropylbenzene	50.0000	49.8133	100		4		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	51.3785	103		3		40	65 - 130
Bromobenzene	50.0000	50.0526	100		2		40	75 - 125
1,2,3-Trichloropropane	50.0000	44.3425	89		5		40	75 - 125
n-Propylbenzene	50.0000	49.2192	98		2		40	70 - 130
2-Chlorotoluene	50.0000	49.0598	98		2		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	47.9692	96		3		40	75 - 130
4-Chlorotoluene	50.0000	49.2733	99		5		40	75 - 130
tert-Butylbenzene	50.0000	48.1217	96		2		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	48.5640	97		3		40	75 - 130
sec-Butylbenzene	50.0000	49.2144	98		2		40	70 - 125
4-Isopropyltoluene	50.0000	48.1217	96		2		40	75 - 130
1,3-Dichlorobenzene	50.0000	49.0248	98		3		40	75 - 125
1,4-Dichlorobenzene	50.0000	47.8974	96		2		40	75 - 125
n-Butylbenzene	50.0000	51.2591	103		1		40	70 - 135
1,2-Dichlorobenzene	50.0000	48.9898	98		2		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	45.9049	92		7		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	53.2360	106		3		40	65 - 135
Hexachlorobutadiene	50.0000	53.4315	107		4		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	50.5664	101		4		40	55 - 140
Naphthalene	50.0000	49.0063	98		6		40	55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-67814

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab File ID: V6I9217.D Lab Sample ID: MB-67814
Instrument ID: V6
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 08/23/2012
Level: (TRACE or LOW/MED) LOW Time Analyzed: 12:18
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-67814	LCS-67814	V6I9213.D	10:43
02	LCSD-67814	LCSD-67814	V6I9214.D	11:07
03	TB-01	L1786-06A	V6I9218.D	12:42
04	SL-MW-23D	L1786-01A	V6I9221.D	13:54
05	SL-MW-73D	L1786-02A	V6I9222.D	14:19
06	SL-MW-23S	L1786-03A	V6I9223.D	14:44

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-67828

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab File ID: V6I9257.D Lab Sample ID: MB-67828
Instrument ID: V6
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 08/24/2012
Level: (TRACE or LOW/MED) LOW Time Analyzed: 12:20
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-67828	LCS-67828	V6I9253.D	10:45
02	LCSD-67828	LCSD-67828	V6I9254.D	11:09
03	SL-MW-23SDL	L1786-03ADL	V6I9262.D	14:22
04	SL-MW-13	L1786-04A	V6I9263.D	14:49
05	SL-MW-12	L1786-07A	V6I9266.D	16:07
06	SL-MW-14	L1786-08A	V6I9267.D	16:32
07	SL-MW-1	L1786-10A	V6I9268.D	17:00
08	SL-MW-2	L1786-11A	V6I9269.D	17:27

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-67875

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab File ID: V6I9336.D Lab Sample ID: MB-67875
Instrument ID: V6
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 08/28/2012
Level: (TRACE or LOW/MED) LOW Time Analyzed: 15:49
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-67875	LCS-67875	V6I9333.D	14:33
02	RB-02	L1786-12A	V6I9338.D	16:42
03	TB-02	L1786-13A	V6I9339.D	17:08
04	SL-MW-16	L1786-09A	V6I9346.D	20:06

COMMENTS: _____

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-67894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab File ID: V6I9366.D Lab Sample ID: MB-67894
Instrument ID: V6
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 08/29/2012
Level: (TRACE or LOW/MED) LOW Time Analyzed: 11:53
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-67894	LCS-67894	V6I9363.D	10:42
02	SL-MW-16MS	L1786-09AMS	V6I9368.D	12:40
03	SL-MW-16MSD	L1786-09AMSD	V6I9369.D	13:04

COMMENTS:

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB6R

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab File ID: V6I9063.D BFB Injection Date: 08/16/2012
Instrument ID: V6 BFB Injection Time: 17:27
GC Column: DB-624 ID: 0.25 (mm)

m/e ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
5015.0 - 40.0% of mass 95	19.7
7530.0 - 60.0% of mass 95	46.0
95Base peak, 100% relative abundance	100.0
965.0 - 9.0% of mass 95	6.6
173Less than 2.0% of mass 174	0.3 (0.3)1
174Greater than 50.0% of mass 95	88.5
1755.0 - 9.0% of mass 174	6.6 (7.4)1
17695.0 - 101.0% of mass 174	85.1 (96.1)1
1775.0 - 9.0% of mass 176	5.6 (6.6)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506R	VSTD0506R	V6I9064.D	08/16/2012	17:53
02	VSTD0206R	VSTD0206R	V6I9065.D	08/16/2012	18:19
03	VSTD0056R	VSTD0056R	V6I9066.D	08/16/2012	18:45
04	VSTD0016R	VSTD0016R	V6I9068.D	08/16/2012	19:37
05	VSTD2006R	VSTD2006R	V6I9069.D	08/16/2012	20:03
06	VSTD1006R	VSTD1006R	V6I9070.D	08/16/2012	20:28
07	VICV0506R	VICV0506R	V6I9071.D	08/16/2012	20:52

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB6W

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab File ID: V6I9210.D BFB Injection Date: 08/23/2012
Instrument ID: V6 BFB Injection Time: 9:02
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.6
75	30.0 - 60.0% of mass 95	50.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.9 (1.0)1
174	Greater than 50.0% of mass 95	86.7
175	5.0 - 9.0% of mass 174	7.1 (8.2)1
176	95.0 - 101.0% of mass 174	84.5 (97.5)1
177	5.0 - 9.0% of mass 176	6.0 (7.1)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506W	VSTD0506W	V6I9212.D	08/23/2012	10:03
02	LCS-67814	LCS-67814	V6I9213.D	08/23/2012	10:43
03	LCSD-67814	LCSD-67814	V6I9214.D	08/23/2012	11:07
04	MB-67814	MB-67814	V6I9217.D	08/23/2012	12:18
05	TB-01	L1786-06A	V6I9218.D	08/23/2012	12:42
06	SL-MW-23D	L1786-01A	V6I9221.D	08/23/2012	13:54
07	SL-MW-73D	L1786-02A	V6I9222.D	08/23/2012	14:19
08	SL-MW-23S	L1786-03A	V6I9223.D	08/23/2012	14:44

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB6X

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab File ID: V6I9250.D BFB Injection Date: 08/24/2012
Instrument ID: V6 BFB Injection Time: 8:48
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.3
75	30.0 - 60.0% of mass 95	47.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.9 (1.0)1
174	Greater than 50.0% of mass 95	90.5
175	5.0 - 9.0% of mass 174	7.2 (8.0)1
176	95.0 - 101.0% of mass 174	88.1 (97.3)1
177	5.0 - 9.0% of mass 176	6.0 (6.8)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506X	VSTD0506X	V6I9252.D	08/24/2012	9:46
02	LCS-67828	LCS-67828	V6I9253.D	08/24/2012	10:45
03	LCSD-67828	LCSD-67828	V6I9254.D	08/24/2012	11:09
04	MB-67828	MB-67828	V6I9257.D	08/24/2012	12:20
05	SL-MW-23SDL	L1786-03ADL	V6I9262.D	08/24/2012	14:22
06	SL-MW-13	L1786-04A	V6I9263.D	08/24/2012	14:49
07	SL-MW-12	L1786-07A	V6I9266.D	08/24/2012	16:07
08	SL-MW-14	L1786-08A	V6I9267.D	08/24/2012	16:32
09	SL-MW-1	L1786-10A	V6I9268.D	08/24/2012	17:00
10	SL-MW-2	L1786-11A	V6I9269.D	08/24/2012	17:27

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB6Z

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab File ID: V6I9320.D BFB Injection Date: 08/28/2012
Instrument ID: V6 BFB Injection Time: 8:48
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	50.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.9 (1.0)1
174	Greater than 50.0% of mass 95	85.0
175	5.0 - 9.0% of mass 174	6.9 (8.1)1
176	95.0 - 101.0% of mass 174	81.4 (95.8)1
177	5.0 - 9.0% of mass 176	5.7 (7.0)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506Z	VSTD0506Z	V6I9322.D	08/28/2012	9:45
02	VSTD0206Z	VSTD0206Z	V6I9323.D	08/28/2012	10:31
03	VSTD0056Z	VSTD0056Z	V6I9324.D	08/28/2012	10:55
04	VSTD0016Z	VSTD0016Z	V6I9325.D	08/28/2012	11:19
05	VSTD2006Z	VSTD2006Z	V6I9327.D	08/28/2012	12:07
06	VSTD1006Z	VSTD1006Z	V6I9328.D	08/28/2012	12:31
07	VICV0506Z	VICV0506Z	V6I9329.D	08/28/2012	12:57

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB6A

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab File ID: V6I9331.D BFB Injection Date: 08/28/2012
Instrument ID: V6 BFB Injection Time: 13:34
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.9
75	30.0 - 60.0% of mass 95	47.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.3 (0.4)1
174	Greater than 50.0% of mass 95	81.3
175	5.0 - 9.0% of mass 174	6.3 (7.7)1
176	95.0 - 101.0% of mass 174	79.4 (97.8)1
177	5.0 - 9.0% of mass 176	5.5 (6.9)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	LCS-67875	LCS-67875	V6I9333.D	08/28/2012	14:33
02	MB-67875	MB-67875	V6I9336.D	08/28/2012	15:49
03	RB-02	L1786-12A	V6I9338.D	08/28/2012	16:42
04	TB-02	L1786-13A	V6I9339.D	08/28/2012	17:08
05	SL-MW-16	L1786-09A	V6I9346.D	08/28/2012	20:06

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB6B

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Lab File ID: V6I9360.D BFB Injection Date: 08/29/2012
Instrument ID: V6 BFB Injection Time: 8:47
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.0
75	30.0 - 60.0% of mass 95	49.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.7 (0.8)1
174	Greater than 50.0% of mass 95	82.0
175	5.0 - 9.0% of mass 174	6.0 (7.3)1
176	95.0 - 101.0% of mass 174	79.9 (97.5)1
177	5.0 - 9.0% of mass 176	5.3 (6.6)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506B	VSTD0506B	V6I9362.D	08/29/2012	9:50
02	LCS-67894	LCS-67894	V6I9363.D	08/29/2012	10:42
03	MB-67894	MB-67894	V6I9366.D	08/29/2012	11:53
04	SL-MW-16MS	L1786-09AMS	V6I9368.D	08/29/2012	12:40
05	SL-MW-16MSD	L1786-09AMSD	V6I9369.D	08/29/2012	13:04

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 08/16/2012 08/16/2012
 EPA Sample No.(VSTD#####): VSTD0506W Date Analyzed: 08/23/2012
 Lab File ID (Standard): V6I9212.D Time Analyzed: 10:03
 Instrument ID: V6 Heated Purge: (Y/N) N

	IS1 (S1)		IS2 (S2)		IS3 (S3)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	941114	5.13	753944	8.1	457182	10.62
UPPER LIMIT	1882228	5.63	1507888	8.6	914364	11.12
LOWER LIMIT	470557	4.63	376972	7.6	228591	10.12
EPA SAMPLE NO.						
01 LCS-67814	919822	5.120	745577	8.101	450014	10.622
02 LCSD-67814	904113	5.131	739983	8.101	446865	10.621
03 MB-67814	867204	5.131	714179	8.101	397510	10.621
04 TB-01	849368	5.131	706266	8.101	389026	10.621
05 SL-MW-23D	857485	5.131	713453	8.101	398405	10.621
06 SL-MW-73D	850169	5.131	722075	8.101	391856	10.622
07 SL-MW-23S	845560	5.129	706035	8.099	394642	10.620

IS1 () = Fluorobenzene

IS2 () = Chlorobenzene-d5

IS3 () = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 08/16/2012 08/16/2012
 EPA Sample No.(VSTD#####): VSTD0506X Date Analyzed: 08/24/2012
 Lab File ID (Standard): V6I9252.D Time Analyzed: 9:46
 Instrument ID: V6 Heated Purge: (Y/N) N

		IS1 (S1)		IS2 (S2)		IS3 (S3)	
		AREA	#	AREA	#	AREA	#
	12 HOUR STD	902147	5.129	736115	8.099	438961	10.62
	UPPER LIMIT	1804294	5.629	1472230	8.599	877922	11.12
	LOWER LIMIT	451074	4.629	368058	7.599	219481	10.12
	EPA SAMPLE NO.						
01	LCS-67828	888960	5.129	721915	8.099	425012	10.620
02	LCSD-67828	900379	5.129	729267	8.099	426553	10.619
03	MB-67828	845274	5.129	700424	8.099	386785	10.619
04	SL-MW-23SDL	843484	5.128	692769	8.098	383374	10.619
05	SL-MW-13	824319	5.131	690658	8.101	373366	10.621
06	SL-MW-12	820169	5.128	674220	8.098	375405	10.618
07	SL-MW-14	829639	5.128	678864	8.098	377303	10.618
08	SL-MW-1	817300	5.129	675978	8.099	381152	10.619
09	SL-MW-2	837082	5.128	675250	8.099	383017	10.619

IS1 () = Fluorobenzene

IS2 () = Chlorobenzene-d5

IS3 () = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 08/28/2012 08/28/2012
 EPA Sample No.(VSTD#####): VSTD0506A Date Analyzed: 08/28/2012
 Lab File ID (Standard): V6I9332.D Time Analyzed: 14:07
 Instrument ID: V6 Heated Purge: (Y/N) N

	IS1 (S1)		IS2 (S2)		IS3 (S3)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	903533	5.129	733143	8.099	438865	10.619
UPPER LIMIT	1807066	5.629	1466286	8.599	877730	11.119
LOWER LIMIT	451767	4.629	366572	7.599	219433	10.119
EPA SAMPLE NO.						
01 LCS-67875	922596	5.128	756683	8.098	447017	10.618
02 MB-67875	849083	5.129	712792	8.099	396673	10.619
03 RB-02	855946	5.128	716415	8.098	395257	10.619
04 TB-02	838674	5.129	695482	8.099	376205	10.620
05 SL-MW-16	800105	5.132	670203	8.102	368999	10.622

IS1 () = Fluorobenzene

IS2 () = Chlorobenzene-d5

IS3 () = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 08/28/2012 08/28/2012
 EPA Sample No.(VSTD#####): VSTD0506B Date Analyzed: 08/29/2012
 Lab File ID (Standard): V6I9362.D Time Analyzed: 9:50
 Instrument ID: V6 Heated Purge: (Y/N) N

	IS1 (S1)		IS2 (S2)		IS3 (S3)	
	AREA	#	RT	#	AREA	#
12 HOUR STD	876337		5.129		459008	
UPPER LIMIT	1752674		5.629		918016	
LOWER LIMIT	438169		4.629		229504	
EPA SAMPLE NO.						
01 LCS-67894	874846		5.128		430981	
02 MB-67894	800573		5.130		369525	
03 SL-MW-16MS	817736		5.129		412937	
04 SL-MW-16MSD	820889		5.128		407672	

IS1 () = Fluorobenzene

IS2 () = Chlorobenzene-d5

IS3 () = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SL-MW-23D

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L1786</u>	Mod. Ref No.: _____ SDG No.: <u>SL1786</u>
Matrix: (SOIL/SED/WATER) <u>WATER</u>	Lab Sample ID: <u>L1786-01A</u>
Sample wt/vol: <u>5.00</u> (g/mL) <u>ML</u>	Lab File ID: <u>V6I9221.D</u>
Level: (TRACE/LOW/MED) <u>LOW</u>	Date Received: <u>08/22/2012</u>
% Moisture: not dec. _____	Date Analyzed: <u>08/23/2012</u>
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor: <u>1.0</u>
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: <u>5.0</u> (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	0.97	J
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.5	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	2.8	J
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SL-MW-23D

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-01A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9221.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/22/2012
% Moisture: not dec.	Date Analyzed: 08/23/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	57	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-23D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9221.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/22/2012

% Moisture: not dec. _____ Date Analyzed: 08/23/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120823.B\V6I9221.D
 Report Date: 24-Aug-2012 10:58

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120823.B\V6I9221.D
 Lab Smp Id: L1786-01A Client Smp ID: SL-MW-23D
 Inj Date : 23-AUG-2012 13:54
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-01A,,67814
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120823.B\v68260Gadd-6lvl.m
 Meth Date : 24-Aug-2012 10:57 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
22 Methyl tert-butyl ether	73	3.367	3.367	(0.656)	12336	0.96726	1.0
28 cis-1,2-Dichloroethene	96	4.172	4.160	(0.813)	25742	5.49219	5(Q)
\$ 36 Dibromofluoromethane	113	4.550	4.551	(0.887)	259485	53.4262	53
\$ 42 1,2-Dichloroethane-d4	102	4.846	4.846	(0.945)	53201	48.4222	48
* 46 Fluorobenzene	96	5.130	5.130	(1.000)	857485	50.0000	
47 Trichloroethene	130	5.450	5.450	(1.062)	12586	2.79219	3
\$ 58 Toluene-d8	98	6.586	6.586	(0.813)	830210	48.4927	48
63 Tetrachloroethene	164	7.213	7.213	(0.890)	231724	57.0278	57
* 68 Chlorobenzene-d5	117	8.100	8.100	(1.000)	713453	50.0000	
\$ 79 Bromofluorobenzene	95	9.402	9.402	(1.161)	369374	49.3389	49
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.621	(1.000)	398405	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V6.i\120823.B\V6I9221.D
Report Date: 24-Aug-2012 10:58

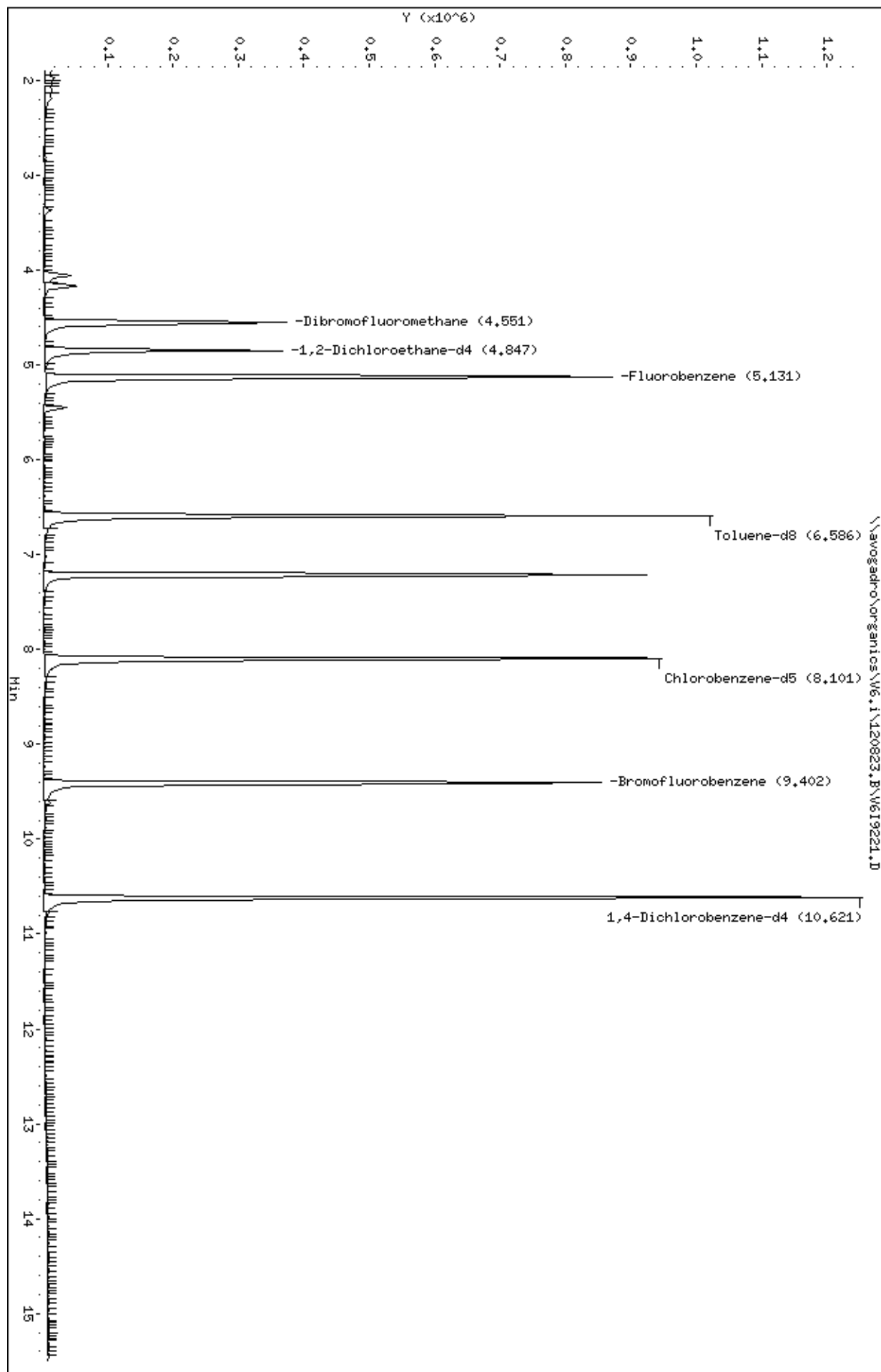
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120823.B\V6I9221.D
Lab Smp Id: L1786-01A Client Smp ID: SL-MW-23D
Inj Date : 23-AUG-2012 13:54
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1786-01A,,67814
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120823.B\v68260Gadd-6lvl.m
Meth Date : 24-Aug-2012 10:57 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120823.B\W619221.D
Date : 23-AUG-2012 13:54
Client ID: SL-MW-23D
Sample Info: 5ML, L1786-01A, 67814
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120823.B\V6I9221.D

Date : 23-AUG-2012 13:54

Client ID: SL-MW-23D

Instrument: V6.i

Sample Info: 5HL, L1786-01A,, 67814

Purge Volume: 5.0

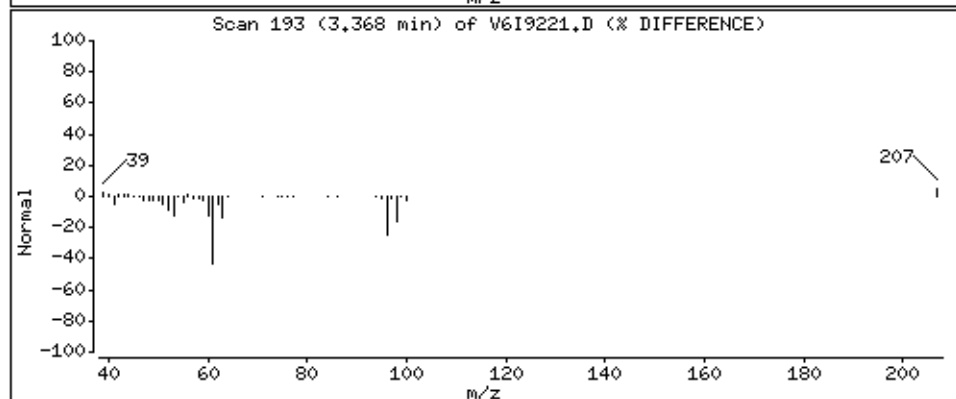
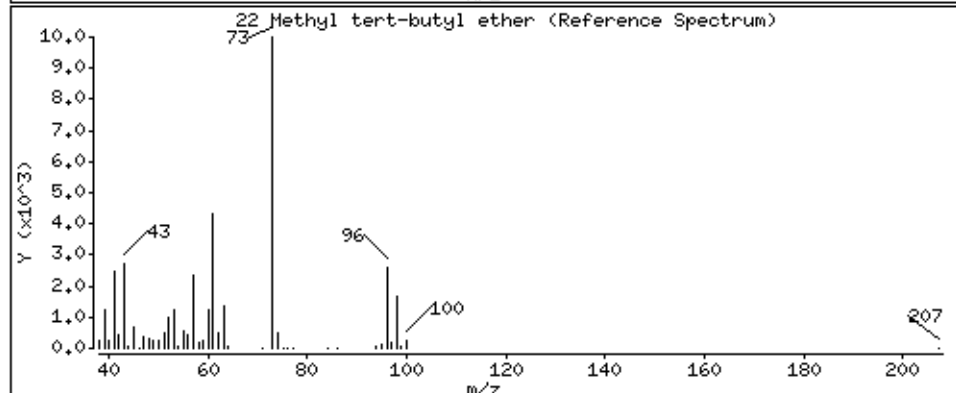
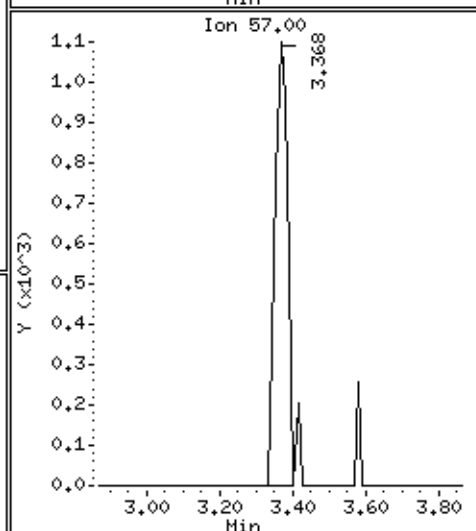
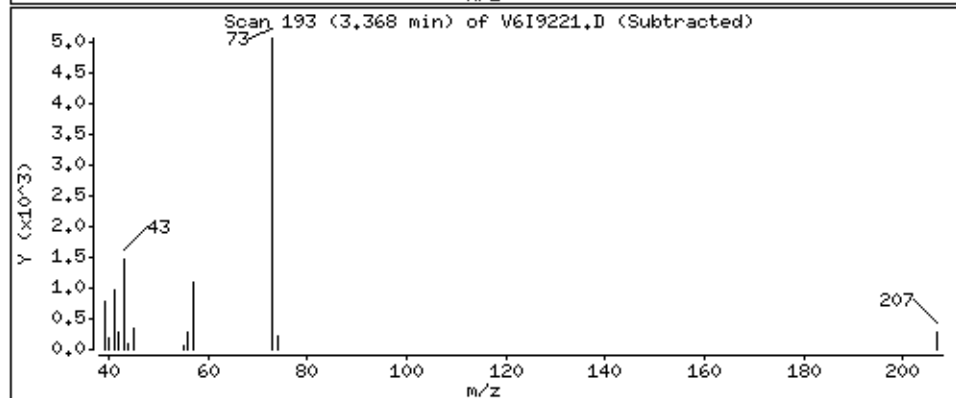
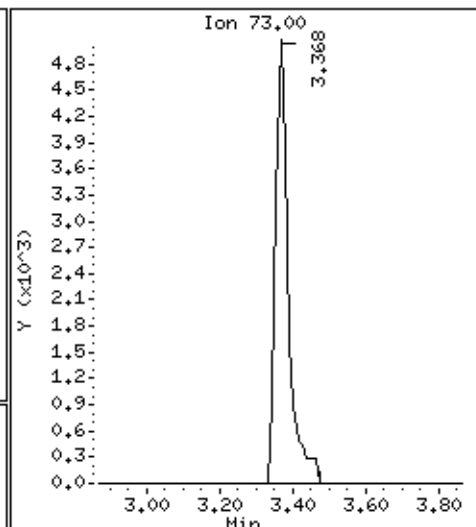
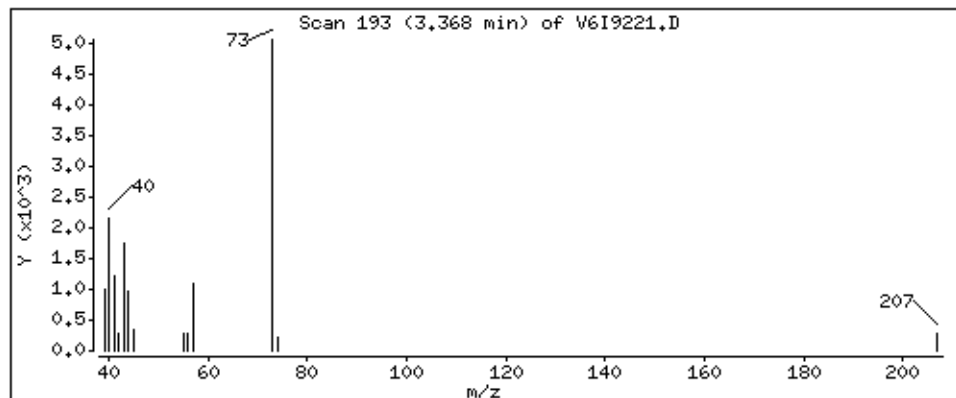
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

22 Methyl tert-butyl ether

Concentration: 1.0 ug/L



Data File: \\avogadro\organics\V6.i\120823,B\V6I9221.D

Date : 23-AUG-2012 13:54

Client ID: SL-MW-23D

Instrument: V6.i

Sample Info: 5HL,L1786-01A,,67814

Purge Volume: 5.0

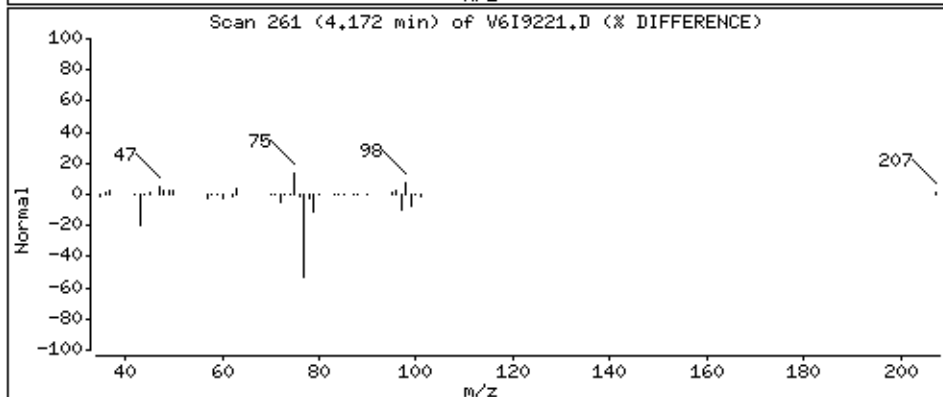
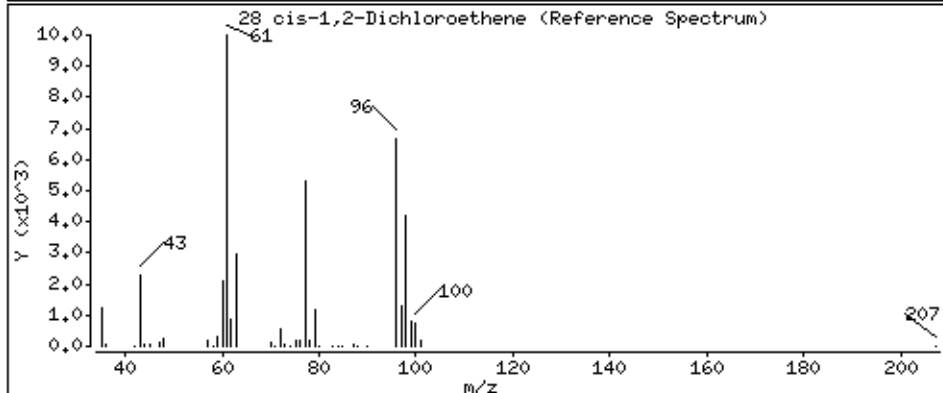
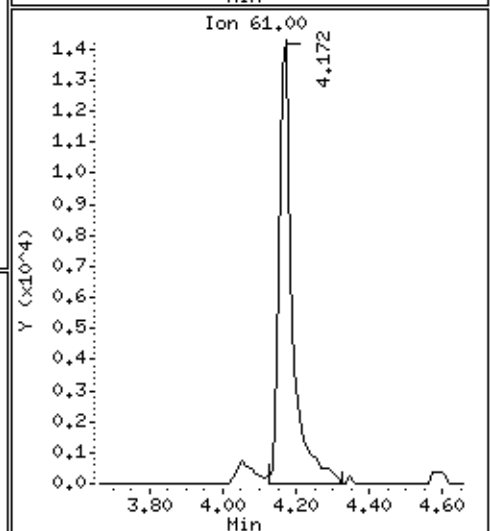
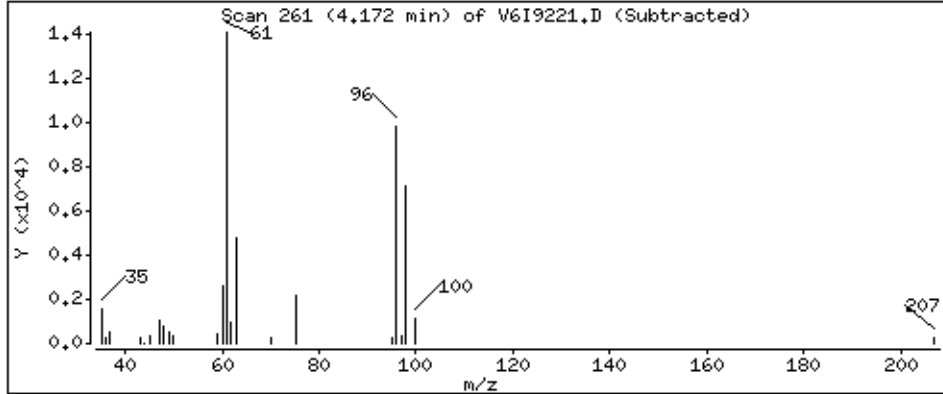
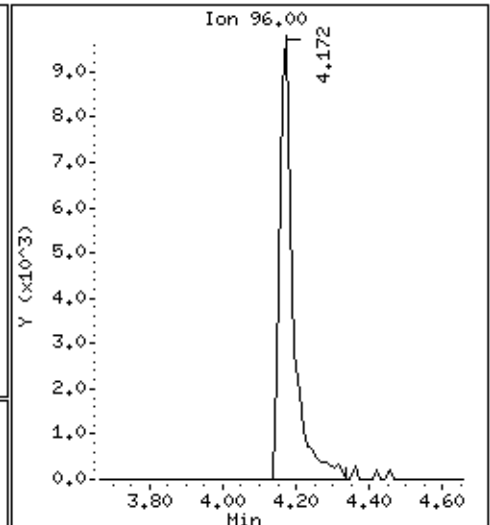
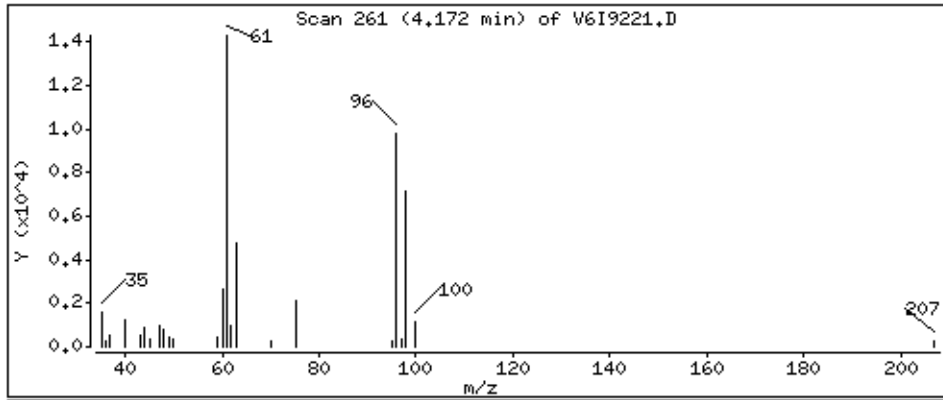
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 5 ug/L



Data File: \\avogadro\organics\V6.i\120823.B\V6I9221.D

Date : 23-AUG-2012 13:54

Client ID: SL-MW-23D

Instrument: V6.i

Sample Info: 5HL,L1786-01A,,67814

Purge Volume: 5.0

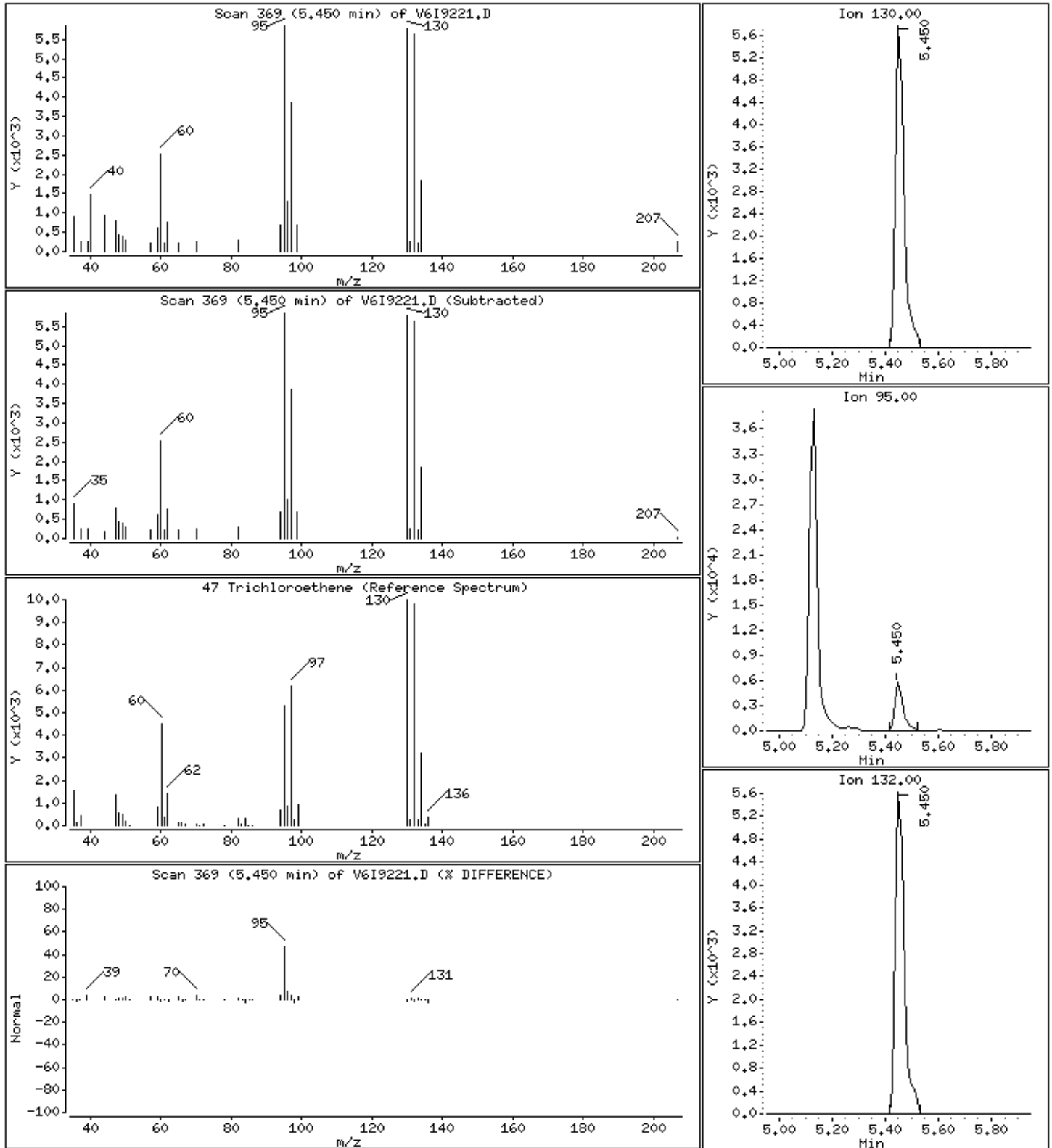
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 3 ug/L



Column diameter: 0.25

Concentration: 57 ug/L

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SL-MW-73D

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-02A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9222.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/22/2012
% Moisture: not dec.	Date Analyzed: 08/23/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	0.92	J
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.5	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	2.8	J
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SL-MW-73D

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-02A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9222.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/22/2012
% Moisture: not dec.	Date Analyzed: 08/23/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	53	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-73D

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-02A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9222.D
Level: (TRACE or LOW/MED) LOW Date Received: 08/22/2012
% Moisture: not dec. Date Analyzed: 08/23/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120823.B\V6I9222.D
 Report Date: 24-Aug-2012 10:58

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120823.B\V6I9222.D
 Lab Smp Id: L1786-02A Client Smp ID: SL-MW-73D
 Inj Date : 23-AUG-2012 14:19
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-02A,,67814
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120823.B\v68260Gadd-6lvl.m
 Meth Date : 24-Aug-2012 10:57 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 13
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
22 Methyl tert-butyl ether	73	3.368	3.367	(0.656)	11576	0.91548	0.9
28 cis-1,2-Dichloroethene	96	4.172	4.160	(0.813)	25650	5.51965	6
\$ 36 Dibromofluoromethane	113	4.551	4.551	(0.887)	256952	53.3600	53
\$ 42 1,2-Dichloroethane-d4	102	4.847	4.846	(0.945)	54564	50.0902	50
* 46 Fluorobenzene	96	5.131	5.130	(1.000)	850169	50.0000	
47 Trichloroethene	130	5.450	5.450	(1.062)	12637	2.82763	3
\$ 58 Toluene-d8	98	6.586	6.586	(0.813)	812330	46.8817	47
63 Tetrachloroethene	164	7.213	7.213	(0.890)	219037	53.2619	53
* 68 Chlorobenzene-d5	117	8.101	8.100	(1.000)	722075	50.0000	
\$ 79 Bromofluorobenzene	95	9.402	9.402	(1.161)	361745	47.7429	48
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.621	(1.000)	391856	50.0000	

Data File: \\avogadro\organics\V6.i\120823.B\V6I9222.D
Report Date: 24-Aug-2012 10:58

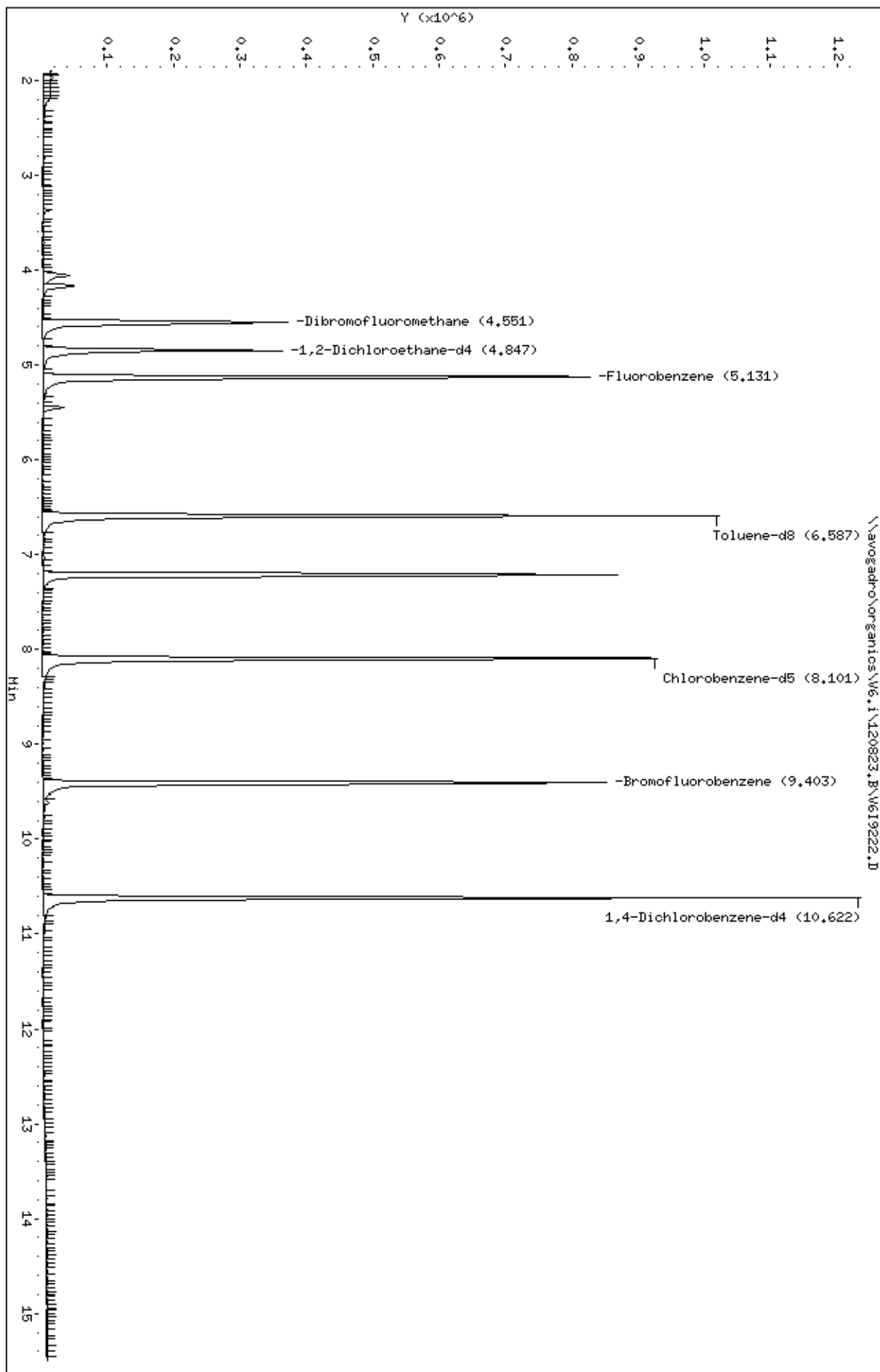
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120823.B\V6I9222.D
Lab Smp Id: L1786-02A Client Smp ID: SL-MW-73D
Inj Date : 23-AUG-2012 14:19
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1786-02A,,67814
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120823.B\v68260Gadd-6lvl.m
Meth Date : 24-Aug-2012 10:57 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120823.B\W6I9222.D
Date : 23-AUG-2012 14:19
Client ID: SL-MW-73D
Sample Info: 5ML, L1786-02H, 67814
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120823,B\V6I9222.D

Date : 23-AUG-2012 14:19

Client ID: SL-MW-73D

Instrument: V6.i

Sample Info: 5HL,L1786-02A,,67814

Purge Volume: 5.0

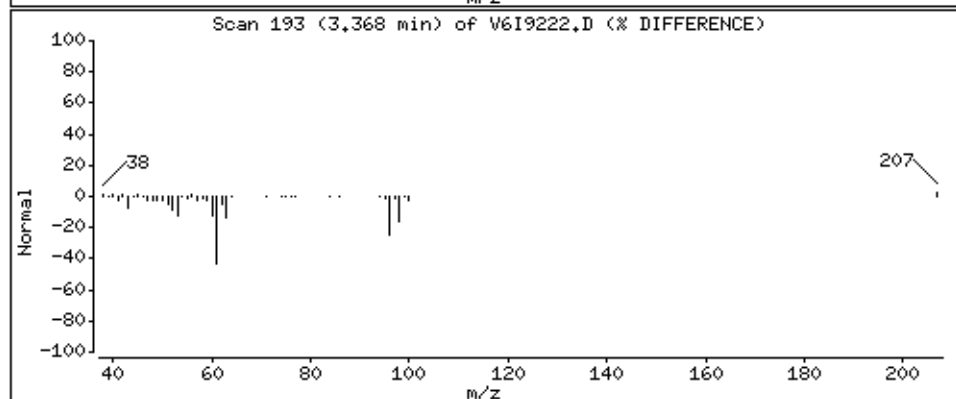
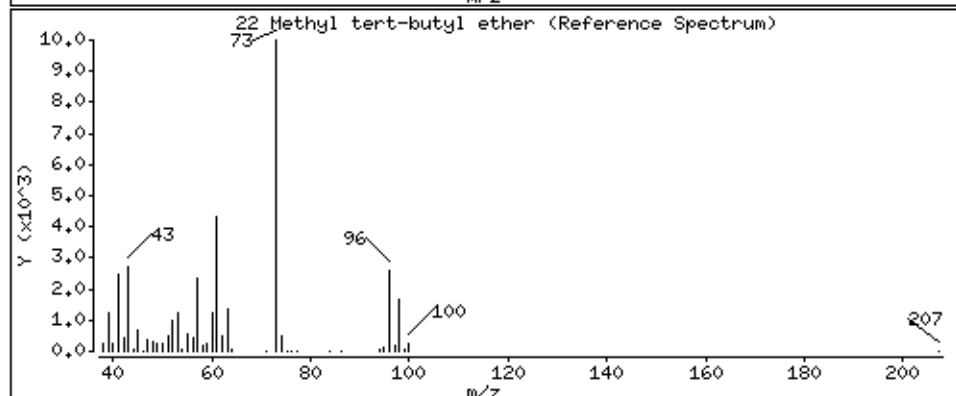
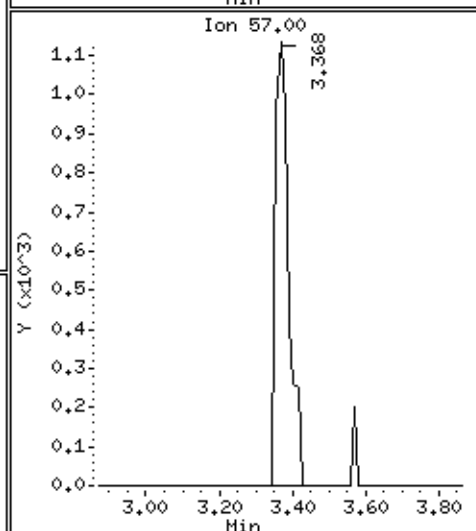
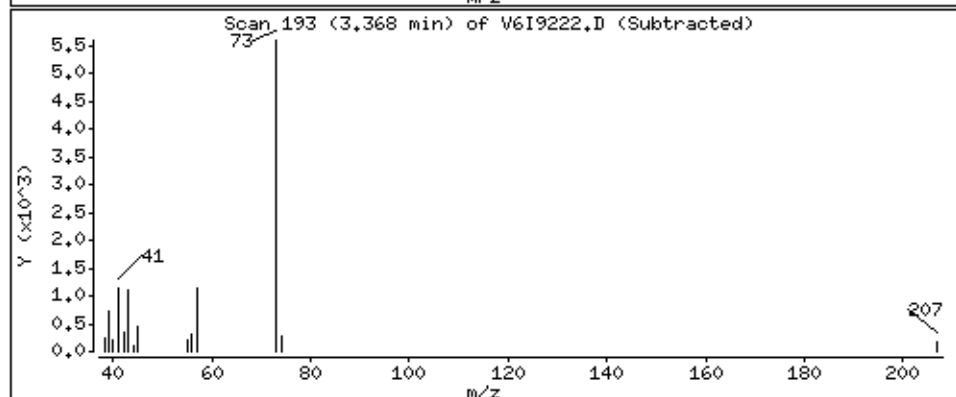
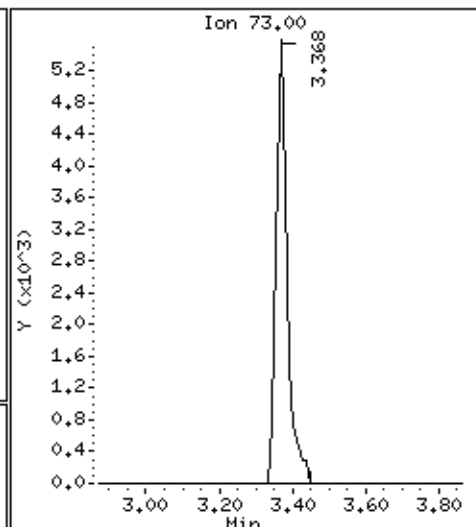
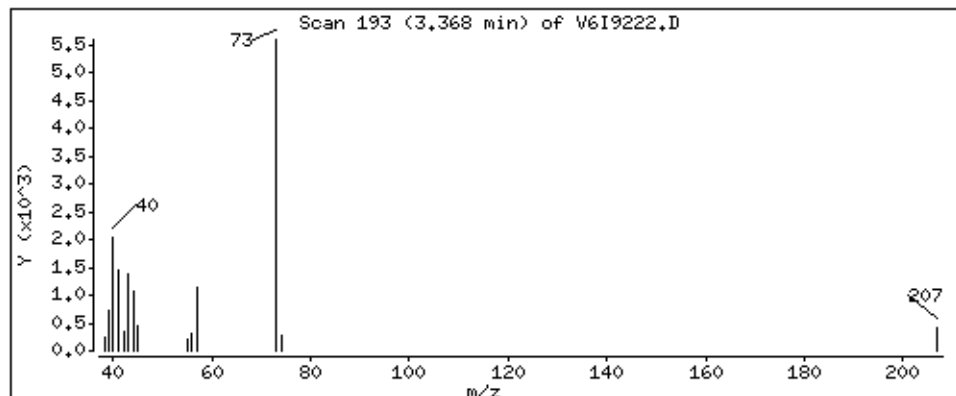
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

22 Methyl tert-butyl ether

Concentration: 0.9 ug/L



Data File: \\avogadro\organics\V6.i\120823,B\V6I9222.D

Date : 23-AUG-2012 14:19

Client ID: SL-MW-73D

Instrument: V6.i

Sample Info: 5HL,L1786-02A,,67814

Purge Volume: 5.0

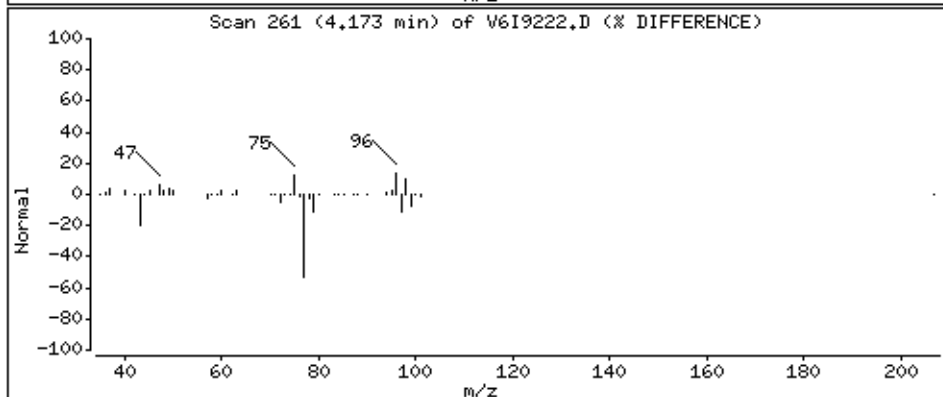
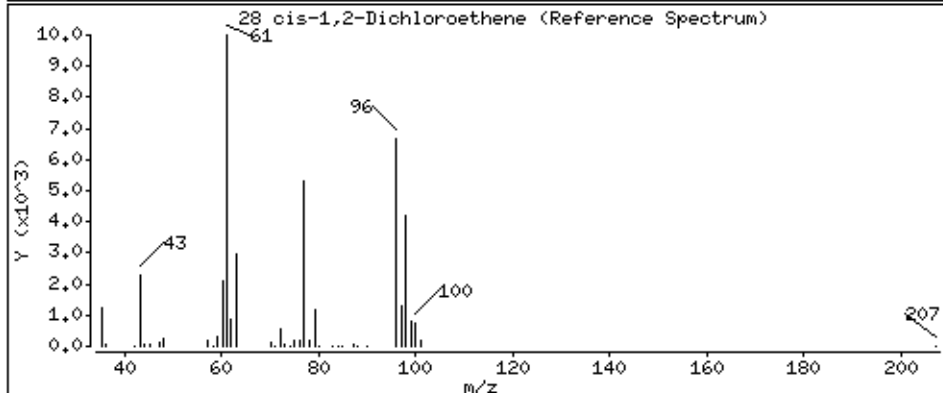
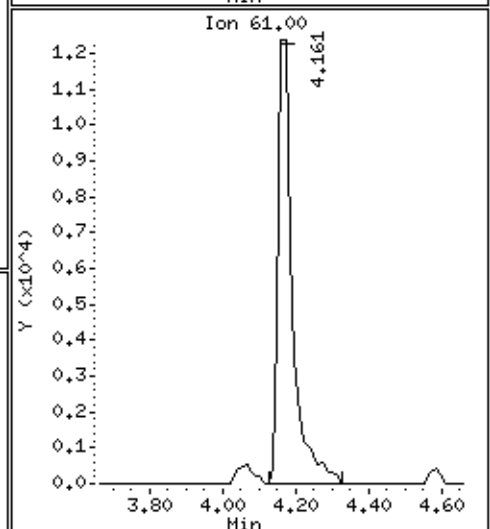
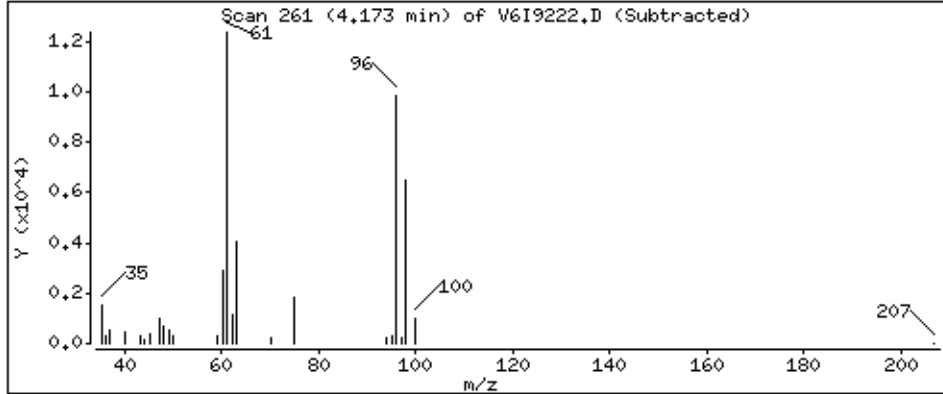
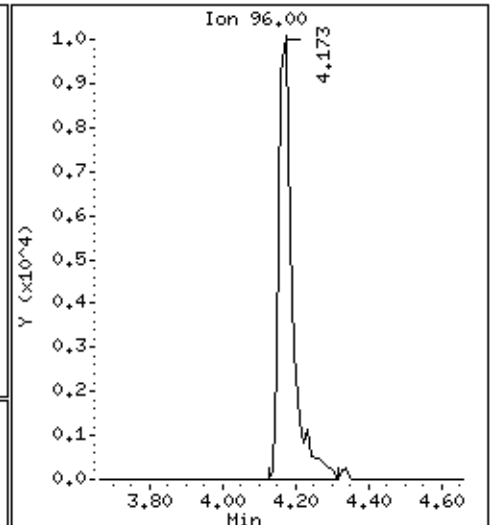
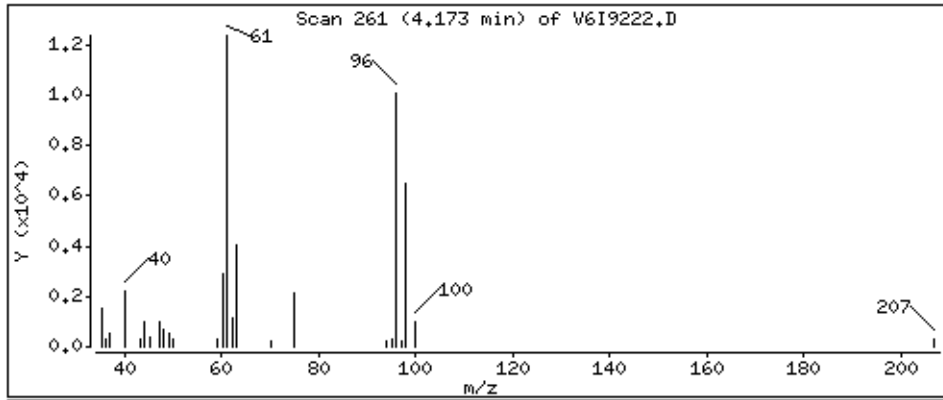
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 6 ug/L



Data File: \\avogadro\organics\V6.i\120823.B\V6I9222.D

Date : 23-AUG-2012 14:19

Client ID: SL-MW-73D

Instrument: V6.i

Sample Info: 5HL,L1786-02A,,67814

Purge Volume: 5.0

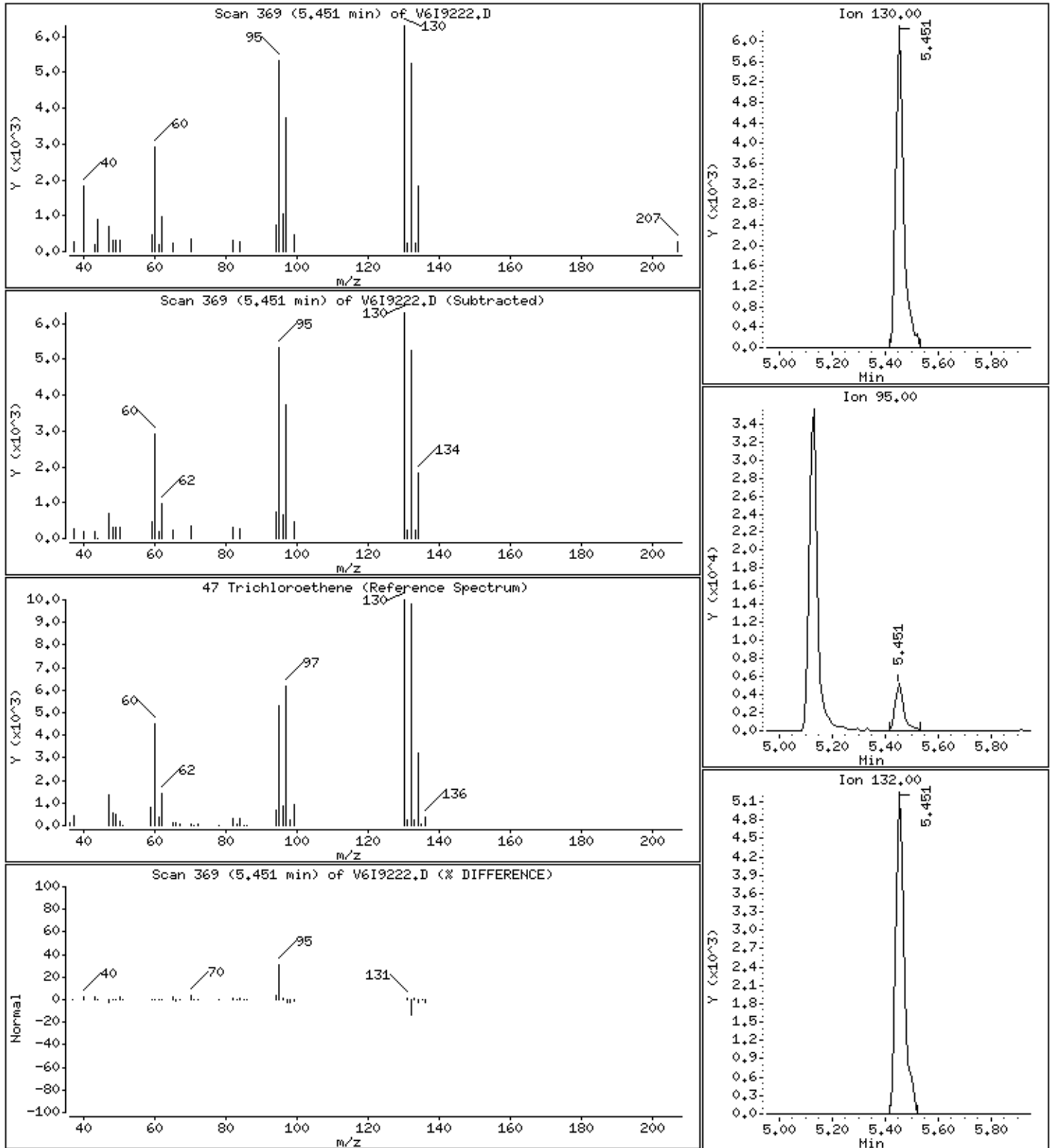
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 3 ug/L



Data File: \\avogadro\organics\V6.i\120823,B\V6I9222.D

Date : 23-AUG-2012 14:19

Client ID: SL-MW-73D

Instrument: V6.i

Sample Info: 5HL,L1786-02A,,67814

Purge Volume: 5.0

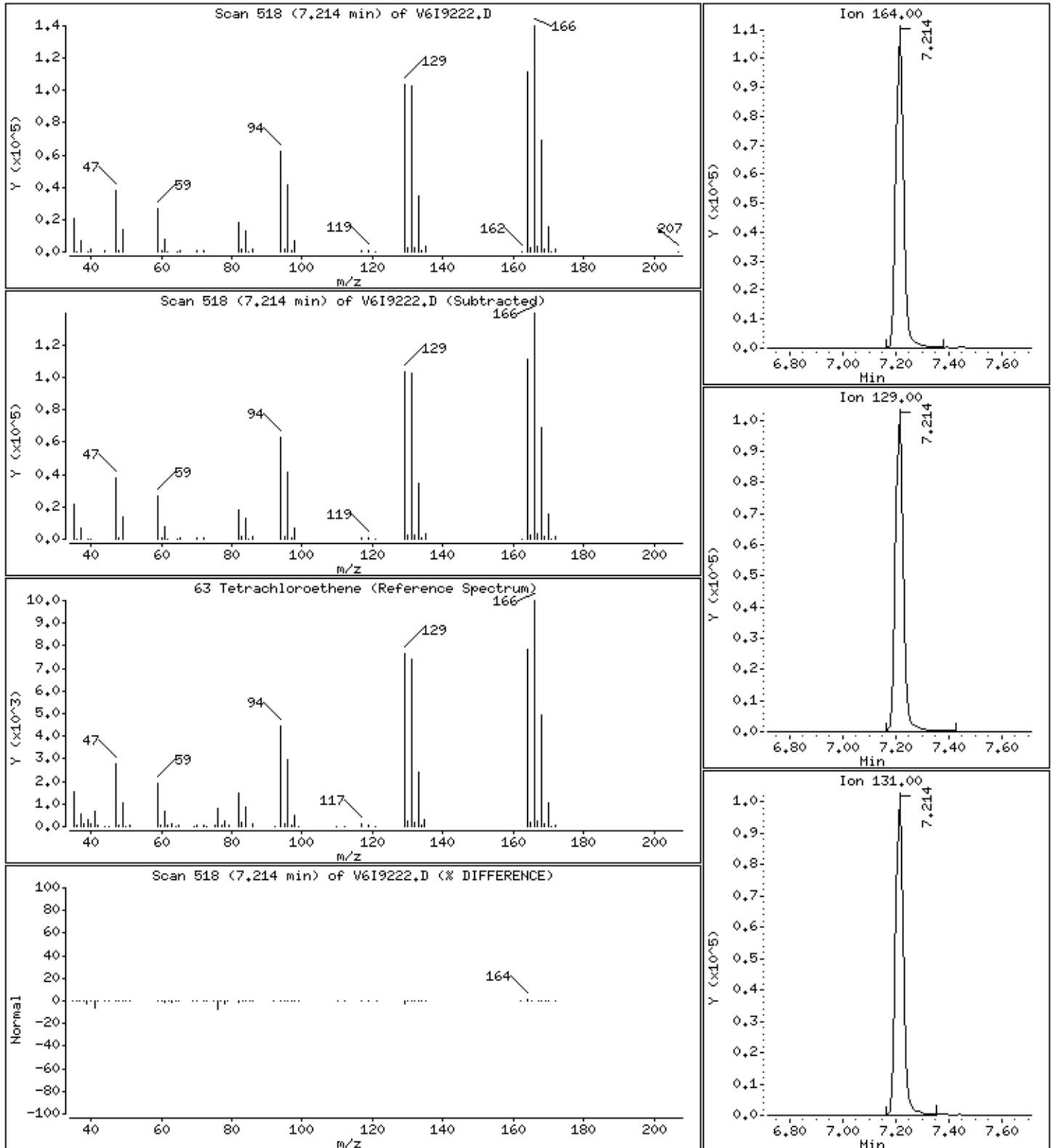
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 53 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SL-MW-23S

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-03A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9223.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/22/2012
% Moisture: not dec.	Date Analyzed: 08/23/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	2.2	J
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	9.5	
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	47	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	3.5	J
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	28	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SL-MW-23S

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L1786</u>	Mod. Ref No.: _____ SDG No.: <u>SL1786</u>
Matrix: (SOIL/SED/WATER) <u>WATER</u>	Lab Sample ID: <u>L1786-03A</u>
Sample wt/vol: <u>5.00</u> (g/mL) <u>ML</u>	Lab File ID: <u>V6I9223.D</u>
Level: (TRACE/LOW/MED) <u>LOW</u>	Date Received: <u>08/22/2012</u>
% Moisture: not dec. _____	Date Analyzed: <u>08/23/2012</u>
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor: <u>1.0</u>
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: <u>5.0</u> (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
127-18-4	Tetrachloroethene	<u>1300</u>	E
591-78-6	2-Hexanone	<u>5.0</u>	U
124-48-1	Dibromochloromethane	<u>5.0</u>	U
106-93-4	1,2-Dibromoethane	<u>5.0</u>	U
108-90-7	Chlorobenzene	<u>5.0</u>	U
630-20-6	1,1,1,2-Tetrachloroethane	<u>5.0</u>	U
100-41-4	Ethylbenzene	<u>5.0</u>	U
179601-23-1	m,p-Xylene	<u>5.0</u>	U
95-47-6	o-Xylene	<u>5.0</u>	U
1330-20-7	Xylene (Total)	<u>5.0</u>	U
100-42-5	Styrene	<u>5.0</u>	U
75-25-2	Bromoform	<u>5.0</u>	U
98-82-8	Isopropylbenzene	<u>5.0</u>	U
79-34-5	1,1,2,2-Tetrachloroethane	<u>5.0</u>	U
108-86-1	Bromobenzene	<u>5.0</u>	U
96-18-4	1,2,3-Trichloropropane	<u>5.0</u>	U
103-65-1	n-Propylbenzene	<u>5.0</u>	U
95-49-8	2-Chlorotoluene	<u>5.0</u>	U
108-67-8	1,3,5-Trimethylbenzene	<u>5.0</u>	U
106-43-4	4-Chlorotoluene	<u>5.0</u>	U
98-06-6	tert-Butylbenzene	<u>5.0</u>	U
95-63-6	1,2,4-Trimethylbenzene	<u>5.0</u>	U
135-98-8	sec-Butylbenzene	<u>5.0</u>	U
99-87-6	4-Isopropyltoluene	<u>5.0</u>	U
541-73-1	1,3-Dichlorobenzene	<u>5.0</u>	U
106-46-7	1,4-Dichlorobenzene	<u>5.0</u>	U
104-51-8	n-Butylbenzene	<u>5.0</u>	U
95-50-1	1,2-Dichlorobenzene	<u>5.0</u>	U
96-12-8	1,2-Dibromo-3-chloropropane	<u>5.0</u>	U
120-82-1	1,2,4-Trichlorobenzene	<u>5.0</u>	U
87-68-3	Hexachlorobutadiene	<u>5.0</u>	U
87-61-6	1,2,3-Trichlorobenzene	<u>5.0</u>	U
91-20-3	Naphthalene	<u>5.0</u>	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-23S

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-03A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9223.D
Level: (TRACE or LOW/MED) LOW Date Received: 08/22/2012
% Moisture: not dec. Date Analyzed: 08/23/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120823.B\V6I9223.D
 Report Date: 24-Aug-2012 10:58

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120823.B\V6I9223.D
 Lab Smp Id: L1786-03A Client Smp ID: SL-MW-23S
 Inj Date : 23-AUG-2012 14:44
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-03A,,67814
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120823.B\v68260Gadd-6lvl.m
 Meth Date : 24-Aug-2012 10:57 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 14
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						CONCENTRATIONS	
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
10 1,1-Dichloroethene	96		2.810	2.811 (0.548)		12312	2.17808	2
22 Methyl tert-butyl ether	73		3.366	3.367 (0.656)		119280	9.48461	9
28 cis-1,2-Dichloroethene	96		4.170	4.160 (0.813)		216593	46.8629	47
\$ 36 Dibromofluoromethane	113		4.549	4.551 (0.887)		258185	53.9083	54
37 1,1,1-Trichloroethane	97		4.584	4.574 (0.894)		21667	3.50809	4
\$ 42 1,2-Dichloroethane-d4	102		4.845	4.846 (0.945)		55344	51.0831	51
* 46 Fluorobenzene	96		5.129	5.130 (1.000)		845560	50.0000	
47 Trichloroethene	130		5.448	5.450 (1.062)		125253	28.1791	28
\$ 58 Toluene-d8	98		6.596	6.586 (0.814)		814676	48.0853	48
63 Tetrachloroethene	164		7.223	7.213 (0.892)		5194549	1291.82	1300(A)
* 68 Chlorobenzene-d5	117		8.099	8.100 (1.000)		706035	50.0000	
\$ 79 Bromofluorobenzene	95		9.400	9.402 (1.161)		364469	49.1952	49
* 92 1,4-Dichlorobenzene-d4	152		10.619	10.621 (1.000)		394642	50.0000	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\V6.i\120823.B\V6I9223.D
Report Date: 24-Aug-2012 10:58

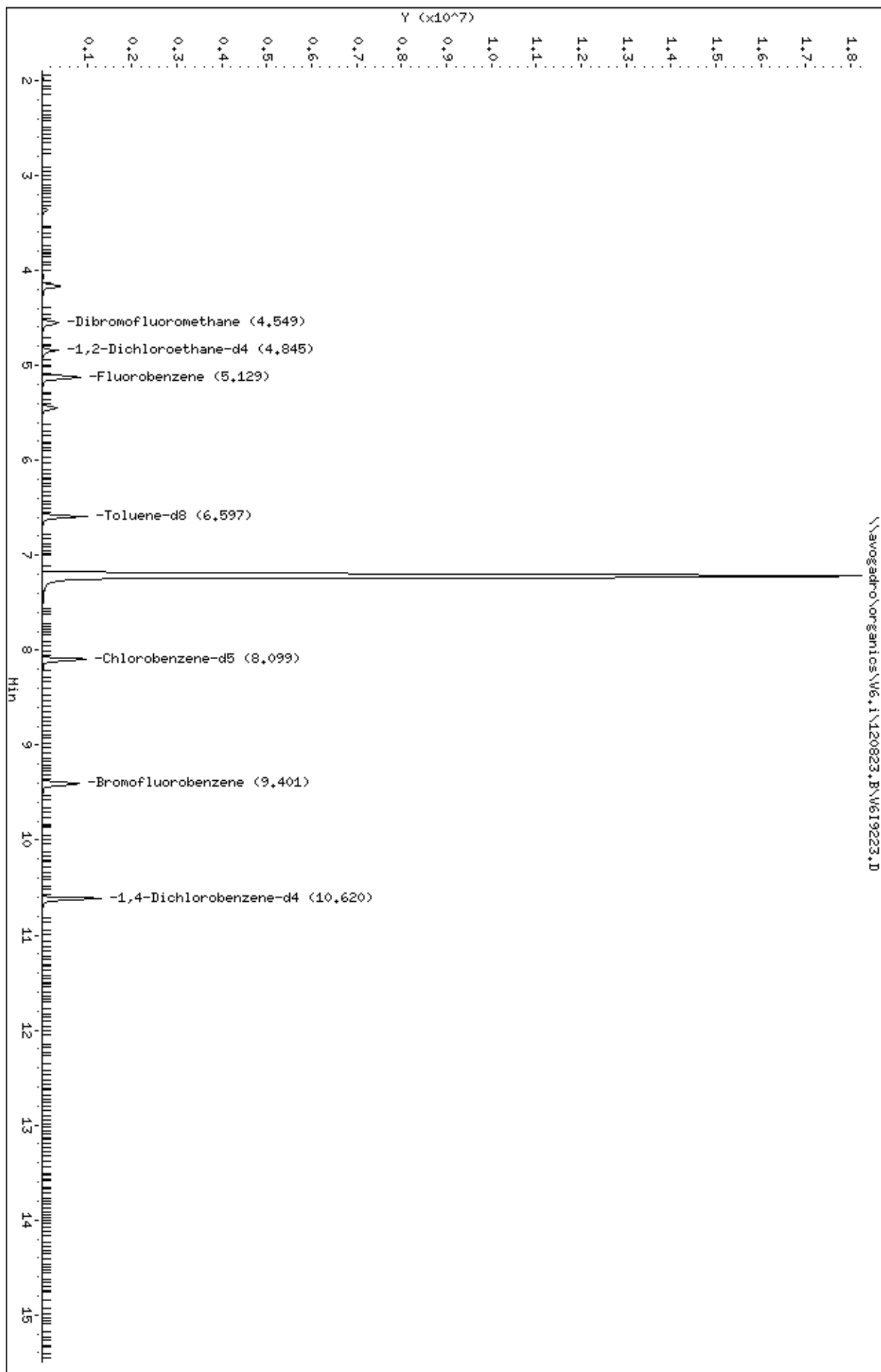
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120823.B\V6I9223.D
Lab Smp Id: L1786-03A Client Smp ID: SL-MW-23S
Inj Date : 23-AUG-2012 14:44
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1786-03A,,67814
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120823.B\v68260Gadd-6lvl.m
Meth Date : 24-Aug-2012 10:57 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120823.B\W6I9223.D
Date : 23-AUG-2012 14:44
Client ID: SL-MW-238
Sample Info: 5ML, L1786-03H, 67814
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120823,B\V6I9223.D

Date : 23-AUG-2012 14:44

Client ID: SL-MW-23S

Instrument: V6.i

Sample Info: 5HL,L1786-03A,,67814

Purge Volume: 5.0

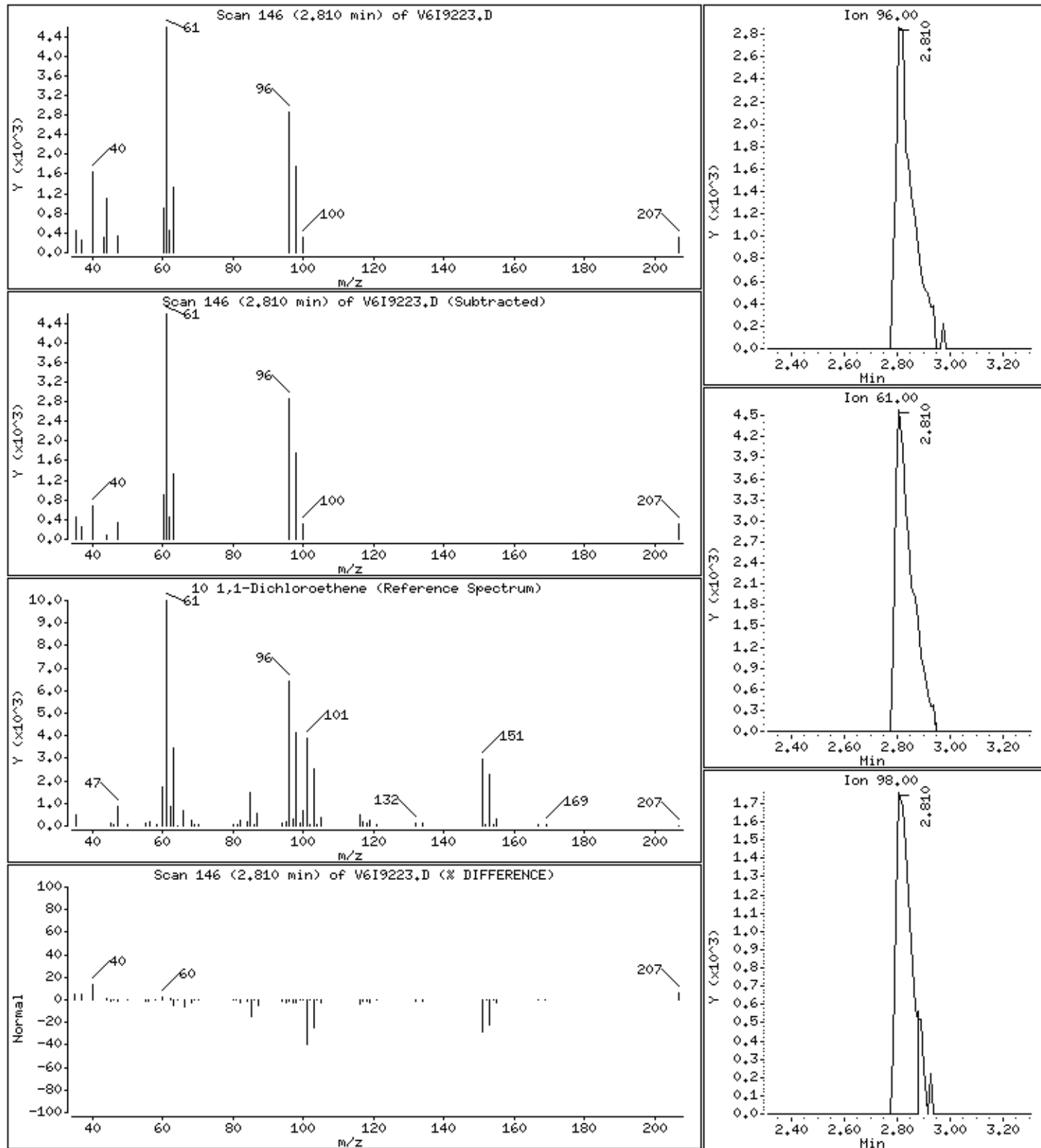
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

10 1,1-Dichloroethene

Concentration: 2 ug/L



Data File: \\avogadro\organics\V6.i\120823,B\V6I9223.D

Date : 23-AUG-2012 14:44

Client ID: SL-MW-23S

Instrument: V6.i

Sample Info: 5HL,L1786-03A,,67814

Purge Volume: 5.0

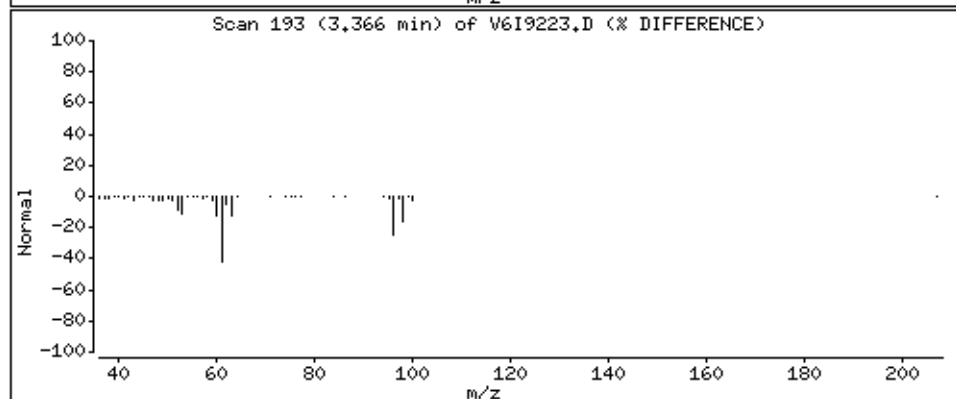
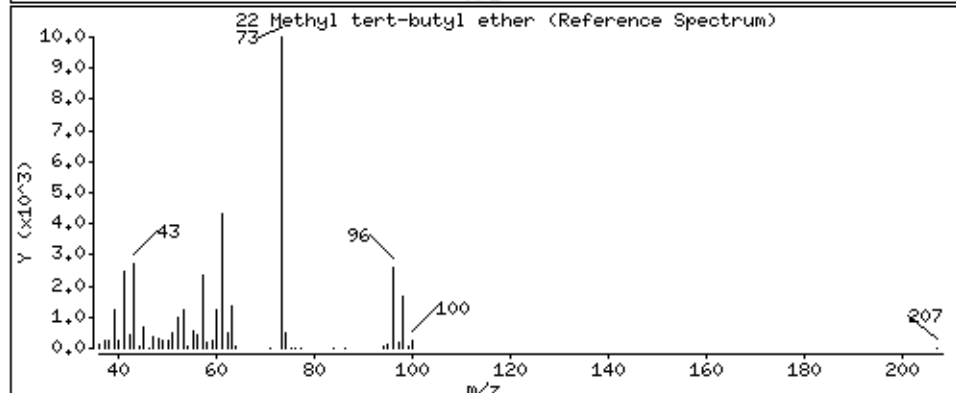
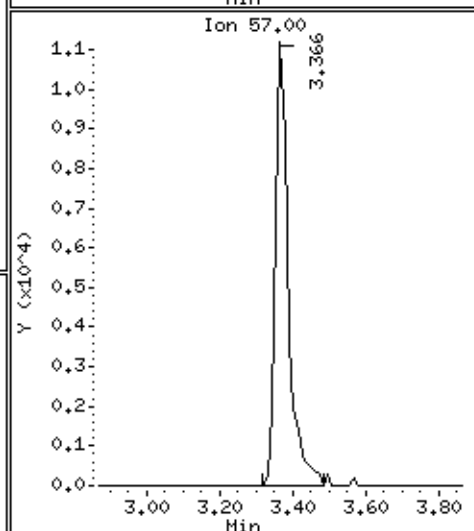
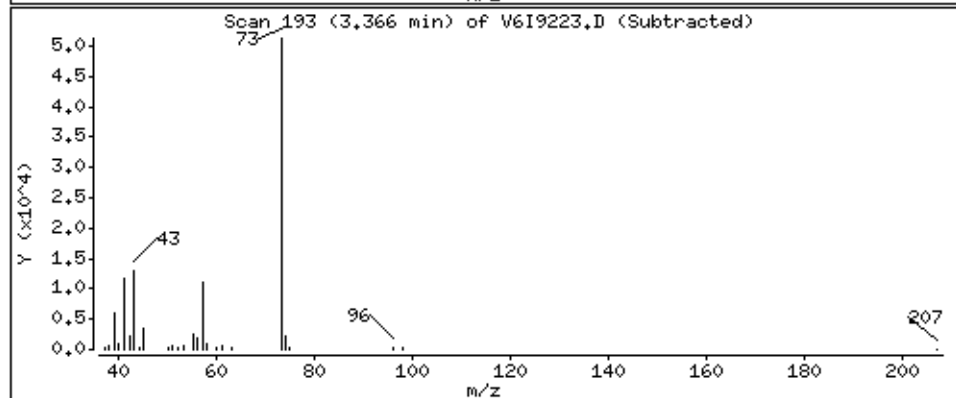
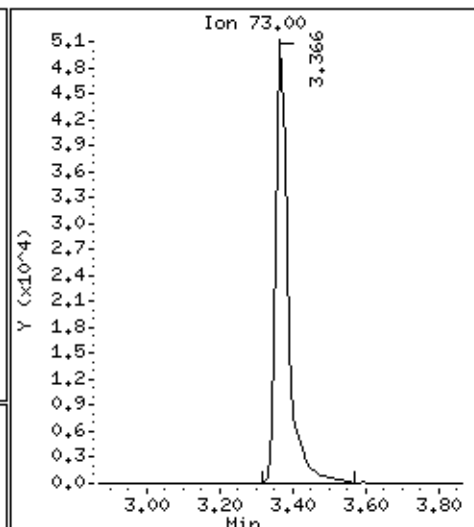
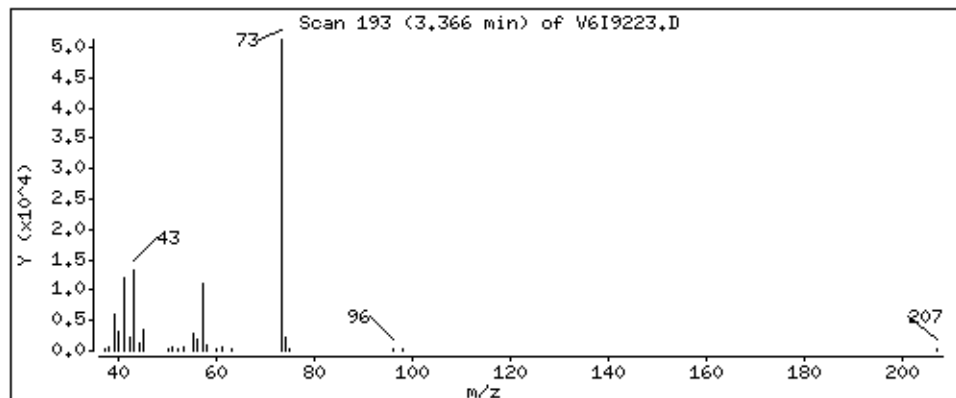
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

22 Methyl tert-butyl ether

Concentration: 9 ug/L



Data File: \\avogadro\organics\V6.i\120823.B\V6I9223.D

Date : 23-AUG-2012 14:44

Client ID: SL-MW-23S

Instrument: V6.i

Sample Info: 5HL,L1786-03A,,67814

Purge Volume: 5.0

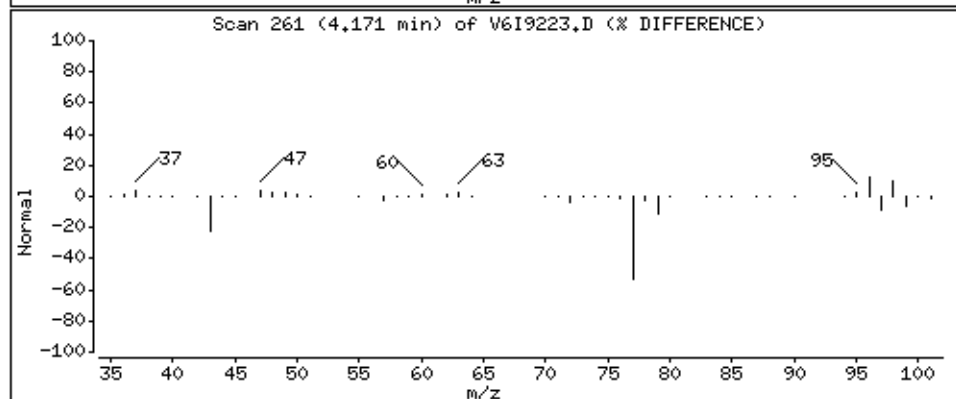
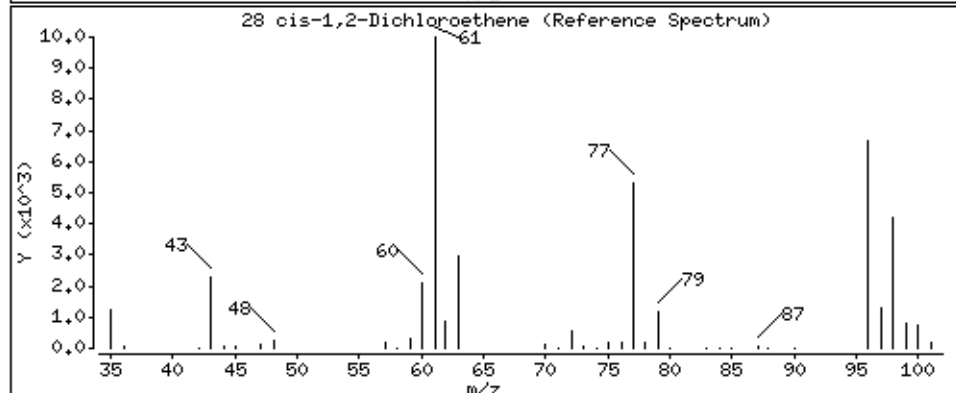
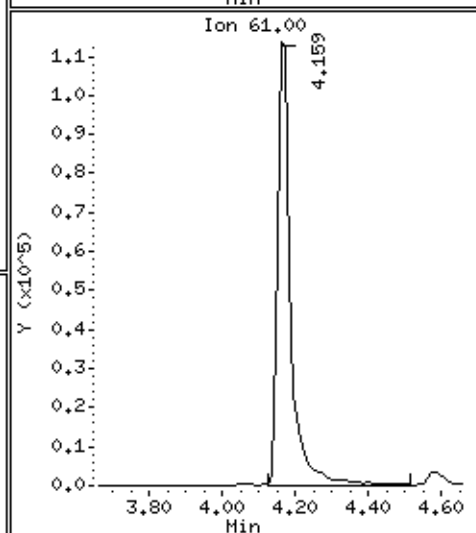
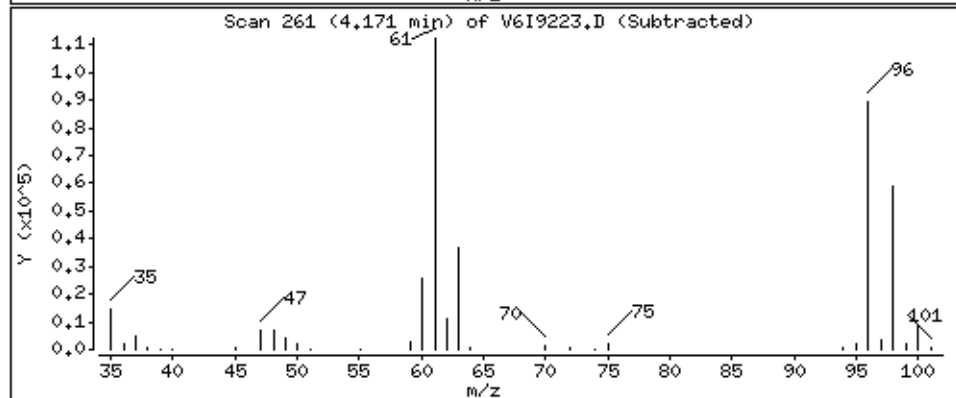
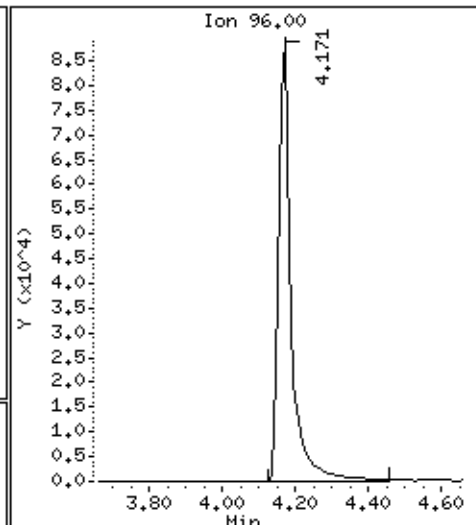
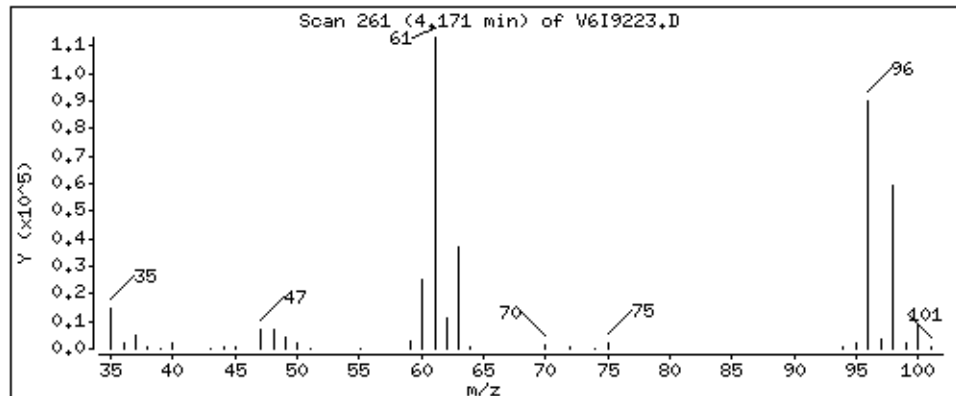
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 47 ug/L



Data File: \\avogadro\organics\V6.i\120823.B\V6I9223.D

Date : 23-AUG-2012 14:44

Client ID: SL-MW-23S

Instrument: V6.i

Sample Info: 5HL, L1786-03A,, 67814

Purge Volume: 5.0

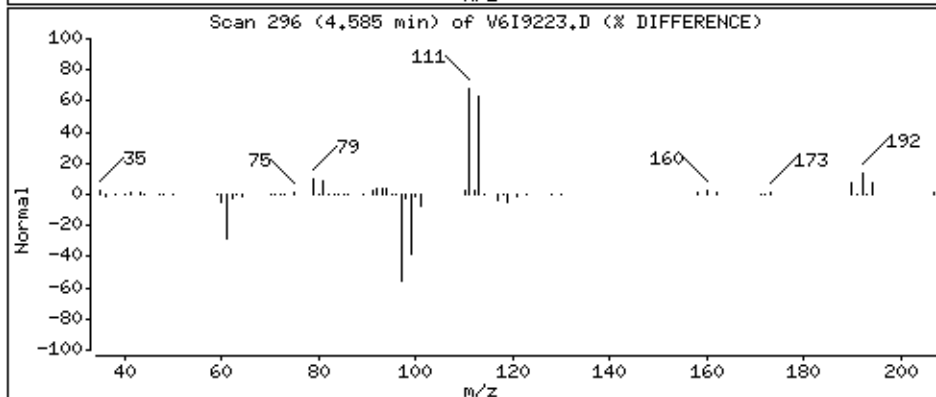
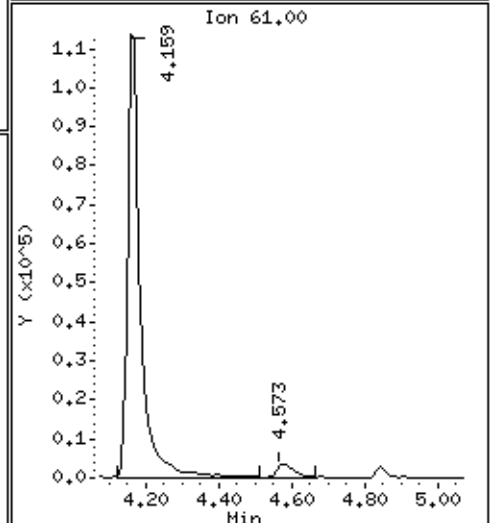
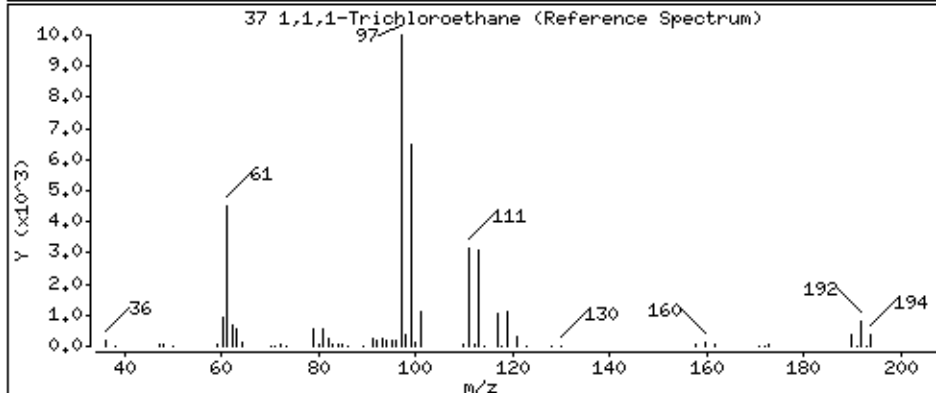
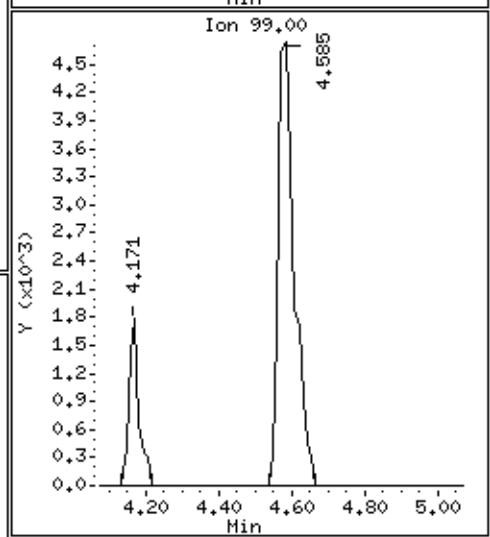
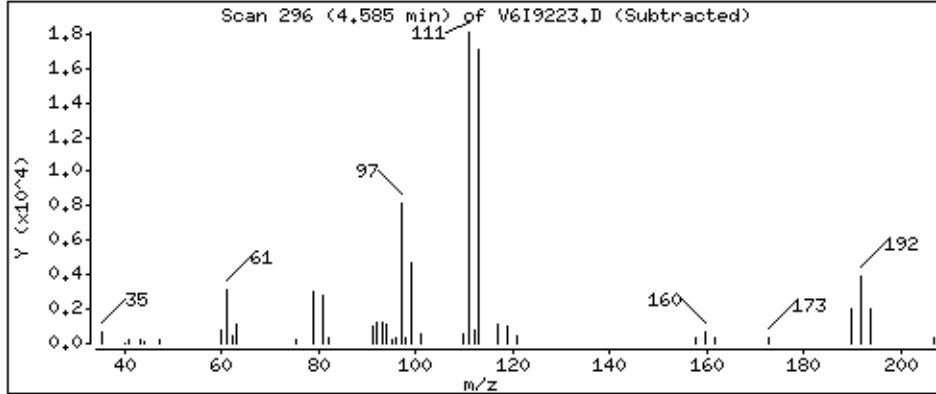
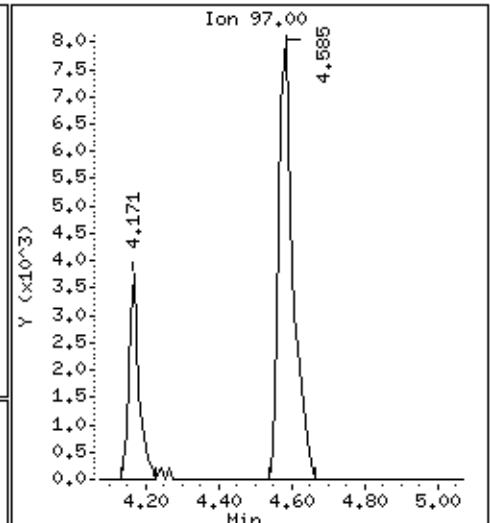
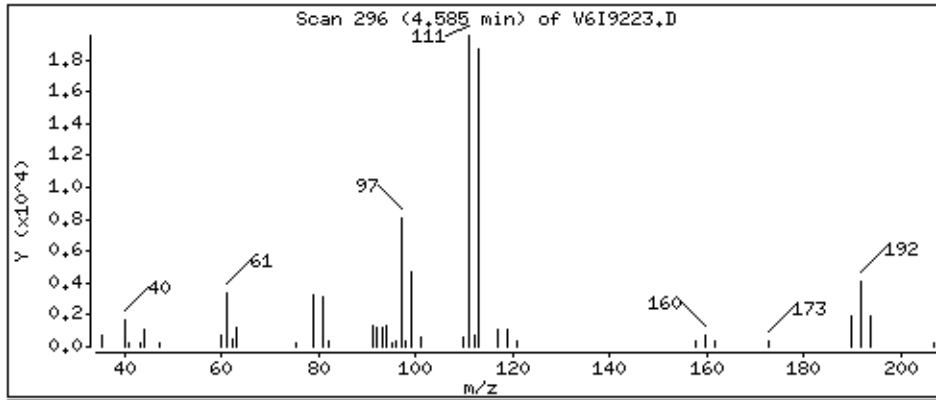
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

37 1,1,1-Trichloroethane

Concentration: 4 ug/L



Data File: \\avogadro\organics\V6.i\120823.B\V6I9223.D

Date : 23-AUG-2012 14:44

Client ID: SL-MW-23S

Instrument: V6.i

Sample Info: 5HL,L1786-03A,,67814

Purge Volume: 5.0

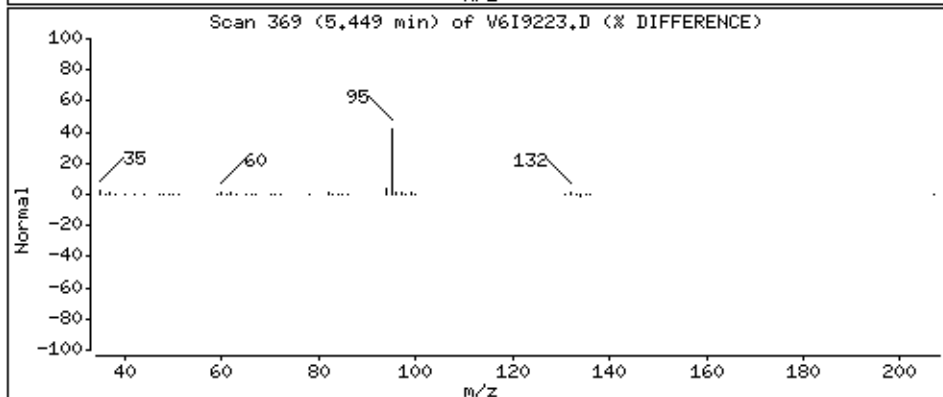
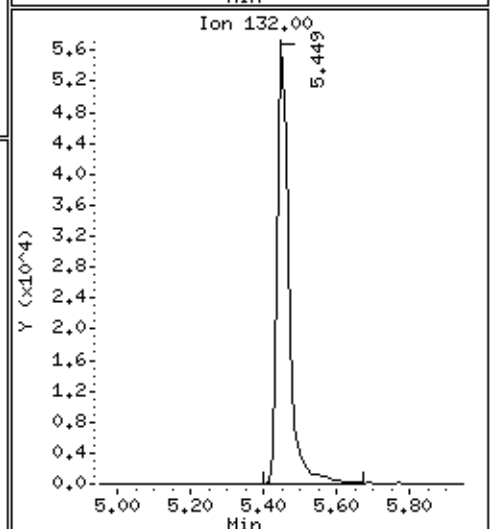
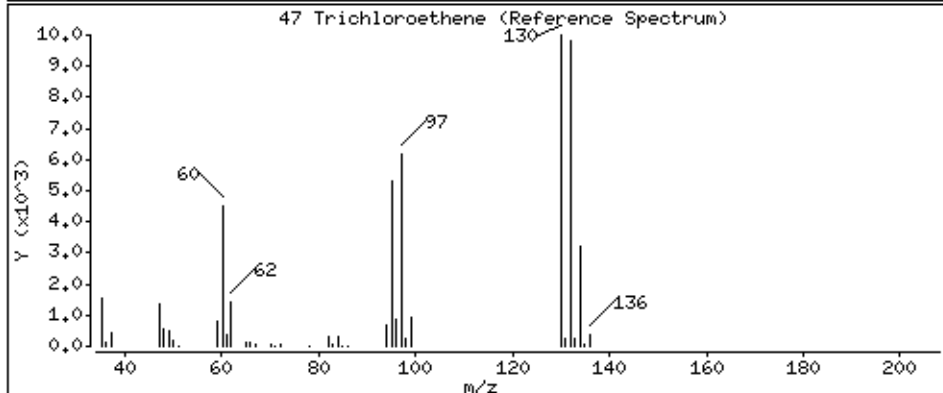
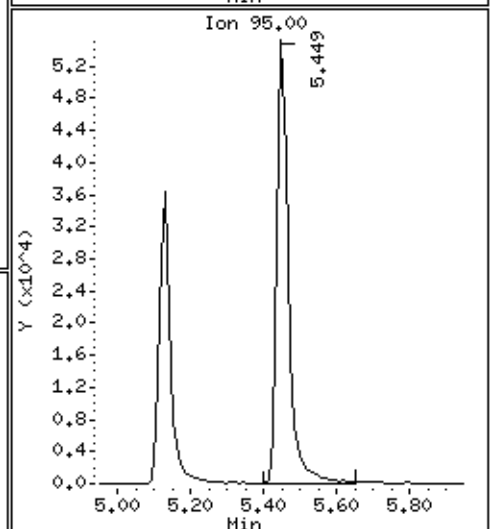
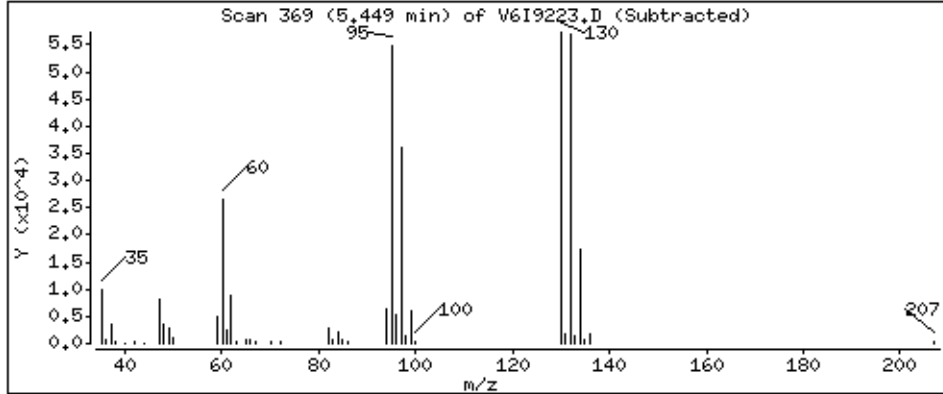
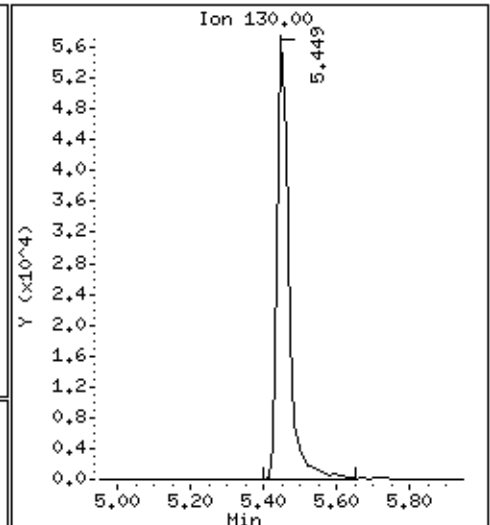
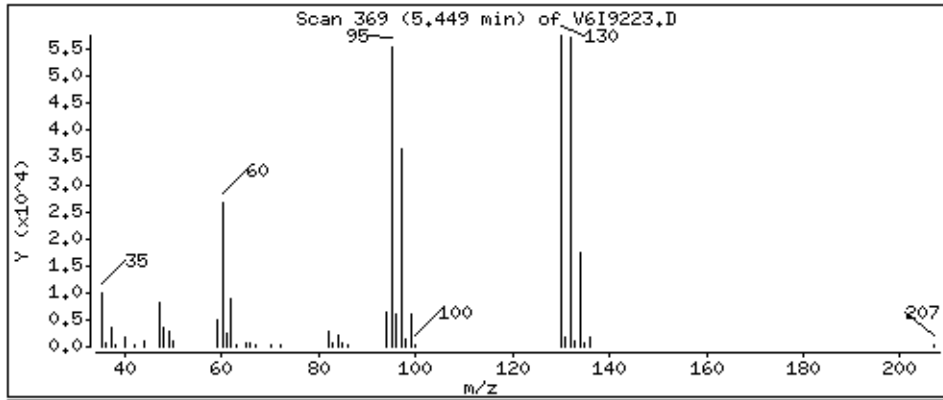
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 28 ug/L



Data File: \\avogadro\organics\V6.i\120823.B\V6I9223.D

Date : 23-AUG-2012 14:44

Client ID: SL-MW-23S

Instrument: V6.i

Sample Info: 5HL,L1786-03A,,67814

Purge Volume: 5.0

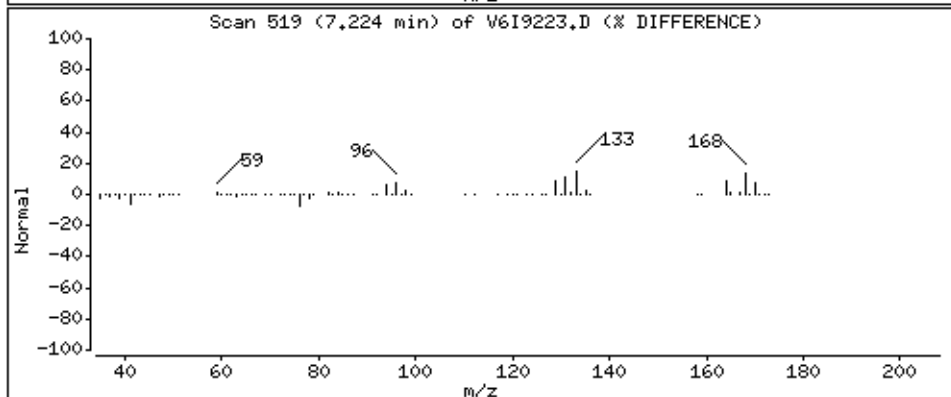
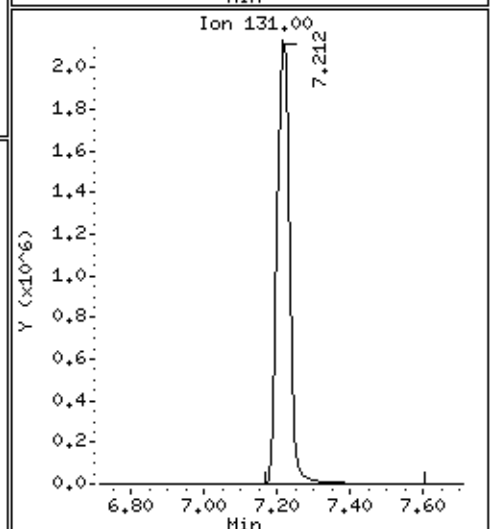
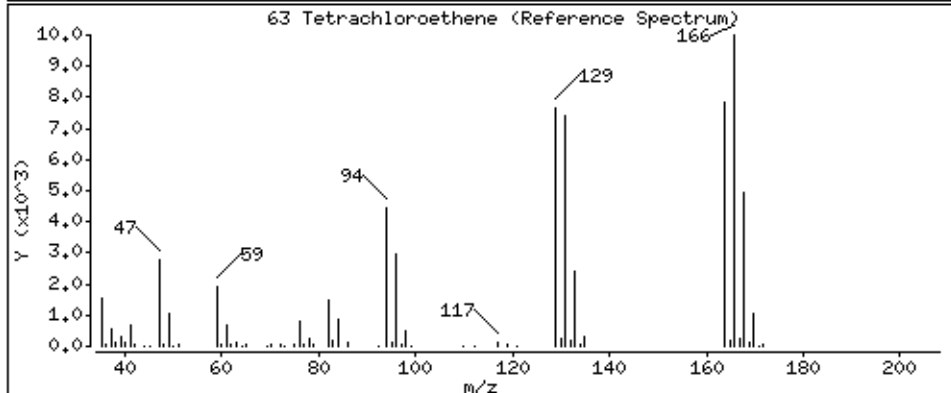
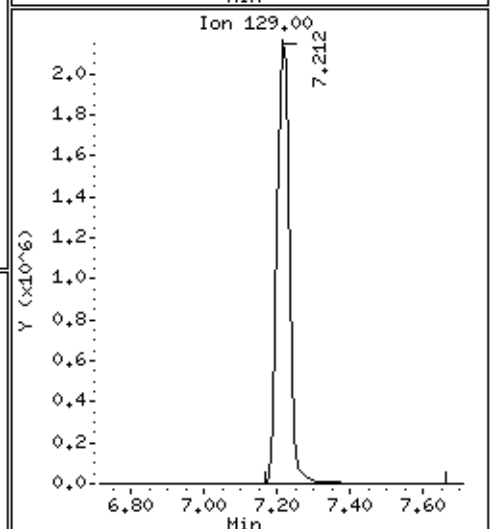
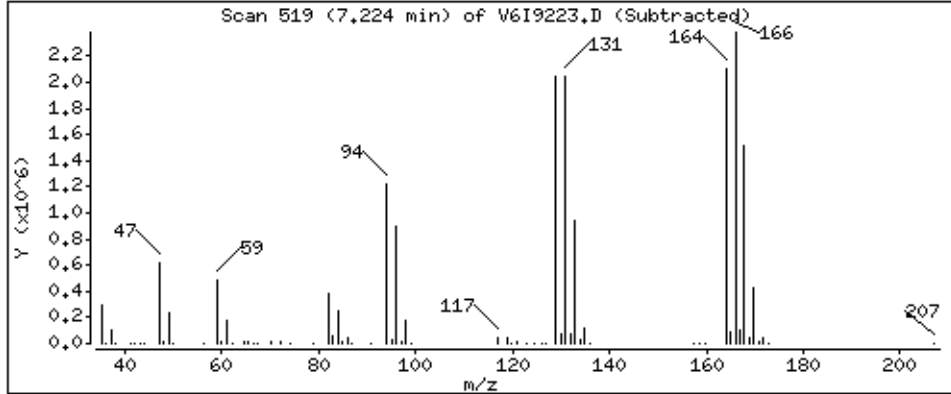
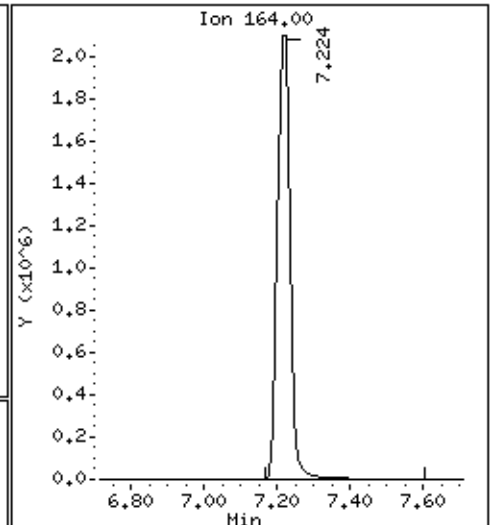
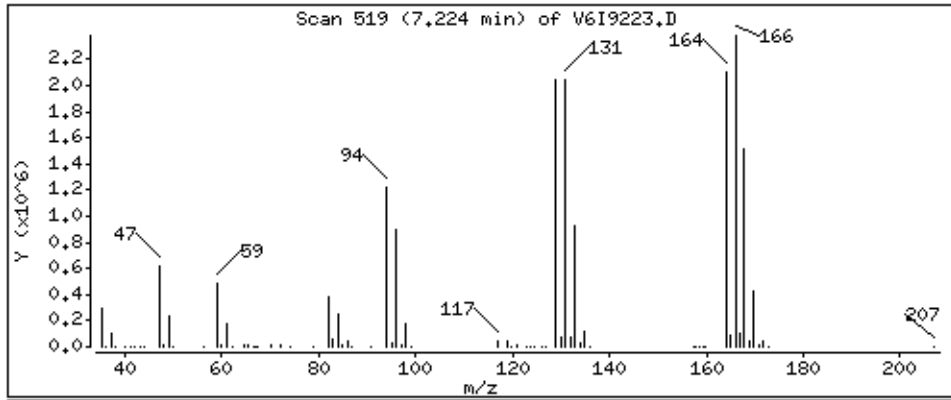
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 1300 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-23SDL

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-03ADL
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9262.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/22/2012
% Moisture: not dec.	Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 20.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	100	U
74-87-3	Chloromethane	100	U
75-01-4	Vinyl chloride	100	U
74-83-9	Bromomethane	100	U
75-00-3	Chloroethane	100	U
75-69-4	Trichlorofluoromethane	100	U
75-35-4	1,1-Dichloroethene	100	U
67-64-1	Acetone	100	U
74-88-4	Iodomethane	100	U
75-15-0	Carbon disulfide	100	U
75-09-2	Methylene chloride	100	U
156-60-5	trans-1,2-Dichloroethene	100	U
1634-04-4	Methyl tert-butyl ether	100	U
75-34-3	1,1-Dichloroethane	100	U
108-05-4	Vinyl acetate	100	U
78-93-3	2-Butanone	100	U
156-59-2	cis-1,2-Dichloroethene	46	DJ
594-20-7	2,2-Dichloropropane	100	U
74-97-5	Bromochloromethane	100	U
67-66-3	Chloroform	100	U
71-55-6	1,1,1-Trichloroethane	100	U
563-58-6	1,1-Dichloropropene	100	U
56-23-5	Carbon tetrachloride	100	U
107-06-2	1,2-Dichloroethane	100	U
71-43-2	Benzene	100	U
79-01-6	Trichloroethene	24	DJ
78-87-5	1,2-Dichloropropane	100	U
74-95-3	Dibromomethane	100	U
75-27-4	Bromodichloromethane	100	U
10061-01-5	cis-1,3-Dichloropropene	100	U
108-10-1	4-Methyl-2-pentanone	100	U
108-88-3	Toluene	100	U
10061-02-6	trans-1,3-Dichloropropene	100	U
79-00-5	1,1,2-Trichloroethane	100	U
142-28-9	1,3-Dichloropropane	100	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-23SDL

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-03ADL
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9262.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/22/2012
% Moisture: not dec.	Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 20.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	1800	D
591-78-6	2-Hexanone	100	U
124-48-1	Dibromochloromethane	100	U
106-93-4	1,2-Dibromoethane	100	U
108-90-7	Chlorobenzene	100	U
630-20-6	1,1,1,2-Tetrachloroethane	100	U
100-41-4	Ethylbenzene	100	U
179601-23-1	m,p-Xylene	100	U
95-47-6	o-Xylene	100	U
1330-20-7	Xylene (Total)	100	U
100-42-5	Styrene	100	U
75-25-2	Bromoform	100	U
98-82-8	Isopropylbenzene	100	U
79-34-5	1,1,2,2-Tetrachloroethane	100	U
108-86-1	Bromobenzene	100	U
96-18-4	1,2,3-Trichloropropane	100	U
103-65-1	n-Propylbenzene	100	U
95-49-8	2-Chlorotoluene	100	U
108-67-8	1,3,5-Trimethylbenzene	100	U
106-43-4	4-Chlorotoluene	100	U
98-06-6	tert-Butylbenzene	100	U
95-63-6	1,2,4-Trimethylbenzene	100	U
135-98-8	sec-Butylbenzene	100	U
99-87-6	4-Isopropyltoluene	100	U
541-73-1	1,3-Dichlorobenzene	100	U
106-46-7	1,4-Dichlorobenzene	100	U
104-51-8	n-Butylbenzene	100	U
95-50-1	1,2-Dichlorobenzene	100	U
96-12-8	1,2-Dibromo-3-chloropropane	100	U
120-82-1	1,2,4-Trichlorobenzene	100	U
87-68-3	Hexachlorobutadiene	100	U
87-61-6	1,2,3-Trichlorobenzene	100	U
91-20-3	Naphthalene	100	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-23SDL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-03ADL
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9262.D
Level: (TRACE or LOW/MED) LOW Date Received: 08/22/2012
% Moisture: not dec. Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120824.B\V6I9262.D
 Report Date: 27-Aug-2012 10:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120824.B\V6I9262.D
 Lab Smp Id: L1786-03ADL Client Smp ID: SL-MW-23SDL
 Inj Date : 24-AUG-2012 14:22
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-03ADL,,67828,20
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
 Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 13
 Dil Factor: 20.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	20.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
28 cis-1,2-Dichloroethene	96	4.169	4.158	(0.813)	10494	2.27611	46
\$ 36 Dibromofluoromethane	113	4.548	4.549	(0.887)	252757	52.9048	53
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.845	(0.945)	52968	49.0104	49
* 46 Fluorobenzene	96	5.128	5.129	(1.000)	843484	50.0000	
47 Trichloroethene	130	5.447	5.448	(1.062)	5400	1.21787	24
\$ 58 Toluene-d8	98	6.595	6.584	(0.814)	804584	48.3990	48
63 Tetrachloroethene	164	7.210	7.211	(0.890)	346452	87.8083	1800
* 68 Chlorobenzene-d5	117	8.098	8.099	(1.000)	692769	50.0000	
\$ 79 Bromofluorobenzene	95	9.399	9.400	(1.161)	349309	48.0518	48
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.619	(1.000)	383374	50.0000	

Data File: \\avogadro\organics\V6.i\120824.B\V6I9262.D
Report Date: 27-Aug-2012 10:39

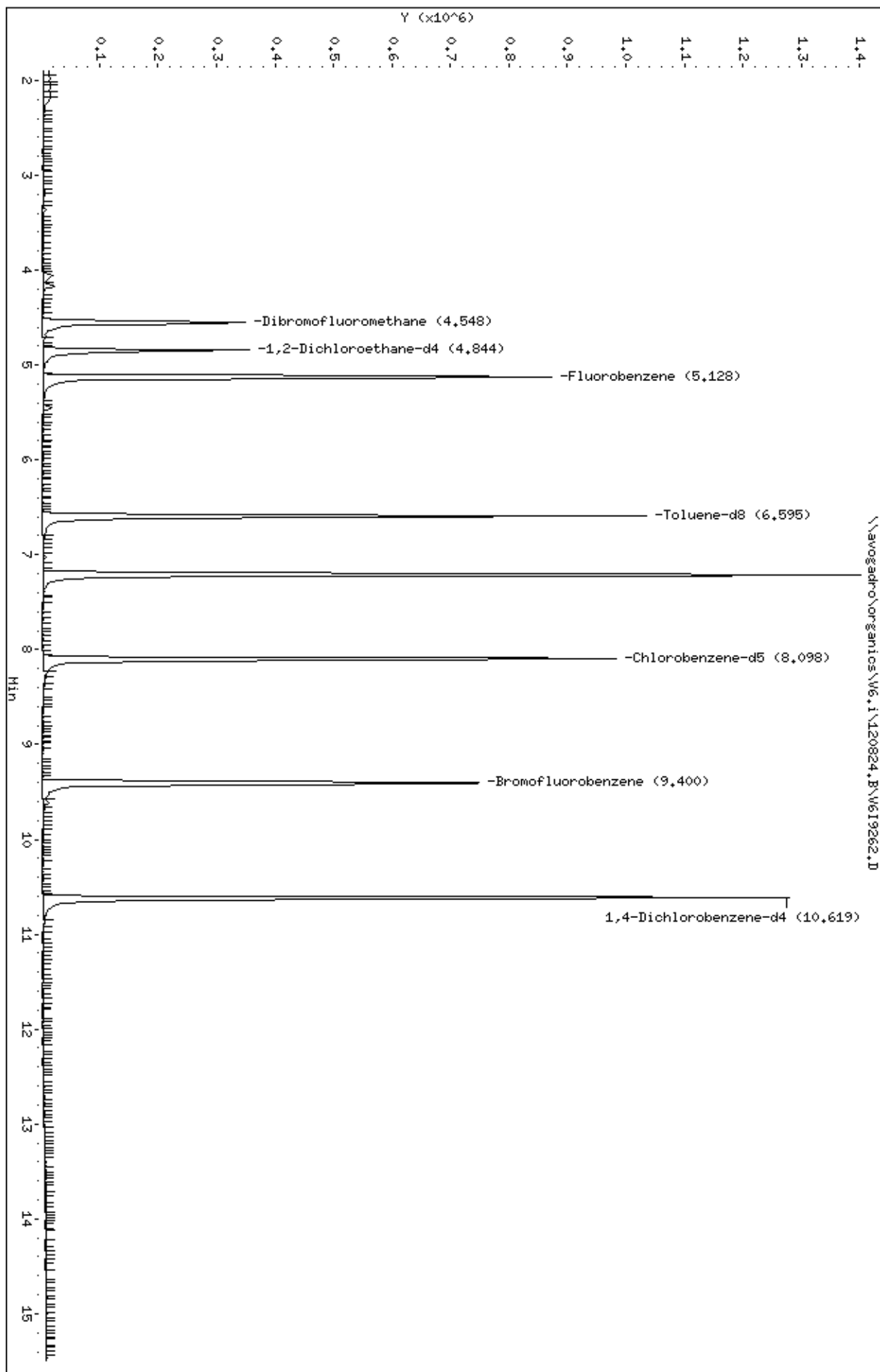
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120824.B\V6I9262.D
Lab Smp Id: L1786-03ADL Client Smp ID: SL-MW-23SDL
Inj Date : 24-AUG-2012 14:22
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1786-03ADL,,67828,20
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
Als bottle: 13
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120824,B\W619262.D
Date : 24-AUG-2012 14:22
Client ID: SL-MW-23SIL
Sample Info: 5ML, L1786-034DL,, 67828, 20
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120824.B\V6I9262.D

Date : 24-AUG-2012 14:22

Client ID: SL-MW-23SDL

Instrument: V6.i

Sample Info: 5HL, L1786-03ADL,, 67828, 20

Purge Volume: 5.0

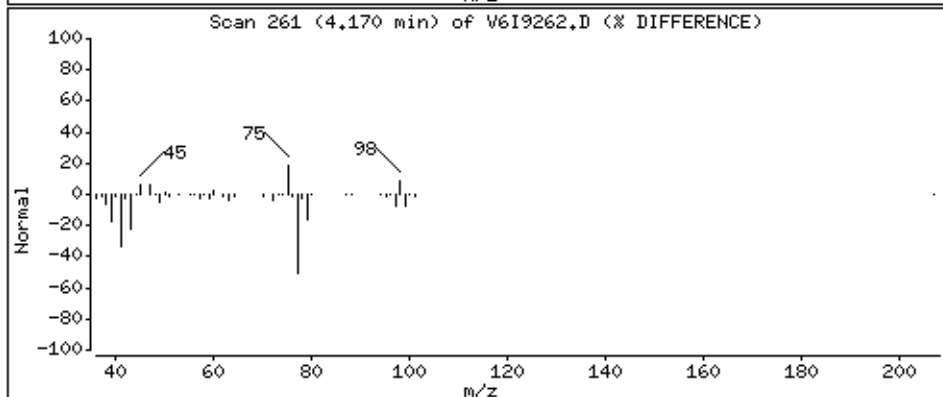
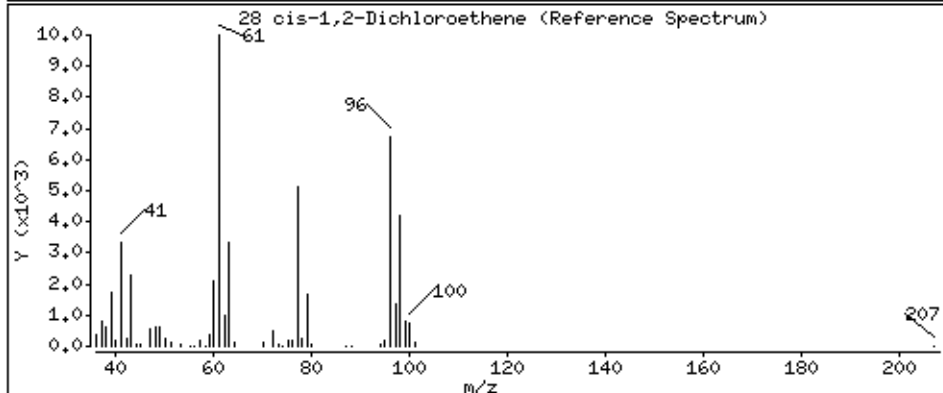
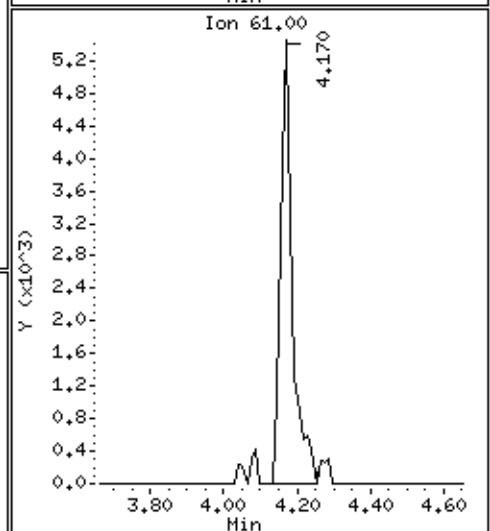
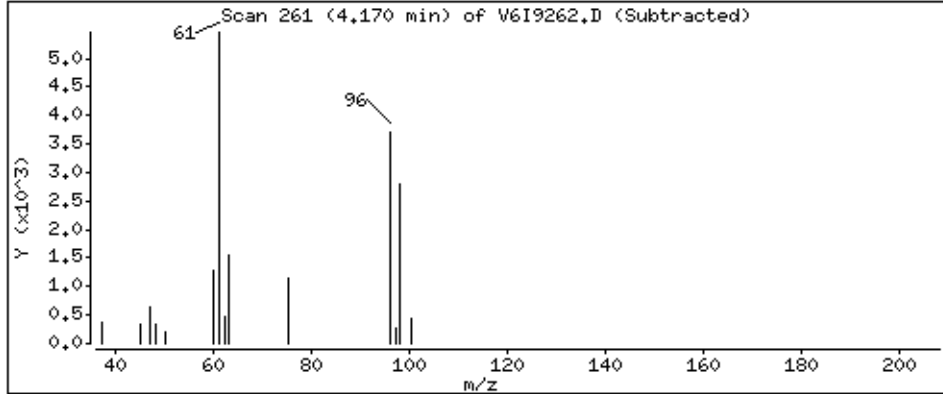
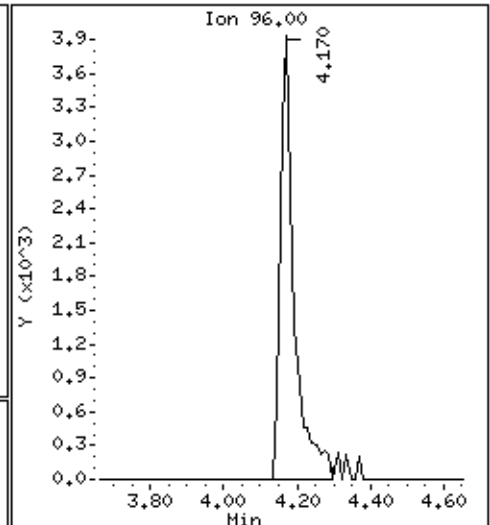
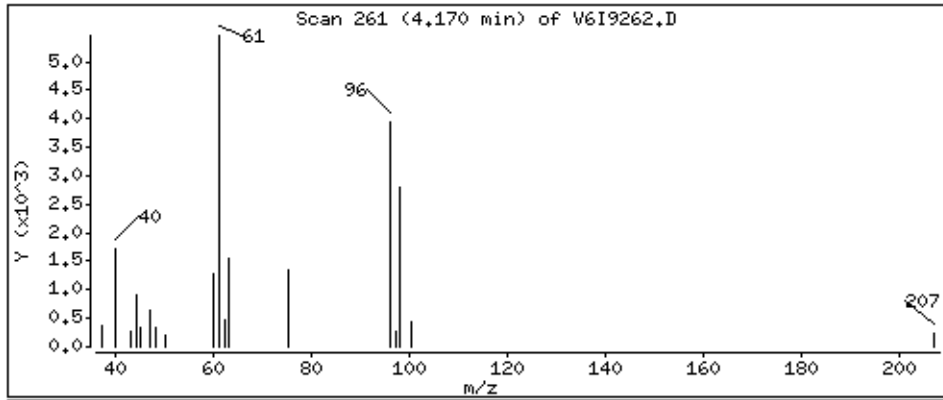
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 46 ug/L



Data File: \\avogadro\organics\V6.i\120824.B\V6I9262.D

Date : 24-AUG-2012 14:22

Client ID: SL-MW-23SDL

Instrument: V6.i

Sample Info: 5HL, L1786-03ADL,, 67828, 20

Purge Volume: 5.0

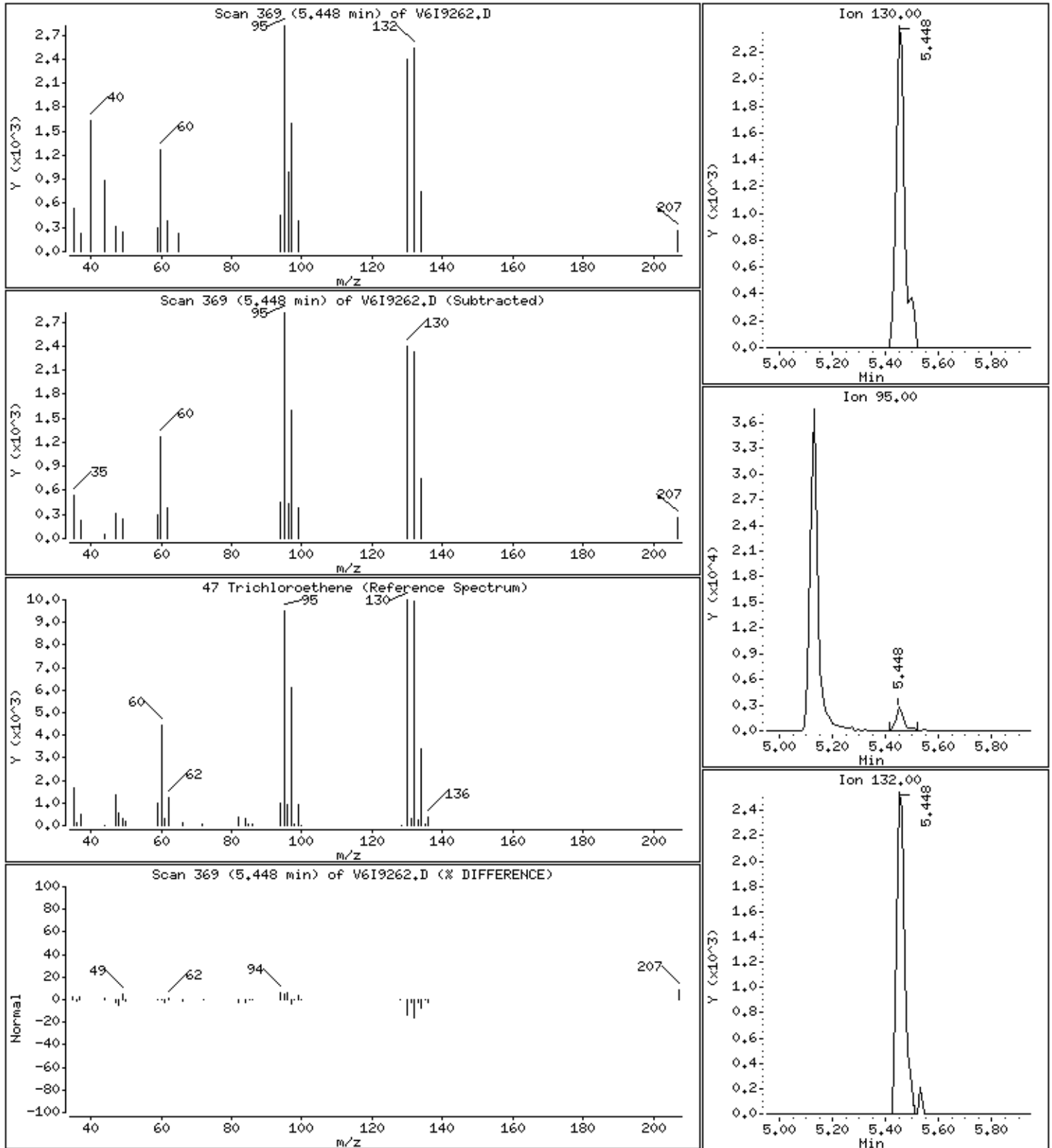
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 24 ug/L



Data File: \\avogadro\organics\V6.i\120824.B\V6I9262.D

Date : 24-AUG-2012 14:22

Client ID: SL-MW-23SDL

Instrument: V6.i

Sample Info: 5HL, L1786-03ADL,, 67828, 20

Purge Volume: 5.0

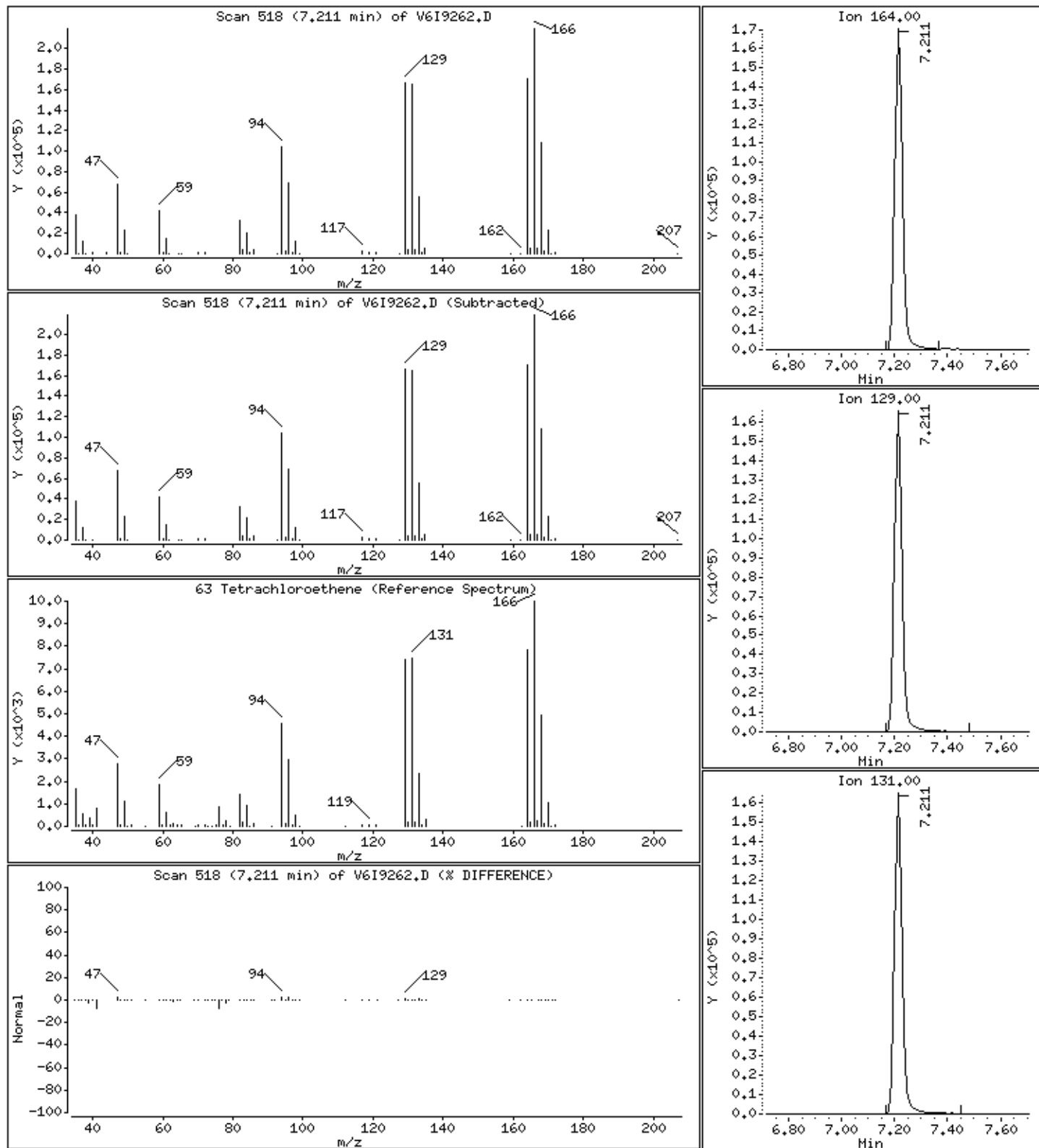
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 1800 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-13

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-04A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9263.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/22/2012
% Moisture: not dec.	Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	6.7	
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	0.71	J
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-13

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-04A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9263.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/22/2012
% Moisture: not dec.	Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	1.0	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-13

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-04A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9263.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/22/2012

% Moisture: not dec. _____ Date Analyzed: 08/24/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120824.B\V6I9263.D
 Report Date: 27-Aug-2012 10:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120824.B\V6I9263.D
 Lab Smp Id: L1786-04A Client Smp ID: SL-MW-13
 Inj Date : 24-AUG-2012 14:49
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-04A,,67828
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
 Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 14
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
22 Methyl tert-butyl ether	73	3.367	3.366	(0.656)	82419	6.72246	7
\$ 36 Dibromofluoromethane	113	4.551	4.549	(0.887)	249917	53.5266	54
\$ 42 1,2-Dichloroethane-d4	102	4.846	4.845	(0.945)	51984	49.2182	49
* 46 Fluorobenzene	96	5.130	5.129	(1.000)	824319	50.0000	
47 Trichloroethene	130	5.450	5.448	(1.062)	3086	0.71217	0.7(Q)
\$ 58 Toluene-d8	98	6.586	6.584	(0.813)	801139	48.3391	48
63 Tetrachloroethene	164	7.213	7.211	(0.890)	4074	1.03571	1
* 68 Chlorobenzene-d5	117	8.100	8.099	(1.000)	690658	50.0000	
\$ 79 Bromofluorobenzene	95	9.402	9.400	(1.161)	342134	47.2086	47
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.619	(1.000)	373366	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V6.i\120824.B\V6I9263.D
Report Date: 27-Aug-2012 10:39

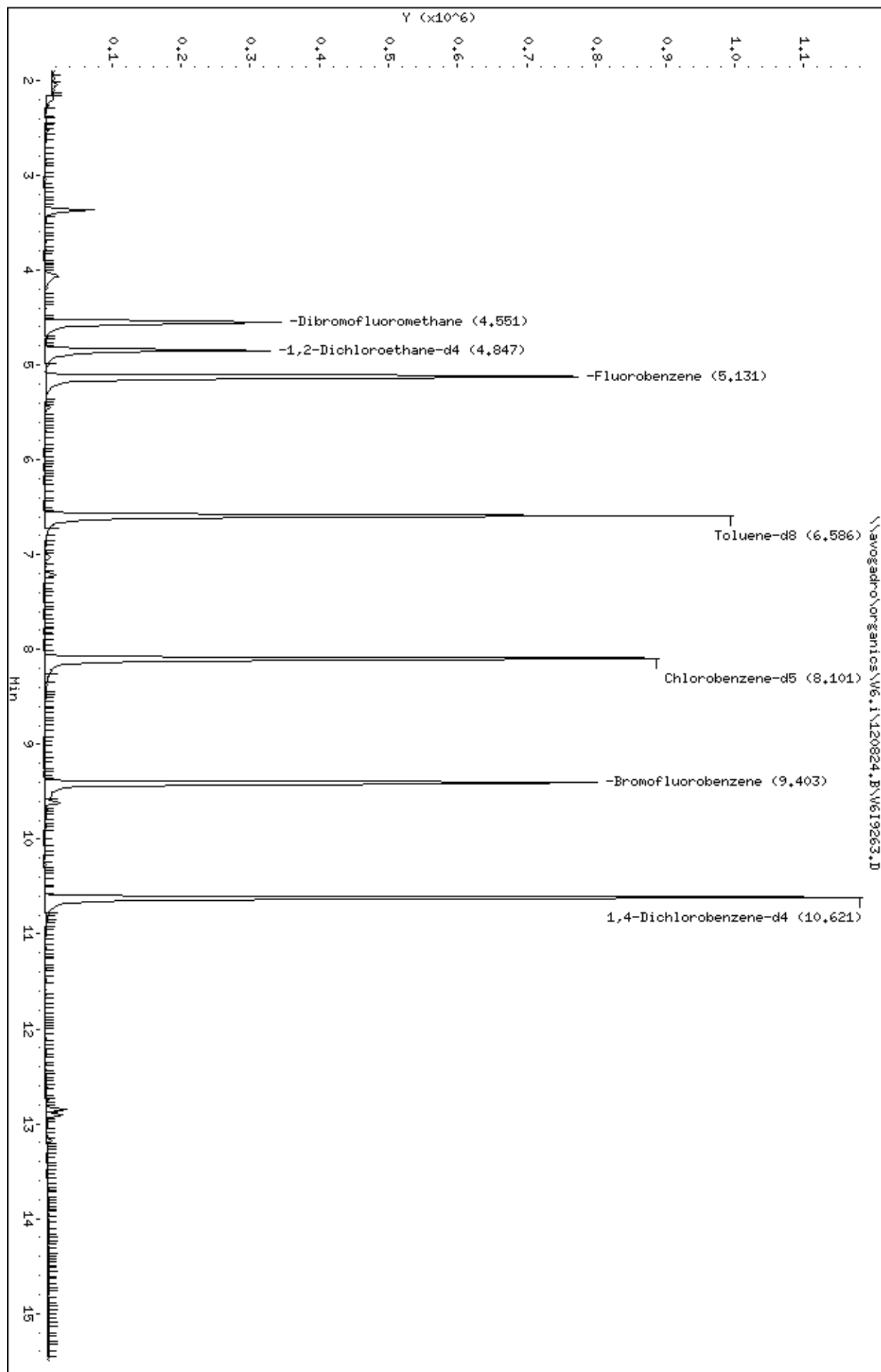
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120824.B\V6I9263.D
Lab Smp Id: L1786-04A Client Smp ID: SL-MW-13
Inj Date : 24-AUG-2012 14:49
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1786-04A,,67828
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120824,B\W619263.D
Date : 24-AUG-2012 14:49
Client ID: SL-MW-13
Sample Info: SWL, L1786-044, 67828
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120824.B\V6I9263.D

Date : 24-AUG-2012 14:49

Client ID: SL-MW-13

Instrument: V6.i

Sample Info: 5HL,L1786-04A,,67828

Purge Volume: 5.0

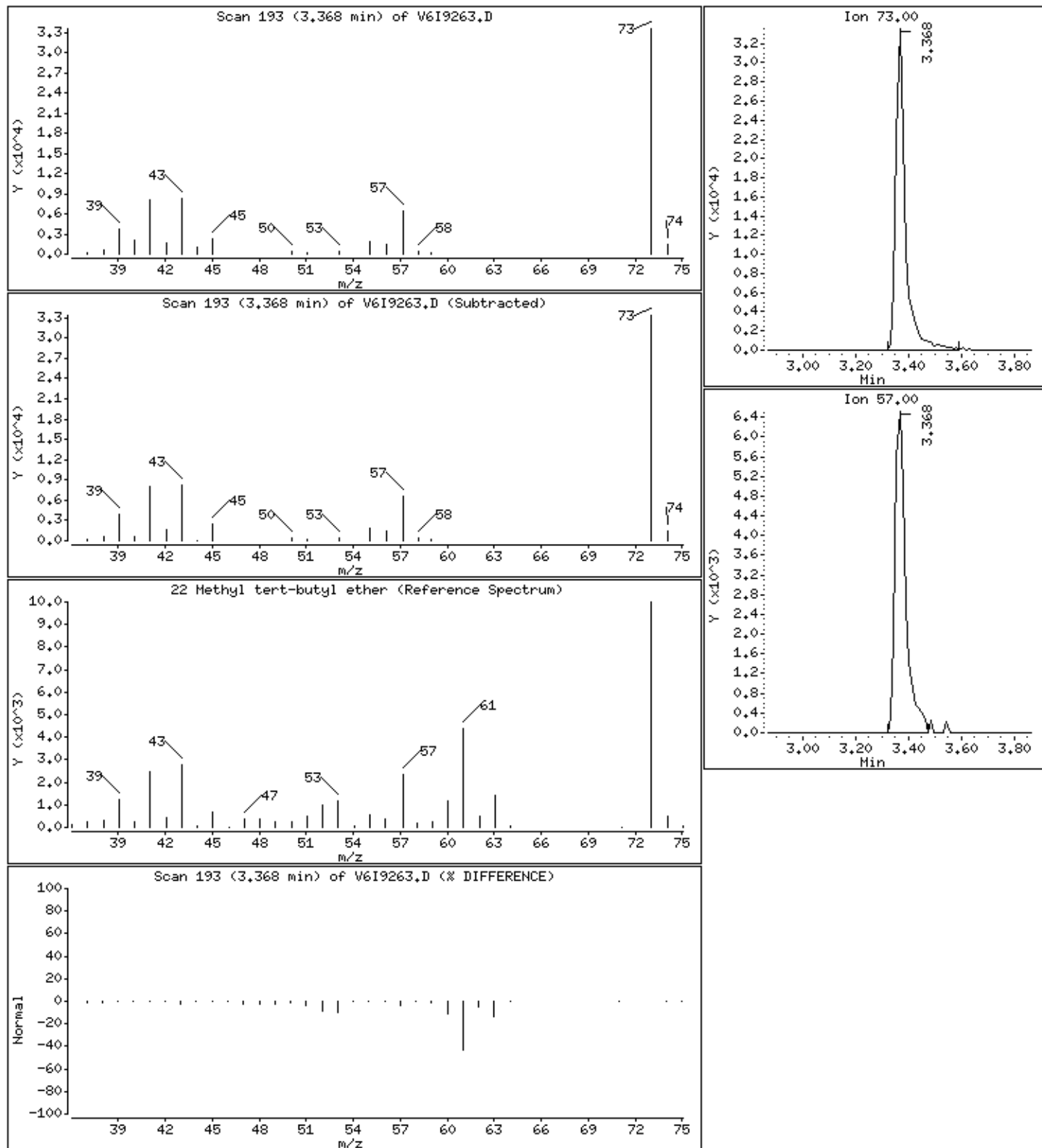
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

22 Methyl tert-butyl ether

Concentration: 7 ug/L



Data File: \\avogadro\organics\V6.i\120824.B\V6I9263.D

Date : 24-AUG-2012 14:49

Client ID: SL-MW-13

Instrument: V6.i

Sample Info: 5HL, L1786-04A,, 67828

Purge Volume: 5.0

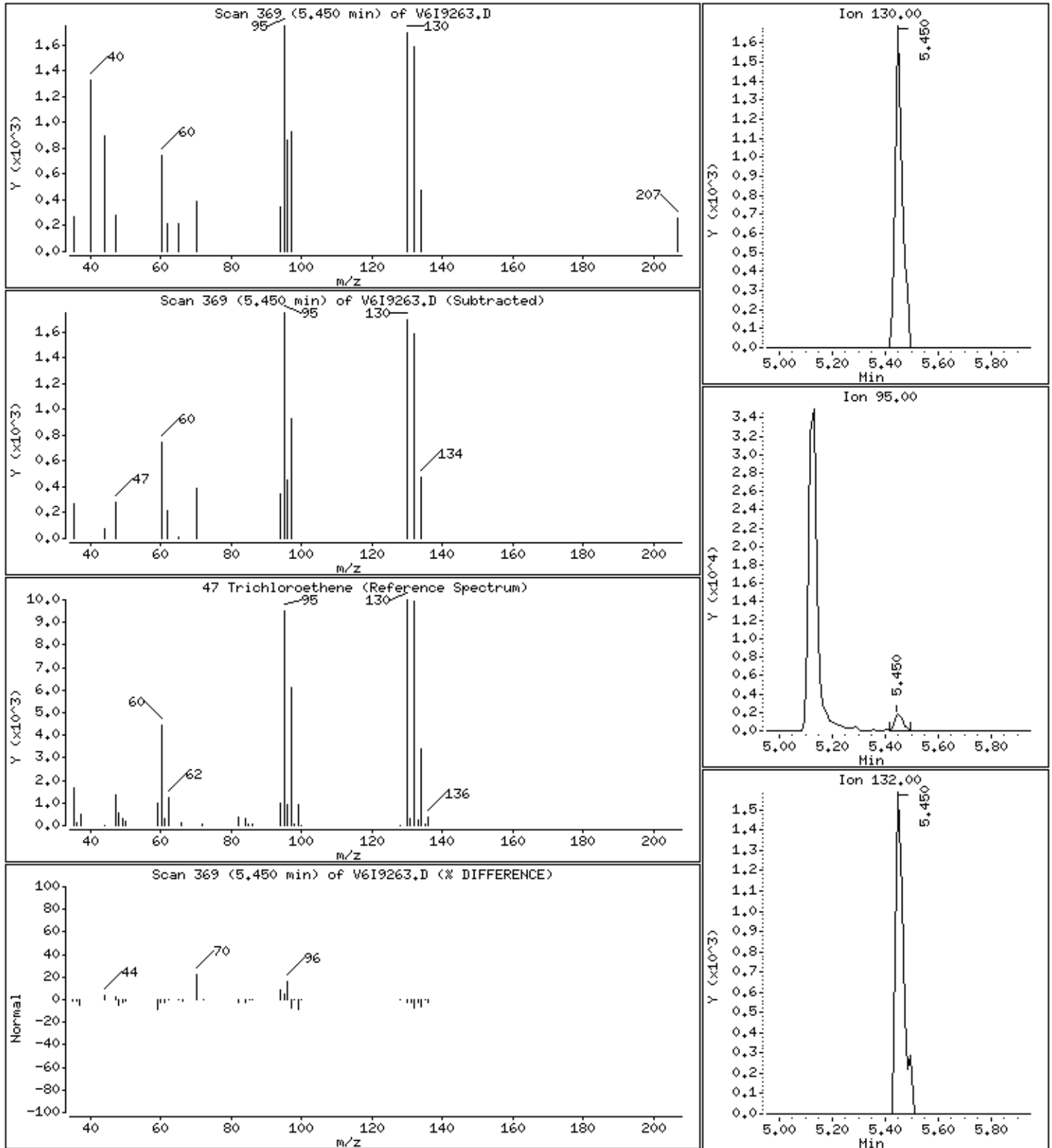
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 0.7 ug/L



Data File: \\avogadro\organics\V6.i\120824.B\V6I9263.D

Date : 24-AUG-2012 14:49

Client ID: SL-MW-13

Instrument: V6.i

Sample Info: 5HL, L1786-04A,, 67828

Purge Volume: 5.0

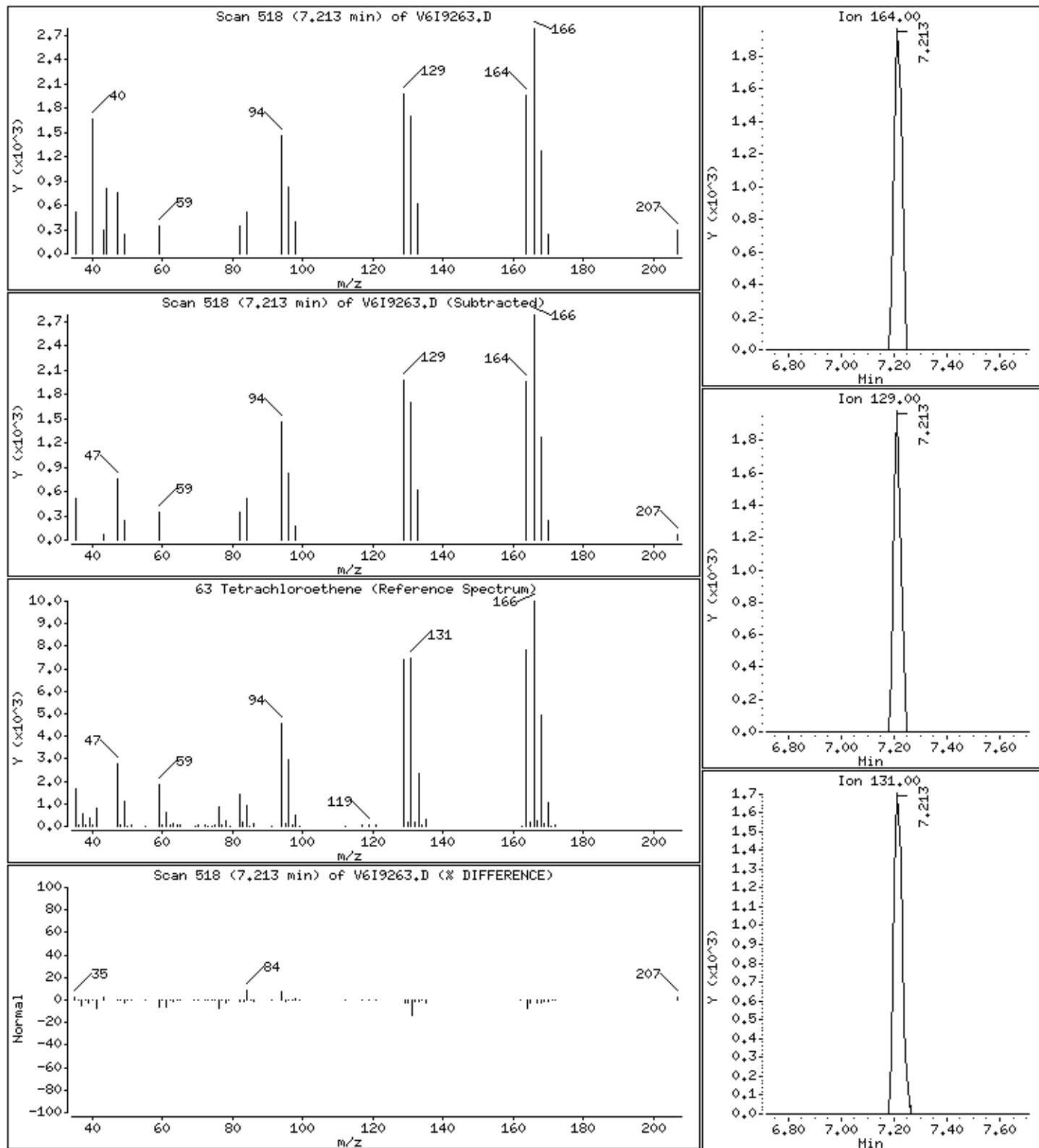
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 1 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-01

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-06A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9218.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/22/2012
% Moisture: not dec.	Date Analyzed: 08/23/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-01

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-06A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9218.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/22/2012
% Moisture: not dec.	Date Analyzed: 08/23/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-01

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-06A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9218.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/22/2012

% Moisture: not dec. _____ Date Analyzed: 08/23/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120823.B\V6I9218.D
 Report Date: 24-Aug-2012 10:58

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120823.B\V6I9218.D
 Lab Smp Id: L1786-06A Client Smp ID: TB-01
 Inj Date : 23-AUG-2012 12:42
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-06A,,67814
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120823.B\v68260Gadd-6lvl.m
 Meth Date : 24-Aug-2012 10:57 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.551	4.551	(0.887)	256283	53.2712	53
\$ 42 1,2-Dichloroethane-d4	102	4.846	4.846	(0.945)	53347	49.0191	49
* 46 Fluorobenzene	96	5.130	5.130	(1.000)	849368	50.0000	
\$ 58 Toluene-d8	98	6.598	6.586	(0.814)	812015	47.9126	48
* 68 Chlorobenzene-d5	117	8.100	8.100	(1.000)	706266	50.0000	
\$ 79 Bromofluorobenzene	95	9.402	9.402	(1.161)	361952	48.8395	49
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.621	(1.000)	389026	50.0000	

Data File: \\avogadro\organics\V6.i\120823.B\V6I9218.D
Report Date: 24-Aug-2012 10:58

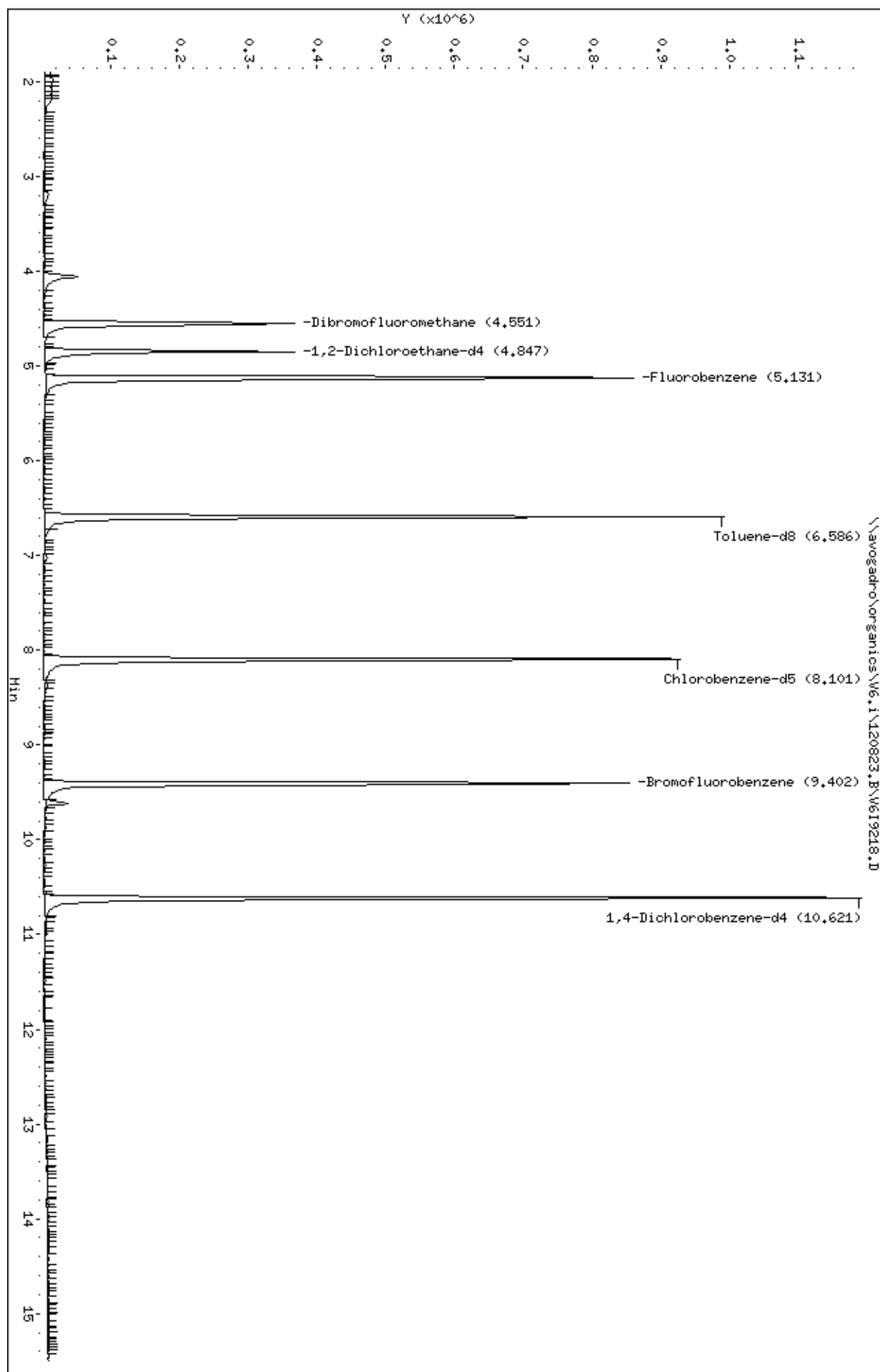
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120823.B\V6I9218.D
Lab Smp Id: L1786-06A Client Smp ID: TB-01
Inj Date : 23-AUG-2012 12:42
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1786-06A,,67814
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120823.B\v68260Gadd-6lvl.m
Meth Date : 24-Aug-2012 10:57 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120823.B\W619218.D
Date : 23-AUG-2012 12:42
Client ID: TB-01
Sample Info: 5ML, L1786-06H, 67814
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-12

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-07A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9266.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/23/2012
% Moisture: not dec.	Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	0.68	J
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.6	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	1.1	J
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SL-MW-12

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L1786</u>	Mod. Ref No.: _____ SDG No.: <u>SL1786</u>
Matrix: (SOIL/SED/WATER) <u>WATER</u>	Lab Sample ID: <u>L1786-07A</u>
Sample wt/vol: <u>5.00</u> (g/mL) <u>ML</u>	Lab File ID: <u>V6I9266.D</u>
Level: (TRACE/LOW/MED) <u>LOW</u>	Date Received: <u>08/23/2012</u>
% Moisture: not dec. _____	Date Analyzed: <u>08/24/2012</u>
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor: <u>1.0</u>
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: <u>5.0</u> (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
127-18-4	Tetrachloroethene	0.80	J
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-12

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9266.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/23/2012

% Moisture: not dec. _____ Date Analyzed: 08/24/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120824.B\V6I9266.D
 Report Date: 27-Aug-2012 10:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120824.B\V6I9266.D
 Lab Smp Id: L1786-07A Client Smp ID: SL-MW-12
 Inj Date : 24-AUG-2012 16:07
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-07A,,67828
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
 Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
22 Methyl tert-butyl ether	73	3.364	3.366	(0.656)	8279	0.67869	0.7
28 cis-1,2-Dichloroethene	96	4.169	4.158	(0.813)	25014	5.57968	6
\$ 36 Dibromofluoromethane	113	4.548	4.549	(0.887)	250519	53.9270	54
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.845	(0.945)	51867	49.3559	49
* 46 Fluorobenzene	96	5.128	5.129	(1.000)	820169	50.0000	
47 Trichloroethene	130	5.447	5.448	(1.062)	4908	1.13837	1
\$ 58 Toluene-d8	98	6.595	6.584	(0.814)	784144	48.4672	48
63 Tetrachloroethene	164	7.210	7.211	(0.890)	3083	0.80288	0.8
* 68 Chlorobenzene-d5	117	8.098	8.099	(1.000)	674220	50.0000	
\$ 79 Bromofluorobenzene	95	9.399	9.400	(1.161)	338222	47.8067	48
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.619	(1.000)	375405	50.0000	

Data File: \\avogadro\organics\V6.i\120824.B\V6I9266.D
Report Date: 27-Aug-2012 10:39

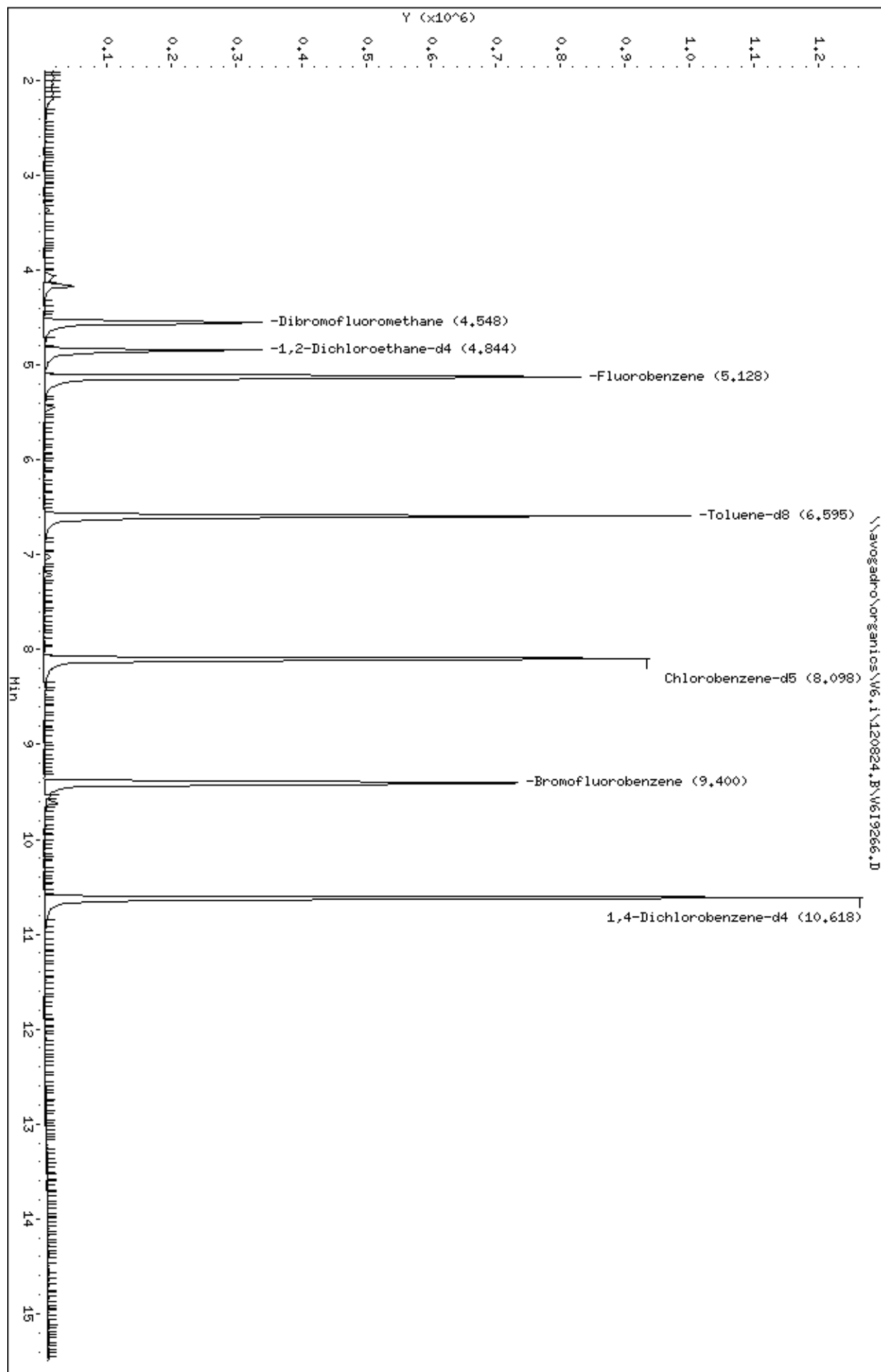
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120824.B\V6I9266.D
Lab Smp Id: L1786-07A Client Smp ID: SL-MW-12
Inj Date : 24-AUG-2012 16:07
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1786-07A,,67828
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120824,B\W619266.D
Date : 24-AUG-2012 16:07
Client ID: SL-MW-12
Sample Info: 5ML, L1786-07A, 67828
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120824.B\V6I9266.D

Date : 24-AUG-2012 16:07

Client ID: SL-MW-12

Instrument: V6.i

Sample Info: 5HL,L1786-07A,,67828

Purge Volume: 5.0

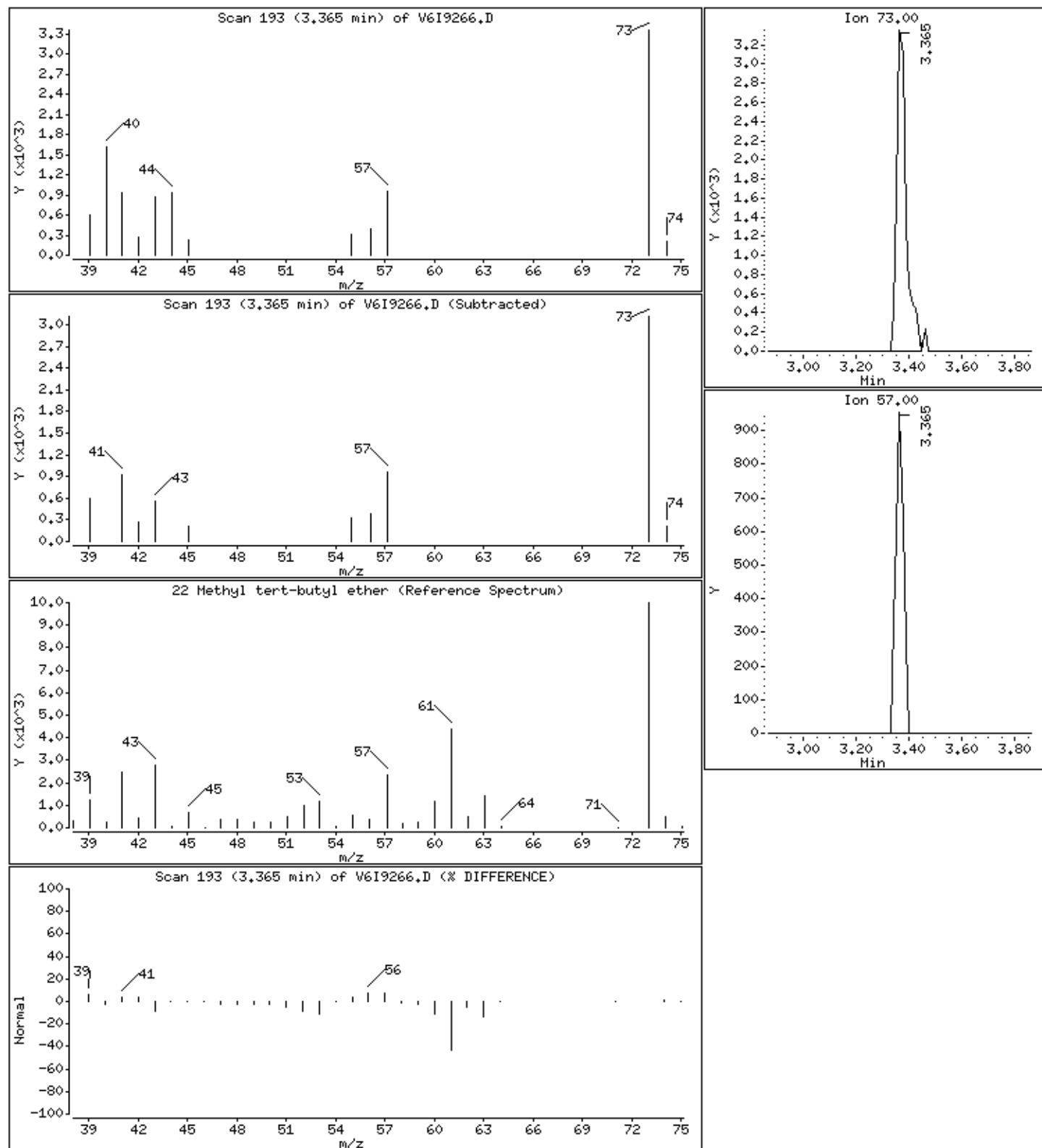
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

22 Methyl tert-butyl ether

Concentration: 0.7 ug/L



Data File: \\avogadro\organics\V6.i\120824.B\V6I9266.D

Date : 24-AUG-2012 16:07

Client ID: SL-MW-12

Instrument: V6.i

Sample Info: 5HL,L1786-07A,,67828

Purge Volume: 5.0

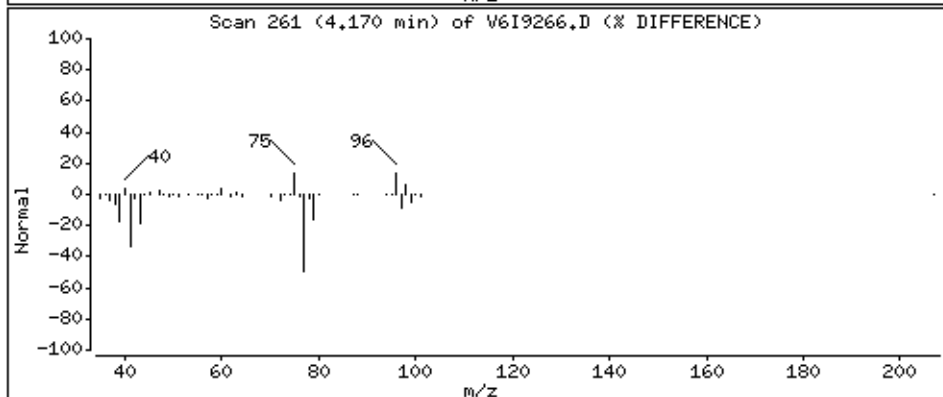
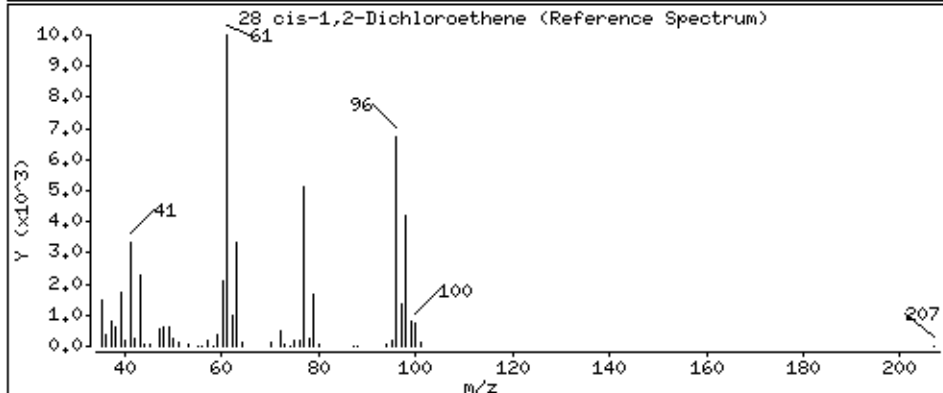
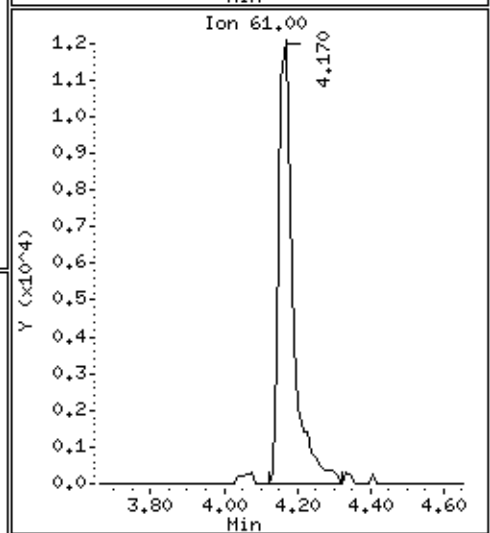
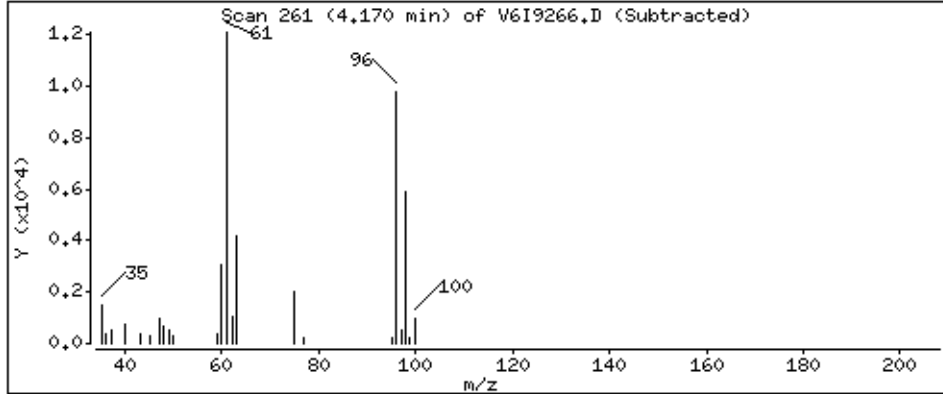
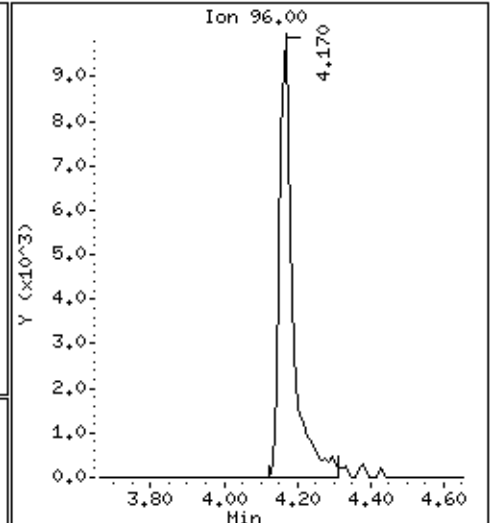
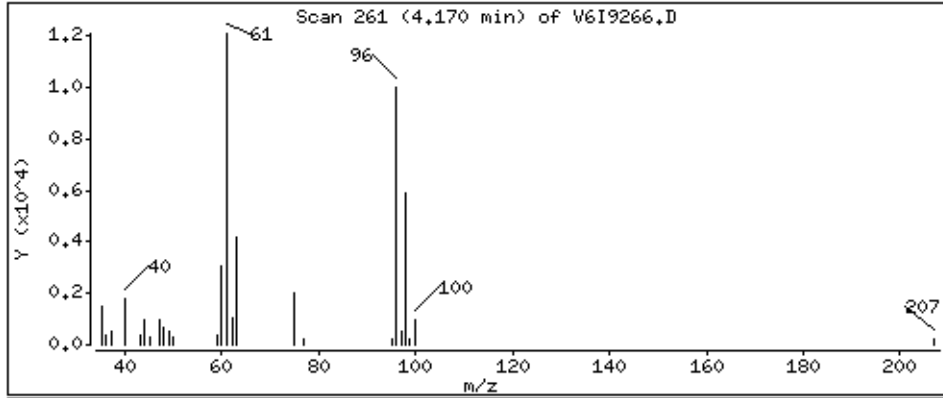
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 6 ug/L



Data File: \\avogadro\organics\V6.i\120824.B\V6I9266.D

Date : 24-AUG-2012 16:07

Client ID: SL-MW-12

Instrument: V6.i

Sample Info: 5HL, L1786-07A,, 67828

Purge Volume: 5.0

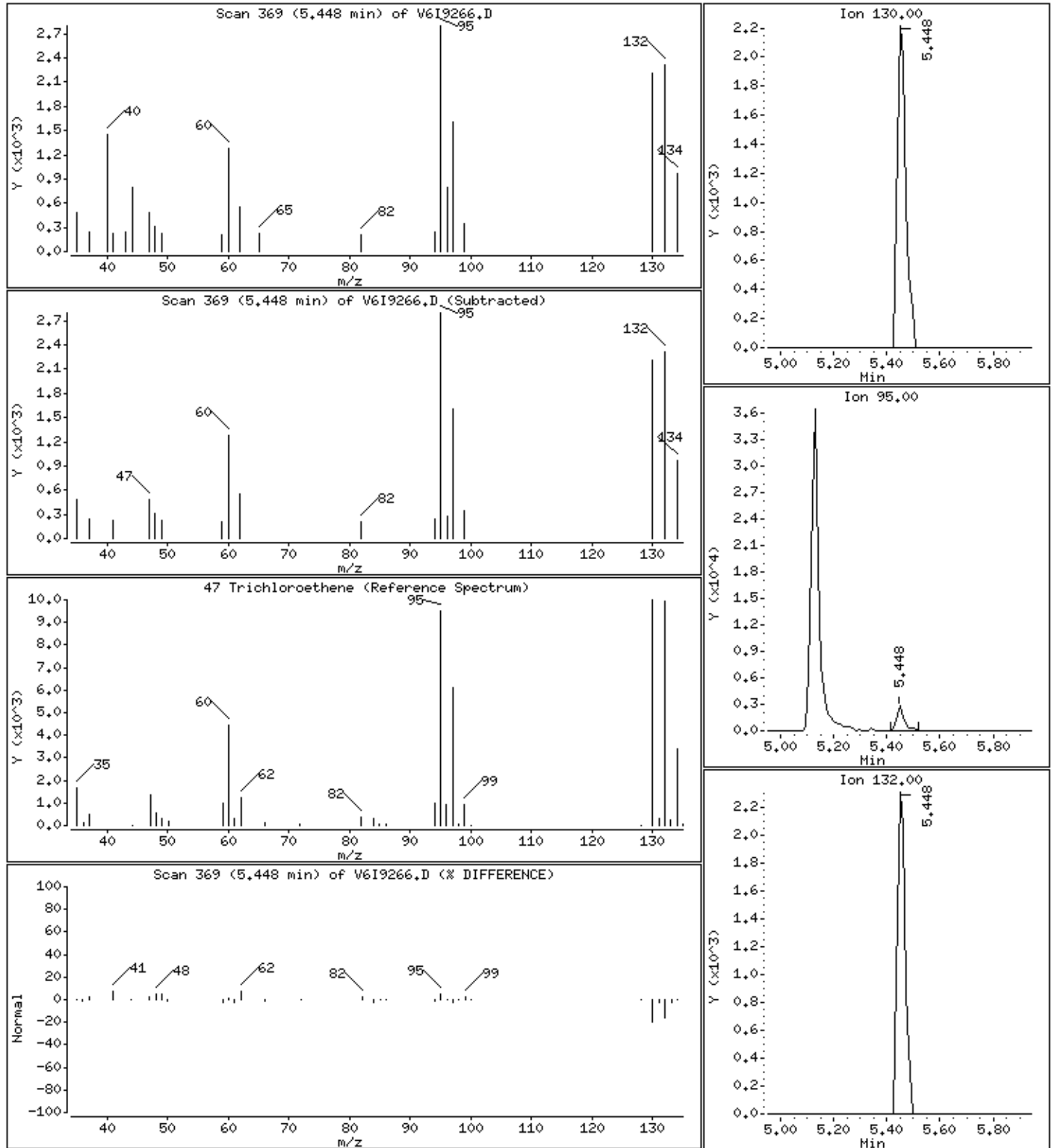
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 1 ug/L



Data File: \\avogadro\organics\V6.i\120824.B\V6I9266.D

Date : 24-AUG-2012 16:07

Client ID: SL-MW-12

Instrument: V6.i

Sample Info: 5HL,L1786-07A,,67828

Purge Volume: 5.0

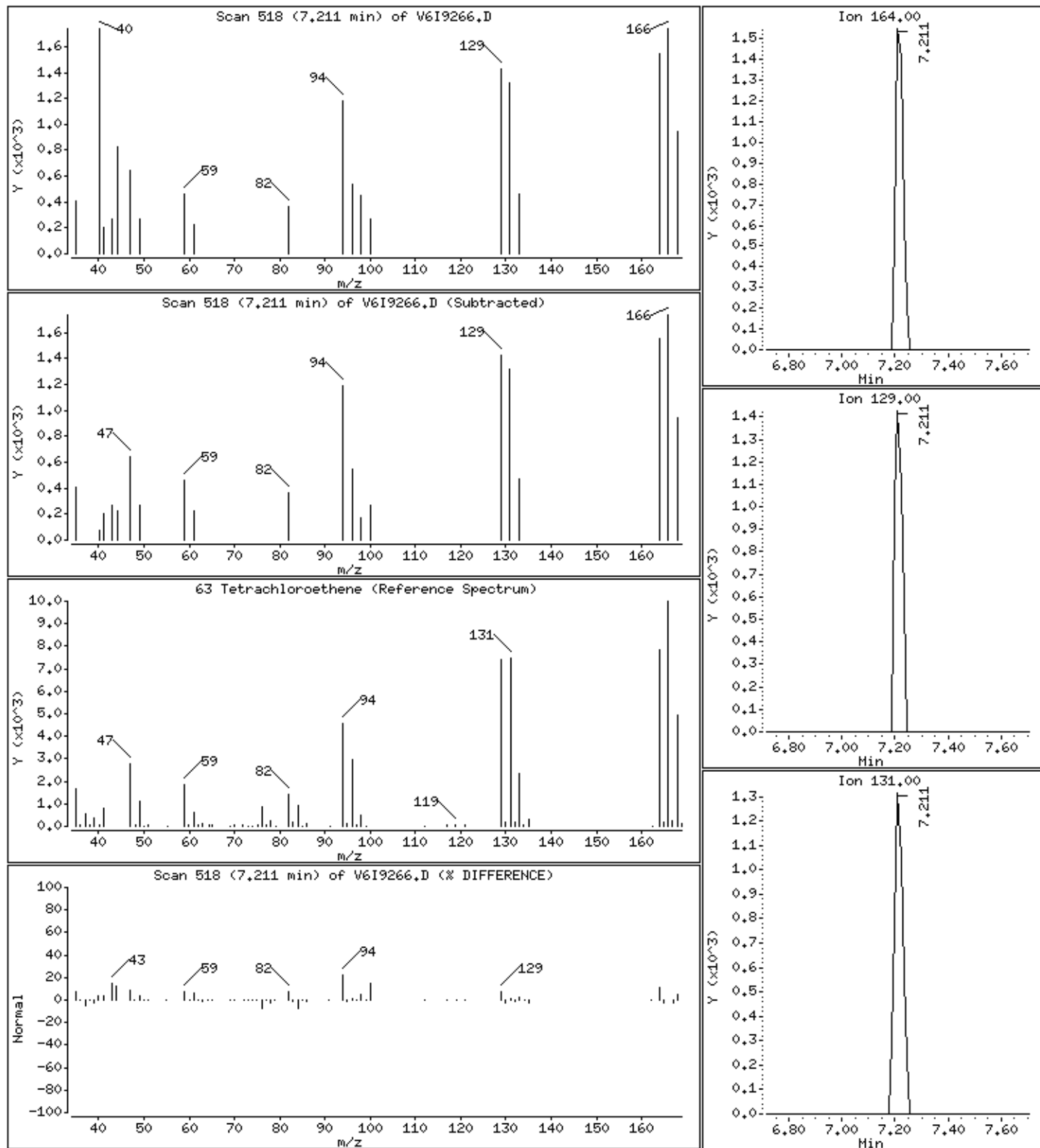
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 0.8 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9267.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/23/2012

% Moisture: not dec. Date Analyzed: 08/24/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	4.6	J
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9267.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/23/2012

% Moisture: not dec. Date Analyzed: 08/24/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-14

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-08A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9267.D
 Level: (TRACE or LOW/MED) LOW Date Received: 08/23/2012
 % Moisture: not dec. Date Analyzed: 08/24/2012
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown	2.039	5.2	J

¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120824.B\V6I9267.D
 Report Date: 27-Aug-2012 10:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120824.B\V6I9267.D
 Lab Smp Id: L1786-08A Client Smp ID: SL-MW-14
 Inj Date : 24-AUG-2012 16:32
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-08A,,67828
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
 Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 18
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
22 Methyl tert-butyl ether	73	3.364	3.366	(0.656)	57033	4.62204	5
\$ 36 Dibromofluoromethane	113	4.547	4.549	(0.887)	248954	52.9784	53
\$ 42 1,2-Dichloroethane-d4	102	4.843	4.845	(0.945)	50690	47.6853	48
* 46 Fluorobenzene	96	5.127	5.129	(1.000)	829639	50.0000	
\$ 58 Toluene-d8	98	6.595	6.584	(0.814)	788647	48.4120	48
* 68 Chlorobenzene-d5	117	8.097	8.099	(1.000)	678864	50.0000	
\$ 79 Bromofluorobenzene	95	9.399	9.400	(1.161)	342250	48.0451	48
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.619	(1.000)	377303	50.0000	

Data File: \\avogadro\organics\V6.i\120824.B\V6I9267.D
 Report Date: 27-Aug-2012 10:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120824.B\V6I9267.D
 Lab Smp Id: L1786-08A Client Smp ID: SL-MW-14
 Inj Date : 24-AUG-2012 16:32
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-08A,,67828
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
 Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 18
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

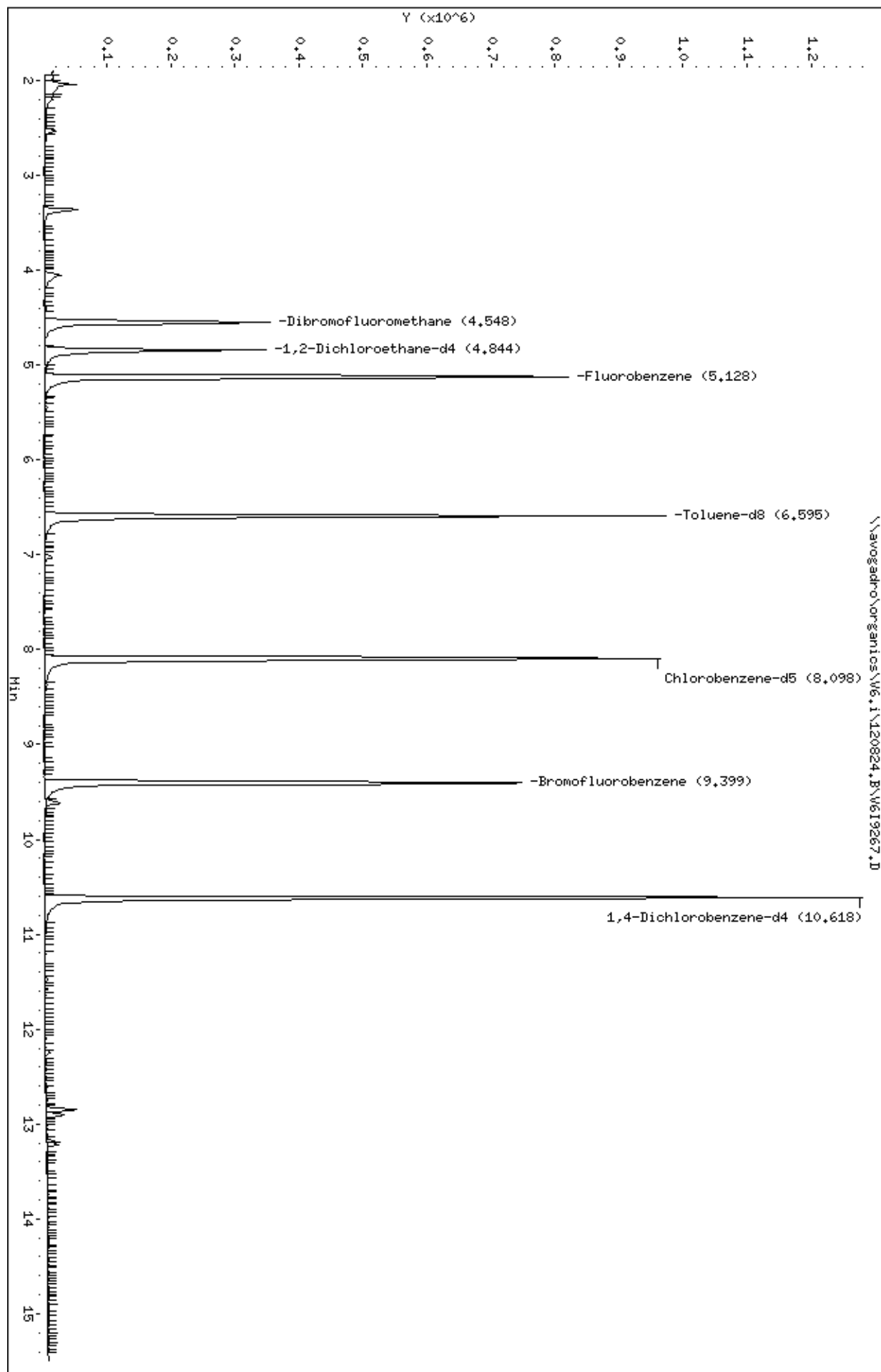
Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

ISTD	RT	AREA	AMOUNT
=====	=====	=====	=====
* 46 Fluorobenzene	5.128	1812817	50.000

CONCENTRATIONS					QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/L)	QUAL	LIBRARY	LIB ENTRY	CPND #
=====	=====	=====	=====	=====	=====	=====	=====
Unknown				CAS #:			
2.039	186727	5.15017350	5	0		0	46

Data File: \\avogadro\organics\W6,i\120824,B\W619267.D
Date : 24-AUG-2012 16:32
Client ID: SL-MW-14
Sample Info: 5HL, L1786-08H, 67828
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120824.B\V6I9267.D

Date : 24-AUG-2012 16:32

Client ID: SL-MW-14

Instrument: V6.i

Sample Info: 5HL,L1786-08A,,67828

Purge Volume: 5.0

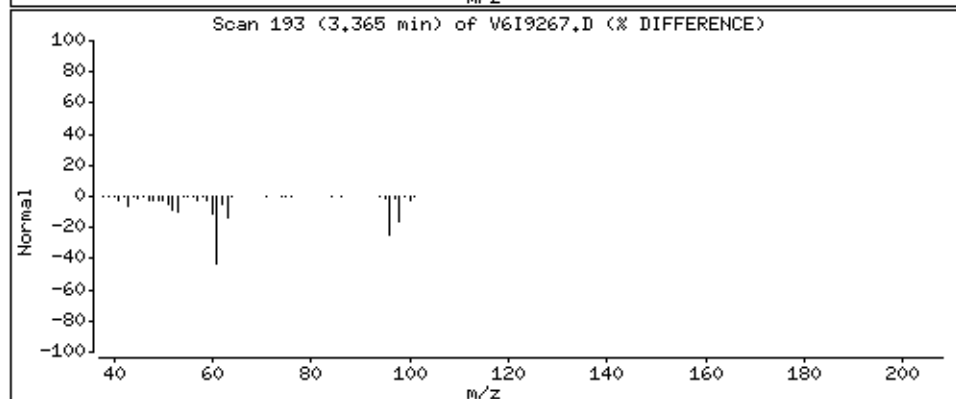
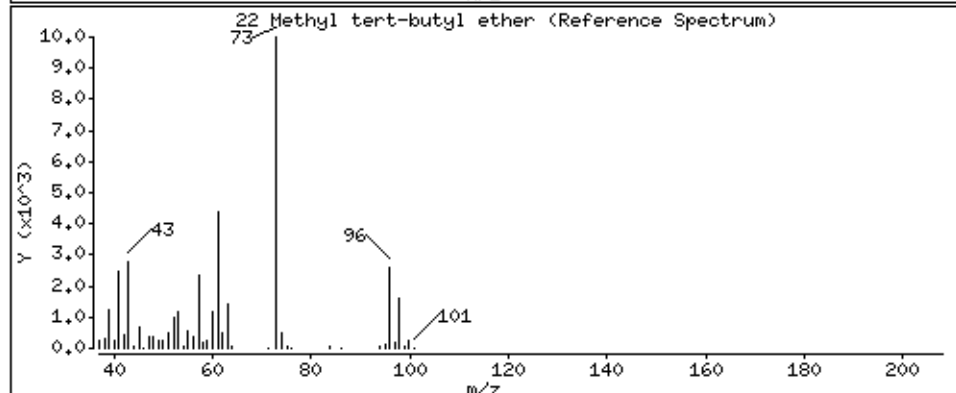
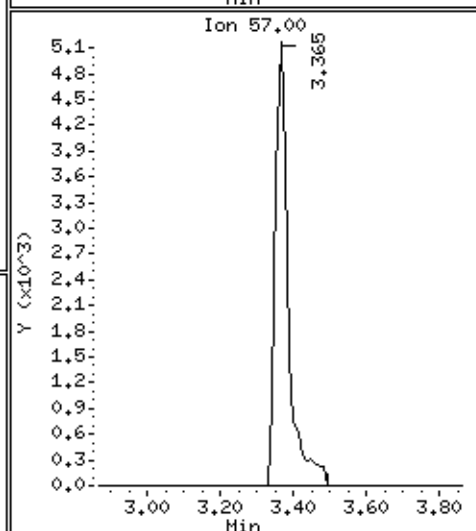
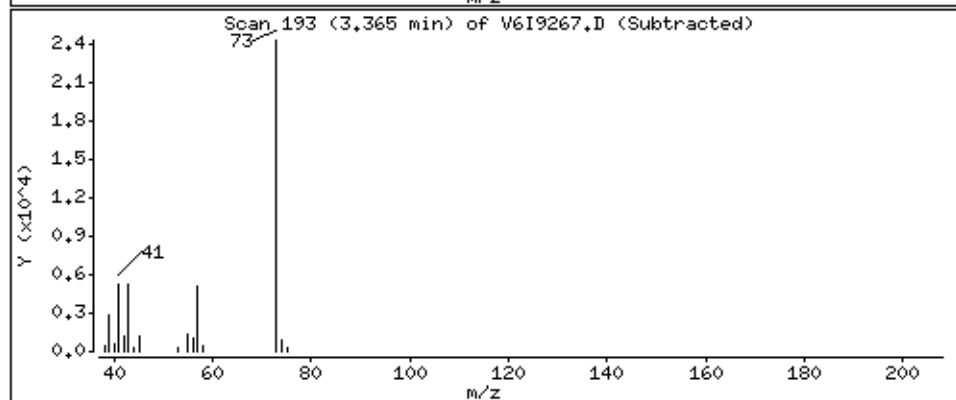
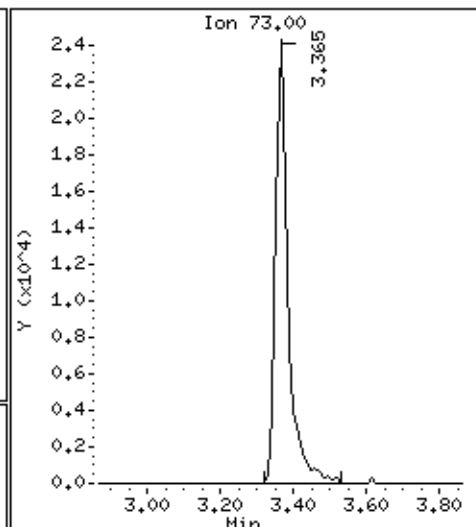
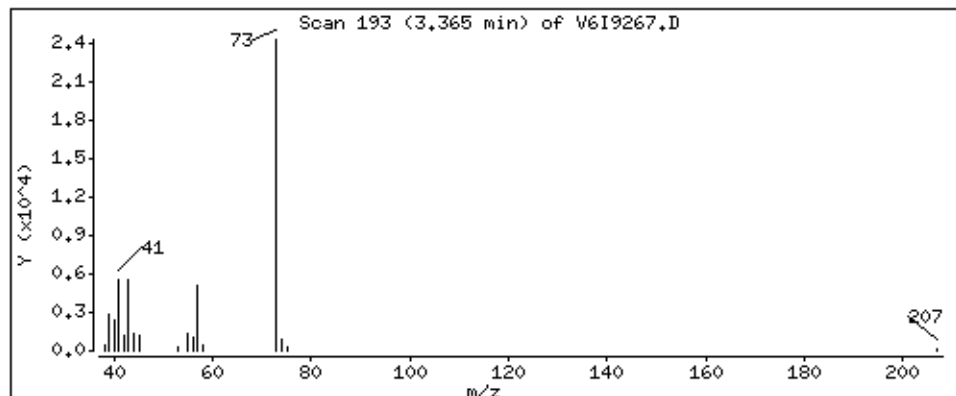
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

22 Methyl tert-butyl ether

Concentration: 5 ug/L



Data File: \\avogadro\organics\V6.i\120824.B\V6I9267.D

Date : 24-AUG-2012 16:32

Client ID: SL-MW-14

Instrument: V6.i

Sample Info: 5HL,L1786-08A,,67828

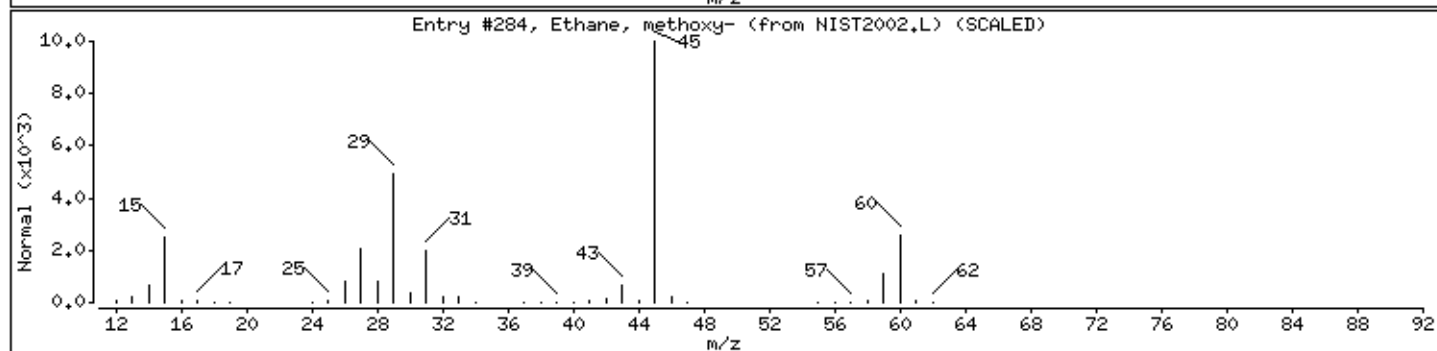
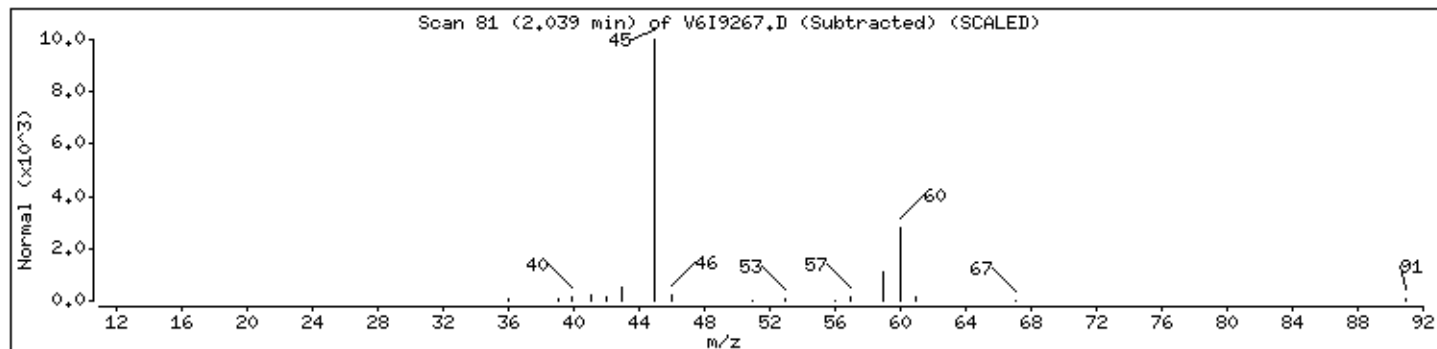
Purge Volume: 5.0

Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ethane, methoxy-	540-67-0	NIST2002.L	284	78	C3H8O	60



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-16

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-09A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9346.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/23/2012
% Moisture: not dec.	Date Analyzed: 08/28/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	2.1	J
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	1.1	J
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	1.4	J
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	20	
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	1.7	J
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	9.5	
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-16

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-09A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9346.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/23/2012
% Moisture: not dec.	Date Analyzed: 08/28/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	100	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-16

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-09A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9346.D
Level: (TRACE or LOW/MED) LOW Date Received: 08/23/2012
% Moisture: not dec. Date Analyzed: 08/28/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120828A.B\V6I9346.D
 Report Date: 29-Aug-2012 10:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120828A.B\V6I9346.D
 Lab Smp Id: L1786-09A Client Smp ID: SL-MW-16
 Inj Date : 28-AUG-2012 20:06
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-09A,,67875
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120828A.B\v68260Gadd-6lvl.m
 Meth Date : 29-Aug-2012 10:43 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 27
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					CONCENTRATIONS	
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
4 Vinyl Chloride	62	1.853	1.861 (0.361)		11984	2.07607	2
10 1,1-Dichloroethene	96	2.824	2.820 (0.550)		4923	1.06953	1(Q)
22 Methyl tert-butyl ether	73	3.368	3.364 (0.656)		18063	1.44560	1
28 cis-1,2-Dichloroethene	96	4.173	4.169 (0.813)		90693	20.1952	20
\$ 36 Dibromofluoromethane	113	4.551	4.548 (0.887)		236297	50.2255	50
37 1,1,1-Trichloroethane	97	4.575	4.583 (0.892)		11111	1.69708	2
\$ 42 1,2-Dichloroethane-d4	102	4.847	4.843 (0.945)		49441	48.9876	49
* 46 Fluorobenzene	96	5.131	5.127 (1.000)		800105	50.0000	
47 Trichloroethene	130	5.451	5.447 (1.062)		45041	9.45008	9
\$ 58 Toluene-d8	98	6.598	6.595 (0.815)		787102	49.4777	49
63 Tetrachloroethene	164	7.214	7.210 (0.890)		429283	102.330	100
* 68 Chlorobenzene-d5	117	8.101	8.097 (1.000)		670203	50.0000	
\$ 79 Bromofluorobenzene	95	9.403	9.399 (1.161)		323434	46.0455	46
* 92 1,4-Dichlorobenzene-d4	152	10.622	10.618 (1.000)		368999	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V6.i\120828A.B\V6I9346.D
Report Date: 29-Aug-2012 10:44

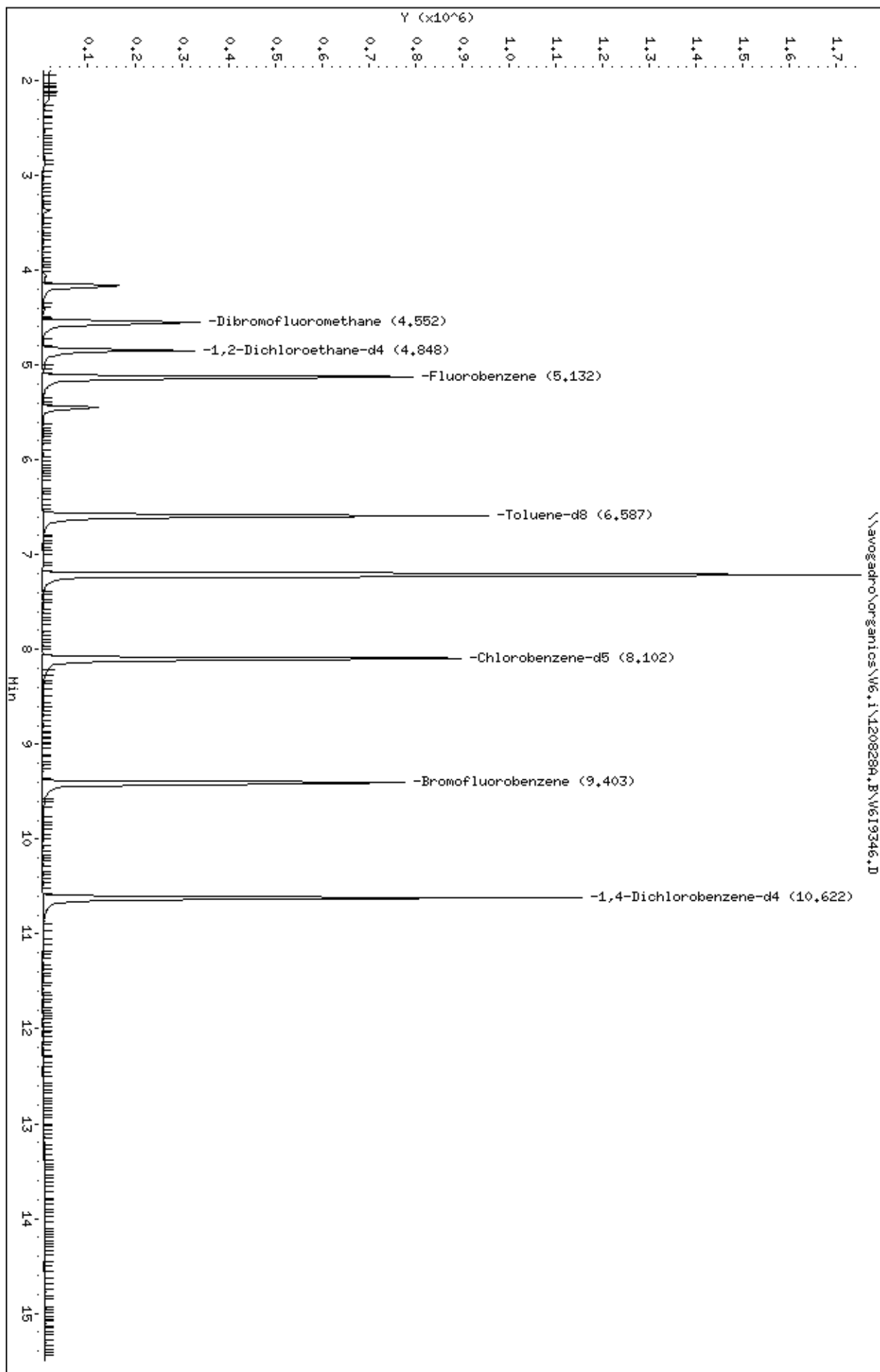
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828A.B\V6I9346.D
Lab Smp Id: L1786-09A Client Smp ID: SL-MW-16
Inj Date : 28-AUG-2012 20:06
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1786-09A,,67875
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120828A.B\v68260Gadd-6lv1.m
Meth Date : 29-Aug-2012 10:43 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6.1\1208284.B\W619346.D
Date : 28-AUG-2012 20:06
Client ID: SL-MW-16
Sample Info: 5HL, L1786-09A, 67875
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120828A.B\V6I9346.D

Date : 28-AUG-2012 20:06

Client ID: SL-MW-16

Instrument: V6.i

Sample Info: 5HL,L1786-09A,,67875

Purge Volume: 5.0

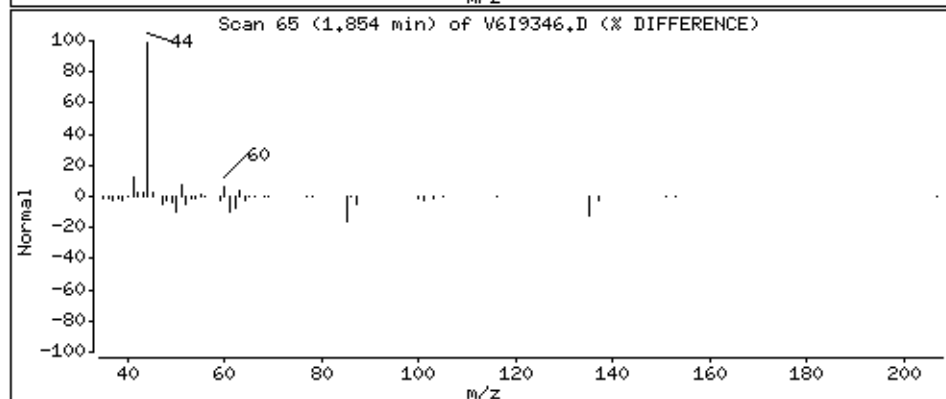
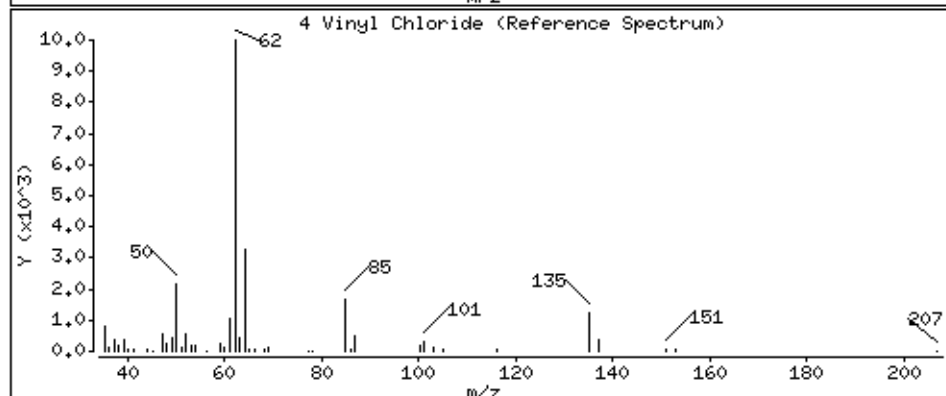
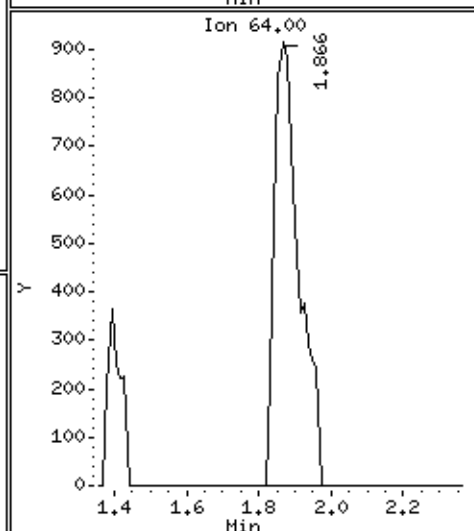
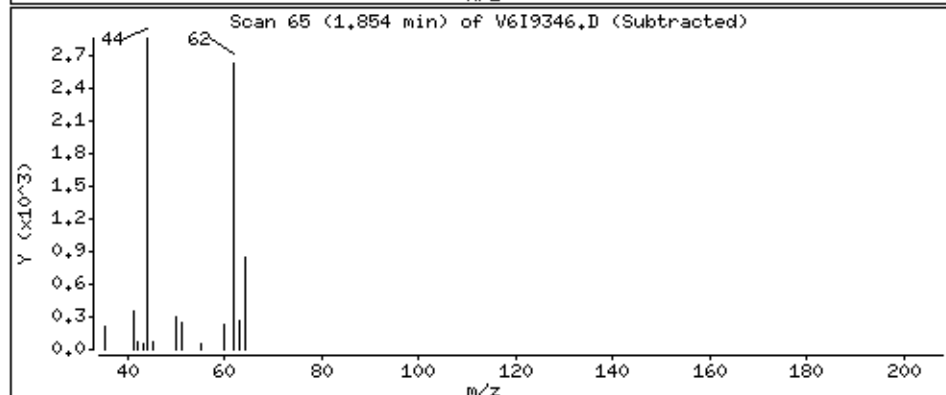
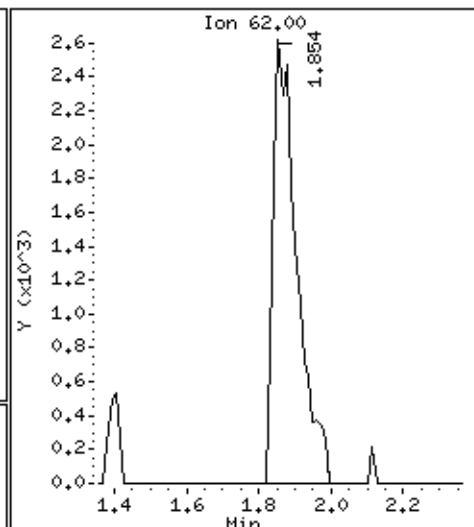
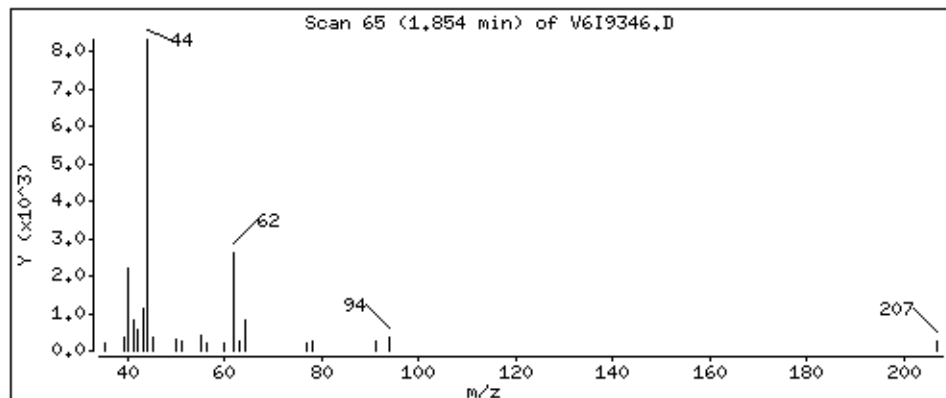
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

4 Vinyl Chloride

Concentration: 2 ug/L



Data File: \\avogadro\organics\V6.i\120828A.B\V6I9346.D

Date : 28-AUG-2012 20:06

Client ID: SL-MW-16

Instrument: V6.i

Sample Info: 5HL,L1786-09A,,67875

Purge Volume: 5.0

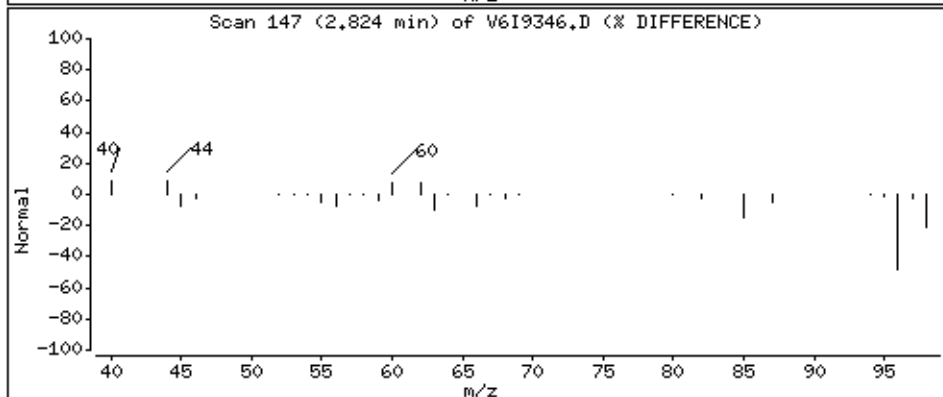
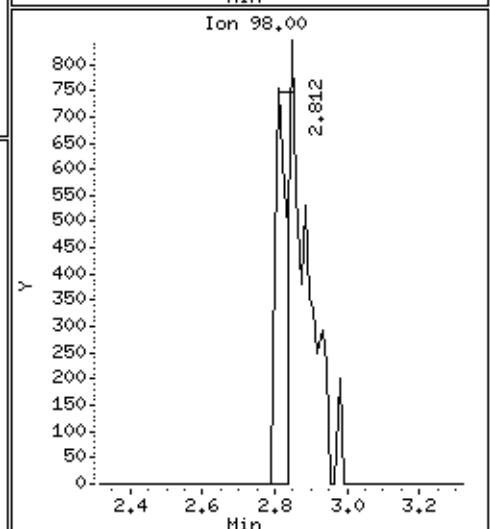
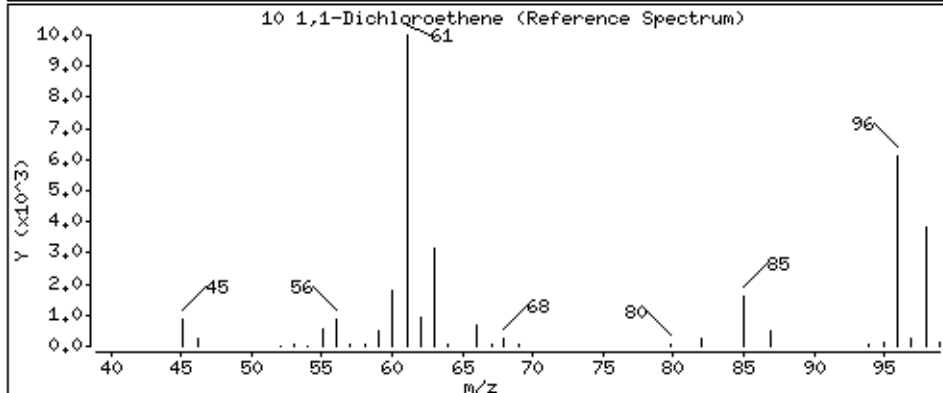
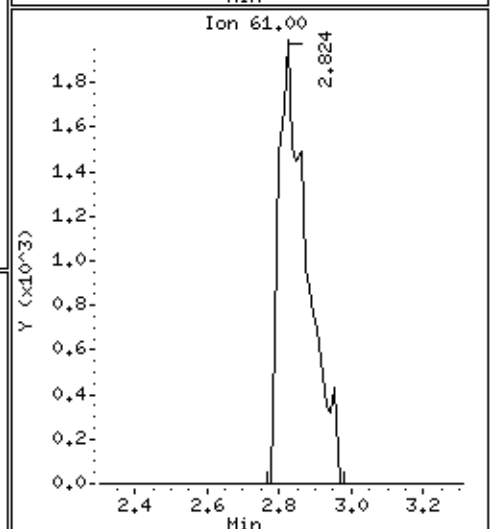
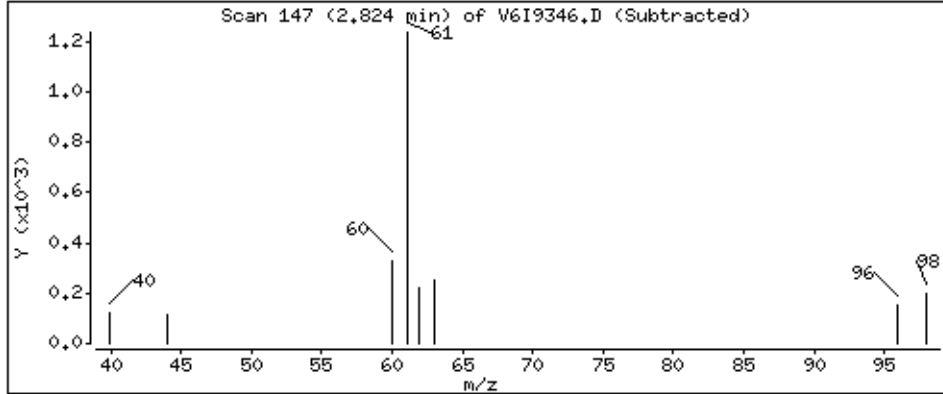
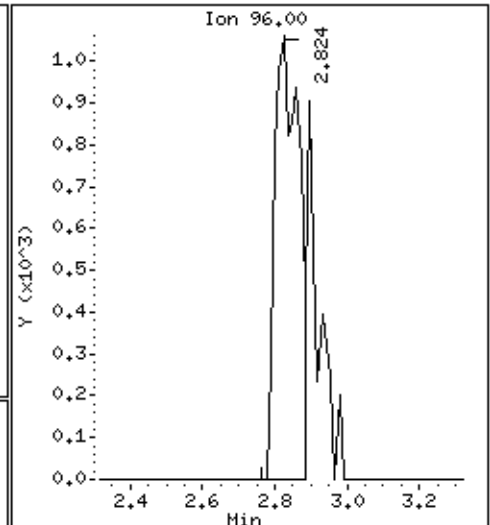
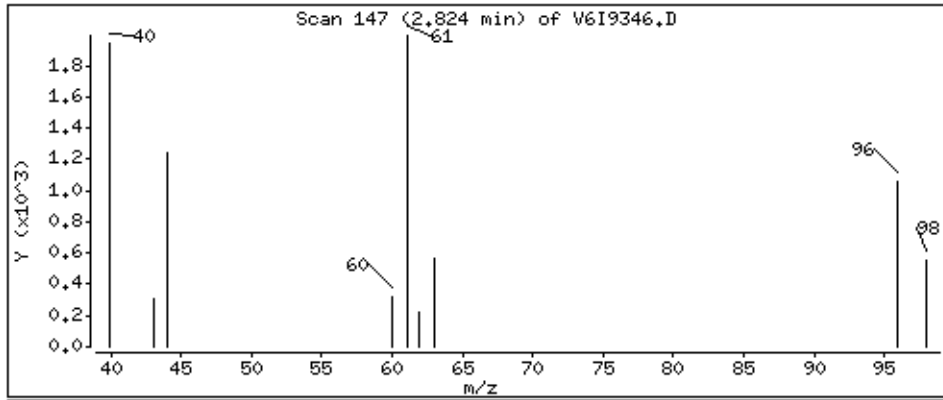
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

10 1,1-Dichloroethene

Concentration: 1 ug/L



Data File: \\avogadro\organics\V6.i\120828A.B\V6I9346.D

Date : 28-AUG-2012 20:06

Client ID: SL-MW-16

Instrument: V6.i

Sample Info: 5HL,L1786-09A,,67875

Purge Volume: 5.0

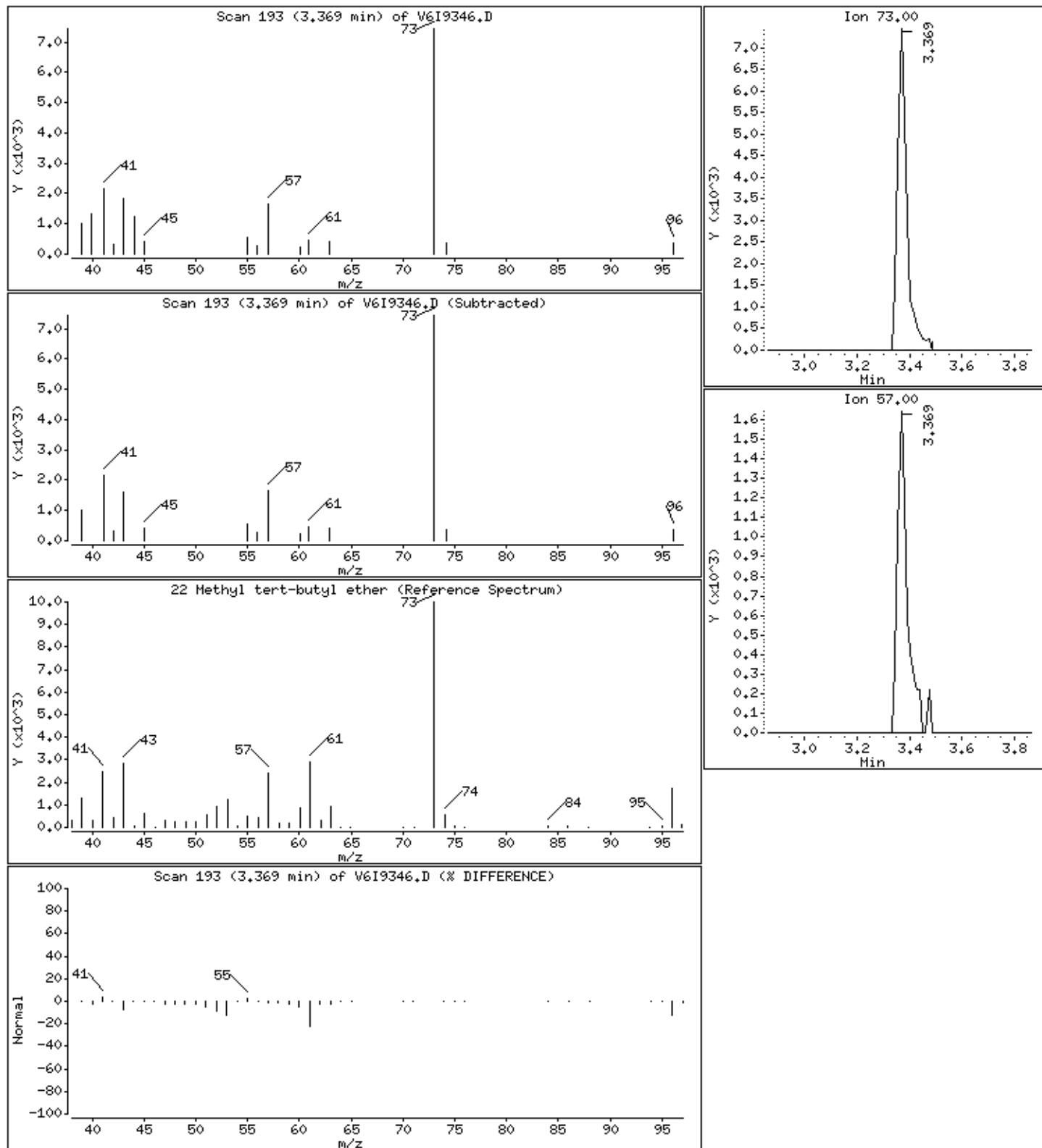
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

22 Methyl tert-butyl ether

Concentration: 1 ug/L



Data File: \\avogadro\organics\V6.i\120828A.B\V6I9346.D

Date : 28-AUG-2012 20:06

Client ID: SL-MW-16

Instrument: V6.i

Sample Info: 5HL,L1786-09A,,67875

Purge Volume: 5.0

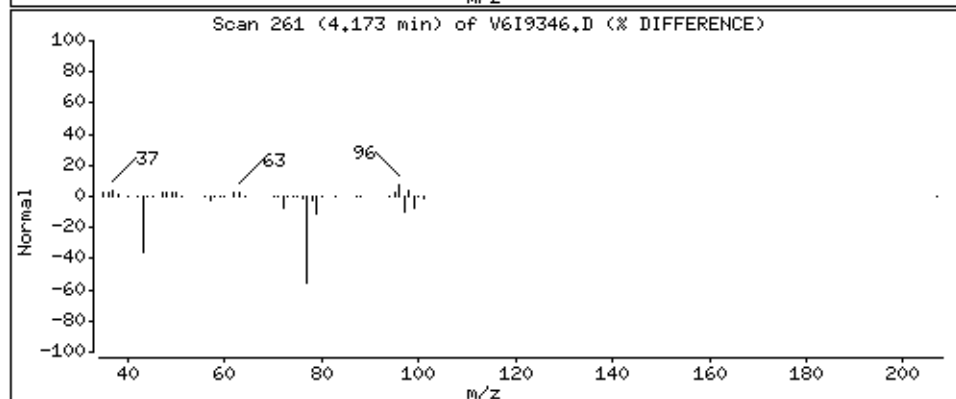
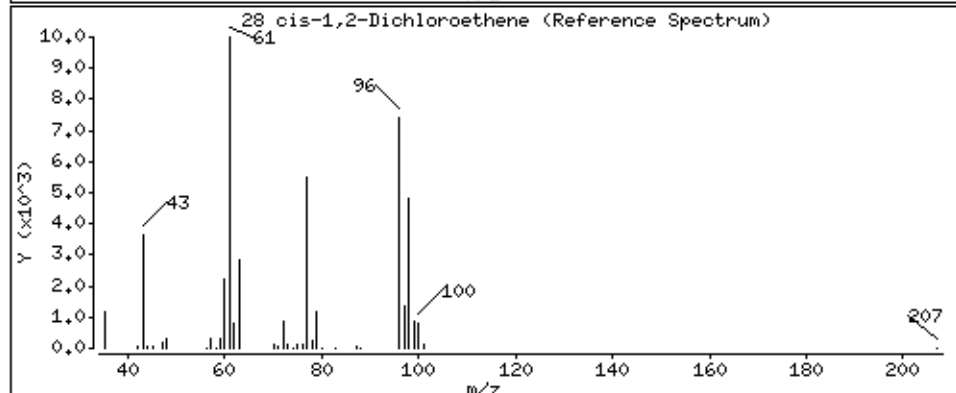
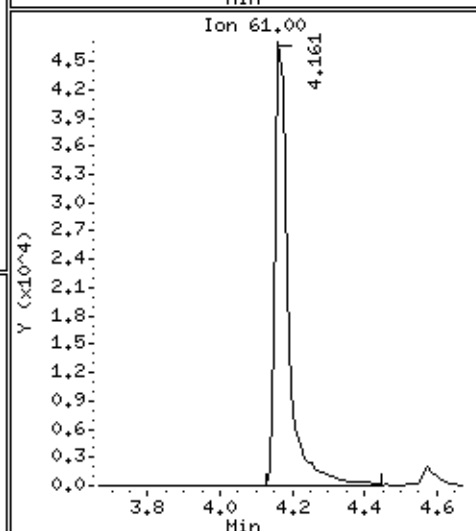
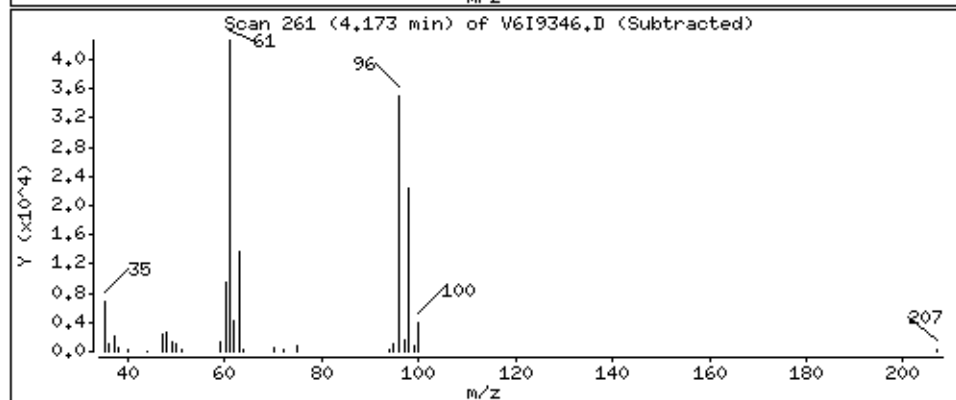
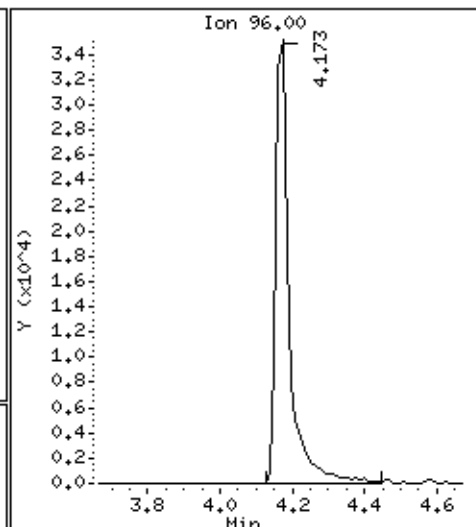
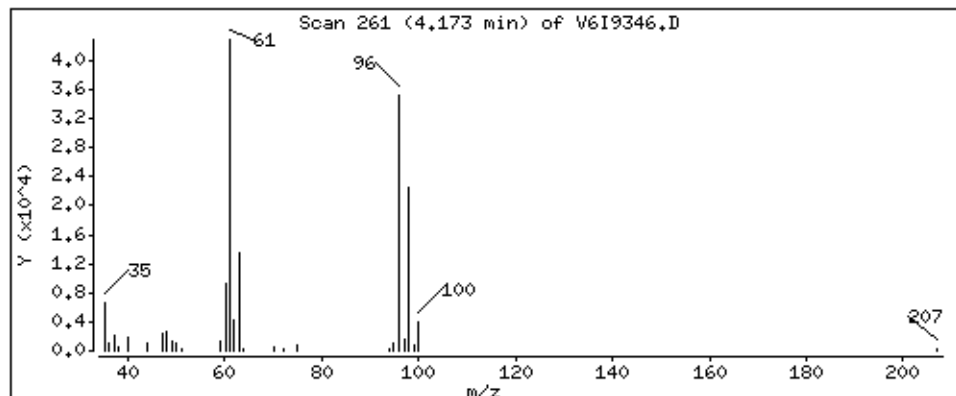
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 20 ug/L



Data File: \\avogadro\organics\V6.i\120828A.B\V6I9346.D

Date : 28-AUG-2012 20:06

Client ID: SL-MW-16

Instrument: V6.i

Sample Info: 5HL,L1786-09A,,67875

Purge Volume: 5.0

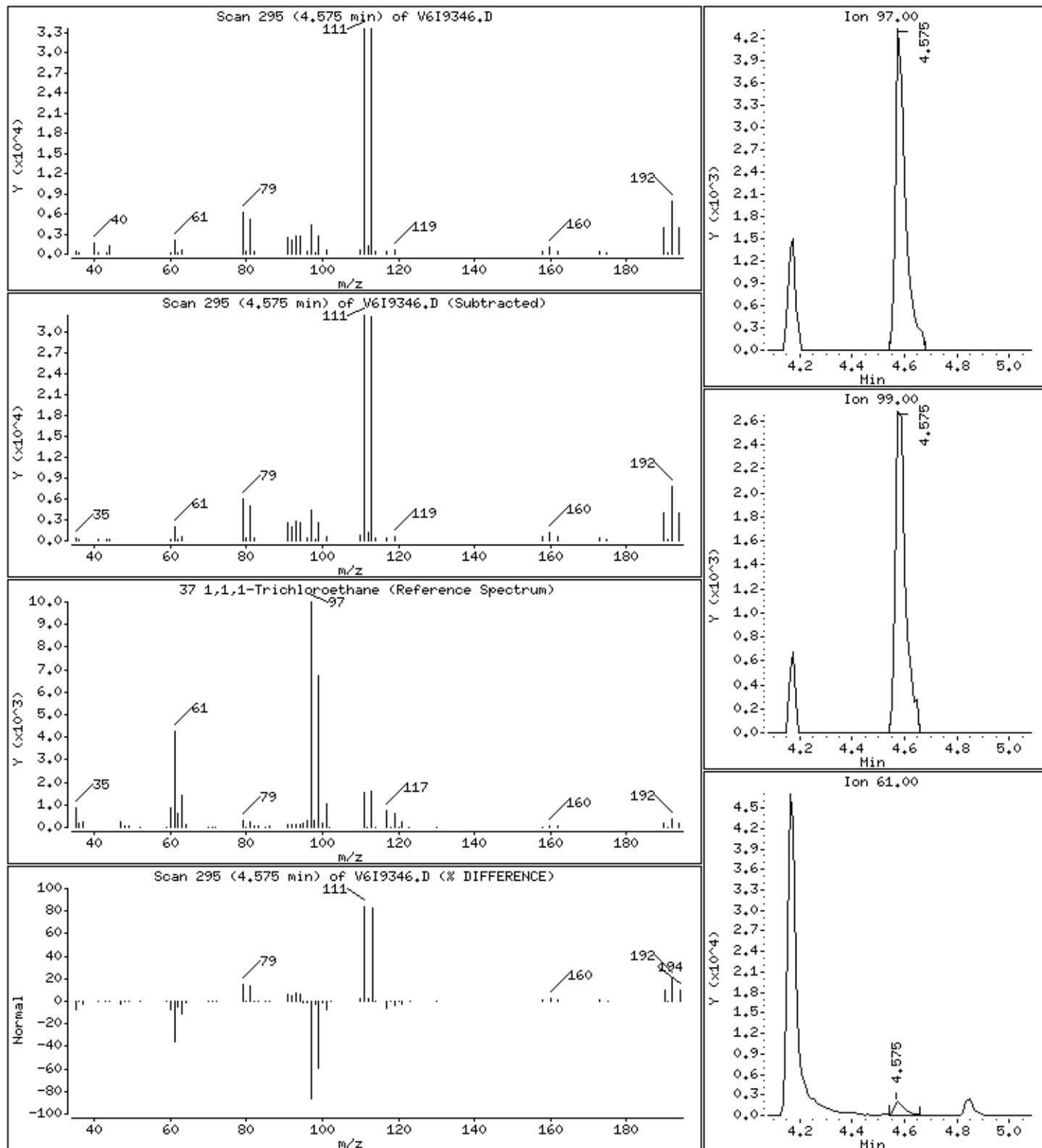
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

37 1,1,1-Trichloroethane

Concentration: 2 ug/L



Data File: \\avogadro\organics\V6.i\120828A.B\V6I9346.D

Date : 28-AUG-2012 20:06

Client ID: SL-MW-16

Instrument: V6.i

Sample Info: 5HL,L1786-09A,,67875

Purge Volume: 5.0

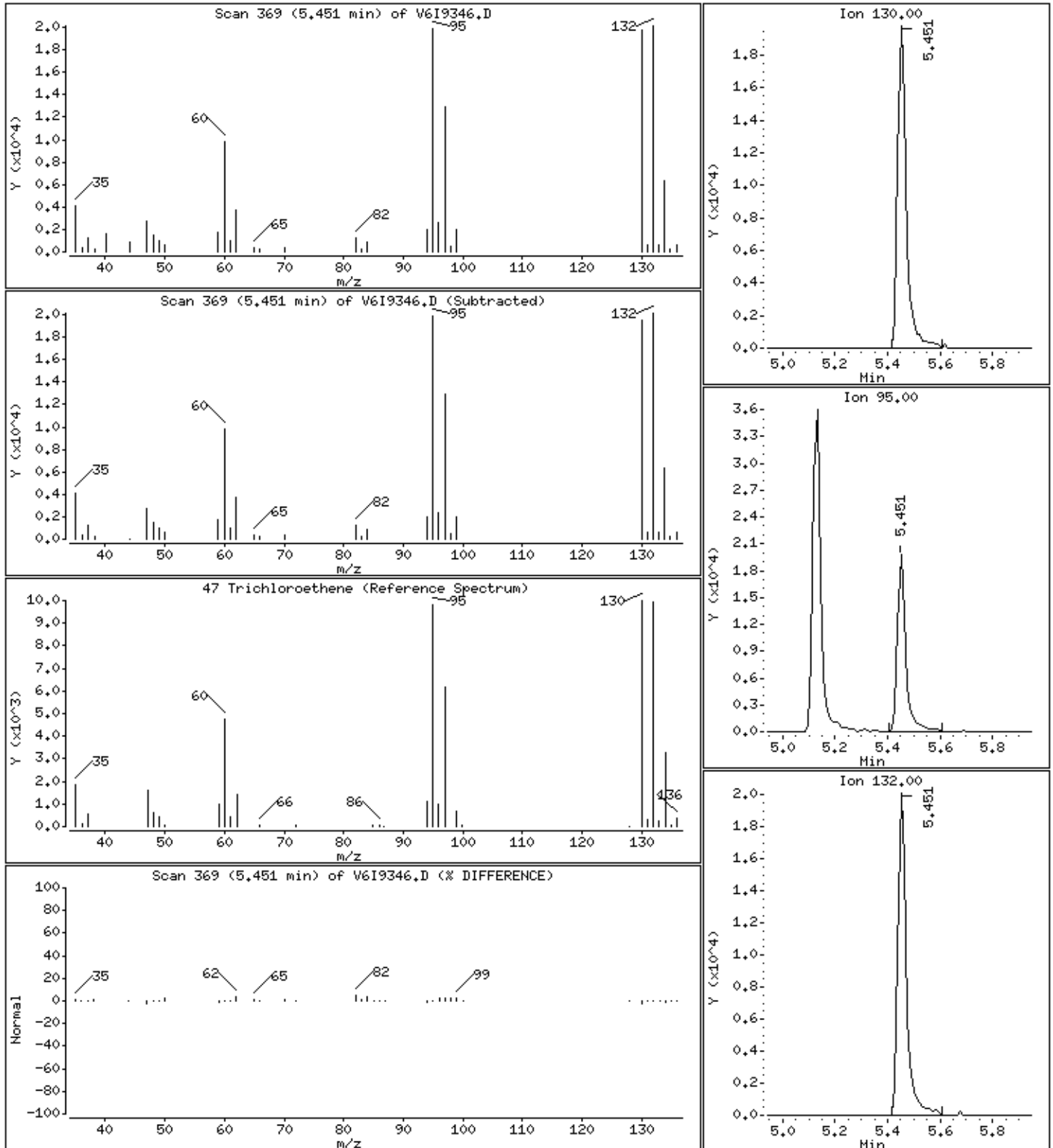
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 9 ug/L



Data File: \\avogadro\organics\V6.i\120828A.B\V6I9346.D

Date : 28-AUG-2012 20:06

Client ID: SL-MW-16

Instrument: V6.i

Sample Info: 5HL,L1786-09A,,67875

Purge Volume: 5.0

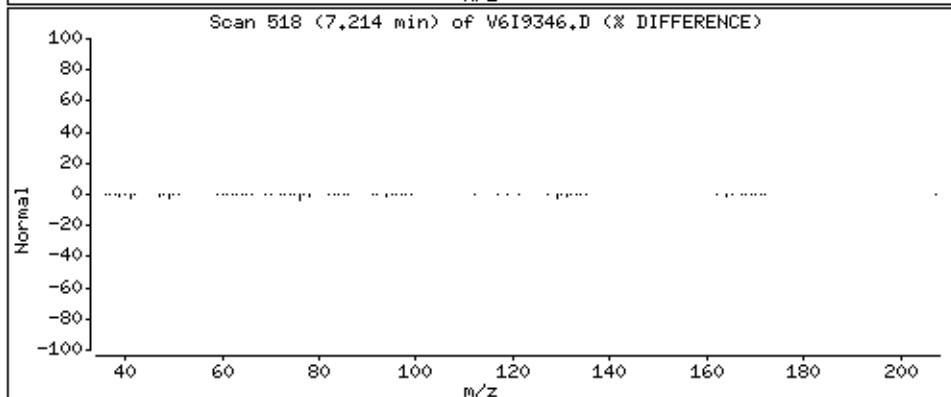
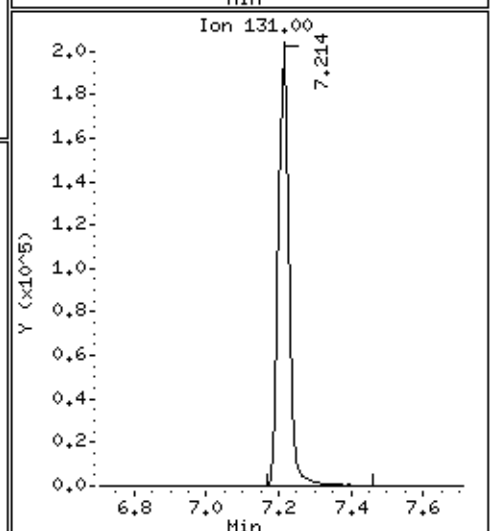
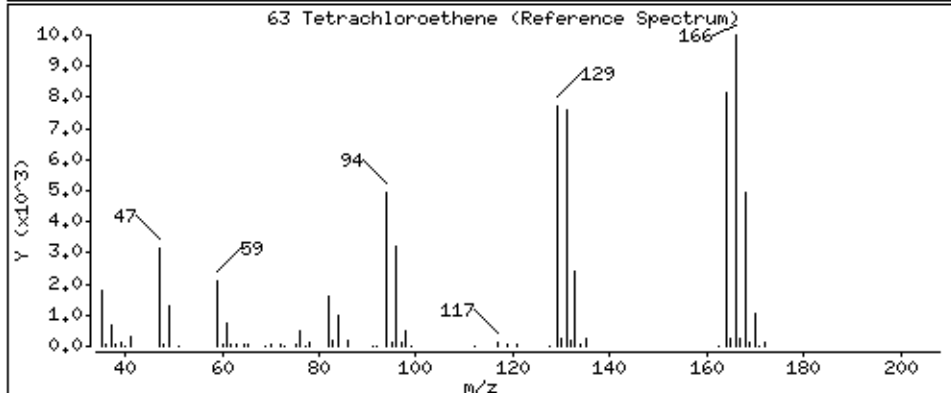
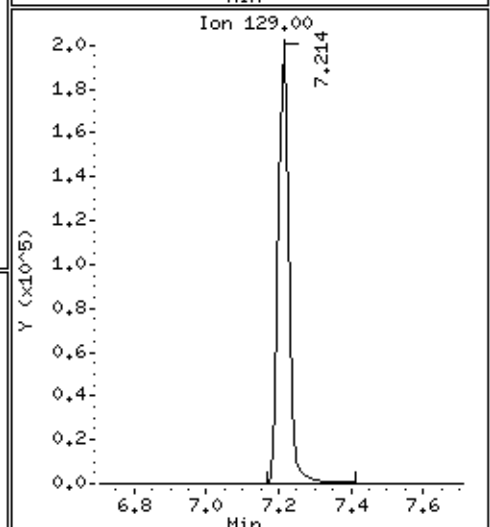
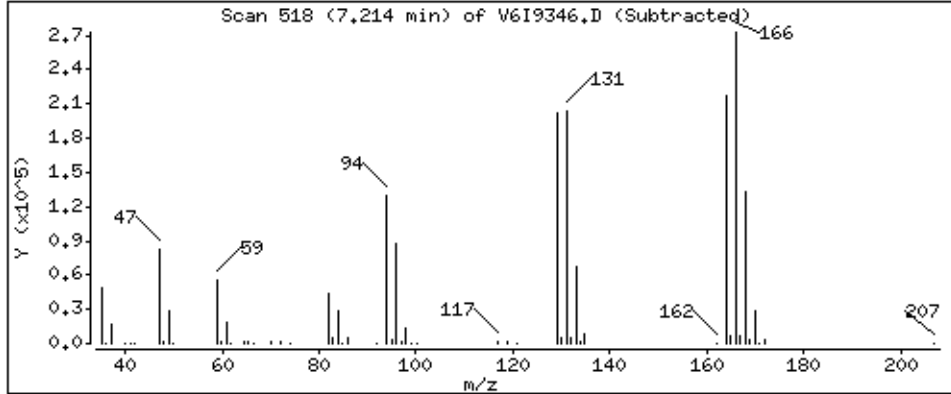
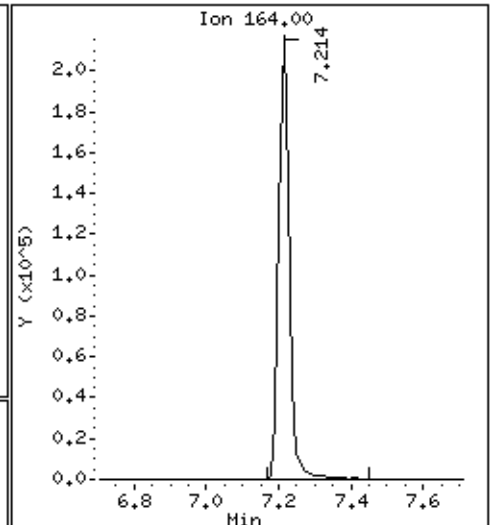
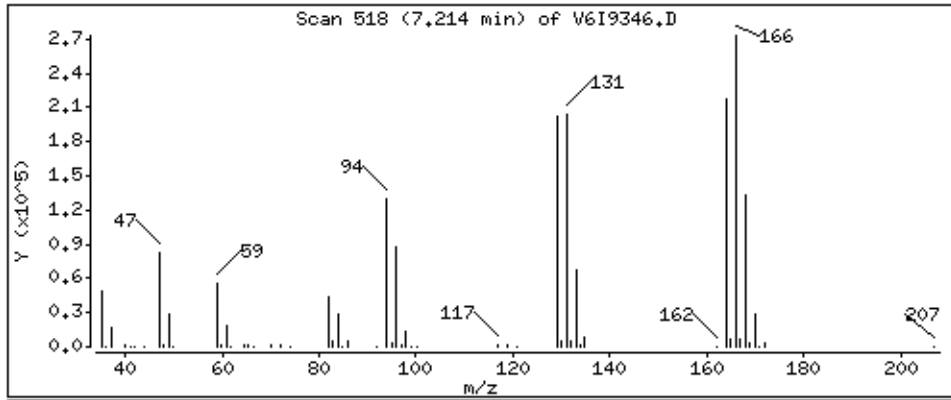
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 100 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-1

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-10A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9268.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/23/2012
% Moisture: not dec.	Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.2	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	0.81	J
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-1

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-10A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9268.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/23/2012
% Moisture: not dec.	Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	18	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-10A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9268.D
Level: (TRACE or LOW/MED) LOW Date Received: 08/23/2012
% Moisture: not dec. Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120824.B\V6I9268.D
 Report Date: 27-Aug-2012 10:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120824.B\V6I9268.D
 Lab Smp Id: L1786-10A Client Smp ID: SL-MW-1
 Inj Date : 24-AUG-2012 17:00
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-10A,,67828
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
 Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 19
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
28 cis-1,2-Dichloroethene	96	4.170	4.158	(0.813)	5415	1.21212	1
\$ 36 Dibromofluoromethane	113	4.549	4.549	(0.887)	248602	53.7022	54
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.845	(0.945)	52642	50.2693	50
* 46 Fluorobenzene	96	5.128	5.129	(1.000)	817300	50.0000	
47 Trichloroethene	130	5.448	5.448	(1.062)	3501	0.81488	0.8
\$ 58 Toluene-d8	98	6.596	6.584	(0.814)	787306	48.5361	48
63 Tetrachloroethene	164	7.211	7.211	(0.890)	69082	17.9438	18
* 68 Chlorobenzene-d5	117	8.098	8.099	(1.000)	675978	50.0000	
\$ 79 Bromofluorobenzene	95	9.400	9.400	(1.161)	337259	47.5466	48
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619	(1.000)	381152	50.0000	

Data File: \\avogadro\organics\V6.i\120824.B\V6I9268.D
Report Date: 27-Aug-2012 10:39

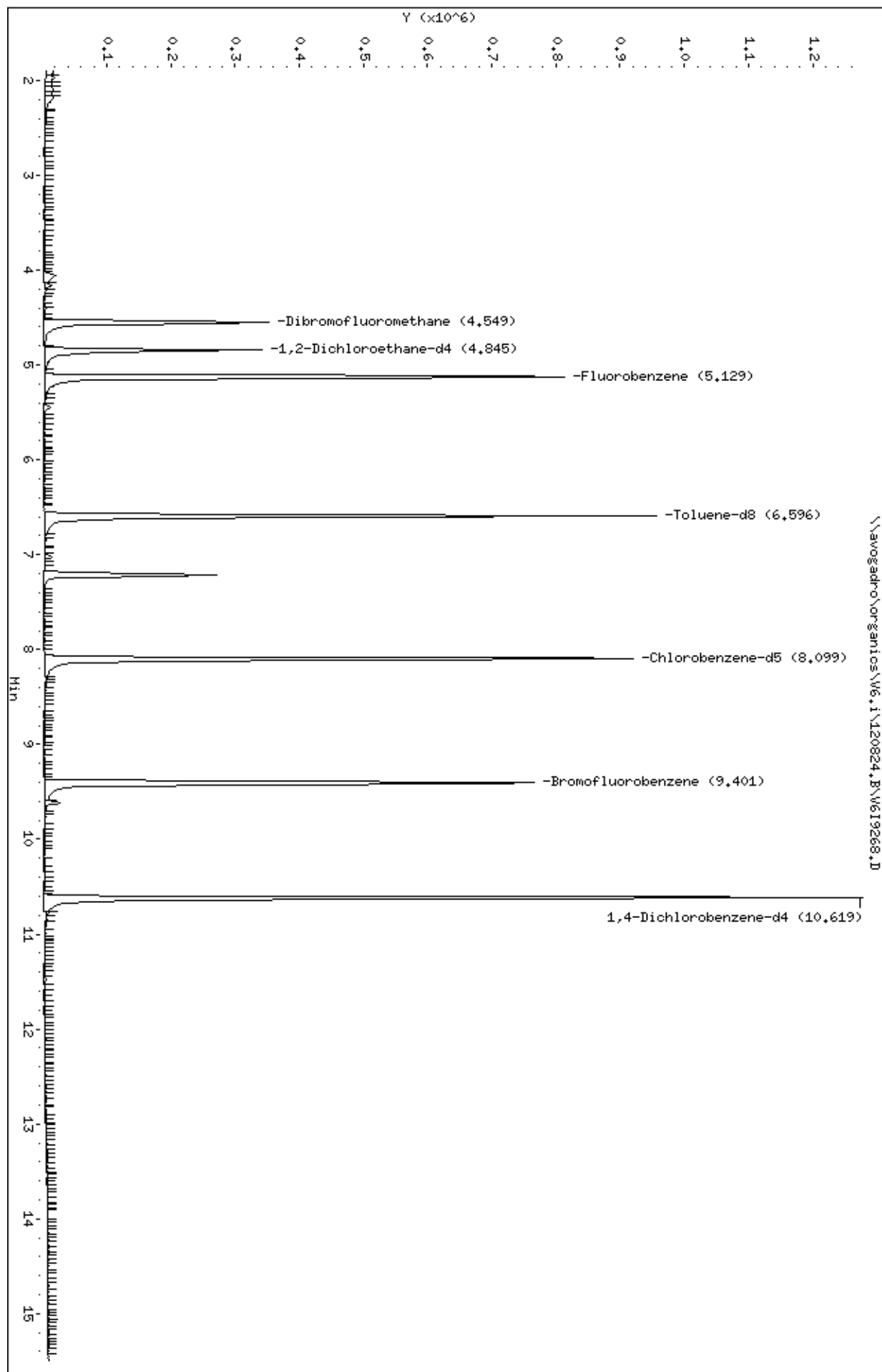
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120824.B\V6I9268.D
Lab Smp Id: L1786-10A Client Smp ID: SL-MW-1
Inj Date : 24-AUG-2012 17:00
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1786-10A,,67828
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120824,B\W619268.D
Date : 24-AUG-2012 17:00
Client ID: SL-MH-1
Sample Info: 5HL, L1786-10H, 67828
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120824.B\V6I9268.D

Date : 24-AUG-2012 17:00

Client ID: SL-MW-1

Instrument: V6.i

Sample Info: 5HL,L1786-10A,,67828

Purge Volume: 5.0

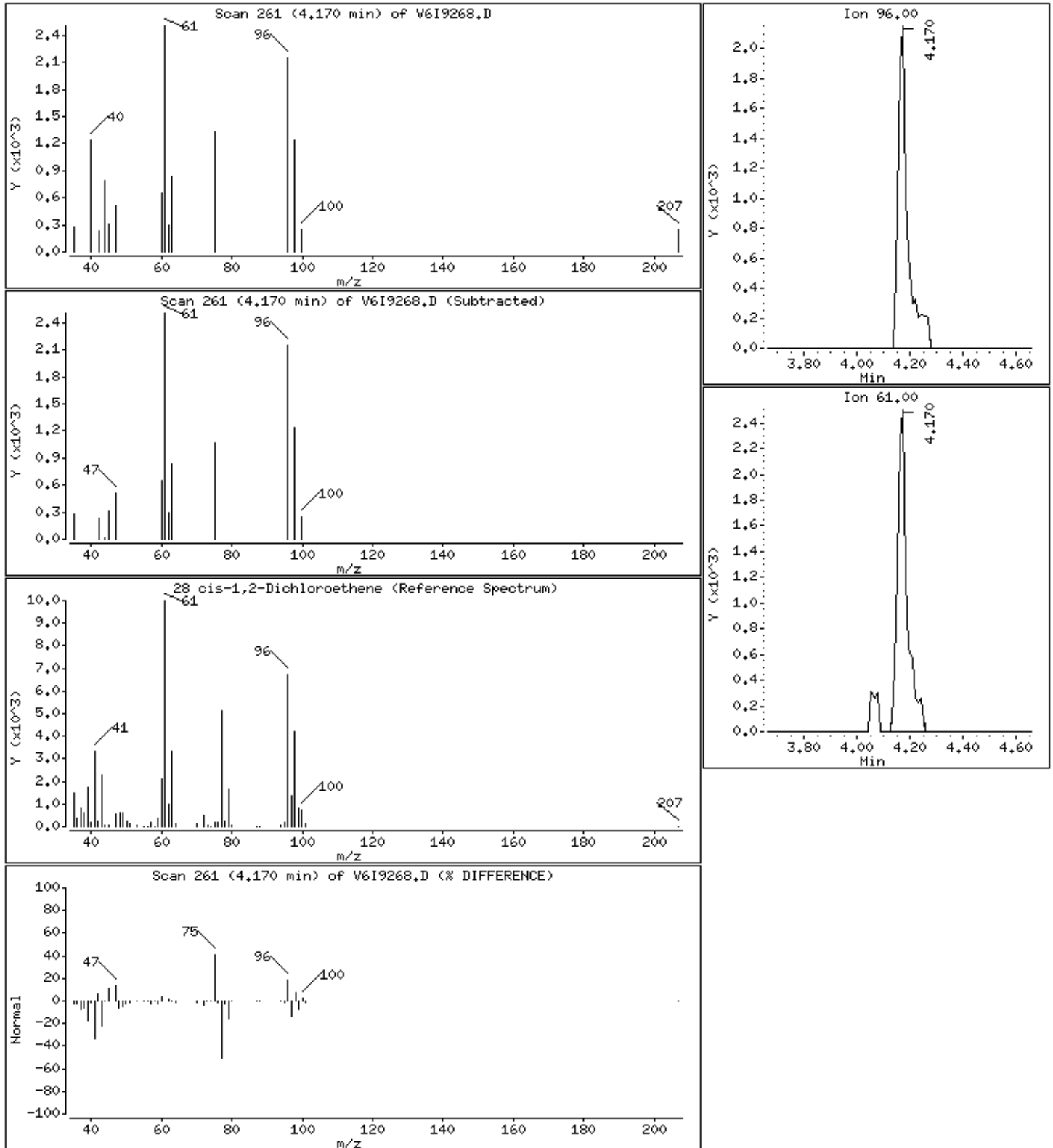
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 1 ug/L



Data File: \\avogadro\organics\V6.i\120824.B\V6I9268.D

Date : 24-AUG-2012 17:00

Client ID: SL-MW-1

Instrument: V6.i

Sample Info: 5HL,L1786-10A,,67828

Purge Volume: 5.0

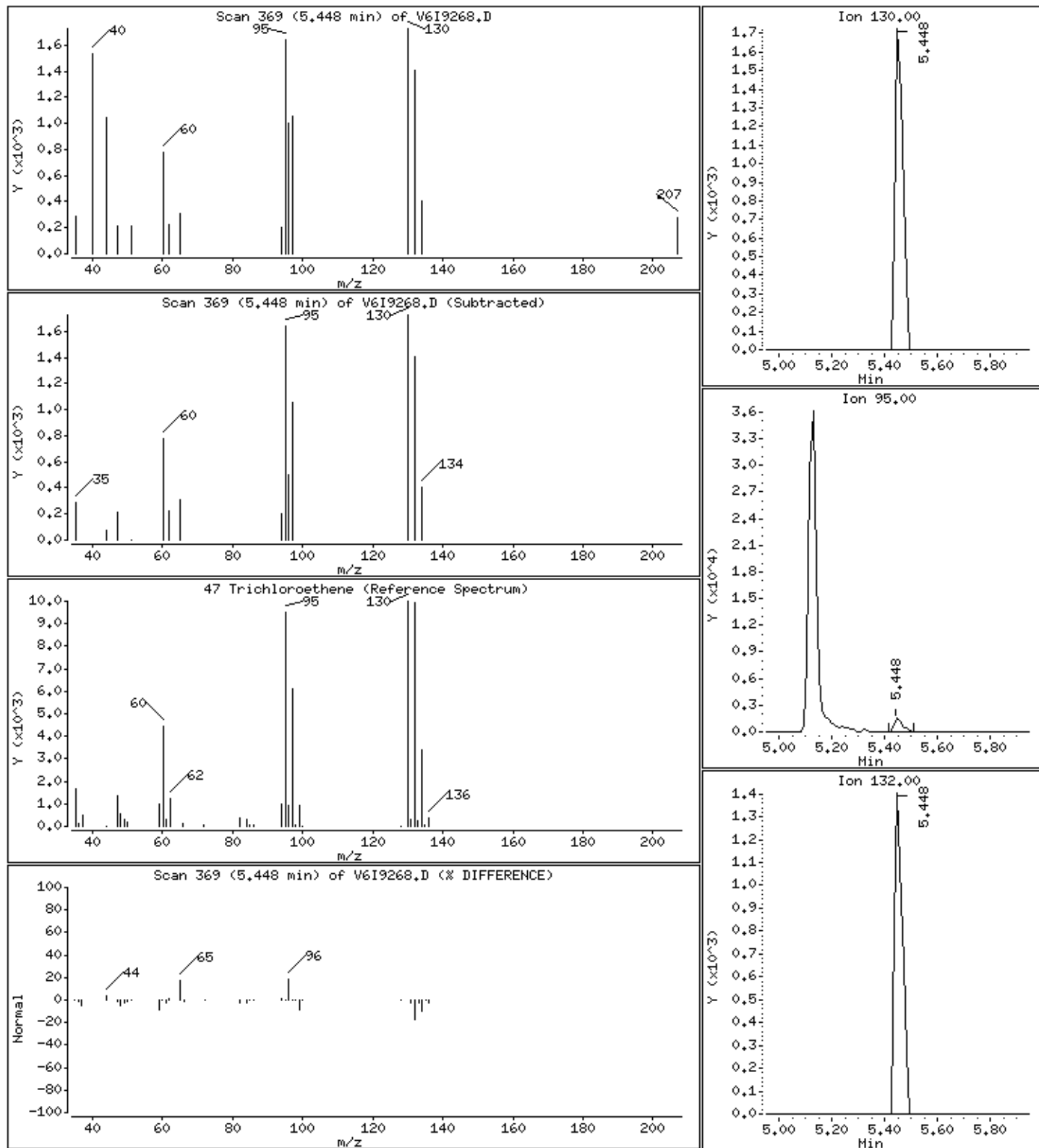
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

47 Trichloroethene

Concentration: 0.8 ug/L



Data File: \\avogadro\organics\V6.i\120824.B\V6I9268.D

Date : 24-AUG-2012 17:00

Client ID: SL-MW-1

Instrument: V6.i

Sample Info: 5HL,L1786-10A,,67828

Purge Volume: 5.0

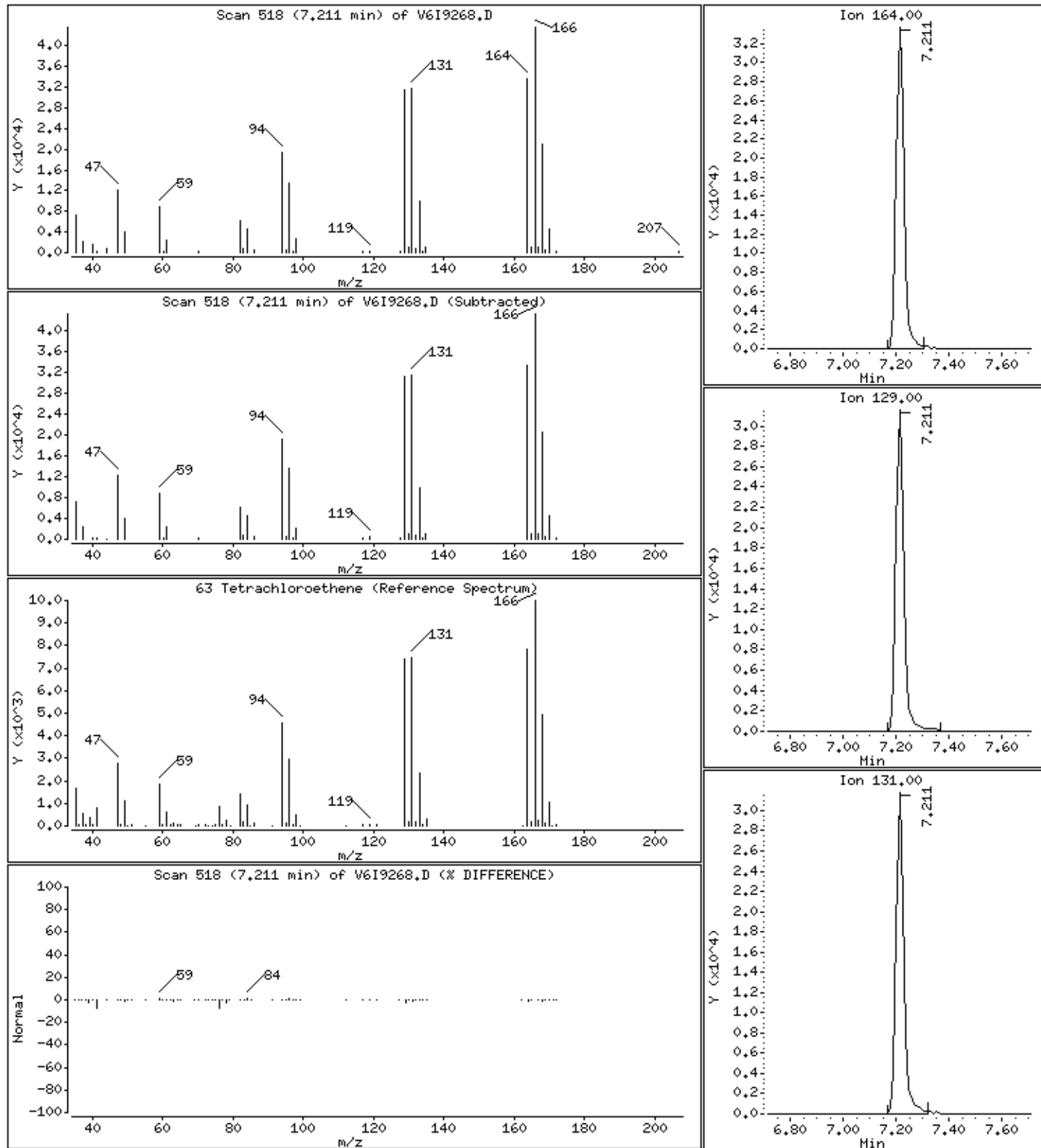
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 18 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-11A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9269.D
Level: (TRACE/LOW/MED) LOW Date Received: 08/23/2012
% Moisture: not dec. Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SL-MW-2

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L1786</u>	Mod. Ref No.: _____ SDG No.: <u>SL1786</u>
Matrix: (SOIL/SED/WATER) <u>WATER</u>	Lab Sample ID: <u>L1786-11A</u>
Sample wt/vol: <u>5.00</u> (g/mL) <u>ML</u>	Lab File ID: <u>V6I9269.D</u>
Level: (TRACE/LOW/MED) <u>LOW</u>	Date Received: <u>08/23/2012</u>
% Moisture: not dec. _____	Date Analyzed: <u>08/24/2012</u>
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor: <u>1.0</u>
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: <u>5.0</u> (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-11A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9269.D
Level: (TRACE or LOW/MED) LOW Date Received: 08/23/2012
% Moisture: not dec. Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120824.B\V6I9269.D
 Report Date: 27-Aug-2012 10:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120824.B\V6I9269.D
 Lab Smp Id: L1786-11A Client Smp ID: SL-MW-2
 Inj Date : 24-AUG-2012 17:27
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-11A,,67828
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
 Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 20
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.548	4.549	(0.887)	249269	52.5738	52
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.845	(0.945)	52342	48.8016	49
* 46 Fluorobenzene	96	5.128	5.129	(1.000)	837082	50.0000	
\$ 58 Toluene-d8	98	6.595	6.584	(0.814)	787145	48.5785	48
* 68 Chlorobenzene-d5	117	8.098	8.099	(1.000)	675250	50.0000	
\$ 79 Bromofluorobenzene	95	9.400	9.400	(1.161)	338786	47.8133	48
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.619	(1.000)	383017	50.0000	

Data File: \\avogadro\organics\V6.i\120824.B\V6I9269.D
Report Date: 27-Aug-2012 10:39

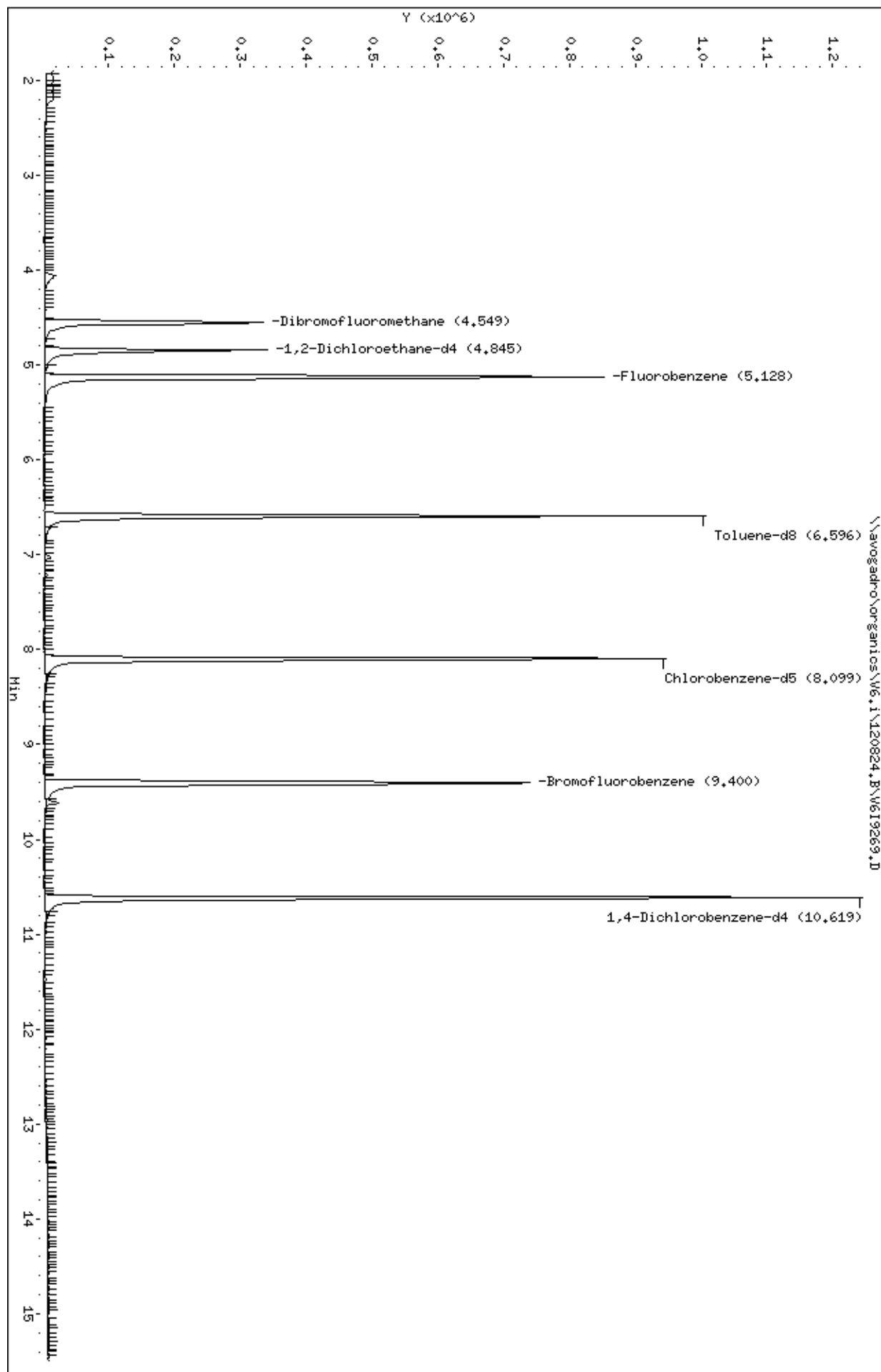
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120824.B\V6I9269.D
Lab Smp Id: L1786-11A Client Smp ID: SL-MW-2
Inj Date : 24-AUG-2012 17:27
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1786-11A,,67828
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120824,B\W619269.D
Date : 24-AUG-2012 17:27
Client ID: SL-MW-2
Sample Info: 5ML, L1786-11A, 67828
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RB-02

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-12A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9338.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/23/2012
% Moisture: not dec.	Date Analyzed: 08/28/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

RB-02

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-12A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9338.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/23/2012
% Moisture: not dec.	Date Analyzed: 08/28/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

RB-02

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-12A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9338.D
Level: (TRACE or LOW/MED) LOW Date Received: 08/23/2012
% Moisture: not dec. Date Analyzed: 08/28/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120828A.B\V6I9338.D
 Report Date: 29-Aug-2012 10:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120828A.B\V6I9338.D
 Lab Smp Id: L1786-12A Client Smp ID: RB-02
 Inj Date : 28-AUG-2012 16:42
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-12A,,67875
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120828A.B\v68260Gadd-6lvl.m
 Meth Date : 29-Aug-2012 10:43 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 19
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.548	4.548	(0.887)	256944	51.0511	51
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.843	(0.945)	53778	49.8086	50
* 46 Fluorobenzene	96	5.128	5.127	(1.000)	855946	50.0000	
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	833861	49.0359	49
* 68 Chlorobenzene-d5	117	8.098	8.097	(1.000)	716415	50.0000	
\$ 79 Bromofluorobenzene	95	9.411	9.399	(1.162)	351285	46.7846	47
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.618	(1.000)	395257	50.0000	

Data File: \\avogadro\organics\V6.i\120828A.B\V6I9338.D
Report Date: 29-Aug-2012 10:44

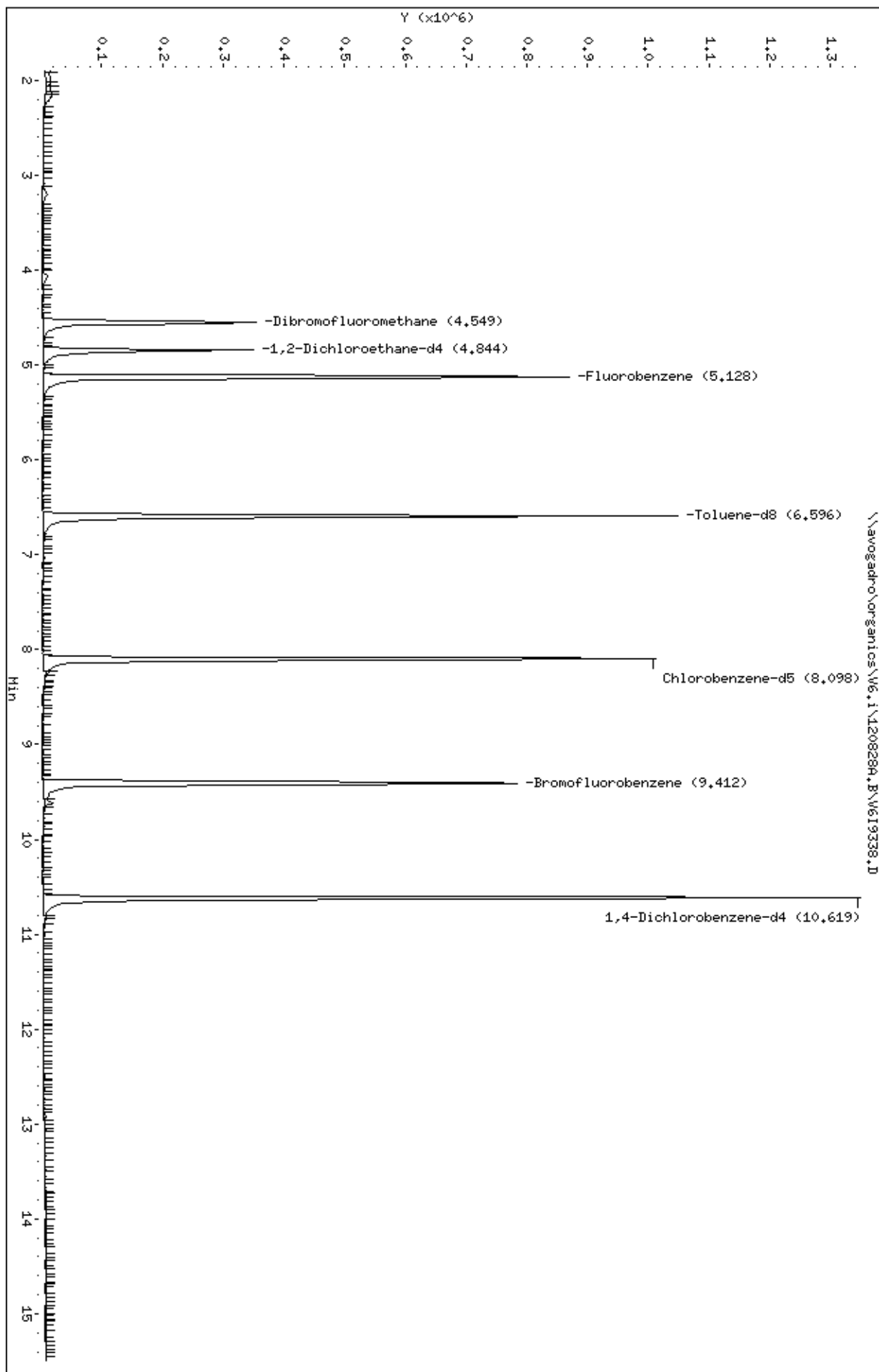
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828A.B\V6I9338.D
Lab Smp Id: L1786-12A Client Smp ID: RB-02
Inj Date : 28-AUG-2012 16:42
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1786-12A,,67875
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120828A.B\v68260Gadd-6lvl.m
Meth Date : 29-Aug-2012 10:43 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6.1\1208284.B\W619338.D
Date : 28-AUG-2012 16:42
Client ID: RB-02
Sample Info: 5HL, L1786-12H, 67875
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-02

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-13A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9339.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/23/2012
% Moisture: not dec.	Date Analyzed: 08/28/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-02

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1786-13A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9339.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/23/2012
% Moisture: not dec.	Date Analyzed: 08/28/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-02

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-13A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9339.D
Level: (TRACE or LOW/MED) LOW Date Received: 08/23/2012
% Moisture: not dec. Date Analyzed: 08/28/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120828A.B\V6I9339.D
 Report Date: 29-Aug-2012 10:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120828A.B\V6I9339.D
 Lab Smp Id: L1786-13A Client Smp ID: TB-02
 Inj Date : 28-AUG-2012 17:08
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-13A,,67875
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120828A.B\v68260Gadd-6lvl.m
 Meth Date : 29-Aug-2012 10:43 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 20
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.549	4.548	(0.887)	243419	49.3599	49
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.843	(0.945)	52777	49.8881	50
* 46 Fluorobenzene	96	5.129	5.127	(1.000)	838674	50.0000	
\$ 58 Toluene-d8	98	6.596	6.595	(0.814)	806862	48.8763	49
* 68 Chlorobenzene-d5	117	8.099	8.097	(1.000)	695482	50.0000	
\$ 79 Bromofluorobenzene	95	9.401	9.399	(1.161)	336516	46.1666	46
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.618	(1.000)	376205	50.0000	

Data File: \\avogadro\organics\V6.i\120828A.B\V6I9339.D
Report Date: 29-Aug-2012 10:44

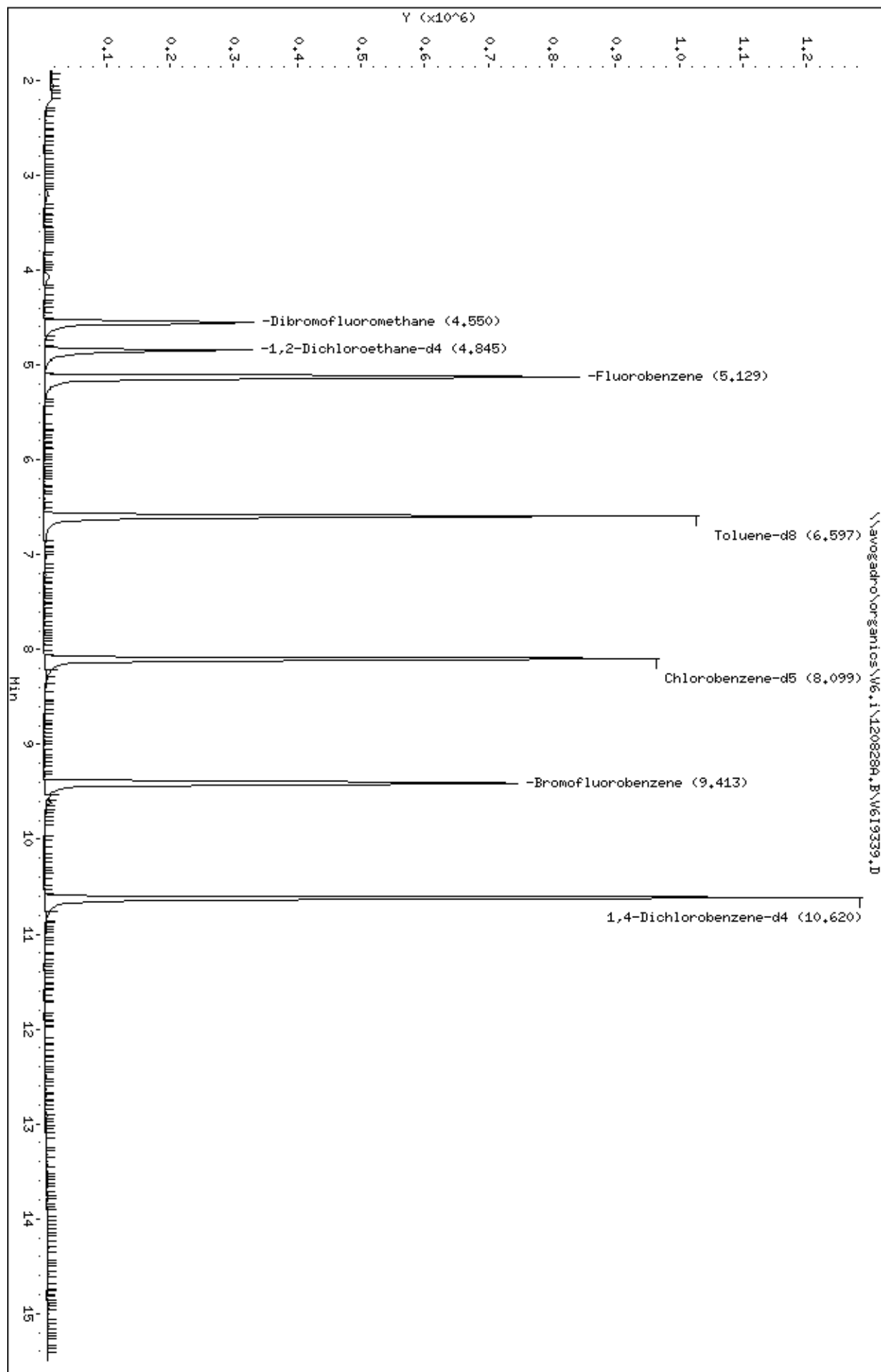
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828A.B\V6I9339.D
Lab Smp Id: L1786-13A Client Smp ID: TB-02
Inj Date : 28-AUG-2012 17:08
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1786-13A,,67875
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120828A.B\v68260Gadd-6lvl.m
Meth Date : 29-Aug-2012 10:43 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6.1\1208284.B\W619339.D
Date : 28-AUG-2012 17:08
Client ID: TB-02
Sample Info: 5HL, L1786-13A, 67875
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: LIMS
Column diameter: 0.25



Lab Name: Spectrum Analytical, Inc.

Lab Code: MITKEM

Instrument ID: V6

Heated Purge: (Y/N) N

Purge Volume: 5

GC Column: DB-624

Case No.: L1786

SAS No.:

Calibration Date(s): 08/16/2012

Calibration Times: 17:53

ID: 0.25

Length: 30

SDG No.: SL1786

08/16/2012

20:28

(mm)

(mm)

LAB FILE ID: RRF005 = <u>V6I90066.D</u> RRF020 = <u>V6I90065.D</u> RRF050 = <u>V6I90064.D</u> RRF100 = <u>V6I9070.D</u> RRF200 = <u>V6I90069.D</u>												
RRF001 = <u>V6I90068.D</u>												
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					RRF	% RSD
Dibromomethane	0.169	0.166	0.158	0.156	0.161	0.157					0.161	3.2
Bromodichloromethane	0.344	0.365	0.324	0.321	0.322	0.359					0.339	5.7
cis-1,3-Dichloropropene	0.382	0.426	0.383	0.368	0.379	0.349					0.381	6.7
4-Methyl-2-pentanone	0.308	0.333	0.332	0.312	0.312						0.319	3.8
Toluene	1.055	1.050	0.918	0.873	0.809	1.076					0.964	11.6
trans-1,3-Dichloropropene	0.374	0.396	0.366	0.361	0.362	0.328					0.364	6.0
1,1,2-Trichloroethane	0.225	0.233	0.219	0.214	0.219	0.267					0.229	8.5
1,3-Dichloropropane	0.455	0.502	0.458	0.448	0.442	0.386					0.448	8.3
Tetrachloroethene	0.299	0.297	0.258	0.285	0.258	0.311					0.285	7.9
2-Hexanone	0.230	0.283	0.285	0.273	0.280						0.270	8.5
Dibromochloromethane	0.384	0.404	0.379	0.371	0.367	0.361					0.378	4.0
1,2-Dibromoethane	0.317	0.356	0.332	0.322	0.321	0.263					0.318	9.7
Chlorobenzene	0.907	0.933	0.801	0.786	0.745	0.855					0.838	8.7
1,1,1,2-Tetrachloroethane	0.366	0.380	0.335	0.333	0.330	0.366					0.352	6.1
Ethylbenzene	0.485	0.476	0.422	0.423	0.410	0.458					0.446	7.1
m,p-Xylene	0.597	0.596	0.509	0.494	0.447	0.577					0.537	11.6
o-Xylene	0.572	0.597	0.521	0.509	0.494	0.555					0.541	7.4
Xylene (Total)	0.589	0.596	0.513	0.499	0.463	0.569					0.538	10.1
Styrene	1.000	1.017	0.897	0.879	0.820	0.963					0.929	8.2
Bromoform	0.268	0.304	0.285	0.284	0.290	0.232					0.277	9.0
Isopropylbenzene	1.475	1.467	1.245	1.180	1.060	1.645					1.345	16.3
1,1,2,2-Tetrachloroethane	1.259	1.294	0.923	0.936	0.888	1.756					1.176	28.5
Bromobenzene	0.727	0.763	0.690	0.688	0.649	0.697					0.702	5.5
1,2,3-Trichloropropane	0.886	0.967	0.926	0.885	0.876	1.310					0.975	17.2
n-Propylbenzene	0.680	0.701	0.628	0.635	0.594	0.700					0.656	6.7
2-Chlorotoluene	0.645	0.672	0.599	0.606	0.579	0.682					0.631	6.7
1,3,5-Trimethylbenzene	2.241	2.175	1.889	1.813	1.575	2.551					2.041	17.1

Lab Name:	Spectrum Analytical, Inc.		SAS No.:	SDG No.:
Lab Code:	MITKEM	Case No.:	L1786	SL1786
Instrument ID:	V6	Calibration Date(s):		08/16/2012
Heated Purge: (Y/N)	N	Calibration Times:		17:53
Purge Volume:	5	(mL)		20:28
GC Column:	DB-624	ID:	0.25 (mm)	Length: 30 (mm)

LAB FILE ID: RRF005 = <u>V6I90066.D</u> RRF020 = <u>V6I90065.D</u> RRF050 = <u>V6I90064.D</u> RRF100 = <u>V6I90070.D</u> RRF200 = <u>V6I90069.D</u>											
RRF001 = <u>V6I90068.D</u>											
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001				RRF	% RSD
4-Chlorotoluene	0.718	0.726	0.639	0.664	0.617	0.740				0.684	7.5
tert-Butylbenzene	2.301	2.238	1.910	1.822	1.586	2.555				2.069	17.3
1,2,4-Trimethylbenzene	2.219	2.204	1.922	1.839	1.590	2.597				2.062	17.1
sec-Butylbenzene	2.645	2.527	2.204	2.062	1.771	3.042				2.375	19.1
4-Isopropyltoluene	2.301	2.238	1.910	1.822	1.586	2.555				2.069	17.3
1,3-Dichlorobenzene	1.365	1.366	1.210	1.191	1.081	1.537				1.292	12.6
1,4-Dichlorobenzene	1.517	1.495	1.302	1.276	1.134	1.696				1.403	14.5
n-Butylbenzene	1.903	1.971	1.693	1.596	1.377	2.090				1.772	15.0
1,2-Dichlorobenzene	1.408	1.390	1.252	1.214	1.087	1.485				1.306	11.3
1,2-Dibromo-3-chloropropane	0.190	0.197	0.185	0.176	0.170	0.171				0.182	6.1
1,2,4-Trichlorobenzene	0.795	0.798	0.752	0.737	0.696	0.838				0.769	6.6
Hexachlorobutadiene	0.304	0.291	0.261	0.254	0.230	0.409				0.292	21.7
1,2,3-Trichlorobenzene	0.732	0.688	0.657	0.665	0.628	0.758				0.688	7.1
Naphthalene	2.437	2.393	2.137	2.061	1.755	2.413				2.199	12.2

Lab Name: MITKEM

Case No.: L1786

SAS No.:

SDG No.: SL1786

Instrument ID: V6

Calibration Date(s): 08/16/2012

08/16/2012

Heated Purge: (Y/N) N

Calibration Times: 17:53

20:28

Purge Volume: 5

(mL)

GC Column: DB-624

ID: 0.25

(mm)

Length: 30

(mm)

LAB FILE ID: RRF005 = V6I90066.D RRF020 = V6I90065.D RRF050 = V6I90064.D RRF100 = V6I90070.D RRF200 = V6I90069.D
RRF001 = V6I90068.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001	RRF		% RSD
Dibromofluoromethane	0.289	0.282	0.280	0.284	0.282	0.288		0.284	1.3
1,2-Dichloroethane-d4	0.066	0.065	0.066	0.060	0.063	0.066		0.064	3.8
Toluene-d8	1.205	1.208	1.199	1.201	1.187	1.152		1.192	1.7
Bromofluorobenzene	0.523	0.522	0.516	0.527	0.536	0.502		0.521	2.2

Lab Name:	Spectrum Analytical, Inc.	Case No.:	L1786	SAS No.:	SDG No.:	SL1786
Lab Code:	MITKEM					
Instrument ID:	V6	Calibration Date(s): 08/28/2012 08/28/2012				
Heated Purge: (Y/N)	N	Calibration Times: 9:45 12:31				
Purge Volume:	5	(mL)				
GC Column:	DB-624	ID:	0.25	(mm)	Length:	30 (mm)

LAB FILE ID: RRF005 = <u>V6I9324.D</u> RRF020 = <u>V6I9323.D</u> RRF050 = <u>V6I9322.D</u> RRF100 = <u>V6I9328.D</u> RRF200 = <u>V6I9327.D</u>									
RRF001 = <u>V6I9325.D</u>									
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001			
							RRF		% RSD
Dichlorodifluoromethane	0.213	0.193	0.190	0.206	0.188	0.183		0.195	6.0
Chloromethane	0.397	0.429	0.430	0.410	0.395	0.404		0.411	3.7
Vinyl chloride	0.403	0.353	0.366	0.350	0.331	0.362		0.361	6.6
Bromomethane	0.258	0.242	0.250	0.237	0.228	0.318		0.255	12.8
Chloroethane	0.223	0.196	0.207	0.200	0.195	0.223		0.207	6.2
Trichlorofluoromethane	0.527	0.473	0.494	0.502	0.483	0.356		0.472	12.7
1,1-Dichloroethene	0.304	0.189	0.333	0.321	0.312	0.268		0.288	18.5
Acetone	0.036	0.044	0.033	0.032	0.036			0.036	13.1
Iodomethane	0.663	0.559	0.612	0.618	0.595	0.699		0.624	8.0
Carbon disulfide	1.274	1.177	1.203	1.158	1.072	1.227		1.185	5.8
Methylene chloride	0.412	0.331	0.332	0.327	0.310	0.639		0.392	32.2
trans-1,2-dichloroethene	0.297	0.268	0.288	0.283	0.266	0.289		0.282	4.4
Methyl tert-butyl ether	0.817	0.823	0.800	0.779	0.719	0.748		0.781	5.3
1,1-Dichloroethane	0.506	0.483	0.493	0.480	0.453	0.508		0.487	4.2
Vinyl acetate	0.964	0.954	0.957	0.931	0.844	0.862		0.918	5.7
2-Butanone	0.032	0.042	0.038	0.040	0.039			0.038	10.0
cis-1,2-Dichloroethene	0.283	0.285	0.294	0.290	0.273	0.259		0.281	4.5
2,2-Dichloropropane	0.264	0.234	0.240	0.228	0.219	0.252		0.239	6.9
Bromochloromethane	0.155	0.156	0.154	0.159	0.155	0.144		0.154	3.2
Chloroform	0.500	0.477	0.480	0.480	0.443	0.466		0.474	4.0
1,1,1-Trichloroethane	0.426	0.378	0.393	0.425	0.407	0.426		0.409	4.9
1,1-Dichloropropene	0.132	0.129	0.135	0.139	0.135	0.144		0.136	3.8
Carbon tetrachloride	0.435	0.398	0.417	0.440	0.426	0.415		0.422	3.6
1,2-Dichloroethane	0.397	0.382	0.409	0.413	0.395	0.376		0.395	3.6
Benzene	1.043	0.985	0.989	0.943	0.836	1.007		0.967	7.4
Trichloroethene	0.316	0.288	0.288	0.290	0.278	0.328		0.298	6.5
1,2-Dichloropropane	0.272	0.258	0.261	0.273	0.263	0.238		0.261	4.8

Lab Name:	Spectrum Analytical, Inc.		Case No.:	L1786	SAS No.:	SDG No.:	SL1786
Lab Code:	MITKEM						
Instrument ID:	V6		Calibration Date(s):		08/28/2012		08/28/2012
Heated Purge: (Y/N)	N		Calibration Times:		9:45		12:31
Purge Volume:	5		(mL)				
GC Column:	DB-624	ID:	0.25	(mm)	Length:	30	(mm)

LAB FILE ID: RRF005 = V6I9324.D RRF020 = V6I9323.D RRF050 = V6I9323.D RRF100 = V6I9328.D RRF200 = V6I9327.D
RRF001 = V6I9325.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001				RRF	% RSD
Dibromomethane	0.177	0.176	0.183	0.193	0.187	0.153				0.178	7.8
Bromodichloromethane	0.374	0.375	0.384	0.384	0.369	0.350				0.373	3.4
cis-1,3-Dichloropropene	0.408	0.410	0.423	0.442	0.413	0.382				0.413	4.8
4-Methyl-2-pentanone	0.305	0.295	0.289	0.323	0.306					0.304	4.2
Toluene	1.123	1.075	1.074	1.022	0.887	1.142				1.054	8.7
trans-1,3-Dichloropropene	0.372	0.382	0.405	0.416	0.407	0.260				0.374	15.5
1,1,2-Trichloroethane	0.240	0.244	0.242	0.250	0.240	0.224				0.240	3.6
1,3-Dichloropropane	0.488	0.492	0.489	0.496	0.475	0.426				0.478	5.5
Tetrachloroethene	0.332	0.298	0.292	0.292	0.283	0.381				0.313	12.0
2-Hexanone	0.231	0.261	0.242	0.266	0.273					0.255	6.9
Dibromochloromethane	0.404	0.406	0.407	0.417	0.405	0.351				0.398	6.0
1,2-Dibromoethane	0.338	0.350	0.351	0.362	0.349	0.274				0.337	9.4
Chlorobenzene	0.999	0.923	0.898	0.874	0.794	0.829				0.886	8.2
1,1,1,2-Tetrachloroethane	0.381	0.366	0.374	0.374	0.362	0.356				0.369	2.5
Ethylbenzene	0.502	0.462	0.475	0.464	0.447	0.444				0.466	4.6
m,p-Xylene	0.632	0.591	0.578	0.544	0.501	0.577				0.570	7.8
o-Xylene	0.585	0.573	0.574	0.566	0.543	0.556				0.566	2.6
Xylene (Total)	0.616	0.585	0.577	0.551	0.515	0.570				0.569	6.0
Styrene	1.031	1.006	0.989	0.976	0.887	0.968				0.976	5.0
Bromoform	0.281	0.300	0.306	0.323	0.323	0.217				0.292	13.7
Isopropylbenzene	1.532	1.438	1.405	1.311	1.174	1.391				1.375	8.9
1,1,2,2-Tetrachloroethane	1.303	1.209	1.243	1.261	0.924	1.340				1.213	12.3
Bromobenzene	0.737	0.728	0.744	0.729	0.692	0.698				0.721	3.0
1,2,3-Trichloropropane	0.879	0.888	0.906	0.983	0.934	1.239				0.971	14.0
n-Propylbenzene	0.728	0.676	0.678	0.657	0.627	0.730				0.683	5.9
2-Chlorotoluene	0.696	0.632	0.645	0.637	0.605	0.709				0.654	6.1
1,3,5-Trimethylbenzene	2.273	2.105	2.026	1.896	1.673	2.286				2.043	11.5

Lab Name:	Spectrum Analytical, Inc.	Case No.:	L1786	SAS No.:	SDG No.:	SL1786
Lab Code:	MITKEM					
Instrument ID:	V6	Calibration Date(s):				08/28/2012
Heated Purge: (Y/N)	N	Calibration Times:				9:45
Purge Volume:	5	(mL)				12:31
GC Column:	DB-624	ID:	0.25	(mm)	Length:	30 (mm)

LAB FILE ID: RRF005 = V6I9324.D RRF020 = V6I9323.D RRF050 = V6I9322.D RRF100 = V6I9328.D RRF200 = V6I9327.D
RRF001 = V6I9325.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001	RRF		% RSD
4-Chlorotoluene	0.752	0.670	0.703	0.688	0.652	0.759	0.704		6.2
tert-Butylbenzene	2.542	2.369	2.371	2.240	2.035	2.654	2.368		9.2
1,2,4-Trimethylbenzene	2.326	2.118	2.075	1.946	1.694	2.327	2.081		11.6
sec-Butylbenzene	2.796	2.494	2.435	2.235	1.904	2.902	2.461		14.9
4-Isopropyltoluene	2.312	2.113	2.088	1.923	1.680	2.409	2.087		12.6
1,3-Dichlorobenzene	1.380	1.310	1.308	1.275	1.157	1.423	1.309		7.0
1,4-Dichlorobenzene	1.652	1.483	1.442	1.367	1.214	1.756	1.486		13.1
n-Butylbenzene	2.021	1.970	1.918	1.754	1.523	2.070	1.876		10.9
1,2-Dichlorobenzene	1.471	1.360	1.347	1.299	1.155	1.495	1.354		9.1
1,2-Dibromo-3-chloropropane	0.177	0.178	0.164	0.176	0.169	0.161	0.171		4.2
1,2,4-Trichlorobenzene	0.860	0.825	0.828	0.749	0.739	0.859	0.810		6.6
Hexachlorobutadiene	0.339	0.304	0.291	0.262	0.264	0.379	0.306		14.9
1,2,3-Trichlorobenzene	0.785	0.719	0.724	0.671	0.650	0.840	0.731		9.7
Naphthalene	2.485	2.339	2.175	2.076	1.761	2.603	2.240		13.6

Contract:

Lab Code: MITKEM

Case No.: L1786

SAS No.:

SDG No.: SL1786

Instrument ID: V6

Calibration Date(s): 08/28/2012

08/28/2012

Heated Purge: (Y/N) N

Calibration Times: 9:45

12:31

Purge Volume: 5

(mL)

GC Column: DB-624

ID: 0.25

(mm)

Length: 30

(mm)

LAB FILE ID: RRF005 = <u>V6I9324.D</u> RRF020 = <u>V6I9323.D</u> RRF050 = <u>V6I9322.D</u> RRF100 = <u>V6I9328.D</u> RRF200 = <u>V6I9327.D</u>											
RRF001 = <u>V6I9325.D</u>											
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001				RRF	% RSD
Dibromofluoromethane	0.291	0.295	0.292	0.296	0.296	0.295				0.294	0.7
1,2-Dichloroethane-d4	0.060	0.064	0.067	0.062	0.063	0.063				0.063	3.5
Toluene-d8	1.209	1.197	1.181	1.173	1.175	1.162				1.183	1.5
Bromofluorobenzene	0.512	0.520	0.516	0.523	0.548	0.491				0.519	3.5

Data File: \\avogadro\organics\V6.i\120816.B\V6I9064.D
Report Date: 17-Aug-2012 10:31

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120816.B\V6I9064.D
Lab Smp Id: VSTD0506R Client Smp ID: VSTD0506R
Inj Date : 16-AUG-2012 17:53
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0506R,VSTD0506R
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120816.B\v68260Gadd-6lvl.m
Meth Date : 17-Aug-2012 10:30 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 10:42 Cal File: V6I9053.D
Als bottle: 15 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.602	1.603 (0.312)		96163	50.0000	45
2 Freon114	85	1.696	1.697 (0.331)		156976	50.0000	44
3 Chloromethane	50	1.779	1.768 (0.347)		287882	50.0000	44
4 Vinyl Chloride	62	1.850	1.863 (0.361)		232946	50.0000	45
5 Bromomethane	94	2.134	2.135 (0.416)		155105	50.0000	50(H)
6 Chloroethane	64	2.217	2.218 (0.432)		151204	50.0000	45
7 Trichlorofluoromethane	101	2.406	2.407 (0.469)		324084	50.0000	46
126 Ethanol	46	2.536	2.538 (0.495)		29435	5000.00	4600(A)
8 Ether	59	2.607	2.608 (0.509)		191398	50.0000	48
9 Acrolein	56	2.726	2.727 (0.532)		126601	250.000	260(A)
10 1,1-Dichloroethene	96	2.820	2.821 (0.550)		242989	50.0000	49
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.809	2.810 (0.548)		205363	50.0000	46
12 Acetone	58	2.844	2.845 (0.555)		28544	50.0000	50
13 Iodomethane	142	2.962	2.952 (0.578)		422534	50.0000	46
14 Carbon Disulfide	76	2.998	2.999 (0.585)		797842	50.0000	45
15 Acetonitrile	41	3.069	3.070 (0.599)		628137	500.000	630(A)
16 Allyl Chloride	39	3.069	3.070 (0.599)		300998	50.0000	62
17 Methyl Acetate	43	3.081	3.082 (0.601)		282232	50.0000	50
18 Methylene Chloride	84	3.199	3.188 (0.624)		263505	50.0000	49
19 tert-Butanol	59	3.235	3.236 (0.631)		53680	100.000	88
20 Acrylonitrile	53	3.365	3.366 (0.656)		113963	50.0000	51
21 trans-1,2-Dichloroethene	96	3.377	3.378 (0.659)		223111	50.0000	48
22 Methyl tert-butyl ether	73	3.365	3.366 (0.656)		673298	50.0000	47

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.708	3.709 (0.723)		401894		50.0000	47
24 Vinyl acetate	43	3.732	3.733 (0.728)		850993		50.0000	50
25 Diisopropyl Ether	45	3.732	3.733 (0.728)		794918		50.0000	48
26 2-Chloro-1,3-Butadiene	53	3.779	3.780 (0.737)		329481		50.0000	47
27 Ethyl tert-butyl ether	59	4.016	4.017 (0.783)		724965		50.0000	48
29 2,2-Dichloropropane	77	4.169	4.170 (0.813)		175278		50.0000	48
28 cis-1,2-Dichloroethene	96	4.169	4.170 (0.813)		233666		50.0000	45
30 2-Butanone	72	4.169	4.170 (0.813)		35258		50.0000	50
32 Propionitrile	54	4.228	4.230 (0.825)		390447		500.000	490(A)
33 Methacrylonitrile	41	4.347	4.348 (0.848)		342975		100.000	100
34 Bromochloromethane	128	4.370	4.372 (0.852)		132387		50.0000	50
31 Tetrahydrofuran	72	4.406	4.407 (0.859)		70366		100.000	96
35 Chloroform	83	4.418	4.419 (0.862)		378966		50.0000	47
\$ 36 Dibromofluoromethane	113	4.548	4.549 (0.887)		266901		50.0000	49
37 1,1,1-Trichloroethane	97	4.583	4.585 (0.894)		304957		50.0000	44
38 Cyclohexane	56	4.631	4.632 (0.903)		350266		50.0000	44
39 1,1-Dichloropropene	110	4.714	4.715 (0.919)		107068		50.0000	45
40 Carbon Tetrachloride	117	4.725	4.727 (0.922)		318843		50.0000	45
41 Isobutyl Alcohol	43	4.773	4.774 (0.931)		244012		1000.00	940(A)
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.845 (0.945)		63255		50.0000	52
43 Benzene	78	4.891	4.892 (0.954)		799394		50.0000	48
44 1,2-Dichloroethane	62	4.903	4.904 (0.956)		334828		50.0000	49
45 tert-Amyl methyl ether	73	4.962	4.963 (0.968)		660099		50.0000	47
M 50 1,2-Dichloroethene (Total)	96				456777		100.000	93
* 46 Fluorobenzene	96	5.128	5.129 (1.000)		953642		50.0000	
47 Trichloroethene	130	5.447	5.448 (1.062)		234958		50.0000	47
48 Methylcyclohexane	83	5.625	5.626 (1.097)		260466		50.0000	45
49 1,2-Dichloropropane	63	5.660	5.661 (1.104)		233647		50.0000	49
51 Methyl Methacrylate	69	5.731	5.732 (1.118)		208608		50.0000	51
52 Dibromomethane	93	5.779	5.780 (1.127)		150556		50.0000	49
53 1,4-Dioxane	88	5.779	5.780 (1.127)		29436		1000.00	800(A)
54 Bromodichloromethane	83	5.909	5.910 (1.152)		308806		50.0000	48
55 2-Chloroethyl vinyl ether	63	6.654	6.655 (1.298)		74598		50.0000	44
56 cis-1,3-Dichloropropene	75	6.323	6.324 (1.233)		365282		50.0000	50
57 4-Methyl-2-pentanone	43	6.465	6.466 (1.261)		316791		50.0000	52
\$ 58 Toluene-d8	98	6.595	6.596 (0.814)		922870		50.0000	50
59 Toluene	91	6.654	6.655 (1.298)		874981		50.0000	48
60 trans-1,3-Dichloropropene	75	6.879	6.880 (1.341)		348948		50.0000	50
61 Ethyl Methacrylate	69	6.950	6.951 (1.355)		282456		50.0000	50
62 1,1,2-Trichloroethane	97	7.068	7.069 (1.378)		208437		50.0000	48
63 Tetrachloroethene	164	7.210	7.211 (0.890)		198411		50.0000	45
64 1,3-Dichloropropane	76	7.234	7.235 (0.893)		352386		50.0000	51
65 2-Hexanone	43	7.317	7.318 (0.904)		219367		50.0000	53
66 Dibromochloromethane	129	7.483	7.484 (0.924)		291722		50.0000	50
67 1,2-Dibromoethane	107	7.613	7.614 (0.940)		255963		50.0000	52
69 1-Chlorohexane	91	8.086	8.087 (0.999)		266998		50.0000	44
* 68 Chlorobenzene-d5	117	8.098	8.099 (1.000)		769994		50.0000	
70 Chlorobenzene	112	8.133	8.134 (1.004)		616528		50.0000	48
71 1,1,1,2-Tetrachloroethane	131	8.216	8.217 (1.015)		257744		50.0000	48
72 Ethylbenzene	106	8.240	8.241 (1.018)		325147		50.0000	47
73 m,p-Xylene	106	8.370	8.371 (1.034)		784230		100.000	95
74 o-Xylene	106	8.820	8.821 (1.089)		401307		50.0000	48
75 Styrene	104	8.831	8.833 (1.091)		690815		50.0000	49
76 Bromoform	173	9.056	9.057 (1.118)		219222		50.0000	51

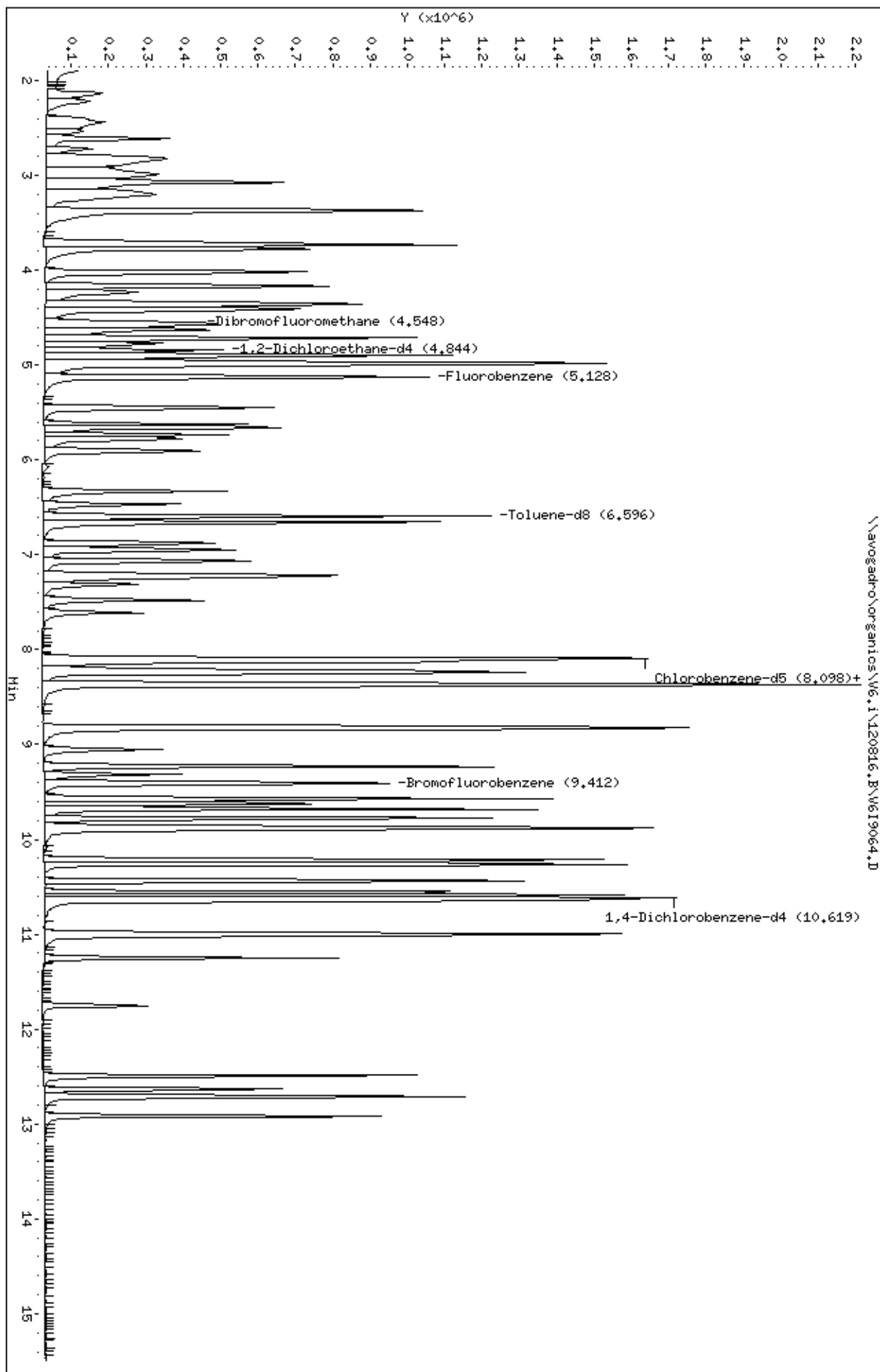
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.234	9.235 (1.140)		958514		50.0000	46
78 trans-1,4-Dichloro-2-butene	75	9.317	9.318 (1.150)		103770		50.0000	52
\$ 79 Bromofluorobenzene	95	9.411	9.401 (1.162)		397070		50.0000	49
80 1,1,2,2-Tetrachloroethane	77	9.565	9.566 (0.901)		406234		50.0000	39
81 Bromobenzene	156	9.577	9.578 (0.902)		303586		50.0000	49
82 1,2,3-Trichloropropane	75	9.612	9.614 (0.905)		407363		50.0000	47
83 n-Propylbenzene	120	9.683	9.685 (0.912)		276341		50.0000	48
84 2-Chlorotoluene	126	9.778	9.779 (0.921)		263403		50.0000	47
85 1,3,5-Trimethylbenzene	105	9.873	9.874 (0.930)		831127		50.0000	46
86 4-Chlorotoluene	126	9.896	9.898 (0.932)		281251		50.0000	47
M 94 Xylene (Total)	106				1185537		150.000	140
87 tert-Butylbenzene	119	10.583	10.584 (0.997)		840324		50.0000	46
88 1,2,4-Trimethylbenzene	105	10.263	10.264 (0.967)		845646		50.0000	47
89 sec-Butylbenzene	105	10.441	10.442 (0.983)		970050		50.0000	46
90 1,3-Dichlorobenzene	146	10.559	10.548 (0.994)		532678		50.0000	47
91 4-Isopropyltoluene	119	10.583	10.584 (0.997)		840324		50.0000	46
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.619 (1.000)		440071		50.0000	
93 1,4-Dichlorobenzene	146	10.642	10.643 (1.002)		573019		50.0000	46
95 n-Butylbenzene	91	10.985	10.986 (1.035)		745190		50.0000	48
96 1,2-Dichlorobenzene	146	11.009	11.010 (1.037)		550760		50.0000	48
97 Hexachloroethane	117	11.245	11.246 (1.059)		187635		50.0000	46
98 1,2-Dibromo-3-chloropropane	75	11.754	11.743 (1.107)		81408		50.0000	51
141 1,3,5-Trichlorobenzene	182	12.488	12.489 (2.435)		317660		50.0000	50(A)
99 1,2,4-Trichlorobenzene	180	12.488	12.489 (1.176)		331132		50.0000	49
100 Hexachlorobutadiene	225	12.630	12.631 (1.189)		115025		50.0000	49
101 Naphthalene	128	12.713	12.714 (1.197)		940445		50.0000	48
102 1,2,3-Trichlorobenzene	180	12.914	12.915 (1.216)		289331		50.0000	48

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6,i\120816.B\W6I9064.D
Date : 16-AUG-2012 17:53
Client ID: VSTD0506R
Sample Info: 5HL,VSTD0506R,VSTD0506R
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120816.B\V6I9065.D
Lab Smp Id: VSTD0206R Client Smp ID: VSTD0206R
Inj Date : 16-AUG-2012 18:19
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0206R,VSTD0206R
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120816.B\v68260Gadd-6lvl.m
Meth Date : 17-Aug-2012 10:30 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 18:19 Cal File: V6I9065.D
Als bottle: 16 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Dichlorodifluoromethane	85		1.603	1.603	(0.313)	46900	20.0000	22
2 Freon114	85		1.697	1.697	(0.331)	75978	20.0000	22
3 Chloromethane	50		1.768	1.768	(0.345)	135475	20.0000	22
4 Vinyl Chloride	62		1.863	1.863	(0.363)	108247	20.0000	22
5 Bromomethane	94		2.135	2.135	(0.416)	68193	20.0000	21
6 Chloroethane	64		2.218	2.218	(0.433)	69241	20.0000	21
7 Trichlorofluoromethane	101		2.407	2.407	(0.469)	156909	20.0000	22
126 Ethanol	46		2.538	2.538	(0.495)	16203	2000.00	2300(A)
8 Ether	59		2.609	2.608	(0.509)	83632	20.0000	21
9 Acrolein	56		2.727	2.727	(0.532)	58160	100.000	110
10 1,1-Dichloroethene	96		2.822	2.821	(0.550)	110584	20.0000	21
11 1,1,2-Trichloro-1,2,2-Trifluo	101		2.822	2.810	(0.550)	100155	20.0000	22
12 Acetone	58		2.845	2.845	(0.555)	10559	20.0000	19
13 Iodomethane	142		2.964	2.952	(0.578)	197540	20.0000	22
14 Carbon Disulfide	76		2.999	2.999	(0.585)	366702	20.0000	21
15 Acetonitrile	41		3.070	3.070	(0.599)	277408	200.000	210(A)
16 Allyl Chloride	39		3.070	3.070	(0.599)	135091	20.0000	21
17 Methyl Acetate	43		3.082	3.082	(0.601)	122793	20.0000	21
18 Methylene Chloride	84		3.200	3.188	(0.624)	118809	20.0000	21
19 tert-Butanol	59		3.236	3.236	(0.631)	27227	40.0000	45
20 Acrylonitrile	53		3.366	3.366	(0.656)	44453	20.0000	20
21 trans-1,2-Dichloroethene	96		3.378	3.378	(0.659)	101828	20.0000	21

Data File: \\avogadro\organics\V6.i\120816.B\V6I9065.D
Report Date: 17-Aug-2012 10:31

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
22 Methyl tert-butyl ether	73	3.366	3.366 (0.656)		295713		20.0000	21
23 1,1-Dichloroethane	63	3.697	3.709 (0.721)		184192		20.0000	21
24 Vinyl acetate	43	3.733	3.733 (0.728)		375697		20.0000	21
25 Diisopropyl Ether	45	3.733	3.733 (0.728)		354903		20.0000	21
26 2-Chloro-1,3-Butadiene	53	3.768	3.780 (0.735)		151249		20.0000	21
27 Ethyl tert-butyl ether	59	4.017	4.017 (0.783)		322953		20.0000	21
29 2,2-Dichloropropane	77	4.159	4.170 (0.811)		81395		20.0000	22
28 cis-1,2-Dichloroethene	96	4.170	4.170 (0.813)		105604		20.0000	21
30 2-Butanone	72	4.170	4.170 (0.813)		14142		20.0000	20
32 Propionitrile	54	4.230	4.230 (0.825)		156349		200.000	200
33 Methacrylonitrile	41	4.348	4.348 (0.848)		139847		40.0000	40
34 Bromochloromethane	128	4.372	4.372 (0.852)		56305		20.0000	21
31 Tetrahydrofuran	72	4.407	4.407 (0.859)		31294		40.0000	42
35 Chloroform	83	4.419	4.419 (0.862)		168345		20.0000	21
\$ 36 Dibromofluoromethane	113	4.549	4.549 (0.887)		267781		50.0000	50
37 1,1,1-Trichloroethane	97	4.585	4.585 (0.894)		145485		20.0000	22
38 Cyclohexane	56	4.632	4.632 (0.903)		165423		20.0000	22
39 1,1-Dichloropropene	110	4.715	4.715 (0.919)		49134		20.0000	21
40 Carbon Tetrachloride	117	4.715	4.727 (0.919)		150856		20.0000	22
41 Isobutyl Alcohol	43	4.786	4.774 (0.933)		110687		400.000	420(A)
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.845 (0.945)		61997		50.0000	50
43 Benzene	78	4.892	4.892 (0.954)		365115		20.0000	21
44 1,2-Dichloroethane	62	4.904	4.904 (0.956)		144040		20.0000	21
45 tert-Amyl methyl ether	73	4.963	4.963 (0.968)		286371		20.0000	21
M 50 1,2-Dichloroethene (Total)	96				207432		40.0000	43
* 46 Fluorobenzene	96	5.129	5.129 (1.000)		950433		50.0000	
47 Trichloroethene	130	5.448	5.448 (1.062)		108392		20.0000	21
48 Methylcyclohexane	83	5.626	5.626 (1.097)		126262		20.0000	22
49 1,2-Dichloropropane	63	5.661	5.661 (1.104)		102214		20.0000	21
51 Methyl Methacrylate	69	5.732	5.732 (1.118)		87028		20.0000	20
52 Dibromomethane	93	5.780	5.780 (1.127)		63032		20.0000	20
53 1,4-Dioxane	88	5.792	5.780 (1.129)		15922		400.000	460(A)
54 Bromodichloromethane	83	5.910	5.910 (1.152)		138612		20.0000	21
55 2-Chloroethyl vinyl ether	63	6.655	6.655 (1.298)		34978		20.0000	22(T)
56 cis-1,3-Dichloropropene	75	6.336	6.324 (1.235)		161894		20.0000	21
57 4-Methyl-2-pentanone	43	6.466	6.466 (1.261)		126565		20.0000	20
\$ 58 Toluene-d8	98	6.596	6.596 (0.814)		913904		50.0000	50
59 Toluene	91	6.655	6.655 (1.298)		399126		20.0000	21
60 trans-1,3-Dichloropropene	75	6.880	6.880 (1.341)		150435		20.0000	21
61 Ethyl Methacrylate	69	6.951	6.951 (1.355)		120390		20.0000	21
62 1,1,2-Trichloroethane	97	7.070	7.069 (1.378)		88434		20.0000	21
63 Tetrachloroethene	164	7.212	7.211 (0.890)		89844		20.0000	21
64 1,3-Dichloropropane	76	7.247	7.235 (0.895)		151951		20.0000	21
65 2-Hexanone	43	7.318	7.318 (0.904)		85574		20.0000	20
66 Dibromochloromethane	129	7.484	7.484 (0.924)		122193		20.0000	21
67 1,2-Dibromoethane	107	7.614	7.614 (0.940)		107708		20.0000	21
69 1-Chlorohexane	91	8.087	8.087 (0.999)		122478		20.0000	22
* 68 Chlorobenzene-d5	117	8.099	8.099 (1.000)		756580		50.0000	
70 Chlorobenzene	112	8.123	8.134 (1.003)		282467		20.0000	22
71 1,1,1,2-Tetrachloroethane	131	8.217	8.217 (1.015)		114926		20.0000	21
72 Ethylbenzene	106	8.241	8.241 (1.018)		144126		20.0000	21
73 m,p-Xylene	106	8.371	8.371 (1.034)		360649		40.0000	43
74 o-Xylene	106	8.809	8.821 (1.088)		180765		20.0000	21
75 Styrene	104	8.833	8.833 (1.091)		307690		20.0000	21

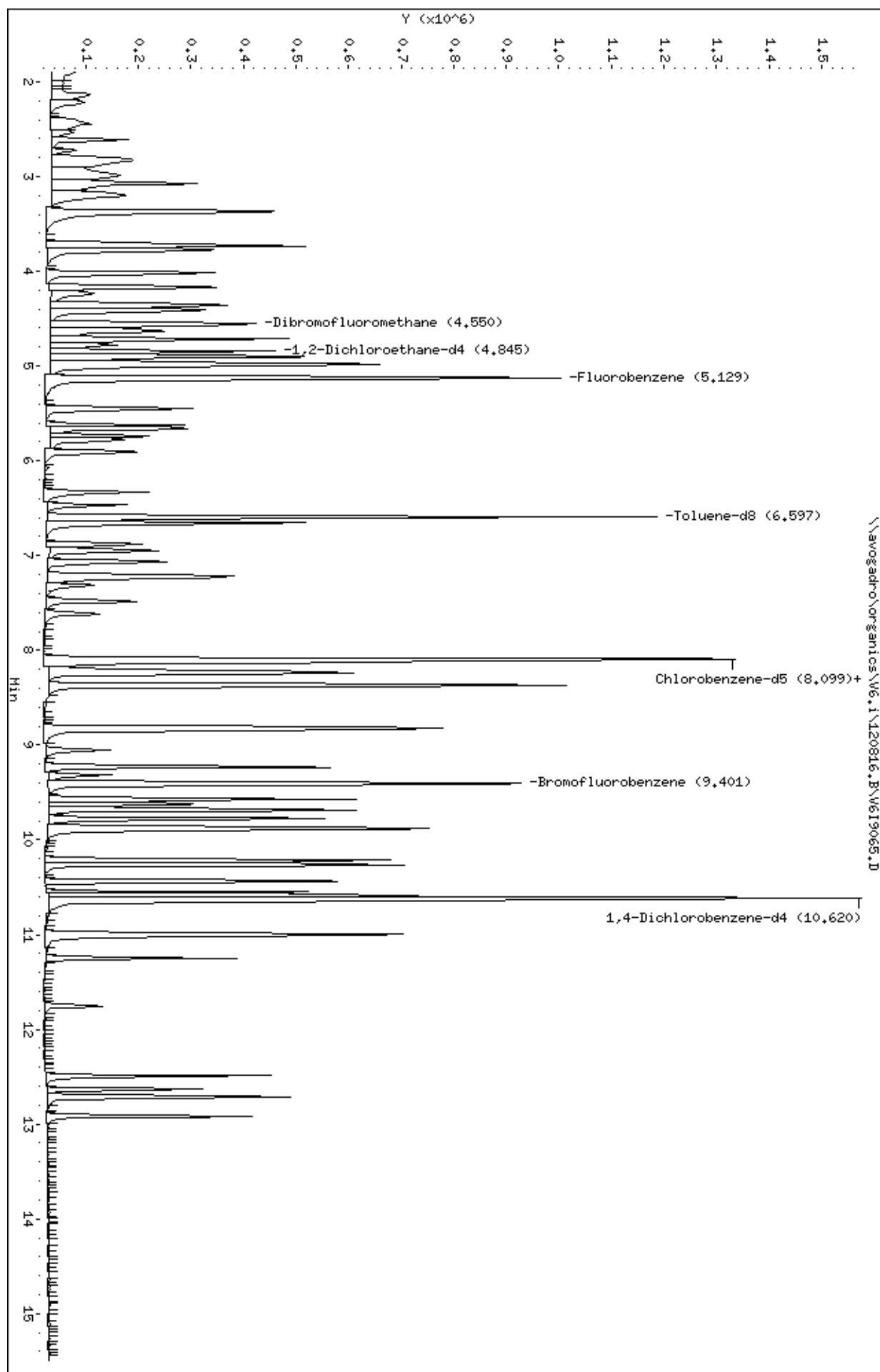
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 Bromoform	173	9.057	9.057	(1.118)	91927		20.0000	21
77 Isopropylbenzene	105	9.235	9.235	(1.140)	443993		20.0000	22
78 trans-1,4-Dichloro-2-butene	75	9.318	9.318	(1.150)	38814		20.0000	20
\$ 79 Bromofluorobenzene	95	9.401	9.401	(1.161)	395080		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.566	9.566	(0.901)	226801		20.0000	23
81 Bromobenzene	156	9.578	9.578	(0.902)	133748		20.0000	21
82 1,2,3-Trichloropropane	75	9.614	9.614	(0.905)	169471		20.0000	20
83 n-Propylbenzene	120	9.685	9.685	(0.912)	122831		20.0000	21
84 2-Chlorotoluene	126	9.779	9.779	(0.921)	117835		20.0000	21
85 1,3,5-Trimethylbenzene	105	9.874	9.874	(0.930)	381264		20.0000	21
86 4-Chlorotoluene	126	9.898	9.898	(0.932)	127276		20.0000	21
M 94 Xylene (Total)	106				541414		60.0000	64
87 tert-Butylbenzene	119	10.584	10.584	(0.997)	392372		20.0000	22
88 1,2,4-Trimethylbenzene	105	10.264	10.264	(0.967)	386433		20.0000	21
89 sec-Butylbenzene	105	10.442	10.442	(0.983)	443007		20.0000	21
90 1,3-Dichlorobenzene	146	10.548	10.548	(0.993)	239484		20.0000	21
91 4-Isopropyltoluene	119	10.584	10.584	(0.997)	392372		20.0000	22
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619	(1.000)	438301		50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.643	(1.002)	262148		20.0000	21
95 n-Butylbenzene	91	10.986	10.986	(1.035)	345550		20.0000	22
96 1,2-Dichlorobenzene	146	11.010	11.010	(1.037)	243776		20.0000	21
97 Hexachloroethane	117	11.246	11.246	(1.059)	81420		20.0000	21
98 1,2-Dibromo-3-chloropropane	75	11.755	11.743	(1.107)	34561		20.0000	21
141 1,3,5-Trichlorobenzene	182	12.489	12.489	(2.435)	133987		20.0000	20(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.489	(1.176)	139863		20.0000	20
100 Hexachlorobutadiene	225	12.631	12.631	(1.189)	51017		20.0000	21
101 Naphthalene	128	12.714	12.714	(1.197)	419566		20.0000	21
102 1,2,3-Trichlorobenzene	180	12.915	12.915	(1.216)	120602		20.0000	20

QC Flag Legend

T - Target compound detected outside RT window.
 A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W6,i\120816.B\W6I9065.D
Date : 16-AUG-2012 18:19
Client ID: VSTD0206R
Sample Info: 5HL,VSTD0206R,VSTD0206R
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120816.B\V6I9066.D
Report Date: 17-Aug-2012 10:31

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120816.B\V6I9066.D
Lab Smp Id: VSTD0056R Client Smp ID: VSTD0056R
Inj Date : 16-AUG-2012 18:45
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0056R,VSTD0056R
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120816.B\v68260Gadd-6lvl.m
Meth Date : 17-Aug-2012 10:30 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 18:45 Cal File: V6I9066.D
Als bottle: 17 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.605	1.603 (0.313)		11105	5.00000	5
2 Freon114	85	1.700	1.697 (0.331)		20239	5.00000	6
3 Chloromethane	50	1.759	1.768 (0.343)		32420	5.00000	5
4 Vinyl Chloride	62	1.853	1.863 (0.361)		27527	5.00000	5
5 Bromomethane	94	2.137	2.135 (0.417)		19273	5.00000	6
6 Chloroethane	64	2.220	2.218 (0.433)		18060	5.00000	5
7 Trichlorofluoromethane	101	2.409	2.407 (0.470)		40503	5.00000	5
126 Ethanol	46	2.528	2.538 (0.493)		3163	500.000	470(A)
8 Ether	59	2.611	2.608 (0.509)		21149	5.00000	5
9 Acrolein	56	2.729	2.727 (0.532)		14258	25.0000	26
10 1,1-Dichloroethene	96	2.812	2.821 (0.548)		25975	5.00000	5
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.824	2.810 (0.550)		25908	5.00000	5
12 Acetone	58	2.835	2.845 (0.553)		3291	5.00000	6
13 Iodomethane	142	2.954	2.952 (0.576)		47468	5.00000	5
14 Carbon Disulfide	76	3.001	2.999 (0.585)		94967	5.00000	5
15 Acetonitrile	41	3.072	3.070 (0.599)		40034	50.0000	35
16 Allyl Chloride	39	3.072	3.070 (0.599)		22720	5.00000	4
17 Methyl Acetate	43	3.084	3.082 (0.601)		28012	5.00000	5
18 Methylene Chloride	84	3.202	3.188 (0.624)		36544	5.00000	6
19 tert-Butanol	59	3.238	3.236 (0.631)		7233	10.0000	11
20 Acrylonitrile	53	3.368	3.366 (0.656)		10263	5.00000	5
21 trans-1,2-Dichloroethene	96	3.380	3.378 (0.659)		23098	5.00000	5

						AMOUNTS	
QUANT SIG						CAL -AMT	ON -COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
22 Methyl tert-butyl ether	73	3.368	3.366	(0.656)	69647	5.00000	5
23 1,1-Dichloroethane	63	3.699	3.709	(0.721)	43177	5.00000	5
24 Vinyl acetate	43	3.735	3.733	(0.728)	92486	5.00000	5
25 Diisopropyl Ether	45	3.735	3.733	(0.728)	86101	5.00000	5
26 2-Chloro-1,3-Butadiene	53	3.770	3.780	(0.735)	39090	5.00000	5
27 Ethyl tert-butyl ether	59	4.019	4.017	(0.783)	78406	5.00000	5
29 2,2-Dichloropropane	77	4.161	4.170	(0.811)	19986	5.00000	5
28 cis-1,2-Dichloroethene	96	4.173	4.170	(0.813)	25630	5.00000	5
30 2-Butanone	72	4.173	4.170	(0.813)	3528	5.00000	5
32 Propionitrile	54	4.255	4.230	(0.829)	32857	50.0000	44
33 Methacrylonitrile	41	4.350	4.348	(0.848)	30030	10.0000	9
34 Bromochloromethane	128	4.374	4.372	(0.852)	12656	5.00000	5
31 Tetrahydrofuran	72	4.409	4.407	(0.859)	7234	10.0000	10
35 Chloroform	83	4.421	4.419	(0.862)	42930	5.00000	5
\$ 36 Dibromofluoromethane	113	4.551	4.549	(0.887)	273455	50.0000	51
37 1,1,1-Trichloroethane	97	4.575	4.585	(0.892)	37782	5.00000	5
38 Cyclohexane	56	4.634	4.632	(0.903)	40224	5.00000	5
39 1,1-Dichloropropene	110	4.717	4.715	(0.919)	13036	5.00000	5
40 Carbon Tetrachloride	117	4.717	4.727	(0.919)	39318	5.00000	5
41 Isobutyl Alcohol	43	4.788	4.774	(0.933)	24171	100.000	95
\$ 42 1,2-Dichloroethane-d4	102	4.847	4.845	(0.945)	62267	50.0000	50
43 Benzene	78	4.894	4.892	(0.954)	88573	5.00000	5
44 1,2-Dichloroethane	62	4.906	4.904	(0.956)	35101	5.00000	5
45 tert-Amyl methyl ether	73	4.965	4.963	(0.968)	70632	5.00000	5
M 50 1,2-Dichloroethene (Total)	96				48728	10.0000	10
* 46 Fluorobenzene	96	5.131	5.129	(1.000)	946684	50.0000	
47 Trichloroethene	130	5.451	5.448	(1.062)	26295	5.00000	5
48 Methylcyclohexane	83	5.628	5.626	(1.097)	32775	5.00000	5
49 1,2-Dichloropropane	63	5.664	5.661	(1.104)	22754	5.00000	5
51 Methyl Methacrylate	69	5.735	5.732	(1.118)	19228	5.00000	5
52 Dibromomethane	93	5.782	5.780	(1.127)	15956	5.00000	5
53 1,4-Dioxane	88	5.782	5.780	(1.127)	4144	100.000	110
54 Bromodichloromethane	83	5.912	5.910	(1.152)	32574	5.00000	5
55 2-Chloroethyl vinyl ether	63	6.657	6.655	(1.297)	8745	5.00000	5(T)
56 cis-1,3-Dichloropropene	75	6.338	6.324	(1.235)	36205	5.00000	5
57 4-Methyl-2-pentanone	43	6.468	6.466	(1.261)	29166	5.00000	5
\$ 58 Toluene-d8	98	6.598	6.596	(0.815)	901857	50.0000	50
59 Toluene	91	6.657	6.655	(1.297)	99867	5.00000	5
60 trans-1,3-Dichloropropene	75	6.882	6.880	(1.341)	35394	5.00000	5
61 Ethyl Methacrylate	69	6.953	6.951	(1.355)	25906	5.00000	5
62 1,1,2-Trichloroethane	97	7.072	7.069	(1.378)	21316	5.00000	5
63 Tetrachloroethene	164	7.214	7.211	(0.890)	22421	5.00000	5
64 1,3-Dichloropropane	76	7.249	7.235	(0.895)	34090	5.00000	5
65 2-Hexanone	43	7.320	7.318	(0.904)	17224	5.00000	4
66 Dibromochloromethane	129	7.486	7.484	(0.924)	28734	5.00000	5(T)
67 1,2-Dibromoethane	107	7.616	7.614	(0.940)	23738	5.00000	5(T)
69 1-Chlorohexane	91	8.089	8.087	(0.999)	32754	5.00000	6
* 68 Chlorobenzene-d5	117	8.101	8.099	(1.000)	748707	50.0000	
70 Chlorobenzene	112	8.125	8.134	(1.003)	67881	5.00000	5
71 1,1,1,2-Tetrachloroethane	131	8.208	8.217	(1.013)	27381	5.00000	5
72 Ethylbenzene	106	8.243	8.241	(1.018)	36288	5.00000	5
73 m,p-Xylene	106	8.373	8.371	(1.034)	89410	10.0000	10
74 o-Xylene	106	8.811	8.821	(1.088)	42848	5.00000	5
75 Styrene	104	8.835	8.833	(1.091)	74847	5.00000	5

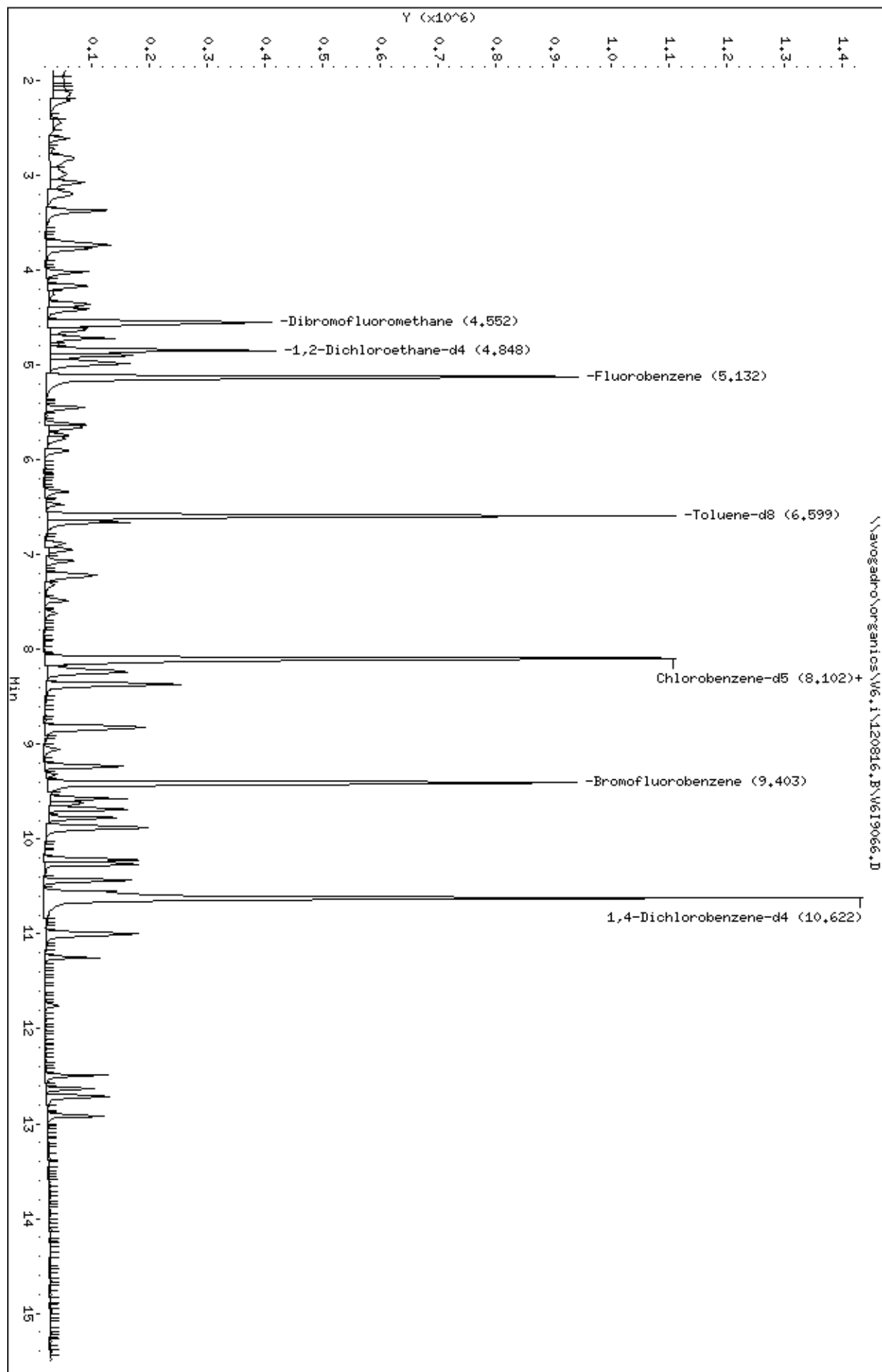
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 Bromoform	173	9.060	9.057 (1.118)		20070		5.00000	5
77 Isopropylbenzene	105	9.225	9.235 (1.139)		110411		5.00000	5
78 trans-1,4-Dichloro-2-butene	75	9.320	9.318 (1.150)		7594		5.00000	4
\$ 79 Bromofluorobenzene	95	9.403	9.401 (1.161)		391359		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.568	9.566 (0.901)		55152		5.00000	5
81 Bromobenzene	156	9.580	9.578 (0.902)		31842		5.00000	5
82 1,2,3-Trichloropropane	75	9.616	9.614 (0.905)		38790		5.00000	5
83 n-Propylbenzene	120	9.687	9.685 (0.912)		29783		5.00000	5
84 2-Chlorotoluene	126	9.781	9.779 (0.921)		28234		5.00000	5
85 1,3,5-Trimethylbenzene	105	9.876	9.874 (0.930)		98162		5.00000	5
86 4-Chlorotoluene	126	9.900	9.898 (0.932)		31468		5.00000	5
M 94 Xylene (Total)	106				132258		15.0000	16
87 tert-Butylbenzene	119	10.586	10.584 (0.997)		100792		5.00000	5
88 1,2,4-Trimethylbenzene	105	10.266	10.264 (0.967)		97182		5.00000	5
89 sec-Butylbenzene	105	10.432	10.442 (0.982)		115835		5.00000	5
90 1,3-Dichlorobenzene	146	10.550	10.548 (0.993)		59776		5.00000	5
91 4-Isopropyltoluene	119	10.586	10.584 (0.997)		100792		5.00000	5
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.619 (1.000)		438021		50.0000	
93 1,4-Dichlorobenzene	146	10.645	10.643 (1.002)		66453		5.00000	5
95 n-Butylbenzene	91	10.988	10.986 (1.035)		83343		5.00000	5
96 1,2-Dichlorobenzene	146	11.012	11.010 (1.037)		61691		5.00000	5
97 Hexachloroethane	117	11.249	11.246 (1.059)		20480		5.00000	5
98 1,2-Dibromo-3-chloropropane	75	11.746	11.743 (1.106)		8336		5.00000	5
141 1,3,5-Trichlorobenzene	182	12.491	12.489 (2.434)		34183		5.00000	5(A)
99 1,2,4-Trichlorobenzene	180	12.491	12.489 (1.176)		34838		5.00000	5
100 Hexachlorobutadiene	225	12.633	12.631 (1.189)		13312		5.00000	5
101 Naphthalene	128	12.716	12.714 (1.197)		106746		5.00000	5
102 1,2,3-Trichlorobenzene	180	12.917	12.915 (1.216)		32053		5.00000	5

QC Flag Legend

T - Target compound detected outside RT window.
 A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W6,i\120816.B\W6I9066.D
Date : 16-AUG-2012 18:45
Client ID: VSTD0056R
Sample Info: 5HL,VSTD0056R,VSTD0056R
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120816.B\V6I9068.D
 Report Date: 17-Aug-2012 10:31

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120816.B\V6I9068.D
 Lab Smp Id: VSTD0016R Client Smp ID: VSTD0016R
 Inj Date : 16-AUG-2012 19:37
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML,VSTD0016R,VSTD0016R
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120816.B\v68260Gadd-6lvl.m
 Meth Date : 17-Aug-2012 10:30 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 19 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.589	1.603 (0.310)		2364	1.00000	1
2 Freon114	85	1.743	1.697 (0.340)		2317	1.00000	0.7
3 Chloromethane	50	1.767	1.768 (0.345)		7898	1.00000	1
4 Vinyl Chloride	62	1.849	1.863 (0.361)		5467	1.00000	1
5 Bromomethane	94	2.133	2.135 (0.416)		4639	1.00000	1
6 Chloroethane	64	2.228	2.218 (0.435)		3953	1.00000	1
7 Trichlorofluoromethane	101	2.406	2.407 (0.469)		6705	1.00000	1.0
126 Ethanol	46	2.571	2.538 (0.502)		158	100.000	28
8 Ether	59	2.607	2.608 (0.508)		4016	1.00000	1
9 Acrolein	56	2.737	2.727 (0.534)		3937	5.00000	(a)
10 1,1-Dichloroethene	96	2.808	2.821 (0.548)		2120	1.00000	(a)
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.808	2.810 (0.548)		3468	1.00000	0.8
12 Acetone	58	2.867	2.845 (0.559)		550	1.00000	1.0
13 Iodomethane	142	2.962	2.952 (0.578)		8775	1.00000	1.0
14 Carbon Disulfide	76	2.997	2.999 (0.585)		19341	1.00000	1
15 Acetonitrile	41	3.068	3.070 (0.598)		7441	1.00000	8
16 Allyl Chloride	39	3.068	3.070 (0.598)		4205	1.00000	0.9
17 Methyl Acetate	43	3.092	3.082 (0.603)		5581	1.00000	1.0
18 Methylene Chloride	84	3.198	3.188 (0.624)		14068	1.00000	0.9
19 tert-Butanol	59	3.305	3.236 (0.645)		360	1.00000	0.6
20 Acrylonitrile	53	3.388	3.366 (0.661)		788	1.00000	0.4(a)
21 trans-1,2-Dichloroethene	96	3.376	3.378 (0.658)		4449	1.00000	1.0

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
22 Methyl tert-butyl ether	73	3.364	3.366 (0.656)		17794		1.00000	1
23 1,1-Dichloroethane	63	3.707	3.709 (0.723)		9209		1.00000	1
24 Vinyl acetate	43	3.731	3.733 (0.728)		15407		1.00000	0.9
25 Diisopropyl Ether	45	3.731	3.733 (0.728)		17579		1.00000	1
26 2-Chloro-1,3-Butadiene	53	3.778	3.780 (0.737)		8923		1.00000	1
27 Ethyl tert-butyl ether	59	4.015	4.017 (0.783)		16935		1.00000	1
29 2,2-Dichloropropane	77	4.169	4.170 (0.813)		4176		1.00000	1
28 cis-1,2-Dichloroethene	96	4.169	4.170 (0.813)		6659		1.00000	1
30 2-Butanone	72	4.405	4.170 (0.859)		2073		1.00000	3(T)
32 Propionitrile	54	4.240	4.230 (0.827)		1471		1.00000	2
33 Methacrylonitrile	41	4.358	4.348 (0.850)		4456		1.00000	1
34 Bromochloromethane	128	4.370	4.372 (0.852)		2726		1.00000	1
31 Tetrahydrofuran	72	4.405	4.407 (0.859)		1699		1.00000	2
35 Chloroform	83	4.417	4.419 (0.862)		8342		1.00000	1
\$ 36 Dibromofluoromethane	113	4.547	4.549 (0.887)		271943		1.00000	51
37 1,1,1-Trichloroethane	97	4.583	4.585 (0.894)		7440		1.00000	1
38 Cyclohexane	56	4.618	4.632 (0.901)		9456		1.00000	1
39 1,1-Dichloropropene	110	4.713	4.715 (0.919)		2543		1.00000	1
40 Carbon Tetrachloride	117	4.725	4.727 (0.922)		7121		1.00000	1
41 Isobutyl Alcohol	43	4.961	4.774 (0.968)		8250		1.00000	32(T)
\$ 42 1,2-Dichloroethane-d4	102	4.843	4.845 (0.945)		62225		1.00000	51
43 Benzene	78	4.890	4.892 (0.954)		18660		1.00000	1
44 1,2-Dichloroethane	62	4.914	4.904 (0.958)		7358		1.00000	1
45 tert-Amyl methyl ether	73	4.961	4.963 (0.968)		17133		1.00000	1
M 50 1,2-Dichloroethene (Total)	96				11108		2.00000	2
* 46 Fluorobenzene	96	5.127	5.129 (1.000)		945373		50.0000	
47 Trichloroethene	130	5.447	5.448 (1.062)		4930		1.00000	1.0
48 Methylcyclohexane	83	5.624	5.626 (1.097)		6037		1.00000	1
49 1,2-Dichloropropane	63	5.660	5.661 (1.104)		4623		1.00000	1.0
51 Methyl Methacrylate	69	5.742	5.732 (1.120)		3143		1.00000	0.8
52 Dibromomethane	93	5.790	5.780 (1.129)		2973		1.00000	1.0
54 Bromodichloromethane	83	5.908	5.910 (1.152)		6788		1.00000	1
55 2-Chloroethyl vinyl ether	63	6.654	6.655 (1.298)		2136		1.00000	1(T)
56 cis-1,3-Dichloropropene	75	6.334	6.324 (1.235)		6590		1.00000	0.9
57 4-Methyl-2-pentanone	43	6.476	6.466 (1.263)		5833		1.00000	1.0
\$ 58 Toluene-d8	98	6.594	6.596 (0.814)		896414		1.00000	48
59 Toluene	91	6.665	6.655 (1.300)		20353		1.00000	1
60 trans-1,3-Dichloropropene	75	6.902	6.880 (1.346)		6211		1.00000	0.9
61 Ethyl Methacrylate	69	6.949	6.951 (1.355)		3910		1.00000	0.7
62 1,1,2-Trichloroethane	97	7.068	7.069 (1.378)		5048		1.00000	1
63 Tetrachloroethene	164	7.210	7.211 (0.890)		4844		1.00000	1
64 1,3-Dichloropropane	76	7.245	7.235 (0.895)		6003		1.00000	0.9
65 2-Hexanone	43	7.316	7.318 (0.904)		1446		1.00000	0.3(a)
66 Dibromochloromethane	129	7.482	7.484 (0.924)		5611		1.00000	1.0(T)
67 1,2-Dibromoethane	107	7.624	7.614 (0.942)		4088		1.00000	0.8(T)
69 1-Chlorohexane	91	8.085	8.087 (0.999)		7625		1.00000	1
* 68 Chlorobenzene-d5	117	8.097	8.099 (1.000)		778075		50.0000	
70 Chlorobenzene	112	8.133	8.134 (1.004)		13300		1.00000	1
71 1,1,1,2-Tetrachloroethane	131	8.215	8.217 (1.015)		5697		1.00000	1
72 Ethylbenzene	106	8.239	8.241 (1.018)		7131		1.00000	1
73 m,p-Xylene	106	8.369	8.371 (1.034)		17950		2.00000	2
74 o-Xylene	106	8.819	8.821 (1.089)		8635		1.00000	1
75 Styrene	104	8.843	8.833 (1.092)		14982		1.00000	1
76 Bromoform	173	9.056	9.057 (1.118)		3612		1.00000	0.8(T)

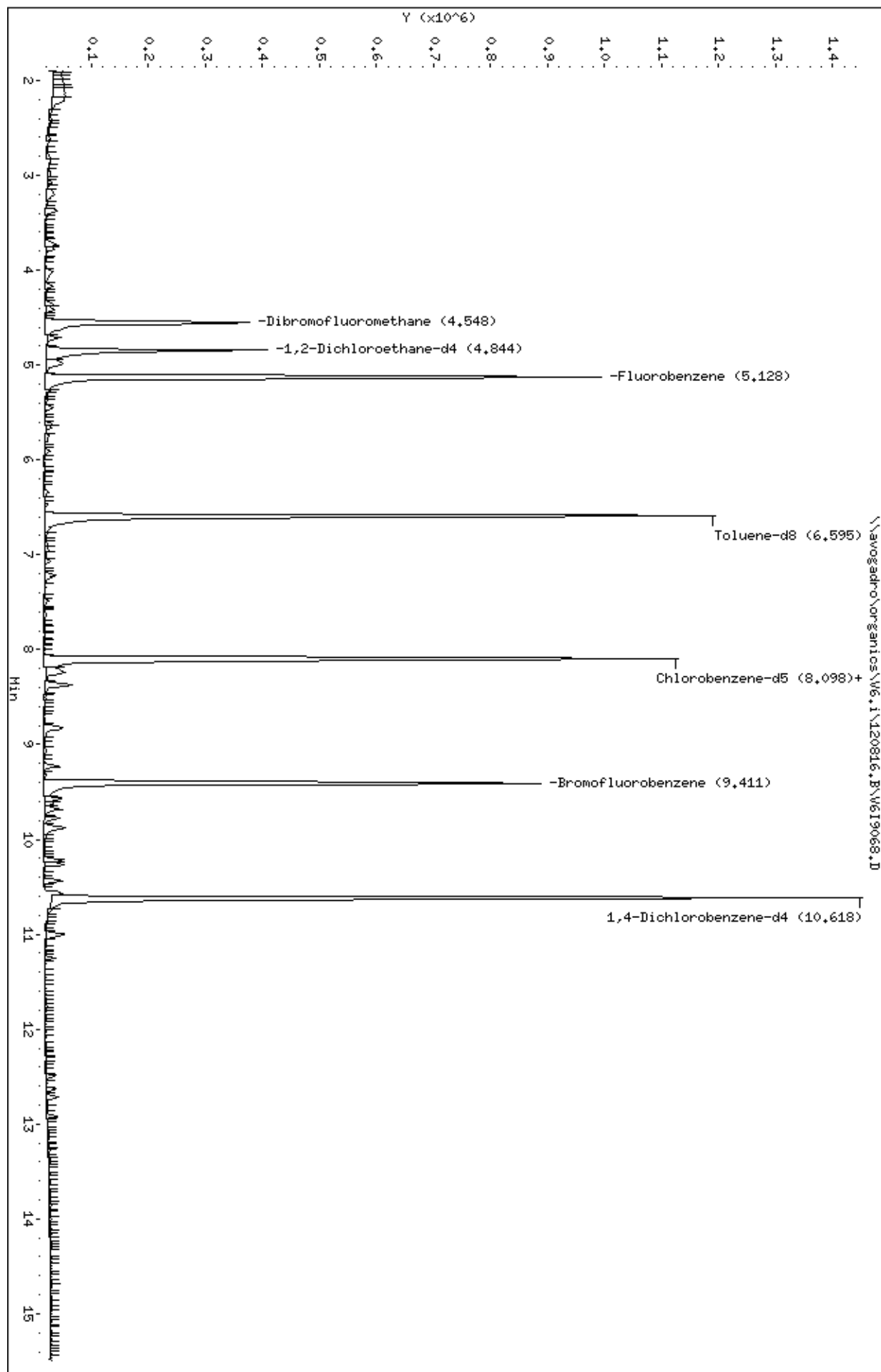
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.233	9.235 (1.140)		25594		1.00000	1
78 trans-1,4-Dichloro-2-butene	75	9.316	9.318 (1.151)		1598		1.00000	0.8
\$ 79 Bromofluorobenzene	95	9.411	9.401 (1.162)		390411		1.00000	48
80 1,1,2,2-Tetrachloroethane	77	9.576	9.566 (0.902)		14647		1.00000	1
81 Bromobenzene	156	9.576	9.578 (0.902)		5814		1.00000	1.0
82 1,2,3-Trichloropropane	75	9.624	9.614 (0.906)		10927		1.00000	1
83 n-Propylbenzene	120	9.683	9.685 (0.912)		5838		1.00000	1
84 2-Chlorotoluene	126	9.777	9.779 (0.921)		5690		1.00000	1
85 1,3,5-Trimethylbenzene	105	9.872	9.874 (0.930)		21279		1.00000	1
86 4-Chlorotoluene	126	9.896	9.898 (0.932)		6177		1.00000	1
M 94 Xylene (Total)	106				26585		3.00000	3
87 tert-Butylbenzene	119	10.582	10.584 (0.997)		21312		1.00000	1
88 1,2,4-Trimethylbenzene	105	10.263	10.264 (0.967)		21660		1.00000	1
89 sec-Butylbenzene	105	10.440	10.442 (0.983)		25379		1.00000	1
90 1,3-Dichlorobenzene	146	10.558	10.548 (0.994)		12820		1.00000	1
91 4-Isopropyltoluene	119	10.582	10.584 (0.997)		21312		1.00000	1
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.619 (1.000)		417099		50.0000	
93 1,4-Dichlorobenzene	146	10.641	10.643 (1.002)		14150		1.00000	1
95 n-Butylbenzene	91	10.984	10.986 (1.035)		17437		1.00000	1
96 1,2-Dichlorobenzene	146	11.020	11.010 (1.038)		12392		1.00000	1
97 Hexachloroethane	117	11.245	11.246 (1.059)		4652		1.00000	1
98 1,2-Dibromo-3-chloropropane	75	11.754	11.743 (1.107)		1425		1.00000	0.9
141 1,3,5-Trichlorobenzene	182	12.499	12.489 (2.438)		6163		1.00000	1.0(A)
99 1,2,4-Trichlorobenzene	180	12.499	12.489 (1.177)		6992		1.00000	1
100 Hexachlorobutadiene	225	12.629	12.631 (1.189)		3408		1.00000	2
101 Naphthalene	128	12.712	12.714 (1.197)		20127		1.00000	1
102 1,2,3-Trichlorobenzene	180	12.925	12.915 (1.217)		6320		1.00000	1

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W6,i\120816.B\W6I9068.D
Date : 16-AUG-2012 19:37
Client ID: VSTD0016R
Sample Info: 5HL,VSTD0016R,VSTD0016R
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120816.B\V6I9069.D
Report Date: 17-Aug-2012 10:31

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120816.B\V6I9069.D
Lab Smp Id: VSTD2006R Client Smp ID: VSTD2006R
Inj Date : 16-AUG-2012 20:03
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD2006R,VSTD2006R
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120816.B\v68260Gadd-6lvl.m
Meth Date : 17-Aug-2012 10:30 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 20:03 Cal File: V6I9069.D
Als bottle: 20 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.603	1.603 (0.313)		416452	200.000	160
2 Freon114	85	1.697	1.697 (0.331)		681669	200.000	180
3 Chloromethane	50	1.780	1.768 (0.347)		1271426	200.000	190
4 Vinyl Chloride	62	1.863	1.863 (0.363)		1019684	200.000	190
5 Bromomethane	94	2.147	2.135 (0.419)		644529	200.000	160
6 Chloroethane	64	2.218	2.218 (0.433)		646093	200.000	180
7 Trichlorofluoromethane	101	2.407	2.407 (0.469)		1385368	200.000	180
126 Ethanol	46	2.538	2.538 (0.495)		130137	20000.0	19000(A)
8 Ether	59	2.609	2.608 (0.509)		792639	200.000	190
9 Acrolein	56	2.727	2.727 (0.532)		496259	1000.00	960(A)
10 1,1-Dichloroethene	96	2.822	2.821 (0.550)		1031695	200.000	210(A)
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.810	2.810 (0.548)		894706	200.000	220(A)
12 Acetone	58	2.833	2.845 (0.552)		123845	200.000	200
13 Iodomethane	142	2.952	2.952 (0.576)		1904448	200.000	200
14 Carbon Disulfide	76	2.999	2.999 (0.585)		3381635	200.000	180
15 Acetonitrile	41	3.070	3.070 (0.599)		1526998	2000.00	1400(A)
16 Allyl Chloride	39	3.070	3.070 (0.599)		767854	200.000	140
17 Methyl Acetate	43	3.082	3.082 (0.601)		1147315	200.000	200
18 Methylene Chloride	84	3.200	3.188 (0.624)		1107942	200.000	140
19 tert-Butanol	59	3.236	3.236 (0.631)		231669	400.000	350(A)
20 Acrylonitrile	53	3.354	3.366 (0.654)		502830	200.000	210(A)
21 trans-1,2-Dichloroethene	96	3.378	3.378 (0.659)		977586	200.000	190

Data File: \\avogadro\organics\V6.i\120816.B\V6I9069.D
Report Date: 17-Aug-2012 10:31

						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
22 Methyl tert-butyl ether	73	3.366	3.366	(0.656)	2576904	200.000	170
23 1,1-Dichloroethane	63	3.697	3.709	(0.721)	1689309	200.000	190
24 Vinyl acetate	43	3.733	3.733	(0.728)	3196147	200.000	180
25 Diisopropyl Ether	45	3.733	3.733	(0.728)	3033277	200.000	170
26 2-Chloro-1,3-Butadiene	53	3.768	3.780	(0.735)	1378996	200.000	180
27 Ethyl tert-butyl ether	59	4.017	4.017	(0.783)	2800499	200.000	180
29 2,2-Dichloropropane	77	4.170	4.170	(0.813)	640850	200.000	150
28 cis-1,2-Dichloroethene	96	4.159	4.170	(0.811)	995761	200.000	200
30 2-Butanone	72	4.170	4.170	(0.813)	146117	200.000	200
32 Propionitrile	54	4.230	4.230	(0.825)	1860780	2000.00	2300(A)
33 Methacrylonitrile	41	4.348	4.348	(0.848)	1369252	400.000	390(A)
34 Bromochloromethane	128	4.360	4.372	(0.850)	555321	200.000	200
31 Tetrahydrofuran	72	4.407	4.407	(0.859)	308913	400.000	400(A)
35 Chloroform	83	4.419	4.419	(0.862)	1549507	200.000	190
\$ 36 Dibromofluoromethane	113	4.549	4.549	(0.887)	284590	50.0000	50
37 1,1,1-Trichloroethane	97	4.585	4.585	(0.894)	1401401	200.000	200
38 Cyclohexane	56	4.632	4.632	(0.903)	1536401	200.000	180
39 1,1-Dichloropropene	110	4.715	4.715	(0.919)	469194	200.000	180
40 Carbon Tetrachloride	117	4.727	4.727	(0.922)	1413264	200.000	190
41 Isobutyl Alcohol	43	4.774	4.774	(0.931)	1147221	4000.00	4200(A)
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.845	(0.945)	63696	50.0000	48
43 Benzene	78	4.892	4.892	(0.954)	3052014	200.000	170
44 1,2-Dichloroethane	62	4.904	4.904	(0.956)	1354828	200.000	190
45 tert-Amyl methyl ether	73	4.963	4.963	(0.968)	2551366	200.000	170
M 50 1,2-Dichloroethene (Total)	96				1973347	400.000	390
* 46 Fluorobenzene	96	5.129	5.129	(1.000)	1009794	50.0000	
47 Trichloroethene	130	5.448	5.448	(1.062)	1016426	200.000	190
48 Methylcyclohexane	83	5.626	5.626	(1.097)	1103016	200.000	160
49 1,2-Dichloropropane	63	5.661	5.661	(1.104)	990864	200.000	200
51 Methyl Methacrylate	69	5.732	5.732	(1.118)	861971	200.000	200
52 Dibromomethane	93	5.768	5.780	(1.125)	648864	200.000	200
53 1,4-Dioxane	88	5.780	5.780	(1.127)	137655	4000.00	3600(A)
54 Bromodichloromethane	83	5.910	5.910	(1.152)	1302227	200.000	190
55 2-Chloroethyl vinyl ether	63	6.655	6.655	(1.298)	332919	200.000	180(T)
56 cis-1,3-Dichloropropene	75	6.324	6.324	(1.233)	1529697	200.000	200
57 4-Methyl-2-pentanone	43	6.466	6.466	(1.261)	1261628	200.000	190
\$ 58 Toluene-d8	98	6.596	6.596	(0.814)	979420	50.0000	49
59 Toluene	91	6.655	6.655	(1.298)	3268576	200.000	160
60 trans-1,3-Dichloropropene	75	6.868	6.880	(1.339)	1461468	200.000	200(A)
61 Ethyl Methacrylate	69	6.951	6.951	(1.355)	1173246	200.000	200
62 1,1,2-Trichloroethane	97	7.070	7.069	(1.378)	883955	200.000	200
63 Tetrachloroethene	164	7.212	7.211	(0.890)	851761	200.000	180
64 1,3-Dichloropropane	76	7.235	7.235	(0.893)	1458607	200.000	200
65 2-Hexanone	43	7.318	7.318	(0.904)	924907	200.000	210(A)
66 Dibromochloromethane	129	7.484	7.484	(0.924)	1211148	200.000	200
67 1,2-Dibromoethane	107	7.614	7.614	(0.940)	1057707	200.000	200
69 1-Chlorohexane	91	8.087	8.087	(0.999)	1123042	200.000	170
* 68 Chlorobenzene-d5	117	8.099	8.099	(1.000)	825009	50.0000	
70 Chlorobenzene	112	8.134	8.134	(1.004)	2459528	200.000	180
71 1,1,1,2-Tetrachloroethane	131	8.217	8.217	(1.015)	1089605	200.000	190
72 Ethylbenzene	106	8.241	8.241	(1.018)	1352939	200.000	190
73 m,p-Xylene	106	8.371	8.371	(1.034)	2950805	400.000	330(A)
74 o-Xylene	106	8.821	8.821	(1.089)	1629775	200.000	180
75 Styrene	104	8.833	8.833	(1.091)	2705743	200.000	180

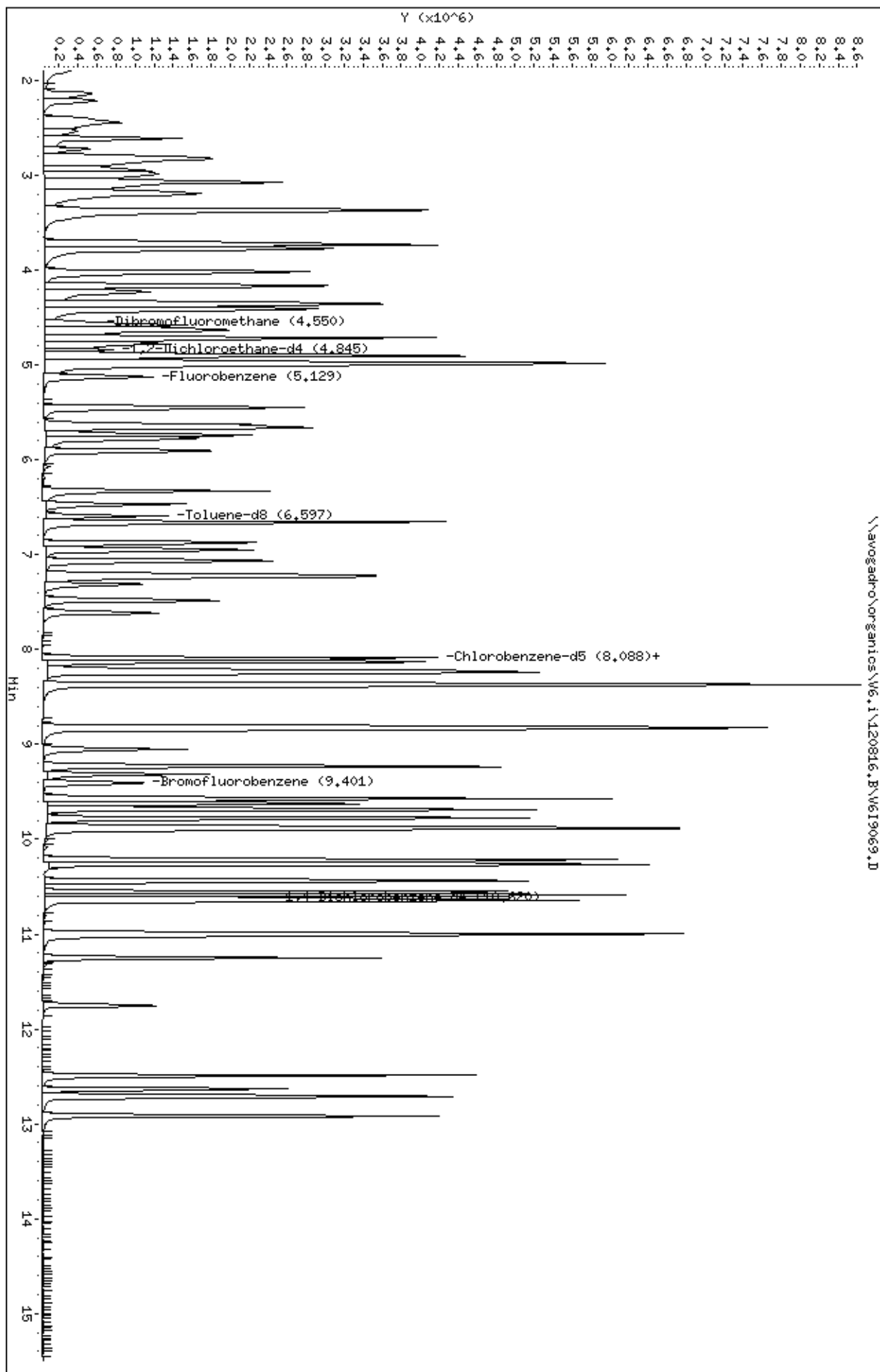
						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
76 Bromoform	173	9.046	9.057	(1.117)	958556	200.000	210(A)
77 Isopropylbenzene	105	9.235	9.235	(1.140)	3497536	200.000	160
78 trans-1,4-Dichloro-2-butene	75	9.318	9.318	(1.150)	491228	200.000	230(A)
\$ 79 Bromofluorobenzene	95	9.401	9.401	(1.161)	442062	50.0000	51
80 1,1,2,2-Tetrachloroethane	77	9.566	9.566	(0.901)	1733092	200.000	160
81 Bromobenzene	156	9.578	9.578	(0.902)	1266661	200.000	180
82 1,2,3-Trichloropropane	75	9.614	9.614	(0.905)	1711016	200.000	230(A)
83 n-Propylbenzene	120	9.685	9.685	(0.912)	1160646	200.000	180
84 2-Chlorotoluene	126	9.779	9.779	(0.921)	1131510	200.000	180
85 1,3,5-Trimethylbenzene	105	9.874	9.874	(0.930)	3076163	200.000	150
86 4-Chlorotoluene	126	9.898	9.898	(0.932)	1203889	200.000	180
M 94 Xylene (Total)	106				4580580	600.000	510
87 tert-Butylbenzene	119	10.584	10.584	(0.997)	3096431	200.000	150
88 1,2,4-Trimethylbenzene	105	10.264	10.264	(0.967)	3105177	200.000	150
89 sec-Butylbenzene	105	10.442	10.442	(0.983)	3458912	200.000	150
90 1,3-Dichlorobenzene	146	10.560	10.548	(0.994)	2111651	200.000	170
91 4-Isopropyltoluene	119	10.584	10.584	(0.997)	3096431	200.000	150
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619	(1.000)	488145	50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.643	(1.002)	2213952	200.000	160
95 n-Butylbenzene	91	10.986	10.986	(1.035)	2689383	200.000	150
96 1,2-Dichlorobenzene	146	11.010	11.010	(1.037)	2122551	200.000	160
97 Hexachloroethane	117	11.247	11.246	(1.059)	808919	200.000	180
98 1,2-Dibromo-3-chloropropane	75	11.743	11.743	(1.106)	332820	200.000	190
141 1,3,5-Trichlorobenzene	182	12.489	12.489	(2.435)	1305726	200.000	180(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.489	(1.176)	1358680	200.000	180
100 Hexachlorobutadiene	225	12.631	12.631	(1.189)	448773	200.000	170
101 Naphthalene	128	12.714	12.714	(1.197)	3426287	200.000	150
102 1,2,3-Trichlorobenzene	180	12.915	12.915	(1.216)	1226076	200.000	170

QC Flag Legend

T - Target compound detected outside RT window.
 A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W6,i\120816.B\W6I9069.D
Date : 16-AUG-2012 20:03
Client ID: WSTD2006R
Sample Info: 5HL,WSTD2006R,WSTD2006R
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120816.B\V6I9070.D
Report Date: 17-Aug-2012 10:31

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120816.B\V6I9070.D
Lab Smp Id: VSTD1006R Client Smp ID: VSTD1006R
Inj Date : 16-AUG-2012 20:28
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD1006R,VSTD1006R
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120816.B\v68260Gadd-6lvl.m
Meth Date : 17-Aug-2012 10:30 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 20:28 Cal File: V6I9070.D
Als bottle: 21 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.601	1.603 (0.312)		214601	100.000	84
2 Freon114	85	1.708	1.697 (0.333)		355187	100.000	96
3 Chloromethane	50	1.779	1.768 (0.347)		621678	100.000	94
4 Vinyl Chloride	62	1.862	1.863 (0.363)		508012	100.000	96
5 Bromomethane	94	2.146	2.135 (0.419)		327323	100.000	86
6 Chloroethane	64	2.217	2.218 (0.432)		318509	100.000	90
7 Trichlorofluoromethane	101	2.406	2.407 (0.469)		716214	100.000	95
126 Ethanol	46	2.536	2.538 (0.495)		69240	10000.0	10000(A)
8 Ether	59	2.607	2.608 (0.508)		387692	100.000	96
9 Acrolein	56	2.725	2.727 (0.532)		237906	500.000	470(A)
10 1,1-Dichloroethene	96	2.820	2.821 (0.550)		514560	100.000	100
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.820	2.810 (0.550)		467960	100.000	110
12 Acetone	58	2.844	2.845 (0.555)		51322	100.000	86
13 Iodomethane	142	2.950	2.952 (0.575)		936114	100.000	100
14 Carbon Disulfide	76	2.998	2.999 (0.585)		1715660	100.000	95
15 Acetonitrile	41	3.069	3.070 (0.598)		850119	1000.00	810(A)
16 Allyl Chloride	39	3.069	3.070 (0.598)		429785	100.000	84
17 Methyl Acetate	43	3.080	3.082 (0.601)		558050	100.000	98
18 Methylene Chloride	84	3.199	3.188 (0.624)		544485	100.000	72
19 tert-Butanol	59	3.234	3.236 (0.631)		112782	200.000	180
20 Acrylonitrile	53	3.364	3.366 (0.656)		225593	100.000	97
21 trans-1,2-Dichloroethene	96	3.376	3.378 (0.658)		476328	100.000	96

Data File: \\avogadro\organics\V6.i\120816.B\V6I9070.D
Report Date: 17-Aug-2012 10:31

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
22 Methyl tert-butyl ether	73	3.364	3.366 (0.656)		1327114		100.000	91
23 1,1-Dichloroethane	63	3.707	3.709 (0.723)		849019		100.000	99
24 Vinyl acetate	43	3.731	3.733 (0.728)		1669775		100.000	94
25 Diisopropyl Ether	45	3.731	3.733 (0.728)		1592328		100.000	93
26 2-Chloro-1,3-Butadiene	53	3.778	3.780 (0.737)		711709		100.000	96
27 Ethyl tert-butyl ether	59	4.015	4.017 (0.783)		1446454		100.000	93
29 2,2-Dichloropropane	77	4.169	4.170 (0.813)		325629		100.000	80
28 cis-1,2-Dichloroethene	96	4.169	4.170 (0.813)		495290		100.000	99
30 2-Butanone	72	4.169	4.170 (0.813)		71063		100.000	97
32 Propionitrile	54	4.228	4.230 (0.825)		898380		1000.00	1100(A)
33 Methacrylonitrile	41	4.346	4.348 (0.848)		659900		200.000	190
34 Bromochloromethane	128	4.370	4.372 (0.852)		264963		100.000	96
31 Tetrahydrofuran	72	4.406	4.407 (0.859)		150511		200.000	200
35 Chloroform	83	4.417	4.419 (0.862)		787849		100.000	99
\$ 36 Dibromofluoromethane	113	4.548	4.549 (0.887)		283827		50.0000	50
37 1,1,1-Trichloroethane	97	4.583	4.585 (0.894)		698877		100.000	99
38 Cyclohexane	56	4.630	4.632 (0.903)		781213		100.000	96
39 1,1-Dichloropropene	110	4.713	4.715 (0.919)		236445		100.000	94
40 Carbon Tetrachloride	117	4.725	4.727 (0.922)		715356		100.000	97
41 Isobutyl Alcohol	43	4.772	4.774 (0.931)		560963		2000.00	2000(A)
\$ 42 1,2-Dichloroethane-d4	102	4.843	4.845 (0.945)		59934		50.0000	47
43 Benzene	78	4.891	4.892 (0.954)		1621266		100.000	94
44 1,2-Dichloroethane	62	4.903	4.904 (0.956)		677547		100.000	99
45 tert-Amyl methyl ether	73	4.962	4.963 (0.968)		1306267		100.000	91
M 50 1,2-Dichloroethene (Total)	96				971618		200.000	200
* 46 Fluorobenzene	96	5.127	5.129 (1.000)		1000383		50.0000	
47 Trichloroethene	130	5.447	5.448 (1.062)		510965		100.000	97
48 Methylcyclohexane	83	5.624	5.626 (1.097)		567038		100.000	86
49 1,2-Dichloropropane	63	5.660	5.661 (1.104)		478774		100.000	96
51 Methyl Methacrylate	69	5.731	5.732 (1.118)		416951		100.000	97
52 Dibromomethane	93	5.778	5.780 (1.127)		311788		100.000	99
53 1,4-Dioxane	88	5.778	5.780 (1.127)		82342		2000.00	2100(A)
54 Bromodichloromethane	83	5.908	5.910 (1.152)		642956		100.000	94
55 2-Chloroethyl vinyl ether	63	6.654	6.655 (1.298)		160793		100.000	91(T)
56 cis-1,3-Dichloropropene	75	6.323	6.324 (1.233)		736059		100.000	98
57 4-Methyl-2-pentanone	43	6.465	6.466 (1.261)		623408		100.000	98
\$ 58 Toluene-d8	98	6.595	6.596 (0.814)		964650		50.0000	50
59 Toluene	91	6.654	6.655 (1.298)		1747364		100.000	90
60 trans-1,3-Dichloropropene	75	6.879	6.880 (1.342)		721511		100.000	100
61 Ethyl Methacrylate	69	6.950	6.951 (1.355)		576480		100.000	98
62 1,1,2-Trichloroethane	97	7.068	7.069 (1.378)		428359		100.000	97
63 Tetrachloroethene	164	7.210	7.211 (0.890)		458175		100.000	100
64 1,3-Dichloropropane	76	7.234	7.235 (0.893)		718941		100.000	100
65 2-Hexanone	43	7.317	7.318 (0.904)		439069		100.000	100
66 Dibromochloromethane	129	7.482	7.484 (0.924)		596693		100.000	100
67 1,2-Dibromoethane	107	7.612	7.614 (0.940)		517691		100.000	100
69 1-Chlorohexane	91	8.086	8.087 (0.999)		570930		100.000	91
* 68 Chlorobenzene-d5	117	8.097	8.099 (1.000)		803268		50.0000	
70 Chlorobenzene	112	8.133	8.134 (1.004)		1262929		100.000	94
71 1,1,1,2-Tetrachloroethane	131	8.216	8.217 (1.015)		534560		100.000	96
72 Ethylbenzene	106	8.239	8.241 (1.018)		679036		100.000	97
73 m,p-Xylene	106	8.370	8.371 (1.034)		1586376		200.000	180
74 o-Xylene	106	8.819	8.821 (1.089)		817913		100.000	95
75 Styrene	104	8.831	8.833 (1.091)		1412478		100.000	95

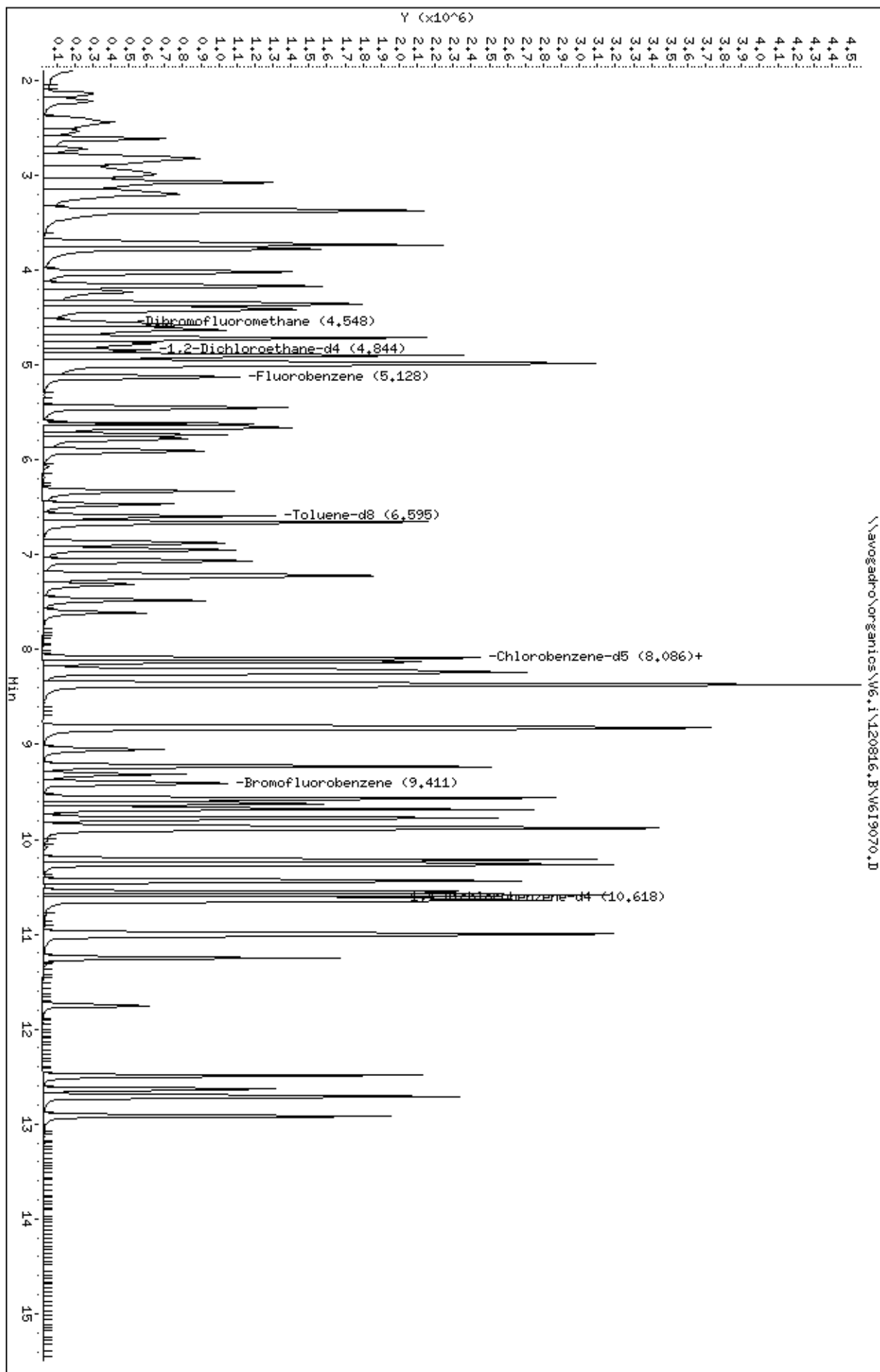
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 Bromoform	173	9.056	9.057	(1.118)	456352		100.000	100
77 Isopropylbenzene	105	9.233	9.235	(1.140)	1894915		100.000	89
78 trans-1,4-Dichloro-2-butene	75	9.316	9.318	(1.151)	222854		100.000	110
\$ 79 Bromofluorobenzene	95	9.411	9.401	(1.162)	423251		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.565	9.566	(0.901)	852547		100.000	84
81 Bromobenzene	156	9.577	9.578	(0.902)	626355		100.000	98
82 1,2,3-Trichloropropane	75	9.624	9.614	(0.906)	805773		100.000	110
83 n-Propylbenzene	120	9.683	9.685	(0.912)	577886		100.000	96
84 2-Chlorotoluene	126	9.778	9.779	(0.921)	552219		100.000	95
85 1,3,5-Trimethylbenzene	105	9.872	9.874	(0.930)	1651344		100.000	90
86 4-Chlorotoluene	126	9.896	9.898	(0.932)	604489		100.000	97
M 94 Xylene (Total)	106				2404289		300.000	280
87 tert-Butylbenzene	119	10.582	10.584	(0.997)	1659246		100.000	88
88 1,2,4-Trimethylbenzene	105	10.263	10.264	(0.967)	1674980		100.000	90
89 sec-Butylbenzene	105	10.440	10.442	(0.983)	1877975		100.000	87
90 1,3-Dichlorobenzene	146	10.559	10.548	(0.994)	1084715		100.000	94
91 4-Isopropyltoluene	119	10.582	10.584	(0.997)	1659246		100.000	88
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.619	(1.000)	455383		50.0000	
93 1,4-Dichlorobenzene	146	10.642	10.643	(1.002)	1161917		100.000	91
95 n-Butylbenzene	91	10.985	10.986	(1.035)	1453592		100.000	90
96 1,2-Dichlorobenzene	146	11.008	11.010	(1.037)	1106035		100.000	93
97 Hexachloroethane	117	11.245	11.246	(1.059)	390059		100.000	96
98 1,2-Dibromo-3-chloropropane	75	11.754	11.743	(1.107)	160009		100.000	97
141 1,3,5-Trichlorobenzene	182	12.487	12.489	(2.435)	643004		100.000	92(A)
99 1,2,4-Trichlorobenzene	180	12.487	12.489	(1.176)	670960		100.000	94
100 Hexachlorobutadiene	225	12.641	12.631	(1.191)	231727		100.000	95
101 Naphthalene	128	12.712	12.714	(1.197)	1877490		100.000	91
102 1,2,3-Trichlorobenzene	180	12.913	12.915	(1.216)	605860		100.000	93

QC Flag Legend

T - Target compound detected outside RT window.
 A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W6,i\120816.B\W6I9070.D
Date : 16-AUG-2012 20:28
Client ID: WSTD1006R
Sample Info: 5HL,WSTD1006R,WSTD1006R
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120828.B\V6I9322.D
Report Date: 28-Aug-2012 16:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828.B\V6I9322.D
Lab Smp Id: VSTD0506Z Client Smp ID: VSTD0506Z
Inj Date : 28-AUG-2012 09:45
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0506Z,VSTD0506Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120828.B\v68260Gadd-6lvl.m
Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 09:45 Cal File: V6I9322.D
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.589	1.590 (0.310)		171861	50.0000	48
2 Freon114	85	1.696	1.697 (0.331)		318961	50.0000	48
3 Chloromethane	50	1.779	1.768 (0.347)		388695	50.0000	52
4 Vinyl Chloride	62	1.850	1.850 (0.361)		331080	50.0000	51
5 Bromomethane	94	2.134	2.134 (0.416)		225795	50.0000	49
6 Chloroethane	64	2.216	2.217 (0.432)		187137	50.0000	50
7 Trichlorofluoromethane	101	2.406	2.407 (0.469)		447140	50.0000	52
126 Ethanol	46	2.536	2.537 (0.495)		54121	5000.00	6500(A)
8 Ether	59	2.607	2.620 (0.508)		203676	50.0000	53
9 Acrolein	56	2.725	2.726 (0.532)		256694	250.000	270(A)
10 1,1-Dichloroethene	96	2.808	2.809 (0.548)		300961	50.0000	58
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.808	2.809 (0.548)		276018	50.0000	48
12 Acetone	58	2.844	2.844 (0.555)		30126	50.0000	46
13 Iodomethane	142	2.950	2.963 (0.575)		553749	50.0000	49
14 Carbon Disulfide	76	2.986	2.998 (0.582)		1088715	50.0000	51
15 Acetonitrile	41	3.068	3.069 (0.598)		681311	500.000	480(A)
16 Allyl Chloride	39	3.068	3.069 (0.598)		369194	50.0000	55
17 Methyl Acetate	43	3.080	3.081 (0.601)		263629	50.0000	52
18 Methylene Chloride	84	3.175	3.199 (0.619)		300177	50.0000	42
19 tert-Butanol	59	3.234	3.235 (0.631)		57764	100.000	100
20 Acrylonitrile	53	3.364	3.365 (0.656)		107844	50.0000	51
21 trans-1,2-Dichloroethene	96	3.376	3.377 (0.658)		260293	50.0000	51
22 Methyl tert-butyl ether	73	3.364	3.377 (0.656)		723670	50.0000	51

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
23 1,1-Dichloroethane	63	3.707	3.708	(0.723)	446392	50.0000	51	
24 Vinyl acetate	43	3.731	3.732	(0.728)	865724	50.0000	52	
25 Diisopropyl Ether	45	3.731	3.732	(0.728)	818276	50.0000	51	
26 2-Chloro-1,3-Butadiene	53	3.778	3.779	(0.737)	391281	50.0000	52	
27 Ethyl tert-butyl ether	59	4.015	4.028	(0.783)	753890	50.0000	50	
29 2,2-Dichloropropane	77	4.169	4.170	(0.813)	216915	50.0000	50	
28 cis-1,2-Dichloroethene	96	4.169	4.170	(0.813)	265856	50.0000	52	
30 2-Butanone	72	4.169	4.170	(0.813)	34277	50.0000	50	
32 Propionitrile	54	4.228	4.229	(0.825)	389416	500.000	500(A)	
33 Methacrylonitrile	41	4.346	4.347	(0.848)	309713	100.000	100	
34 Bromochloromethane	128	4.358	4.371	(0.850)	139355	50.0000	50	
31 Tetrahydrofuran	72	4.406	4.406	(0.859)	69957	100.000	96	
35 Chloroform	83	4.417	4.418	(0.862)	433912	50.0000	50	
\$ 36 Dibromofluoromethane	113	4.548	4.548	(0.887)	264443	50.0000	50	
37 1,1,1-Trichloroethane	97	4.583	4.584	(0.894)	355963	50.0000	48	
38 Cyclohexane	56	4.630	4.631	(0.903)	392265	50.0000	48	
39 1,1-Dichloropropene	110	4.713	4.714	(0.919)	122535	50.0000	50	
40 Carbon Tetrachloride	117	4.713	4.726	(0.919)	377392	50.0000	49	
41 Isobutyl Alcohol	43	4.772	4.785	(0.931)	239585	1000.00	1000(A)	
\$ 42 1,2-Dichloroethane-d4	102	4.843	4.844	(0.945)	60421	50.0000	53	
43 Benzene	78	4.891	4.903	(0.954)	894766	50.0000	51	
44 1,2-Dichloroethane	62	4.903	4.915	(0.956)	370309	50.0000	52	
45 tert-Amyl methyl ether	73	4.962	4.962	(0.968)	708512	50.0000	50	
M 50 1,2-Dichloroethene (Total)	96				526149	100.000	(a)	
* 46 Fluorobenzene	96	5.127	5.128	(1.000)	904916	50.0000		
47 Trichloroethene	130	5.447	5.448	(1.062)	260383	50.0000	48	
48 Methylcyclohexane	83	5.624	5.625	(1.097)	307613	50.0000	48	
49 1,2-Dichloropropane	63	5.660	5.661	(1.104)	236105	50.0000	49	
51 Methyl Methacrylate	69	5.731	5.743	(1.118)	195912	50.0000	50	
52 Dibromomethane	93	5.778	5.779	(1.127)	165187	50.0000	51	
53 1,4-Dioxane	88	5.778	5.779	(1.127)	41689	1000.00	1200(A)	
54 Bromodichloromethane	83	5.908	5.909	(1.152)	347052	50.0000	51	
55 2-Chloroethyl vinyl ether	63	6.180	6.655	(1.205)	16338	50.0000	34(TQMH)M6 AED 08/28	
56 cis-1,3-Dichloropropene	75	6.322	6.335	(1.233)	382618	50.0000	51	
57 4-Methyl-2-pentanone	43	6.464	6.465	(1.261)	261682	50.0000	48	
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	870012	50.0000	50	
59 Toluene	91	6.654	6.655	(1.298)	971797	50.0000	51	
60 trans-1,3-Dichloropropene	75	6.879	6.879	(1.342)	366429	50.0000	54	
61 Ethyl Methacrylate	69	6.950	6.950	(1.355)	277582	50.0000	50	
62 1,1,2-Trichloroethane	97	7.068	7.069	(1.378)	218790	50.0000	50	
63 Tetrachloroethene	164	7.210	7.211	(0.890)	215066	50.0000	47	
64 1,3-Dichloropropane	76	7.245	7.246	(0.895)	360240	50.0000	51	
65 2-Hexanone	43	7.316	7.317	(0.904)	178565	50.0000	48	
66 Dibromochloromethane	129	7.482	7.483	(0.924)	299646	50.0000	51	
67 1,2-Dibromoethane	107	7.612	7.613	(0.940)	258286	50.0000	52	
69 1-Chlorohexane	91	8.086	8.086	(0.999)	314368	50.0000	47(Q)	
* 68 Chlorobenzene-d5	117	8.097	8.098	(1.000)	736906	50.0000		
70 Chlorobenzene	112	8.133	8.134	(1.004)	661550	50.0000	51	
71 1,1,1,2-Tetrachloroethane	131	8.216	8.216	(1.015)	275754	50.0000	51	
72 Ethylbenzene	106	8.239	8.240	(1.018)	350083	50.0000	51	
73 m,p-Xylene	106	8.370	8.370	(1.034)	852074	100.000	100	
74 o-Xylene	106	8.819	8.820	(1.089)	423290	50.0000	51	
75 Styrene	104	8.831	8.832	(1.091)	728906	50.0000	50	
76 Bromoform	173	9.056	9.057	(1.118)	225784	50.0000	52	

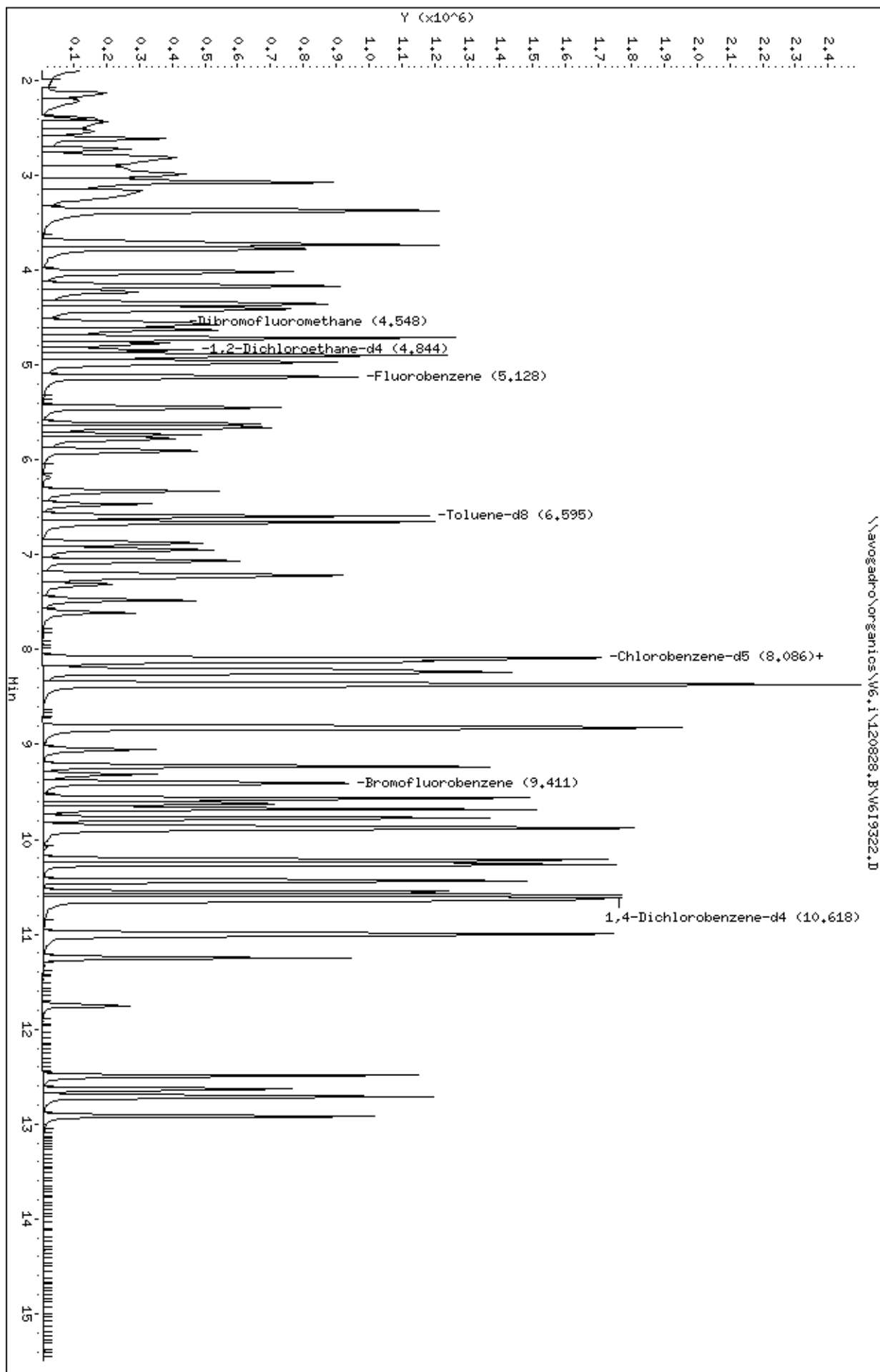
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.233	9.234 (1.140)		1035011		50.0000	51
78 trans-1,4-Dichloro-2-butene	75	9.316	9.317 (1.151)		98447		50.0000	52
\$ 79 Bromofluorobenzene	95	9.399	9.400 (1.161)		380587		50.0000	49
80 1,1,2,2-Tetrachloroethane	77	9.565	9.565 (0.901)		544856		50.0000	51
81 Bromobenzene	156	9.576	9.577 (0.902)		326033		50.0000	52
82 1,2,3-Trichloropropane	75	9.624	9.613 (0.906)		397277		50.0000	47(M)M6 AED 08/28
83 n-Propylbenzene	120	9.683	9.684 (0.912)		297463		50.0000	50
84 2-Chlorotoluene	126	9.778	9.778 (0.921)		282651		50.0000	49
85 1,3,5-Trimethylbenzene	105	9.872	9.873 (0.930)		888367		50.0000	50
86 4-Chlorotoluene	126	9.896	9.897 (0.932)		308154		50.0000	50
M 94 Xylene (Total)	106				1275364		150.000	(a)
87 tert-Butylbenzene	119	10.215	10.583 (0.962)		1039476		50.0000	50(H)
88 1,2,4-Trimethylbenzene	105	10.263	10.264 (0.967)		909735		50.0000	50
89 sec-Butylbenzene	105	10.440	10.441 (0.983)		1067580		50.0000	49
90 1,3-Dichlorobenzene	146	10.559	10.548 (0.994)		573336		50.0000	50
91 4-Isopropyltoluene	119	10.582	10.583 (0.997)		915493		50.0000	50
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.619 (1.000)		438441		50.0000	
93 1,4-Dichlorobenzene	146	10.641	10.642 (1.002)		632382		50.0000	48
95 n-Butylbenzene	91	10.985	10.985 (1.035)		840782		50.0000	51
96 1,2-Dichlorobenzene	146	11.008	11.009 (1.037)		590371		50.0000	50
97 Hexachloroethane	117	11.245	11.246 (1.059)		209227		50.0000	49
98 1,2-Dibromo-3-chloropropane	75	11.754	11.754 (1.107)		71957		50.0000	48
141 1,3,5-Trichlorobenzene	182	12.487	12.488 (2.435)		344912		50.0000	52(A)
99 1,2,4-Trichlorobenzene	180	12.487	12.488 (1.176)		362922		50.0000	51
100 Hexachlorobutadiene	225	12.641	12.630 (1.191)		127785		50.0000	50
101 Naphthalene	128	12.712	12.713 (1.197)		953459		50.0000	48
102 1,2,3-Trichlorobenzene	180	12.913	12.914 (1.216)		317566		50.0000	50

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6.1\120828.B\W619322.D
Date : 28-AUG-2012 09:45
Client ID: VSTD0506Z
Sample Info: 5HL,VSTD0506Z,VSTD0506Z
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120828.B\V6I9323.D
Report Date: 28-Aug-2012 16:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828.B\V6I9323.D
Lab Smp Id: VSTD0206Z Client Smp ID: VSTD0206Z
Inj Date : 28-AUG-2012 10:31
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0206Z,VSTD0206Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120828.B\v68260Gadd-6lvl.m
Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 10:31 Cal File: V6I9323.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.593	1.590 (0.310)		68700	20.0000	20
2 Freon114	85	1.699	1.697 (0.331)		124502	20.0000	19
3 Chloromethane	50	1.770	1.768 (0.345)		152815	20.0000	21
4 Vinyl Chloride	62	1.853	1.850 (0.361)		125721	20.0000	20
5 Bromomethane	94	2.137	2.134 (0.417)		86050	20.0000	19
6 Chloroethane	64	2.220	2.217 (0.433)		69743	20.0000	19
7 Trichlorofluoromethane	101	2.409	2.407 (0.470)		168575	20.0000	20
126 Ethanol	46	2.539	2.537 (0.495)		21937	2000.00	2700(A)
8 Ether	59	2.610	2.620 (0.509)		80320	20.0000	21
9 Acrolein	56	2.728	2.726 (0.532)		104688	100.000	110
10 1,1-Dichloroethene	96	2.811	2.809 (0.548)		67356	20.0000	13
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.811	2.809 (0.548)		107066	20.0000	19
12 Acetone	58	2.835	2.844 (0.553)		15810	20.0000	24
13 Iodomethane	142	2.953	2.963 (0.576)		199185	20.0000	18
14 Carbon Disulfide	76	2.989	2.998 (0.583)		419427	20.0000	20
15 Acetonitrile	41	3.072	3.069 (0.599)		298329	200.000	210(A)
16 Allyl Chloride	39	3.072	3.069 (0.599)		141207	20.0000	21(Q)
17 Methyl Acetate	43	3.083	3.081 (0.601)		107414	20.0000	21
18 Methylene Chloride	84	3.178	3.199 (0.619)		117895	20.0000	17
19 tert-Butanol	59	3.237	3.235 (0.631)		23675	40.0000	44
20 Acrylonitrile	53	3.367	3.365 (0.656)		42061	20.0000	20
21 trans-1,2-Dichloroethene	96	3.379	3.377 (0.659)		95435	20.0000	19
22 Methyl tert-butyl ether	73	3.367	3.377 (0.656)		293365	20.0000	21

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 1,1-Dichloroethane	63	3.699	3.708	(0.721)	171944	20.0000	20
24 Vinyl acetate	43	3.734	3.732	(0.728)	339961	20.0000	21
25 Diisopropyl Ether	45	3.734	3.732	(0.728)	320287	20.0000	20
26 2-Chloro-1,3-Butadiene	53	3.770	3.779	(0.735)	146955	20.0000	20
27 Ethyl tert-butyl ether	59	4.018	4.028	(0.783)	300102	20.0000	20
29 2,2-Dichloropropane	77	4.160	4.170	(0.811)	83363	20.0000	20
28 cis-1,2-Dichloroethene	96	4.172	4.170	(0.813)	101685	20.0000	20
30 2-Butanone	72	4.172	4.170	(0.813)	15012	20.0000	22
32 Propionitrile	54	4.231	4.229	(0.825)	158091	200.000	200(A)
33 Methacrylonitrile	41	4.350	4.347	(0.848)	123297	40.0000	41
34 Bromochloromethane	128	4.361	4.371	(0.850)	55490	20.0000	20
31 Tetrahydrofuran	72	4.397	4.406	(0.857)	28676	40.0000	40
35 Chloroform	83	4.421	4.418	(0.862)	169893	20.0000	20
\$ 36 Dibromofluoromethane	113	4.551	4.548	(0.887)	263188	50.0000	50
37 1,1,1-Trichloroethane	97	4.574	4.584	(0.892)	134822	20.0000	18
38 Cyclohexane	56	4.634	4.631	(0.903)	148824	20.0000	18
39 1,1-Dichloropropene	110	4.716	4.714	(0.919)	45895	20.0000	19
40 Carbon Tetrachloride	117	4.716	4.726	(0.919)	141741	20.0000	19
41 Isobutyl Alcohol	43	4.776	4.785	(0.931)	99058	400.000	420(A)
\$ 42 1,2-Dichloroethane-d4	102	4.847	4.844	(0.945)	56662	50.0000	50
43 Benzene	78	4.894	4.903	(0.954)	351050	20.0000	20
44 1,2-Dichloroethane	62	4.906	4.915	(0.956)	136156	20.0000	19
45 tert-Amyl methyl ether	73	4.965	4.962	(0.968)	278637	20.0000	20
M 50 1,2-Dichloroethene (Total)	96				197120	40.0000	(a)
* 46 Fluorobenzene	96	5.131	5.128	(1.000)	890676	50.0000	
47 Trichloroethene	130	5.450	5.448	(1.062)	102588	20.0000	19
48 Methylcyclohexane	83	5.627	5.625	(1.097)	117681	20.0000	19
49 1,2-Dichloropropane	63	5.663	5.661	(1.104)	91878	20.0000	19
51 Methyl Methacrylate	69	5.734	5.743	(1.118)	72973	20.0000	19
52 Dibromomethane	93	5.781	5.779	(1.127)	62692	20.0000	20
53 1,4-Dioxane	88	5.781	5.779	(1.127)	17901	400.000	530(A)
54 Bromodichloromethane	83	5.900	5.909	(1.150)	133614	20.0000	20
55 2-Chloroethyl vinyl ether	63	6.184	6.655	(1.205)	5775	20.0000	19(TQM)M6 AED 08/28
56 cis-1,3-Dichloropropene	75	6.326	6.335	(1.233)	146211	20.0000	20
57 4-Methyl-2-pentanone	43	6.468	6.465	(1.261)	105191	20.0000	19
\$ 58 Toluene-d8	98	6.586	6.595	(0.813)	862150	50.0000	50
59 Toluene	91	6.657	6.655	(1.297)	382954	20.0000	20
60 trans-1,3-Dichloropropene	75	6.882	6.879	(1.341)	136147	20.0000	20
61 Ethyl Methacrylate	69	6.941	6.950	(1.353)	107867	20.0000	20
62 1,1,2-Trichloroethane	97	7.071	7.069	(1.378)	87044	20.0000	20
63 Tetrachloroethene	164	7.213	7.211	(0.890)	85770	20.0000	19
64 1,3-Dichloropropane	76	7.237	7.246	(0.893)	141680	20.0000	20
65 2-Hexanone	43	7.320	7.317	(0.904)	75101	20.0000	20
66 Dibromochloromethane	129	7.485	7.483	(0.924)	116961	20.0000	20
67 1,2-Dibromoethane	107	7.615	7.613	(0.940)	100773	20.0000	21
69 1-Chlorohexane	91	8.089	8.086	(0.999)	127400	20.0000	19(Q)
* 68 Chlorobenzene-d5	117	8.101	8.098	(1.000)	720089	50.0000	
70 Chlorobenzene	112	8.124	8.134	(1.003)	265967	20.0000	21
71 1,1,1,2-Tetrachloroethane	131	8.207	8.216	(1.013)	105339	20.0000	20
72 Ethylbenzene	106	8.243	8.240	(1.018)	133047	20.0000	20
73 m,p-Xylene	106	8.373	8.370	(1.034)	340201	40.0000	41
74 o-Xylene	106	8.811	8.820	(1.088)	164950	20.0000	20
75 Styrene	104	8.834	8.832	(1.091)	289849	20.0000	20
76 Bromoform	173	9.059	9.057	(1.118)	86360	20.0000	20

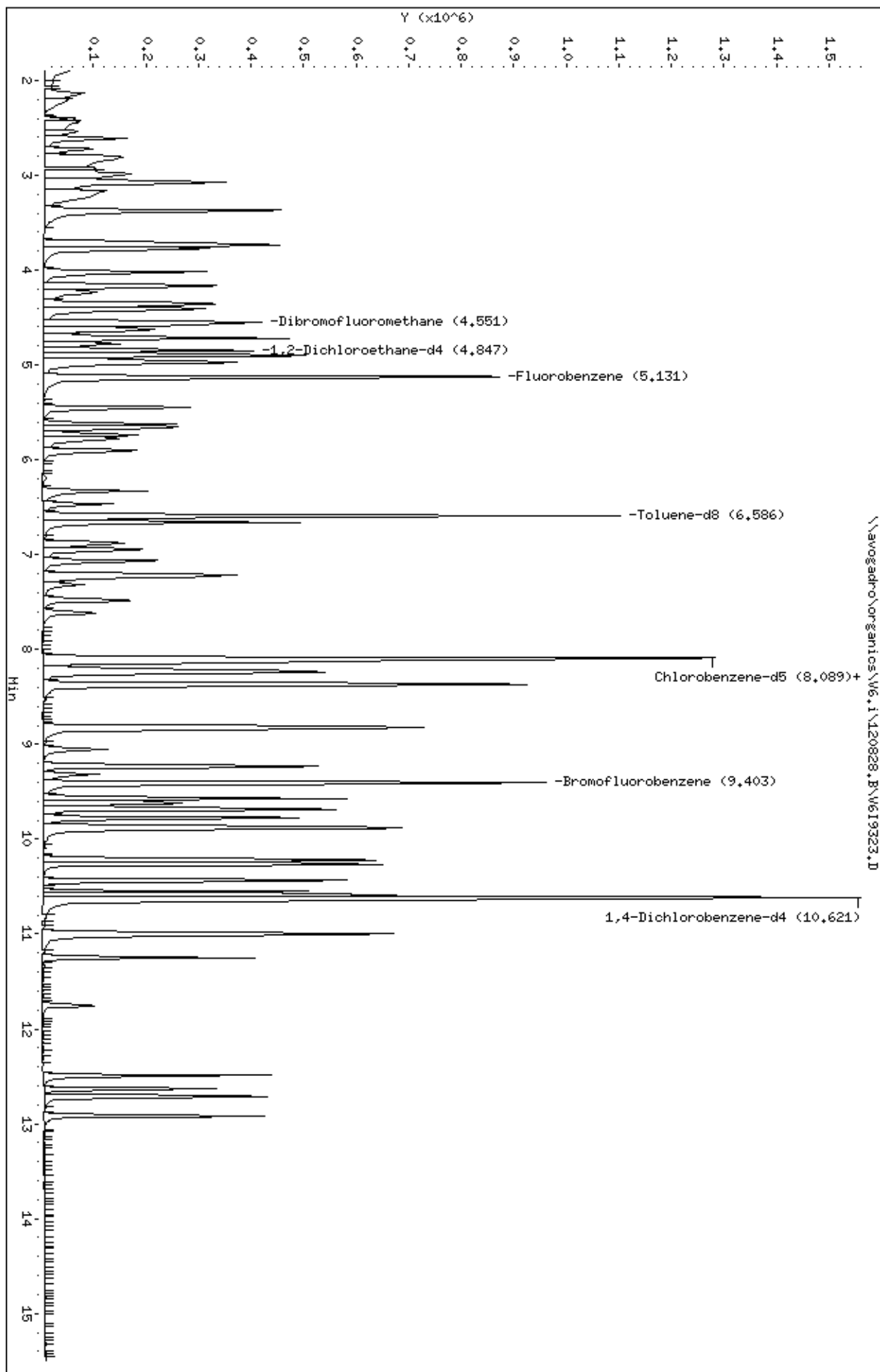
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.225	9.234	(1.139)	414320		20.0000	21
78 trans-1,4-Dichloro-2-butene	75	9.319	9.317	(1.150)	35351		20.0000	19
\$ 79 Bromofluorobenzene	95	9.402	9.400	(1.161)	374610		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.568	9.565	(0.901)	207458		20.0000	20
81 Bromobenzene	156	9.580	9.577	(0.902)	124968		20.0000	20
82 1,2,3-Trichloropropane	75	9.615	9.613	(0.905)	152416		20.0000	18
83 n-Propylbenzene	120	9.686	9.684	(0.912)	116086		20.0000	20
84 2-Chlorotoluene	126	9.781	9.778	(0.921)	108506		20.0000	19
85 1,3,5-Trimethylbenzene	105	9.875	9.873	(0.930)	361354		20.0000	21
86 4-Chlorotoluene	126	9.899	9.897	(0.932)	115041		20.0000	19
M 94 Xylene (Total)	106				505151		60.0000	(a)
87 tert-Butylbenzene	119	10.207	10.583	(0.961)	406579		20.0000	20(H)
88 1,2,4-Trimethylbenzene	105	10.266	10.264	(0.967)	363508		20.0000	20
89 sec-Butylbenzene	105	10.432	10.441	(0.982)	428108		20.0000	20
90 1,3-Dichlorobenzene	146	10.550	10.548	(0.993)	224788		20.0000	20
91 4-Isopropyltoluene	119	10.585	10.583	(0.997)	362610		20.0000	20
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.619	(1.000)	429097		50.0000	
93 1,4-Dichlorobenzene	146	10.645	10.642	(1.002)	254563		20.0000	20
95 n-Butylbenzene	91	10.988	10.985	(1.035)	338197		20.0000	21
96 1,2-Dichlorobenzene	146	11.011	11.009	(1.037)	233354		20.0000	20
97 Hexachloroethane	117	11.248	11.246	(1.059)	81684		20.0000	20
98 1,2-Dibromo-3-chloropropane	75	11.745	11.754	(1.106)	30562		20.0000	21
141 1,3,5-Trichlorobenzene	182	12.491	12.488	(2.434)	133160		20.0000	20(A)
99 1,2,4-Trichlorobenzene	180	12.491	12.488	(1.176)	141558		20.0000	20
100 Hexachlorobutadiene	225	12.633	12.630	(1.189)	52096		20.0000	21
101 Naphthalene	128	12.715	12.713	(1.197)	401496		20.0000	21
102 1,2,3-Trichlorobenzene	180	12.916	12.914	(1.216)	123405		20.0000	20

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6.1\120828.B\W619323.D
Date : 28-AUG-2012 10:31
Client ID: WSTD0206Z
Sample Info: 5HL,WSTD0206Z,WSTD0206Z
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120828.B\V6I9324.D
Report Date: 28-Aug-2012 16:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828.B\V6I9324.D
Lab Smp Id: VSTD0056Z Client Smp ID: VSTD0056Z
Inj Date : 28-AUG-2012 10:55
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0056Z,VSTD0056Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120828.B\v68260Gadd-6lvl.m
Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 10:55 Cal File: V6I9324.D
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.603	1.590 (0.313)		18751	5.00000	5
2 Freon114	85	1.697	1.697 (0.331)		35030	5.00000	5
3 Chloromethane	50	1.768	1.768 (0.345)		34905	5.00000	5
4 Vinyl Chloride	62	1.863	1.850 (0.363)		35433	5.00000	6
5 Bromomethane	94	2.135	2.134 (0.416)		22673	5.00000	5
6 Chloroethane	64	2.218	2.217 (0.433)		19576	5.00000	5
7 Trichlorofluoromethane	101	2.407	2.407 (0.469)		46322	5.00000	6
126 Ethanol	46	2.537	2.537 (0.495)		3229	500.000	400(AQ)
8 Ether	59	2.620	2.620 (0.511)		19977	5.00000	5
9 Acrolein	56	2.727	2.726 (0.532)		23475	25.0000	26
10 1,1-Dichloroethene	96	2.810	2.809 (0.548)		26755	5.00000	5(Q)
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.821	2.809 (0.550)		29121	5.00000	5
12 Acetone	58	2.845	2.844 (0.555)		3141	5.00000	5
13 Iodomethane	142	2.963	2.963 (0.578)		58354	5.00000	5
14 Carbon Disulfide	76	2.999	2.998 (0.585)		112017	5.00000	5
15 Acetonitrile	41	3.070	3.069 (0.599)		64987	50.0000	47
16 Allyl Chloride	39	3.070	3.069 (0.599)		29113	5.00000	4
17 Methyl Acetate	43	3.082	3.081 (0.601)		24647	5.00000	5
18 Methylene Chloride	84	3.176	3.199 (0.619)		36237	5.00000	5
19 tert-Butanol	59	3.236	3.235 (0.631)		4873	10.0000	9
20 Acrylonitrile	53	3.378	3.365 (0.659)		8115	5.00000	4
21 trans-1,2-Dichloroethene	96	3.378	3.377 (0.659)		26145	5.00000	5
22 Methyl tert-butyl ether	73	3.366	3.377 (0.656)		71828	5.00000	5

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.709	3.708 (0.723)		44504		5.00000	5
24 Vinyl acetate	43	3.733	3.732 (0.728)		84803		5.00000	5
25 Diisopropyl Ether	45	3.733	3.732 (0.728)		82335		5.00000	5
26 2-Chloro-1,3-Butadiene	53	3.780	3.779 (0.737)		37822		5.00000	5
27 Ethyl tert-butyl ether	59	4.017	4.028 (0.783)		77431		5.00000	5
29 2,2-Dichloropropane	77	4.170	4.170 (0.813)		23221		5.00000	6
28 cis-1,2-Dichloroethene	96	4.170	4.170 (0.813)		24874		5.00000	5
30 2-Butanone	72	4.182	4.170 (0.815)		2810		5.00000	4(Q)
32 Propionitrile	54	4.253	4.229 (0.829)		32829		50.0000	43
33 Methacrylonitrile	41	4.348	4.347 (0.848)		24860		10.0000	8
34 Bromochloromethane	128	4.372	4.371 (0.852)		13605		5.00000	5
31 Tetrahydrofuran	72	4.407	4.406 (0.859)		7148		10.0000	10
35 Chloroform	83	4.419	4.418 (0.862)		43958		5.00000	5
\$ 36 Dibromofluoromethane	113	4.549	4.548 (0.887)		255964		50.0000	49
37 1,1,1-Trichloroethane	97	4.585	4.584 (0.894)		37429		5.00000	5
38 Cyclohexane	56	4.632	4.631 (0.903)		43056		5.00000	5
39 1,1-Dichloropropene	110	4.715	4.714 (0.919)		11629		5.00000	5
40 Carbon Tetrachloride	117	4.726	4.726 (0.922)		38254		5.00000	5
41 Isobutyl Alcohol	43	4.786	4.785 (0.933)		19772		100.000	86
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.844 (0.945)		52902		50.0000	48
43 Benzene	78	4.892	4.903 (0.954)		91699		5.00000	5
44 1,2-Dichloroethane	62	4.916	4.915 (0.958)		34900		5.00000	5
45 tert-Amyl methyl ether	73	4.963	4.962 (0.968)		72350		5.00000	5
M 50 1,2-Dichloroethene (Total)	96				51019		10.0000	(a)
* 46 Fluorobenzene	96	5.129	5.128 (1.000)		879573		50.0000	
47 Trichloroethene	130	5.448	5.448 (1.062)		27758		5.00000	5
48 Methylcyclohexane	83	5.626	5.625 (1.097)		31210		5.00000	5
49 1,2-Dichloropropane	63	5.661	5.661 (1.104)		23882		5.00000	5
51 Methyl Methacrylate	69	5.744	5.743 (1.120)		17475		5.00000	4
52 Dibromomethane	93	5.780	5.779 (1.127)		15585		5.00000	5
53 1,4-Dioxane	88	5.780	5.779 (1.127)		2392		100.000	71
54 Bromodichloromethane	83	5.910	5.909 (1.152)		32921		5.00000	5
55 2-Chloroethyl vinyl ether	63	6.194	6.655 (1.208)		1117		5.00000	4(TQM)M6 AED 08/28
56 cis-1,3-Dichloropropene	75	6.336	6.335 (1.235)		35863		5.00000	5
57 4-Methyl-2-pentanone	43	6.466	6.465 (1.261)		26842		5.00000	5
\$ 58 Toluene-d8	98	6.596	6.595 (0.814)		849339		50.0000	51
59 Toluene	91	6.655	6.655 (1.298)		98783		5.00000	5
60 trans-1,3-Dichloropropene	75	6.892	6.879 (1.344)		32714		5.00000	5
61 Ethyl Methacrylate	69	6.951	6.950 (1.355)		25915		5.00000	5
62 1,1,2-Trichloroethane	97	7.069	7.069 (1.378)		21096		5.00000	5
63 Tetrachloroethene	164	7.211	7.211 (0.890)		23337		5.00000	5
64 1,3-Dichloropropane	76	7.247	7.246 (0.895)		34266		5.00000	5
65 2-Hexanone	43	7.330	7.317 (0.905)		16213		5.00000	4
66 Dibromochloromethane	129	7.484	7.483 (0.924)		28364		5.00000	5(T)
67 1,2-Dibromoethane	107	7.614	7.613 (0.940)		23729		5.00000	5
69 1-Chlorohexane	91	8.087	8.086 (0.999)		34025		5.00000	5(Q)
* 68 Chlorobenzene-d5	117	8.099	8.098 (1.000)		702771		50.0000	
70 Chlorobenzene	112	8.123	8.134 (1.003)		70214		5.00000	6
71 1,1,1,2-Tetrachloroethane	131	8.217	8.216 (1.015)		26803		5.00000	5
72 Ethylbenzene	106	8.241	8.240 (1.018)		35278		5.00000	5
73 m,p-Xylene	106	8.371	8.370 (1.034)		88818		10.0000	11
74 o-Xylene	106	8.821	8.820 (1.089)		41139		5.00000	5
75 Styrene	104	8.832	8.832 (1.091)		72477		5.00000	5
76 Bromoform	173	9.057	9.057 (1.118)		19752		5.00000	5(T)

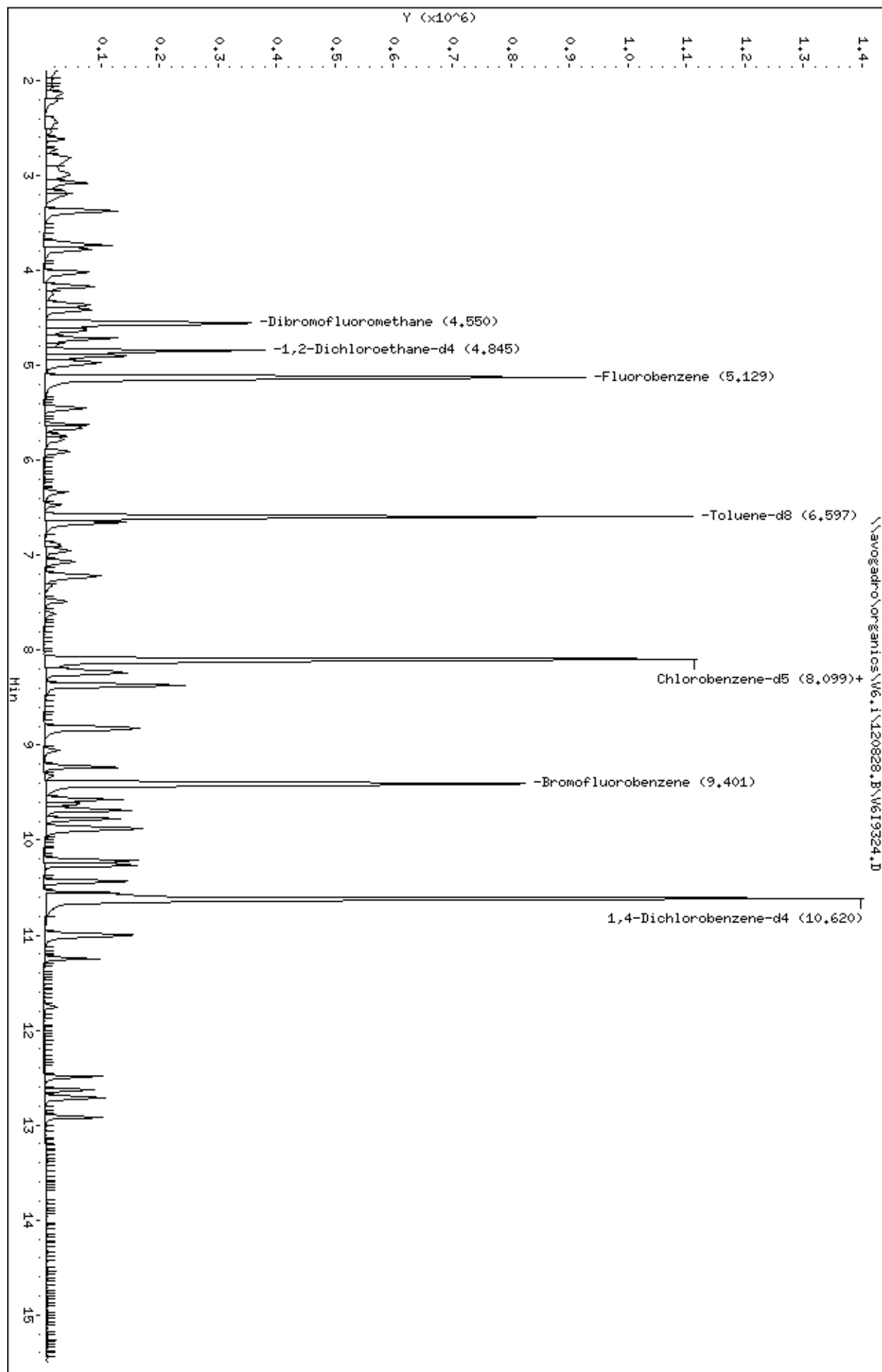
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.235	9.234 (1.140)		107658		5.00000	6
78 trans-1,4-Dichloro-2-butene	75	9.329	9.317 (1.152)		5778		5.00000	3
\$ 79 Bromofluorobenzene	95	9.400	9.400 (1.161)		360041		50.0000	49
80 1,1,2,2-Tetrachloroethane	77	9.578	9.565 (0.902)		53314		5.00000	5
81 Bromobenzene	156	9.578	9.577 (0.902)		30141		5.00000	5
82 1,2,3-Trichloropropane	75	9.613	9.613 (0.905)		35957		5.00000	4
83 n-Propylbenzene	120	9.684	9.684 (0.912)		29783		5.00000	5
84 2-Chlorotoluene	126	9.779	9.778 (0.921)		28487		5.00000	5
85 1,3,5-Trimethylbenzene	105	9.874	9.873 (0.930)		93012		5.00000	6
86 4-Chlorotoluene	126	9.897	9.897 (0.932)		30758		5.00000	5
M 94 Xylene (Total)	106				129957		15.0000	(a)
87 tert-Butylbenzene	119	10.217	10.583 (0.962)		103997		5.00000	5(H)
88 1,2,4-Trimethylbenzene	105	10.264	10.264 (0.967)		95174		5.00000	6
89 sec-Butylbenzene	105	10.430	10.441 (0.982)		114400		5.00000	6
90 1,3-Dichlorobenzene	146	10.560	10.548 (0.994)		56474		5.00000	5
91 4-Isopropyltoluene	119	10.584	10.583 (0.997)		94586		5.00000	6
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619 (1.000)		409114		50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.642 (1.002)		67606		5.00000	6
95 n-Butylbenzene	91	10.986	10.985 (1.035)		82697		5.00000	5
96 1,2-Dichlorobenzene	146	11.010	11.009 (1.037)		60176		5.00000	5
97 Hexachloroethane	117	11.246	11.246 (1.059)		20674		5.00000	5
98 1,2-Dibromo-3-chloropropane	75	11.755	11.754 (1.107)		7238		5.00000	5
141 1,3,5-Trichlorobenzene	182	12.489	12.488 (2.435)		31702		5.00000	5(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.488 (1.176)		35179		5.00000	5
100 Hexachlorobutadiene	225	12.631	12.630 (1.189)		13864		5.00000	6
101 Naphthalene	128	12.714	12.713 (1.197)		101669		5.00000	6
102 1,2,3-Trichlorobenzene	180	12.915	12.914 (1.216)		32100		5.00000	5

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6,i\120828.B\W6I9324.D
 Date : 28-AUG-2012 10:55
 Client ID: VSTD0056Z
 Sample Info: 5HL,VSTD0056Z,VSTD0056Z
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W6,i
 Operator: AH SRC: AH
 Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120828.B\V6I9325.D
Report Date: 28-Aug-2012 16:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828.B\V6I9325.D
Lab Smp Id: VSTD0016Z Client Smp ID: VSTD0016Z
Inj Date : 28-AUG-2012 11:19
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0016Z,VSTD0016Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120828.B\v68260Gadd-6lvl.m
Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 11:19 Cal File: V6I9325.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.617	1.590 (0.315)		3197	1.00000	0.9
2 Freon114	85	1.699	1.697 (0.331)		5894	1.00000	0.9
3 Chloromethane	50	1.770	1.768 (0.345)		7057	1.00000	1.0
4 Vinyl Chloride	62	1.853	1.850 (0.361)		6323	1.00000	1
5 Bromomethane	94	2.137	2.134 (0.417)		5562	1.00000	1(Q)
6 Chloroethane	64	2.220	2.217 (0.433)		3905	1.00000	1
7 Trichlorofluoromethane	101	2.409	2.407 (0.470)		6218	1.00000	0.8
126 Ethanol	46	2.551	2.537 (0.497)		815	100.000	100(Q)
8 Ether	59	2.622	2.620 (0.511)		2751	1.00000	0.7(Q)
9 Acrolein	56	2.729	2.726 (0.532)		4114	5.00000	4
10 1,1-Dichloroethene	96	2.812	2.809 (0.548)		4675	1.00000	0.9
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.847	2.809 (0.555)		5281	1.00000	1.0
12 Acetone	58	2.847	2.844 (0.555)		599	1.00000	0.9(Q)
13 Iodomethane	142	2.954	2.963 (0.576)		12216	1.00000	1
14 Carbon Disulfide	76	3.001	2.998 (0.585)		21449	1.00000	1
15 Acetonitrile	41	3.072	3.069 (0.599)		10697	1.00000	8
16 Allyl Chloride	39	3.072	3.069 (0.599)		5765	1.00000	0.9(Q)
17 Methyl Acetate	43	3.096	3.081 (0.603)		4220	1.00000	0.8
18 Methylene Chloride	84	3.202	3.199 (0.624)		11162	1.00000	2
19 tert-Butanol	59	3.238	3.235 (0.631)		1022	1.00000	2
20 Acrylonitrile	53	3.380	3.365 (0.659)		859	1.00000	0.4(aQ)
21 trans-1,2-Dichloroethene	96	3.380	3.377 (0.659)		5049	1.00000	1
22 Methyl tert-butyl ether	73	3.368	3.377 (0.656)		13066	1.00000	1.0

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.711	3.708 (0.723)		8872		1.00000	1
24 Vinyl acetate	43	3.735	3.732 (0.728)		15056		1.00000	0.9(T)
25 Diisopropyl Ether	45	3.735	3.732 (0.728)		15740		1.00000	1
26 2-Chloro-1,3-Butadiene	53	3.782	3.779 (0.737)		6299		1.00000	0.9
27 Ethyl tert-butyl ether	59	4.019	4.028 (0.783)		15094		1.00000	1
29 2,2-Dichloropropane	77	4.172	4.170 (0.813)		4406		1.00000	1
28 cis-1,2-Dichloroethene	96	4.172	4.170 (0.813)		4527		1.00000	0.9
30 2-Butanone	72	4.196	4.170 (0.818)		426		1.00000	0.6(QM)M6 AED 08/28
32 Propionitrile	54	4.255	4.229 (0.829)		2300		1.00000	3
33 Methacrylonitrile	41	4.350	4.347 (0.848)		4732		1.00000	2
34 Bromochloromethane	128	4.374	4.371 (0.852)		2523		1.00000	0.9
31 Tetrahydrofuran	72	4.421	4.406 (0.862)		882		1.00000	1(Q)
35 Chloroform	83	4.421	4.418 (0.862)		8150		1.00000	1.0
\$ 36 Dibromofluoromethane	113	4.551	4.548 (0.887)		257559		1.00000	50
37 1,1,1-Trichloroethane	97	4.587	4.584 (0.894)		7444		1.00000	1
38 Cyclohexane	56	4.634	4.631 (0.903)		7706		1.00000	1.0
39 1,1-Dichloropropene	110	4.717	4.714 (0.919)		2510		1.00000	1(Q)
40 Carbon Tetrachloride	117	4.717	4.726 (0.919)		7256		1.00000	1.0
41 Isobutyl Alcohol	43	4.965	4.785 (0.968)		6949		1.00000	30(T)
\$ 42 1,2-Dichloroethane-d4	102	4.847	4.844 (0.945)		55321		1.00000	50
43 Benzene	78	4.894	4.903 (0.954)		17594		1.00000	1
44 1,2-Dichloroethane	62	4.918	4.915 (0.958)		6573		1.00000	1.0(T)
45 tert-Amyl methyl ether	73	4.965	4.962 (0.968)		13916		1.00000	1
M 50 1,2-Dichloroethene (Total)	96				9576		2.00000	(a)
* 46 Fluorobenzene	96	5.131	5.128 (1.000)		873696		50.0000	
47 Trichloroethene	130	5.450	5.448 (1.062)		5724		1.00000	1
48 Methylcyclohexane	83	5.628	5.625 (1.097)		6480		1.00000	1
49 1,2-Dichloropropane	63	5.663	5.661 (1.104)		4161		1.00000	0.9
51 Methyl Methacrylate	69	5.746	5.743 (1.120)		3136		1.00000	0.8
52 Dibromomethane	93	5.793	5.779 (1.129)		2667		1.00000	0.8
53 1,4-Dioxane	88	5.793	5.779 (1.129)		150		1.00000	4(QM)M6 AED 08/28
54 Bromodichloromethane	83	5.912	5.909 (1.152)		6115		1.00000	0.9
55 2-Chloroethyl vinyl ether	63	6.657	6.655 (1.297)		1327		1.00000	4(TQ)
56 cis-1,3-Dichloropropene	75	6.338	6.335 (1.235)		6674		1.00000	0.9
57 4-Methyl-2-pentanone	43	6.468	6.465 (1.261)		4803		1.00000	0.9
\$ 58 Toluene-d8	98	6.598	6.595 (0.815)		843243		1.00000	49
59 Toluene	91	6.657	6.655 (1.297)		19948		1.00000	1
60 trans-1,3-Dichloropropene	75	6.894	6.879 (1.344)		4550		1.00000	0.7
61 Ethyl Methacrylate	69	6.953	6.950 (1.355)		4693		1.00000	0.9
62 1,1,2-Trichloroethane	97	7.071	7.069 (1.378)		3917		1.00000	0.9
63 Tetrachloroethene	164	7.213	7.211 (0.890)		5538		1.00000	1
64 1,3-Dichloropropane	76	7.249	7.246 (0.895)		6181		1.00000	0.9
65 2-Hexanone	43	7.332	7.317 (0.905)		2658		1.00000	0.7(T)
66 Dibromochloromethane	129	7.486	7.483 (0.924)		5093		1.00000	0.9(T)
67 1,2-Dibromoethane	107	7.628	7.613 (0.942)		3983		1.00000	0.8(T)
69 1-Chlorohexane	91	8.089	8.086 (0.999)		8105		1.00000	1(Q)
* 68 Chlorobenzene-d5	117	8.101	8.098 (1.000)		725956		50.0000	
70 Chlorobenzene	112	8.125	8.134 (1.003)		12035		1.00000	0.9(Q)
71 1,1,1,2-Tetrachloroethane	131	8.207	8.216 (1.013)		5162		1.00000	1.0(Q)
72 Ethylbenzene	106	8.243	8.240 (1.018)		6442		1.00000	1.0(Q)
73 m,p-Xylene	106	8.373	8.370 (1.034)		16754		2.00000	2
74 o-Xylene	106	8.811	8.820 (1.088)		8076		1.00000	1.0
75 Styrene	104	8.835	8.832 (1.091)		14061		1.00000	1.0
76 Bromoform	173	9.059	9.057 (1.118)		3145		1.00000	0.7(T)

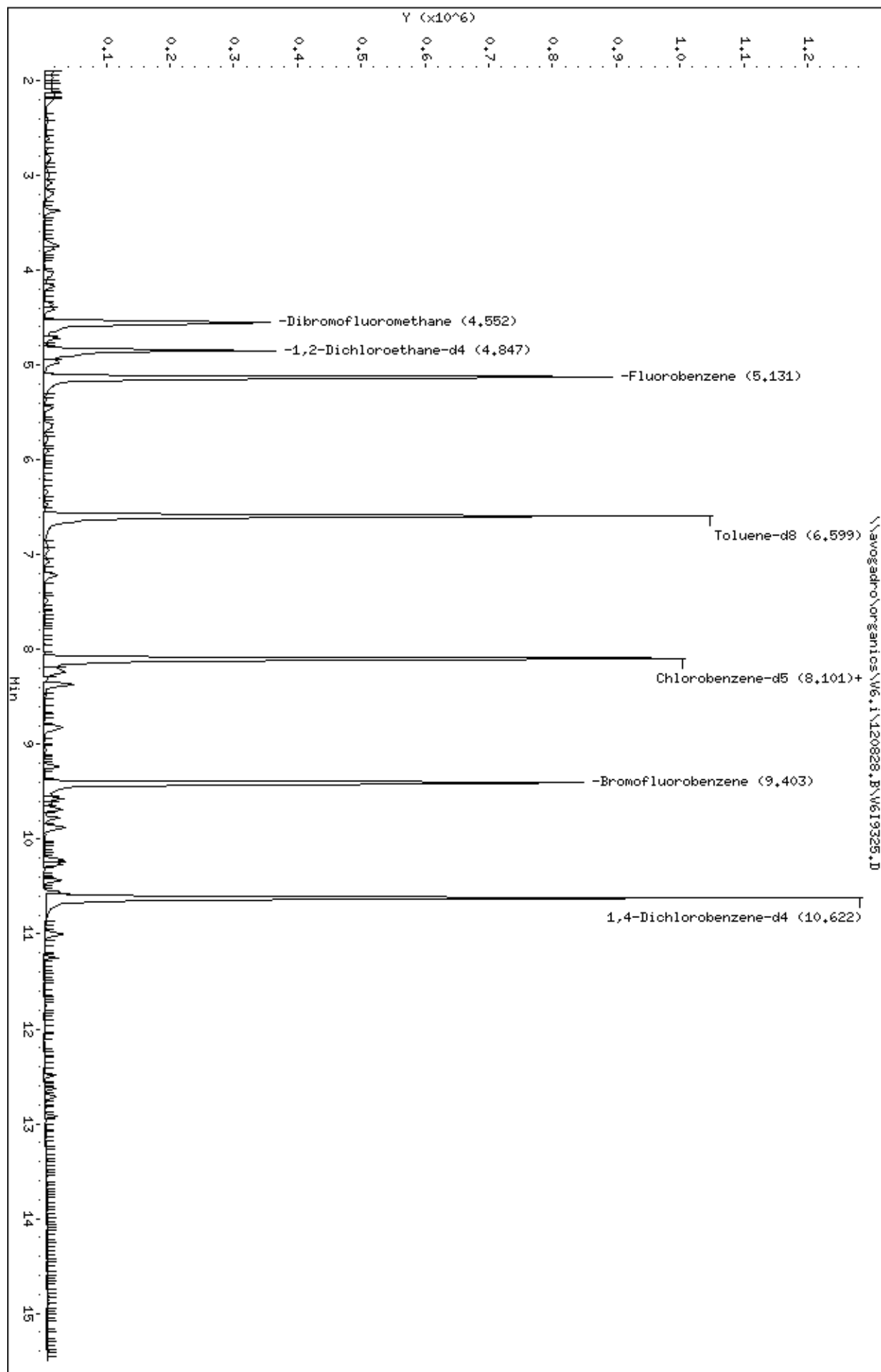
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.225	9.234 (1.139)		20195		1.00000	1
78 trans-1,4-Dichloro-2-butene	75	9.320	9.317 (1.150)		866		1.00000	0.5(Q)
\$ 79 Bromofluorobenzene	95	9.402	9.400 (1.161)		356667		1.00000	47
80 1,1,2,2-Tetrachloroethane	77	9.568	9.565 (0.901)		10745		1.00000	1
81 Bromobenzene	156	9.580	9.577 (0.902)		5595		1.00000	1.0
82 1,2,3-Trichloropropane	75	9.615	9.613 (0.905)		9937		1.00000	1
83 n-Propylbenzene	120	9.686	9.684 (0.912)		5856		1.00000	1
84 2-Chlorotoluene	126	9.781	9.778 (0.921)		5684		1.00000	1(Q)
85 1,3,5-Trimethylbenzene	105	9.876	9.873 (0.930)		18336		1.00000	1
86 4-Chlorotoluene	126	9.899	9.897 (0.932)		6091		1.00000	1
M 94 Xylene (Total)	106				24830		3.00000	(a)
87 tert-Butylbenzene	119	10.219	10.583 (0.962)		21284		1.00000	1(H)
88 1,2,4-Trimethylbenzene	105	10.266	10.264 (0.967)		18663		1.00000	1
89 sec-Butylbenzene	105	10.432	10.441 (0.982)		23273		1.00000	1
90 1,3-Dichlorobenzene	146	10.550	10.548 (0.993)		11412		1.00000	1
91 4-Isopropyltoluene	119	10.586	10.583 (0.997)		19321		1.00000	1
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.619 (1.000)		401035		50.0000	
93 1,4-Dichlorobenzene	146	10.645	10.642 (1.002)		14088		1.00000	1(Q)
95 n-Butylbenzene	91	10.988	10.985 (1.035)		16606		1.00000	1
96 1,2-Dichlorobenzene	146	11.012	11.009 (1.037)		11991		1.00000	1
97 Hexachloroethane	117	11.248	11.246 (1.059)		4126		1.00000	1
98 1,2-Dibromo-3-chloropropane	75	11.745	11.754 (1.106)		1293		1.00000	0.9
141 1,3,5-Trichlorobenzene	182	12.491	12.488 (2.434)		6562		1.00000	1(A)
99 1,2,4-Trichlorobenzene	180	12.491	12.488 (1.176)		6890		1.00000	1
100 Hexachlorobutadiene	225	12.633	12.630 (1.189)		3041		1.00000	1
101 Naphthalene	128	12.716	12.713 (1.197)		20876		1.00000	1
102 1,2,3-Trichlorobenzene	180	12.917	12.914 (1.216)		6738		1.00000	1

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6,i\120828.B\W6I9325.D
Date : 28-AUG-2012 11:19
Client ID: VSTD0016Z
Sample Info: 5M,VSTD0016Z,VSTD0016Z
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120828.B\V6I9327.D
Report Date: 28-Aug-2012 16:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828.B\V6I9327.D
Lab Smp Id: VSTD2006Z Client Smp ID: VSTD2006Z
Inj Date : 28-AUG-2012 12:07
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD2006Z,VSTD2006Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120828.B\v68260Gadd-6lvl.m
Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:07 Cal File: V6I9327.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.601	1.590 (0.312)		699381	200.000	190
2 Freon114	85	1.708	1.697 (0.333)		1310311	200.000	190
3 Chloromethane	50	1.779	1.768 (0.347)		1472752	200.000	190
4 Vinyl Chloride	62	1.862	1.850 (0.363)		1232326	200.000	180
5 Bromomethane	94	2.146	2.134 (0.419)		848525	200.000	180(Q)
6 Chloroethane	64	2.217	2.217 (0.432)		728552	200.000	190
7 Trichlorofluoromethane	101	2.406	2.407 (0.469)		1801421	200.000	200(A)
126 Ethanol	46	2.548	2.537 (0.497)		140258	20000.0	16000(AQ)
8 Ether	59	2.619	2.620 (0.511)		809044	200.000	200(Q)
9 Acrolein	56	2.725	2.726 (0.532)		889273	1000.00	910(A)
10 1,1-Dichloroethene	96	2.820	2.809 (0.550)		1162290	200.000	220(AQ)
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.820	2.809 (0.550)		1218545	200.000	200(A)
12 Acetone	58	2.844	2.844 (0.555)		132923	200.000	200(Q)
13 Iodomethane	142	2.962	2.963 (0.578)		2216636	200.000	190
14 Carbon Disulfide	76	2.998	2.998 (0.585)		3994884	200.000	180
15 Acetonitrile	41	3.069	3.069 (0.598)		2926651	2000.00	2000(A)
16 Allyl Chloride	39	3.069	3.069 (0.598)		1425150	200.000	200(AQ)
17 Methyl Acetate	43	3.080	3.081 (0.601)		1057782	200.000	200
18 Methylene Chloride	84	3.199	3.199 (0.624)		1156642	200.000	160
19 tert-Butanol	59	3.246	3.235 (0.633)		216525	400.000	380(A)
20 Acrylonitrile	53	3.364	3.365 (0.656)		474800	200.000	220(AQ)
21 trans-1,2-Dichloroethene	96	3.376	3.377 (0.658)		990107	200.000	190
22 Methyl tert-butyl ether	73	3.364	3.377 (0.656)		2678804	200.000	180

						AMOUNTS	
		QUANT SIG					
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 1,1-Dichloroethane	63	3.708	3.708	(0.723)	1687210	200.000	180
24 Vinyl acetate	43	3.731	3.732	(0.728)	3143897	200.000	180
25 Diisopropyl Ether	45	3.731	3.732	(0.728)	2945446	200.000	180
26 2-Chloro-1,3-Butadiene	53	3.779	3.779	(0.737)	1481794	200.000	190
27 Ethyl tert-butyl ether	59	4.027	4.028	(0.785)	2765754	200.000	180
29 2,2-Dichloropropane	77	4.169	4.170	(0.813)	814657	200.000	180
28 cis-1,2-Dichloroethene	96	4.169	4.170	(0.813)	1018267	200.000	190
30 2-Butanone	72	4.169	4.170	(0.813)	147009	200.000	210(AQ)
32 Propionitrile	54	4.228	4.229	(0.825)	1641314	2000.00	2000(A)
33 Methacrylonitrile	41	4.346	4.347	(0.848)	1249839	400.000	400(A)
34 Bromochloromethane	128	4.370	4.371	(0.852)	576363	200.000	200
31 Tetrahydrofuran	72	4.406	4.406	(0.859)	299143	400.000	400(AQ)
35 Chloroform	83	4.417	4.418	(0.862)	1650467	200.000	190
\$ 36 Dibromofluoromethane	113	4.559	4.548	(0.889)	275371	50.0000	50
37 1,1,1-Trichloroethane	97	4.583	4.584	(0.894)	1516851	200.000	200
38 Cyclohexane	56	4.630	4.631	(0.903)	1713596	200.000	200
39 1,1-Dichloropropene	110	4.713	4.714	(0.919)	504592	200.000	200
40 Carbon Tetrachloride	117	4.725	4.726	(0.922)	1589602	200.000	200
41 Isobutyl Alcohol	43	4.784	4.785	(0.933)	998439	4000.00	4100(A)
\$ 42 1,2-Dichloroethane-d4	102	4.843	4.844	(0.945)	58719	50.0000	50
43 Benzene	78	4.903	4.903	(0.956)	3115421	200.000	170
44 1,2-Dichloroethane	62	4.914	4.915	(0.958)	1473436	200.000	200
45 tert-Amyl methyl ether	73	4.974	4.962	(0.970)	2598722	200.000	180
M 50 1,2-Dichloroethene (Total)	96				2008374	400.000	(a)
* 46 Fluorobenzene	96	5.127	5.128	(1.000)	931782	50.0000	
47 Trichloroethene	130	5.447	5.448	(1.062)	1035821	200.000	190
48 Methylcyclohexane	83	5.624	5.625	(1.097)	1301423	200.000	200
49 1,2-Dichloropropane	63	5.660	5.661	(1.104)	981783	200.000	200
51 Methyl Methacrylate	69	5.731	5.743	(1.118)	854859	200.000	210(A)
52 Dibromomethane	93	5.778	5.779	(1.127)	695328	200.000	210(A)
53 1,4-Dioxane	88	5.778	5.779	(1.127)	136844	4000.00	3800(AQ)
54 Bromodichloromethane	83	5.908	5.909	(1.152)	1376628	200.000	200
55 2-Chloroethyl vinyl ether	63	6.181	6.655	(1.205)	72887	200.000	230(TAQM)
56 cis-1,3-Dichloropropene	75	6.323	6.335	(1.233)	1537739	200.000	200
57 4-Methyl-2-pentanone	43	6.465	6.465	(1.261)	1140076	200.000	200
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	897245	50.0000	50
59 Toluene	91	6.654	6.655	(1.298)	3306271	200.000	170
60 trans-1,3-Dichloropropene	75	6.879	6.879	(1.342)	1518537	200.000	220(A)
61 Ethyl Methacrylate	69	6.950	6.950	(1.355)	1148610	200.000	200
62 1,1,2-Trichloroethane	97	7.068	7.069	(1.378)	892877	200.000	200
63 Tetrachloroethene	164	7.210	7.211	(0.890)	864719	200.000	180
64 1,3-Dichloropropane	76	7.246	7.246	(0.895)	1451462	200.000	200
65 2-Hexanone	43	7.317	7.317	(0.904)	835327	200.000	210(AQ)
66 Dibromochloromethane	129	7.482	7.483	(0.924)	1237515	200.000	200
67 1,2-Dibromoethane	107	7.612	7.613	(0.940)	1066718	200.000	210(A)
69 1-Chlorohexane	91	8.086	8.086	(0.999)	1219819	200.000	180(Q)
* 68 Chlorobenzene-d5	117	8.097	8.098	(1.000)	763611	50.0000	
70 Chlorobenzene	112	8.133	8.134	(1.004)	2426231	200.000	180(Q)
71 1,1,1,2-Tetrachloroethane	131	8.216	8.216	(1.015)	1105948	200.000	200(Q)
72 Ethylbenzene	106	8.239	8.240	(1.018)	1365927	200.000	190(Q)
73 m,p-Xylene	106	8.370	8.370	(1.034)	3058974	400.000	350(AQ)
74 o-Xylene	106	8.819	8.820	(1.089)	1659185	200.000	190(Q)
75 Styrene	104	8.831	8.832	(1.091)	2710773	200.000	180
76 Bromoform	173	9.056	9.057	(1.118)	987590	200.000	220(A)

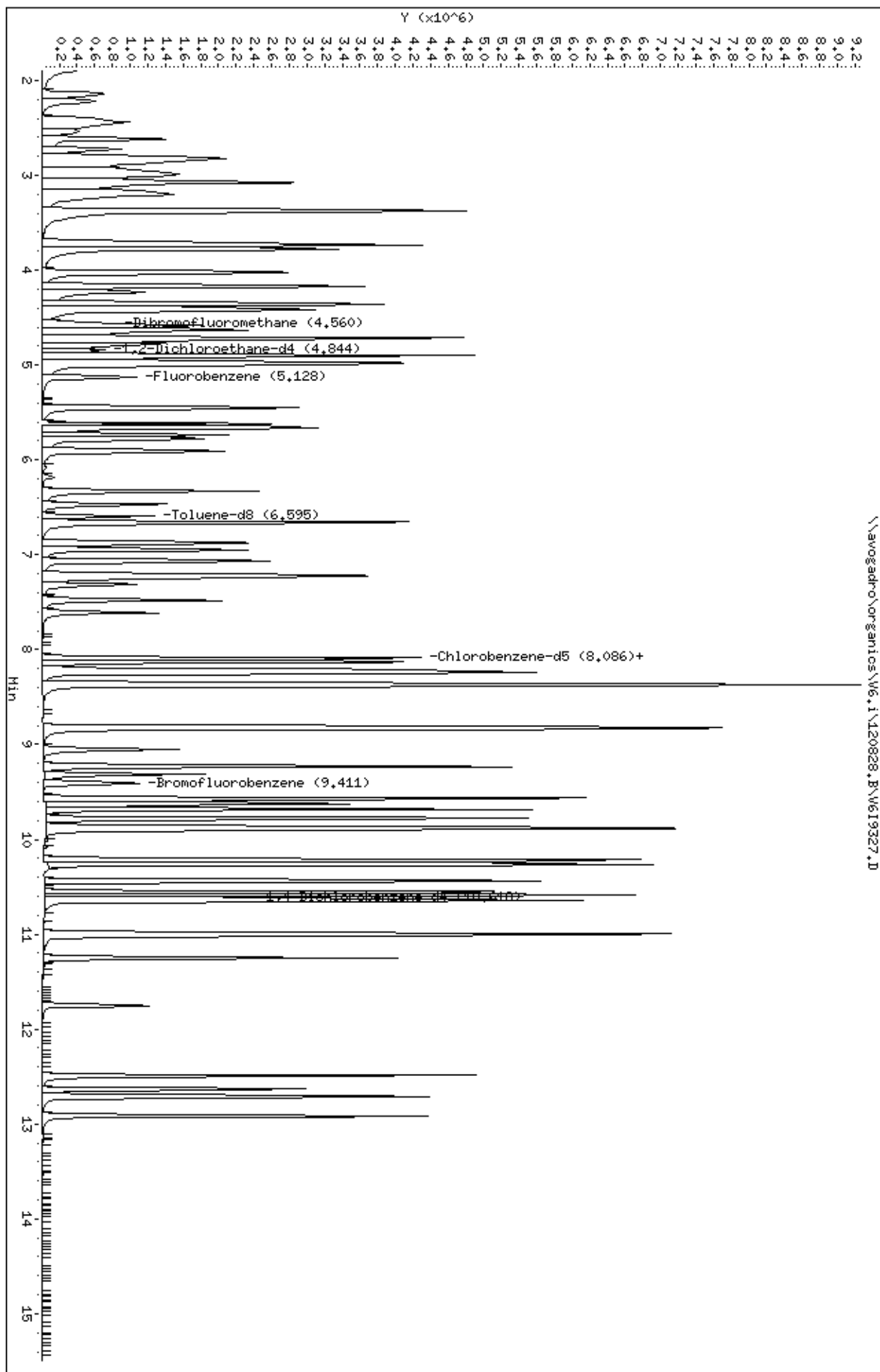
						AMOUNTS		
		QUANT	SIG					
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
77 Isopropylbenzene	105	9.233	9.234	(1.140)	3584834	200.000	170	
78 trans-1,4-Dichloro-2-butene	75	9.316	9.317	(1.151)	483922	200.000	240(AQ)	
\$ 79 Bromofluorobenzene	95	9.411	9.400	(1.162)	418476	50.0000	52	
80 1,1,2,2-Tetrachloroethane	77	9.577	9.565	(0.902)	1744495	200.000	150	
81 Bromobenzene	156	9.577	9.577	(0.902)	1305629	200.000	190(Q)	
82 1,2,3-Trichloropropane	75	9.624	9.613	(0.906)	1763415	200.000	190	
83 n-Propylbenzene	120	9.683	9.684	(0.912)	1183458	200.000	180(Q)	
84 2-Chlorotoluene	126	9.778	9.778	(0.921)	1141178	200.000	180(Q)	
85 1,3,5-Trimethylbenzene	105	9.872	9.873	(0.930)	3157935	200.000	160	
86 4-Chlorotoluene	126	9.896	9.897	(0.932)	1231198	200.000	180(Q)	
M 94 Xylene (Total)	106				4718159	600.000	(a)	
87 tert-Butylbenzene	119	10.216	10.583	(0.962)	3840043	200.000	170(H)	
88 1,2,4-Trimethylbenzene	105	10.263	10.264	(0.967)	3196373	200.000	160	
89 sec-Butylbenzene	105	10.440	10.441	(0.983)	3594265	200.000	150	
90 1,3-Dichlorobenzene	146	10.559	10.548	(0.994)	2183156	200.000	180	
91 4-Isopropyltoluene	119	10.582	10.583	(0.997)	3169885	200.000	160	
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.619	(1.000)	471819	50.0000	(Q)	
93 1,4-Dichlorobenzene	146	10.642	10.642	(1.002)	2291868	200.000	160(Q)	
95 n-Butylbenzene	91	10.985	10.985	(1.035)	2874019	200.000	160	
96 1,2-Dichlorobenzene	146	11.008	11.009	(1.037)	2180361	200.000	170	
97 Hexachloroethane	117	11.245	11.246	(1.059)	878656	200.000	190	
98 1,2-Dibromo-3-chloropropane	75	11.754	11.754	(1.107)	319006	200.000	200	
141 1,3,5-Trichlorobenzene	182	12.487	12.488	(2.435)	1334495	200.000	190(A)	
99 1,2,4-Trichlorobenzene	180	12.487	12.488	(1.176)	1394245	200.000	180	
100 Hexachlorobutadiene	225	12.641	12.630	(1.191)	498395	200.000	180	
101 Naphthalene	128	12.712	12.713	(1.197)	3323759	200.000	160	
102 1,2,3-Trichlorobenzene	180	12.913	12.914	(1.216)	1226730	200.000	180	

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6,i\120828.B\W6I9327.D
 Date : 28-AUG-2012 12:07
 Client ID: WSTD2006Z
 Sample Info: 5HL,WSTD2006Z,WSTD2006Z
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W6,i
 Operator: AH SRC: AH
 Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120828.B\V6I9328.D
Report Date: 28-Aug-2012 16:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828.B\V6I9328.D
Lab Smp Id: VSTD1006Z Client Smp ID: VSTD1006Z
Inj Date : 28-AUG-2012 12:31
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD1006Z,VSTD1006Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120828.B\v68260Gadd-6lvl.m
Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 9 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.593	1.590 (0.311)		370146	100.000	100
2 Freon114	85	1.700	1.697 (0.331)		679383	100.000	100
3 Chloromethane	50	1.783	1.768 (0.347)		735953	100.000	100
4 Vinyl Chloride	62	1.854	1.850 (0.361)		629152	100.000	97
5 Bromomethane	94	2.138	2.134 (0.417)		424773	100.000	93
6 Chloroethane	64	2.220	2.217 (0.433)		358483	100.000	96
7 Trichlorofluoromethane	101	2.410	2.407 (0.470)		901241	100.000	110
126 Ethanol	46	2.540	2.537 (0.495)		62428	10000.0	7500(A)
8 Ether	59	2.611	2.620 (0.509)		401185	100.000	100(Q)
9 Acrolein	56	2.729	2.726 (0.532)		444172	500.000	470(A)
10 1,1-Dichloroethene	96	2.812	2.809 (0.548)		575944	100.000	110
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.812	2.809 (0.548)		610496	100.000	110
12 Acetone	58	2.836	2.844 (0.553)		58104	100.000	89
13 Iodomethane	142	2.954	2.963 (0.576)		1110820	100.000	99
14 Carbon Disulfide	76	3.001	2.998 (0.585)		2079932	100.000	98
15 Acetonitrile	41	3.072	3.069 (0.599)		1468680	1000.00	1000(A)
16 Allyl Chloride	39	3.072	3.069 (0.599)		703085	100.000	100
17 Methyl Acetate	43	3.084	3.081 (0.601)		530039	100.000	100
18 Methylene Chloride	84	3.202	3.199 (0.624)		587012	100.000	83
19 tert-Butanol	59	3.238	3.235 (0.631)		103150	200.000	190
20 Acrylonitrile	53	3.368	3.365 (0.656)		220800	100.000	110
21 trans-1,2-Dichloroethene	96	3.380	3.377 (0.659)		508331	100.000	100
22 Methyl tert-butyl ether	73	3.368	3.377 (0.656)		1398802	100.000	100

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 1,1-Dichloroethane	63	3.699	3.708	(0.721)	862767	100.000	99
24 Vinyl acetate	43	3.735	3.732	(0.728)	1671572	100.000	100
25 Diisopropyl Ether	45	3.735	3.732	(0.728)	1569164	100.000	99
26 2-Chloro-1,3-Butadiene	53	3.770	3.779	(0.735)	752723	100.000	100
27 Ethyl tert-butyl ether	59	4.019	4.028	(0.783)	1449349	100.000	97
29 2,2-Dichloropropane	77	4.161	4.170	(0.811)	408675	100.000	95
28 cis-1,2-Dichloroethene	96	4.161	4.170	(0.811)	520062	100.000	100
30 2-Butanone	72	4.173	4.170	(0.813)	71396	100.000	100
32 Propionitrile	54	4.232	4.229	(0.825)	840303	1000.00	1100(A)
33 Methacrylonitrile	41	4.350	4.347	(0.848)	652307	200.000	220(A)
34 Bromochloromethane	128	4.362	4.371	(0.850)	285268	100.000	100
31 Tetrahydrofuran	72	4.398	4.406	(0.857)	150843	200.000	210(A)
35 Chloroform	83	4.421	4.418	(0.862)	862919	100.000	100
\$ 36 Dibromofluoromethane	113	4.551	4.548	(0.887)	265608	50.0000	50
37 1,1,1-Trichloroethane	97	4.587	4.584	(0.894)	762482	100.000	100
38 Cyclohexane	56	4.634	4.631	(0.903)	858378	100.000	100
39 1,1-Dichloropropene	110	4.717	4.714	(0.919)	249899	100.000	100
40 Carbon Tetrachloride	117	4.717	4.726	(0.919)	789915	100.000	100
41 Isobutyl Alcohol	43	4.776	4.785	(0.931)	496605	2000.00	2100(A)
\$ 42 1,2-Dichloroethane-d4	102	4.847	4.844	(0.945)	55499	50.0000	49
43 Benzene	78	4.895	4.903	(0.954)	1693914	100.000	98
44 1,2-Dichloroethane	62	4.906	4.915	(0.956)	741175	100.000	100
45 tert-Amyl methyl ether	73	4.966	4.962	(0.968)	1385089	100.000	99
M 50 1,2-Dichloroethene (Total)	96				1028393	200.000	(a)
* 46 Fluorobenzene	96	5.131	5.128	(1.000)	898023	50.0000	
47 Trichloroethene	130	5.451	5.448	(1.062)	521438	100.000	97
48 Methylcyclohexane	83	5.628	5.625	(1.097)	668097	100.000	100
49 1,2-Dichloropropane	63	5.664	5.661	(1.104)	490444	100.000	100
51 Methyl Methacrylate	69	5.735	5.743	(1.118)	418525	100.000	110
52 Dibromomethane	93	5.770	5.779	(1.125)	345784	100.000	110
53 1,4-Dioxane	88	5.782	5.779	(1.127)	55002	2000.00	1600(A)
54 Bromodichloromethane	83	5.900	5.909	(1.150)	689761	100.000	100
55 2-Chloroethyl vinyl ether	63	6.184	6.655	(1.205)	31826	100.000	100(TQM)M6 AED 08/28
56 cis-1,3-Dichloropropene	75	6.326	6.335	(1.233)	793429	100.000	110
57 4-Methyl-2-pentanone	43	6.468	6.465	(1.261)	579581	100.000	110
\$ 58 Toluene-d8	98	6.598	6.595	(0.815)	865506	50.0000	49
59 Toluene	91	6.658	6.655	(1.297)	1836180	100.000	97
60 trans-1,3-Dichloropropene	75	6.871	6.879	(1.339)	747583	100.000	110
61 Ethyl Methacrylate	69	6.942	6.950	(1.353)	583161	100.000	100
62 1,1,2-Trichloroethane	97	7.060	7.069	(1.376)	448561	100.000	100
63 Tetrachloroethene	164	7.214	7.211	(0.890)	430459	100.000	93
64 1,3-Dichloropropane	76	7.237	7.246	(0.893)	732385	100.000	100
65 2-Hexanone	43	7.308	7.317	(0.902)	392637	100.000	100
66 Dibromochloromethane	129	7.474	7.483	(0.923)	615357	100.000	100
67 1,2-Dibromoethane	107	7.604	7.613	(0.939)	534640	100.000	110
69 1-Chlorohexane	91	8.089	8.086	(0.999)	620500	100.000	92
* 68 Chlorobenzene-d5	117	8.101	8.098	(1.000)	738087	50.0000	
70 Chlorobenzene	112	8.125	8.134	(1.003)	1289764	100.000	98
71 1,1,1,2-Tetrachloroethane	131	8.208	8.216	(1.013)	551564	100.000	100
72 Ethylbenzene	106	8.243	8.240	(1.018)	684643	100.000	100(Q)
73 m,p-Xylene	106	8.373	8.370	(1.034)	1606048	200.000	190
74 o-Xylene	106	8.811	8.820	(1.088)	835748	100.000	100
75 Styrene	104	8.835	8.832	(1.091)	1440769	100.000	100
76 Bromoform	173	9.048	9.057	(1.117)	477175	100.000	110

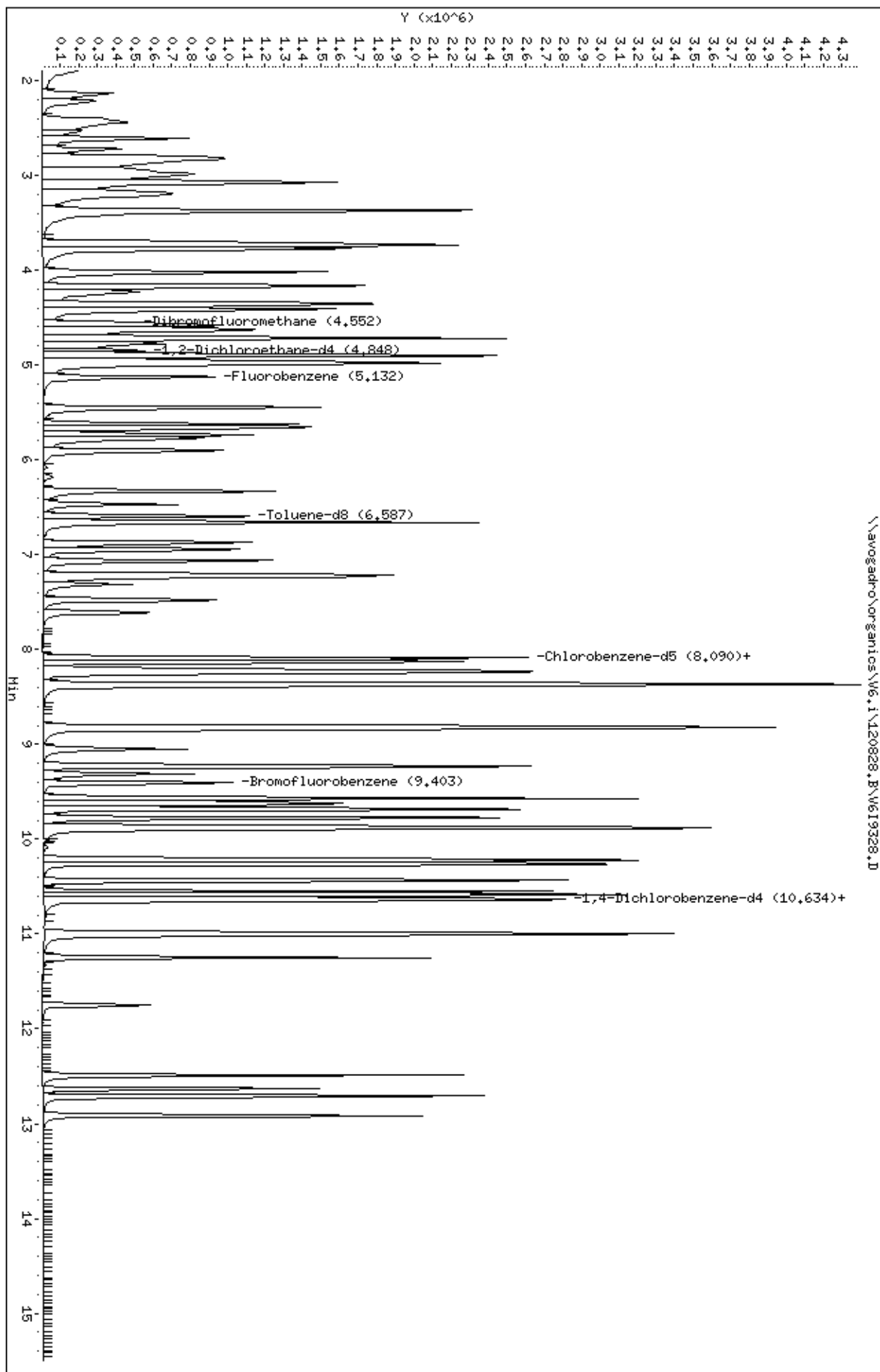
						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 Isopropylbenzene	105	9.225	9.234	(1.139)	1935005	100.000	95
78 trans-1,4-Dichloro-2-butene	75	9.308	9.317	(1.149)	222355	100.000	120
\$ 79 Bromofluorobenzene	95	9.403	9.400	(1.161)	386133	50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.569	9.565	(0.901)	1107660	100.000	100
81 Bromobenzene	156	9.569	9.577	(0.901)	640905	100.000	100(Q)
82 1,2,3-Trichloropropane	75	9.616	9.613	(0.905)	863220	100.000	100
83 n-Propylbenzene	120	9.687	9.684	(0.912)	577537	100.000	96(Q)
84 2-Chlorotoluene	126	9.782	9.778	(0.921)	559290	100.000	97
85 1,3,5-Trimethylbenzene	105	9.876	9.873	(0.930)	1665924	100.000	93
86 4-Chlorotoluene	126	9.900	9.897	(0.932)	604456	100.000	98
M 94 Xylene (Total)	106				2441796	300.000	(a)
87 tert-Butylbenzene	119	10.207	10.583	(0.961)	1967545	100.000	94(H)
88 1,2,4-Trimethylbenzene	105	10.267	10.264	(0.967)	1709334	100.000	93
89 sec-Butylbenzene	105	10.432	10.441	(0.982)	1963370	100.000	91
90 1,3-Dichlorobenzene	146	10.551	10.548	(0.993)	1120289	100.000	97
91 4-Isopropyltoluene	119	10.586	10.583	(0.997)	1689759	100.000	92
* 92 1,4-Dichlorobenzene-d4	152	10.622	10.619	(1.000)	439281	50.0000	(Q)
93 1,4-Dichlorobenzene	146	10.645	10.642	(1.002)	1201265	100.000	92
95 n-Butylbenzene	91	10.988	10.985	(1.035)	1541245	100.000	94
96 1,2-Dichlorobenzene	146	11.012	11.009	(1.037)	1141272	100.000	96
97 Hexachloroethane	117	11.249	11.246	(1.059)	420976	100.000	98
98 1,2-Dibromo-3-chloropropane	75	11.746	11.754	(1.106)	154500	100.000	100
141 1,3,5-Trichlorobenzene	182	12.491	12.488	(2.434)	639242	100.000	97(A)
99 1,2,4-Trichlorobenzene	180	12.491	12.488	(1.176)	657869	100.000	92
100 Hexachlorobutadiene	225	12.633	12.630	(1.189)	229953	100.000	90
101 Naphthalene	128	12.704	12.713	(1.196)	1824282	100.000	93
102 1,2,3-Trichlorobenzene	180	12.917	12.914	(1.216)	589433	100.000	92

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6,i\120828.B\W6I9328.D
Date : 28-AUG-2012 12:31
Client ID: WSTD1006Z
Sample Info: 5M, WSTD1006Z, WSTD1006Z
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/16/2012 Time: 20:52

Lab File ID: V6I9071.D Init. Calib. Date(s): 08/16/2012 08/16/2012

EPA Sample No.(VSTD####) VICV0506R Init. Calib. Time(s): 17:53 20:28

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.113	0.096	0.100	-14.8	20.0
Chloromethane	0.341	0.317	0.010	-7.1	20.0
Vinyl chloride	0.269	0.266	0.010	-1.1	20.0
Bromomethane	0.186	0.170	0.010	-8.4	20.0
Chloroethane	0.177	0.168	0.010	-4.9	20.0
Trichlorofluoromethane	0.373	0.344	0.010	-7.7	20.0
1,1-Dichloroethene	0.241	0.258	0.100	7.2	20.0
Acetone	0.030	0.034	0.010	14.0	20.0
Iodomethane	0.478	0.501	0.010	4.8	20.0
Carbon disulfide	0.920	0.905	0.010	-1.7	20.0
Methylene chloride	0.378	0.282	0.010	-25.3	20.0
trans-1,2-Dichloroethene	0.244	0.250	0.010	2.5	20.0
Methyl tert-butyl ether	0.744	0.732	0.010	-1.5	20.0
1,1-Dichloroethane	0.449	0.443	0.010	-1.3	20.0
Vinyl acetate	0.883	0.912	0.010	3.3	20.0
2-Butanone	0.037	0.035	0.010	-4.1	20.0
cis-1,2-Dichloroethene	0.273	0.266	0.010	-2.8	20.0
2,2-Dichloropropane	0.192	0.177	0.010	-7.7	20.0
Bromochloromethane	0.139	0.144	0.010	3.5	20.0
Chloroform	0.419	0.428	0.010	2.3	20.0
1,1,1-Trichloroethane	0.365	0.384	0.010	5.0	20.0
1,1-Dichloropropene	0.125	0.120	0.010	-3.7	20.0
Carbon tetrachloride	0.372	0.373	0.010	0.4	20.0
1,2-Dichloroethane	0.361	0.365	0.010	1.1	20.0
Benzene	0.881	0.884	0.010	0.3	20.0
Trichloroethene	0.263	0.266	0.010	1.1	20.0
1,2-Dichloropropane	0.247	0.255	0.010	3.3	20.0
Dibromomethane	0.161	0.164	0.010	1.7	20.0
Bromodichloromethane	0.339	0.349	0.010	2.8	20.0
cis-1,3-Dichloropropene	0.381	0.400	0.010	4.9	20.0
4-Methyl-2-pentanone	0.319	0.323	0.010	1.1	20.0
Toluene	0.964	0.976	0.010	1.3	20.0
trans-1,3-Dichloropropene	0.364	0.381	0.010	4.4	20.0
1,1,2-Trichloroethane	0.229	0.233	0.010	1.7	20.0
1,3-Dichloropropane	0.448	0.467	0.010	4.2	20.0
Tetrachloroethene	0.285	0.303	0.010	6.4	20.0
2-Hexanone	0.270	0.277	0.010	2.4	20.0
Dibromochloromethane	0.378	0.392	0.010	3.8	20.0
1,2-Dibromoethane	0.318	0.345	0.010	8.4	20.0
Chlorobenzene	0.838	0.868	0.010	3.6	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/16/2012 Time: 20:52

Lab File ID: V6I9071.D Init. Calib. Date(s): 08/16/2012 08/16/2012

EPA Sample No.(VSTD####) VICV0506R Init. Calib. Time(s): 17:53 20:28

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.352	0.354	0.010	0.7	20.0
Ethylbenzene	0.446	0.444	0.010	-0.5	20.0
m,p-Xylene	0.537	0.547	0.010	1.9	20.0
o-Xylene	0.541	0.547	0.010	1.1	20.0
Xylene (Total)	0.538	0.547	0.010	1.6	20.0
Styrene	0.929	0.950	0.010	2.2	20.0
Bromoform	0.277	0.301	0.010	8.4	20.0
Isopropylbenzene	1.345	1.325	0.300	-1.5	20.0
1,1,2,2-Tetrachloroethane	1.176	1.241	0.300	5.5	20.0
Bromobenzene	0.702	0.716	0.010	2.0	20.0
1,2,3-Trichloropropane	0.975	0.909	0.010	-6.7	20.0
n-Propylbenzene	0.656	0.656	0.010	0.0	20.0
2-Chlorotoluene	0.631	0.630	0.010	0.0	20.0
1,3,5-Trimethylbenzene	2.041	1.962	0.010	-3.9	20.0
4-Chlorotoluene	0.684	0.683	0.010	-0.2	20.0
tert-Butylbenzene	2.069	1.986	0.010	-4.0	20.0
1,2,4-Trimethylbenzene	2.062	2.009	0.010	-2.6	20.0
sec-Butylbenzene	2.375	2.270	0.010	-4.4	20.0
4-Isopropyltoluene	2.069	1.986	0.010	-4.0	20.0
1,3-Dichlorobenzene	1.292	1.274	0.010	-1.4	20.0
1,4-Dichlorobenzene	1.403	1.385	0.010	-1.3	20.0
n-Butylbenzene	1.772	1.742	0.100	-1.7	20.0
1,2-Dichlorobenzene	1.306	1.317	0.010	0.9	20.0
1,2-Dibromo-3-chloropropane	0.182	0.182	0.010	0.2	20.0
1,2,4-Trichlorobenzene	0.769	0.779	0.010	1.2	20.0
Hexachlorobutadiene	0.292	0.273	0.010	-6.5	20.0
1,2,3-Trichlorobenzene	0.688	0.684	0.010	-0.6	20.0
Naphthalene	2.199	2.239	0.010	1.8	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/16/2012 Time: 20:52

Lab File ID: V6I9071.D Init. Calib. Date(s): 08/16/2012 08/16/2012

EPA Sample No.(VSTD####) VICV0506R Init. Calib. Time(s): 17:53 20:28

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.284	0.285	0.010	0.4	20.0
1,2-Dichloroethane-d4	0.064	0.067	0.010	3.8	20.0
Toluene-d8	1.192	1.211	0.010	1.6	20.0
Bromofluorobenzene	0.521	0.522	0.010	0.1	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/23/2012 Time: 10:03

Lab File ID: V6I9212.D Init. Calib. Date(s): 08/16/2012 08/16/2012

EPA Sample No.(VSTD####) VSTD0506W Init. Calib. Time(s): 17:53 20:28

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.113	0.117	0.100	3.9	20.0
Chloromethane	0.341	0.278	0.010	-18.4	20.0
Vinyl chloride	0.269	0.245	0.010	-9.0	20.0
Bromomethane	0.186	0.171	0.010	-7.9	20.0
Chloroethane	0.177	0.156	0.010	-11.8	20.0
Trichlorofluoromethane	0.373	0.407	0.010	9.1	20.0
1,1-Dichloroethene	0.241	0.269	0.100	11.8	20.0
Acetone	0.030	0.026	0.010	-13.5	20.0
Iodomethane	0.478	0.467	0.010	-2.3	20.0
Carbon disulfide	0.920	0.563	0.010	-38.8	20.0
Methylene chloride	0.378	0.274	0.010	-27.3	20.0
trans-1,2-Dichloroethene	0.244	0.234	0.010	-4.0	20.0
Methyl tert-butyl ether	0.744	0.652	0.010	-12.3	20.0
1,1-Dichloroethane	0.449	0.421	0.010	-6.2	20.0
Vinyl acetate	0.883	0.782	0.010	-11.4	20.0
2-Butanone	0.037	0.027	0.010	-24.9	20.0
cis-1,2-Dichloroethene	0.273	0.242	0.010	-11.3	20.0
2,2-Dichloropropane	0.192	0.210	0.010	9.4	20.0
Bromochloromethane	0.139	0.137	0.010	-1.8	20.0
Chloroform	0.419	0.411	0.010	-1.8	20.0
1,1,1-Trichloroethane	0.365	0.348	0.010	-4.8	20.0
1,1-Dichloropropene	0.125	0.119	0.010	-4.3	20.0
Carbon tetrachloride	0.372	0.370	0.010	-0.3	20.0
1,2-Dichloroethane	0.361	0.353	0.010	-2.2	20.0
Benzene	0.881	0.822	0.010	-6.7	20.0
Trichloroethene	0.263	0.260	0.010	-1.1	20.0
1,2-Dichloropropane	0.247	0.232	0.010	-6.2	20.0
Dibromomethane	0.161	0.156	0.010	-3.0	20.0
Bromodichloromethane	0.339	0.333	0.010	-1.8	20.0
cis-1,3-Dichloropropene	0.381	0.377	0.010	-1.1	20.0
4-Methyl-2-pentanone	0.319	0.244	0.010	-23.7	20.0
Toluene	0.964	0.901	0.010	-6.5	20.0
trans-1,3-Dichloropropene	0.364	0.354	0.010	-2.9	20.0
1,1,2-Trichloroethane	0.229	0.208	0.010	-9.5	20.0
1,3-Dichloropropane	0.448	0.423	0.010	-5.7	20.0
Tetrachloroethene	0.285	0.270	0.010	-5.1	20.0
2-Hexanone	0.270	0.201	0.010	-25.7	20.0
Dibromochloromethane	0.378	0.371	0.010	-1.7	20.0
1,2-Dibromoethane	0.318	0.309	0.010	-3.1	20.0
Chlorobenzene	0.838	0.797	0.010	-4.9	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/23/2012 Time: 10:03

Lab File ID: V6I9212.D Init. Calib. Date(s): 08/16/2012 08/16/2012

EPA Sample No.(VSTD####) VSTD0506W Init. Calib. Time(s): 17:53 20:28

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.352	0.338	0.010	-3.7	20.0
Ethylbenzene	0.446	0.427	0.010	-4.2	20.0
m,p-Xylene	0.537	0.509	0.010	-5.1	20.0
o-Xylene	0.541	0.514	0.010	-5.1	20.0
Xylene (Total)	0.538	0.511	0.010	-5.1	20.0
Styrene	0.929	0.873	0.010	-6.1	20.0
Bromoform	0.277	0.270	0.010	-2.6	20.0
Isopropylbenzene	1.345	1.269	0.300	-5.7	20.0
1,1,2,2-Tetrachloroethane	1.176	1.109	0.300	-5.7	20.0
Bromobenzene	0.702	0.645	0.010	-8.1	20.0
1,2,3-Trichloropropane	0.975	0.754	0.010	-22.7	20.0
n-Propylbenzene	0.656	0.593	0.010	-9.7	20.0
2-Chlorotoluene	0.631	0.578	0.010	-8.3	20.0
1,3,5-Trimethylbenzene	2.041	1.803	0.010	-11.6	20.0
4-Chlorotoluene	0.684	0.608	0.010	-11.2	20.0
tert-Butylbenzene	2.069	1.881	0.010	-9.1	20.0
1,2,4-Trimethylbenzene	2.062	1.835	0.010	-11.0	20.0
sec-Butylbenzene	2.375	2.173	0.010	-8.5	20.0
4-Isopropyltoluene	2.069	1.881	0.010	-9.1	20.0
1,3-Dichlorobenzene	1.292	1.179	0.010	-8.7	20.0
1,4-Dichlorobenzene	1.403	1.263	0.010	-10.0	20.0
n-Butylbenzene	1.772	1.686	0.100	-4.8	20.0
1,2-Dichlorobenzene	1.306	1.206	0.010	-7.7	20.0
1,2-Dibromo-3-chloropropane	0.182	0.149	0.010	-18.0	20.0
1,2,4-Trichlorobenzene	0.769	0.776	0.010	0.8	20.0
Hexachlorobutadiene	0.292	0.291	0.010	-0.1	20.0
1,2,3-Trichlorobenzene	0.688	0.661	0.010	-4.0	20.0
Naphthalene	2.199	1.891	0.010	-14.0	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Instrument ID: V6 Calibration Date: 08/23/2012 Time: 10:03
Lab File ID: V6I9212.D Init. Calib. Date(s): 08/16/2012 08/16/2012
EPA Sample No.(VSTD####) VSTD0506W Init. Calib. Time(s): 17:53 20:28
Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)
Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.284	0.297	0.010	4.4	20.0
1,2-Dichloroethane-d4	0.064	0.063	0.010	-2.0	20.0
Toluene-d8	1.192	1.199	0.010	0.6	20.0
Bromofluorobenzene	0.521	0.534	0.010	2.4	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/24/2012 Time: 9:46

Lab File ID: V6I9252.D Init. Calib. Date(s): 08/16/2012 08/16/2012

EPA Sample No.(VSTD####) VSTD0506X Init. Calib. Time(s): 17:53 20:28

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.113	0.115	0.100	1.9	20.0
Chloromethane	0.341	0.298	0.010	-12.6	20.0
Vinyl chloride	0.269	0.262	0.010	-2.6	20.0
Bromomethane	0.186	0.188	0.010	1.1	20.0
Chloroethane	0.177	0.166	0.010	-6.1	20.0
Trichlorofluoromethane	0.373	0.426	0.010	14.3	20.0
1,1-Dichloroethene	0.241	0.160	0.100	-33.5	20.0
Acetone	0.030	0.025	0.010	-15.3	20.0
Iodomethane	0.478	0.501	0.010	4.9	20.0
Carbon disulfide	0.920	0.933	0.010	1.3	20.0
Methylene chloride	0.378	0.296	0.010	-21.5	20.0
trans-1,2-Dichloroethene	0.244	0.251	0.010	3.2	20.0
Methyl tert-butyl ether	0.744	0.702	0.010	-5.6	20.0
1,1-Dichloroethane	0.449	0.446	0.010	-0.5	20.0
Vinyl acetate	0.883	0.824	0.010	-6.7	20.0
2-Butanone	0.037	0.032	0.010	-11.8	20.0
cis-1,2-Dichloroethene	0.273	0.270	0.010	-1.3	20.0
2,2-Dichloropropane	0.192	0.222	0.010	15.7	20.0
Bromochloromethane	0.139	0.147	0.010	5.3	20.0
Chloroform	0.419	0.445	0.010	6.3	20.0
1,1,1-Trichloroethane	0.365	0.367	0.010	0.5	20.0
1,1-Dichloropropene	0.125	0.126	0.010	1.1	20.0
Carbon tetrachloride	0.372	0.386	0.010	3.8	20.0
1,2-Dichloroethane	0.361	0.375	0.010	4.0	20.0
Benzene	0.881	0.887	0.010	0.7	20.0
Trichloroethene	0.263	0.272	0.010	3.5	20.0
1,2-Dichloropropane	0.247	0.249	0.010	0.6	20.0
Dibromomethane	0.161	0.169	0.010	4.7	20.0
Bromodichloromethane	0.339	0.364	0.010	7.2	20.0
cis-1,3-Dichloropropene	0.381	0.405	0.010	6.2	20.0
4-Methyl-2-pentanone	0.319	0.259	0.010	-18.9	20.0
Toluene	0.964	0.971	0.010	0.8	20.0
trans-1,3-Dichloropropene	0.364	0.380	0.010	4.3	20.0
1,1,2-Trichloroethane	0.229	0.225	0.010	-1.8	20.0
1,3-Dichloropropane	0.448	0.465	0.010	3.7	20.0
Tetrachloroethene	0.285	0.279	0.010	-1.9	20.0
2-Hexanone	0.270	0.225	0.010	-16.9	20.0
Dibromochloromethane	0.378	0.391	0.010	3.5	20.0
1,2-Dibromoethane	0.318	0.333	0.010	4.4	20.0
Chlorobenzene	0.838	0.832	0.010	-0.7	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/24/2012 Time: 9:46

Lab File ID: V6I9252.D Init. Calib. Date(s): 08/16/2012 08/16/2012

EPA Sample No.(VSTD####) VSTD0506X Init. Calib. Time(s): 17:53 20:28

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.352	0.356	0.010	1.3	20.0
Ethylbenzene	0.446	0.442	0.010	-0.9	20.0
m,p-Xylene	0.537	0.533	0.010	-0.6	20.0
o-Xylene	0.541	0.547	0.010	1.0	20.0
Xylene (Total)	0.538	0.538	0.010	-0.1	20.0
Styrene	0.929	0.918	0.010	-1.2	20.0
Bromoform	0.277	0.283	0.010	2.0	20.0
Isopropylbenzene	1.345	1.315	0.300	-2.3	20.0
1,1,2,2-Tetrachloroethane	1.176	1.185	0.300	0.7	20.0
Bromobenzene	0.702	0.701	0.010	-0.2	20.0
1,2,3-Trichloropropane	0.975	0.819	0.010	-16.0	20.0
n-Propylbenzene	0.656	0.642	0.010	-2.1	20.0
2-Chlorotoluene	0.631	0.602	0.010	-4.5	20.0
1,3,5-Trimethylbenzene	2.041	1.898	0.010	-7.0	20.0
4-Chlorotoluene	0.684	0.649	0.010	-5.1	20.0
tert-Butylbenzene	2.069	1.945	0.010	-6.0	20.0
1,2,4-Trimethylbenzene	2.062	1.941	0.010	-5.8	20.0
sec-Butylbenzene	2.375	2.261	0.010	-4.8	20.0
4-Isopropyltoluene	2.069	1.945	0.010	-6.0	20.0
1,3-Dichlorobenzene	1.292	1.228	0.010	-4.9	20.0
1,4-Dichlorobenzene	1.403	1.338	0.010	-4.7	20.0
n-Butylbenzene	1.772	1.795	0.100	1.3	20.0
1,2-Dichlorobenzene	1.306	1.261	0.010	-3.4	20.0
1,2-Dibromo-3-chloropropane	0.182	0.156	0.010	-14.0	20.0
1,2,4-Trichlorobenzene	0.769	0.768	0.010	-0.2	20.0
Hexachlorobutadiene	0.292	0.284	0.010	-2.7	20.0
1,2,3-Trichlorobenzene	0.688	0.663	0.010	-3.6	20.0
Naphthalene	2.199	1.988	0.010	-9.6	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/24/2012 Time: 9:46

Lab File ID: V6I9252.D Init. Calib. Date(s): 08/16/2012 08/16/2012

EPA Sample No.(VSTD####) VSTD0506X Init. Calib. Time(s): 17:53 20:28

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.284	0.304	0.010	6.9	20.0
1,2-Dichloroethane-d4	0.064	0.067	0.010	3.9	20.0
Toluene-d8	1.192	1.193	0.010	0.1	20.0
Bromofluorobenzene	0.521	0.527	0.010	1.1	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/28/2012 Time: 12:57

Lab File ID: V6I9329.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VICV0506Z Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.195	0.160	0.100	-18.1	20.0
Chloromethane	0.411	0.364	0.010	-11.4	20.0
Vinyl chloride	0.361	0.295	0.010	-18.1	20.0
Bromomethane	0.255	0.205	0.010	-19.7	20.0
Chloroethane	0.207	0.166	0.010	-20.0	20.0
Trichlorofluoromethane	0.472	0.404	0.010	-14.5	20.0
1,1-Dichloroethene	0.288	0.276	0.100	-4.0	20.0
Acetone	0.036	0.037	0.010	2.8	20.0
Iodomethane	0.624	0.459	0.010	-26.5	20.0
Carbon disulfide	1.185	0.992	0.010	-16.3	20.0
Methylene chloride	0.392	0.289	0.010	-26.4	20.0
trans-1,2-Dichloroethene	0.282	0.237	0.010	-15.7	20.0
Methyl tert-butyl ether	0.781	0.735	0.010	-5.8	20.0
1,1-Dichloroethane	0.487	0.412	0.010	-15.4	20.0
Vinyl acetate	0.918	0.855	0.010	-6.9	20.0
2-Butanone	0.038	0.040	0.010	5.6	20.0
cis-1,2-Dichloroethene	0.281	0.252	0.010	-10.2	20.0
2,2-Dichloropropane	0.239	0.191	0.010	-20.3	20.0
Bromochloromethane	0.154	0.140	0.010	-9.0	20.0
Chloroform	0.474	0.412	0.010	-13.2	20.0
1,1,1-Trichloroethane	0.409	0.323	0.010	-21.1	20.0
1,1-Dichloropropene	0.136	0.114	0.010	-16.4	20.0
Carbon tetrachloride	0.422	0.335	0.010	-20.5	20.0
1,2-Dichloroethane	0.395	0.361	0.010	-8.7	20.0
Benzene	0.967	0.827	0.010	-14.5	20.0
Trichloroethene	0.298	0.234	0.010	-21.6	20.0
1,2-Dichloropropane	0.261	0.234	0.010	-10.2	20.0
Dibromomethane	0.178	0.164	0.010	-7.9	20.0
Bromodichloromethane	0.373	0.329	0.010	-11.6	20.0
cis-1,3-Dichloropropene	0.413	0.375	0.010	-9.2	20.0
4-Methyl-2-pentanone	0.304	0.289	0.010	-4.7	20.0
Toluene	1.054	0.894	0.010	-15.1	20.0
trans-1,3-Dichloropropene	0.374	0.358	0.010	-4.1	20.0
1,1,2-Trichloroethane	0.240	0.222	0.010	-7.5	20.0
1,3-Dichloropropane	0.478	0.448	0.010	-6.3	20.0
Tetrachloroethene	0.313	0.247	0.010	-21.1	20.0
2-Hexanone	0.255	0.275	0.010	8.2	20.0
Dibromochloromethane	0.398	0.374	0.010	-6.0	20.0
1,2-Dibromoethane	0.337	0.326	0.010	-3.4	20.0
Chlorobenzene	0.886	0.776	0.010	-12.4	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/28/2012 Time: 12:57

Lab File ID: V6I9329.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VICV0506Z Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.369	0.320	0.010	-13.1	20.0
Ethylbenzene	0.466	0.400	0.010	-14.0	20.0
m,p-Xylene	0.570	0.501	0.010	-12.1	20.0
o-Xylene	0.566	0.486	0.010	-14.1	20.0
Xylene (Total)	0.569	0.496	0.010	-12.8	20.0
Styrene	0.976	0.855	0.010	-12.4	20.0
Bromoform	0.292	0.292	0.010	0.0	20.0
Isopropylbenzene	1.375	1.233	0.300	-10.3	20.0
1,1,2,2-Tetrachloroethane	1.213	1.122	0.300	-7.5	20.0
Bromobenzene	0.721	0.652	0.010	-9.6	20.0
1,2,3-Trichloropropane	0.971	0.884	0.010	-9.0	20.0
n-Propylbenzene	0.683	0.581	0.010	-14.9	20.0
2-Chlorotoluene	0.654	0.559	0.010	-14.5	20.0
1,3,5-Trimethylbenzene	2.043	1.815	0.010	-11.2	20.0
4-Chlorotoluene	0.704	0.609	0.010	-13.5	20.0
tert-Butylbenzene	2.368	1.884	0.010	-20.5	20.0
1,2,4-Trimethylbenzene	2.081	1.870	0.010	-10.2	20.0
sec-Butylbenzene	2.461	2.183	0.010	-11.3	20.0
4-Isopropyltoluene	2.087	1.884	0.010	-9.7	20.0
1,3-Dichlorobenzene	1.309	1.153	0.010	-11.9	20.0
1,4-Dichlorobenzene	1.486	1.280	0.010	-13.9	20.0
n-Butylbenzene	1.876	1.744	0.100	-7.0	20.0
1,2-Dichlorobenzene	1.354	1.220	0.010	-10.0	20.0
1,2-Dibromo-3-chloropropane	0.171	0.167	0.010	-2.5	20.0
1,2,4-Trichlorobenzene	0.810	0.764	0.010	-5.6	20.0
Hexachlorobutadiene	0.306	0.272	0.010	-11.3	20.0
1,2,3-Trichlorobenzene	0.731	0.683	0.010	-6.6	20.0
Naphthalene	2.240	2.228	0.010	-0.5	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/28/2012 Time: 12:57

Lab File ID: V6I9329.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VICV0506Z Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.294	0.295	0.010	0.3	20.0
1,2-Dichloroethane-d4	0.063	0.064	0.010	1.0	20.0
Toluene-d8	1.183	1.194	0.010	0.9	20.0
Bromofluorobenzene	0.519	0.516	0.010	-0.6	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/28/2012 Time: 14:07

Lab File ID: V6I9332.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VSTD0506A Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.195	0.185	0.100	-5.6	20.0
Chloromethane	0.411	0.410	0.010	-0.3	20.0
Vinyl chloride	0.361	0.335	0.010	-7.2	20.0
Bromomethane	0.255	0.231	0.010	-9.6	20.0
Chloroethane	0.207	0.186	0.010	-10.2	20.0
Trichlorofluoromethane	0.472	0.466	0.010	-1.4	20.0
1,1-Dichloroethene	0.288	0.326	0.100	13.4	20.0
Acetone	0.036	0.047	0.010	30.2	20.0
Iodomethane	0.624	0.548	0.010	-12.2	20.0
Carbon disulfide	1.185	1.138	0.010	-4.0	20.0
Methylene chloride	0.392	0.321	0.010	-17.9	20.0
trans-1,2-Dichloroethene	0.282	0.273	0.010	-3.0	20.0
Methyl tert-butyl ether	0.781	0.789	0.010	1.0	20.0
1,1-Dichloroethane	0.487	0.462	0.010	-5.2	20.0
Vinyl acetate	0.918	0.911	0.010	-0.9	20.0
2-Butanone	0.038	0.041	0.010	8.2	20.0
cis-1,2-Dichloroethene	0.281	0.277	0.010	-1.4	20.0
2,2-Dichloropropane	0.239	0.220	0.010	-8.2	20.0
Bromochloromethane	0.154	0.152	0.010	-1.1	20.0
Chloroform	0.474	0.457	0.010	-3.7	20.0
1,1,1-Trichloroethane	0.409	0.364	0.010	-11.0	20.0
1,1-Dichloropropene	0.136	0.132	0.010	-2.8	20.0
Carbon tetrachloride	0.422	0.385	0.010	-8.7	20.0
1,2-Dichloroethane	0.395	0.387	0.010	-2.0	20.0
Benzene	0.967	0.928	0.010	-4.0	20.0
Trichloroethene	0.298	0.272	0.010	-8.6	20.0
1,2-Dichloropropane	0.261	0.256	0.010	-2.0	20.0
Dibromomethane	0.178	0.175	0.010	-1.9	20.0
Bromodichloromethane	0.373	0.360	0.010	-3.4	20.0
cis-1,3-Dichloropropene	0.413	0.405	0.010	-1.9	20.0
4-Methyl-2-pentanone	0.304	0.293	0.010	-3.4	20.0
Toluene	1.054	1.009	0.010	-4.2	20.0
trans-1,3-Dichloropropene	0.374	0.383	0.010	2.5	20.0
1,1,2-Trichloroethane	0.240	0.238	0.010	-0.9	20.0
1,3-Dichloropropane	0.478	0.478	0.010	0.2	20.0
Tetrachloroethene	0.313	0.277	0.010	-11.4	20.0
2-Hexanone	0.255	0.274	0.010	7.4	20.0
Dibromochloromethane	0.398	0.404	0.010	1.4	20.0
1,2-Dibromoethane	0.337	0.350	0.010	3.8	20.0
Chlorobenzene	0.886	0.869	0.010	-2.0	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/28/2012 Time: 14:07

Lab File ID: V6I9332.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VSTD0506A Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.369	0.357	0.010	-3.3	20.0
Ethylbenzene	0.466	0.454	0.010	-2.5	20.0
m,p-Xylene	0.570	0.547	0.010	-4.1	20.0
o-Xylene	0.566	0.544	0.010	-4.0	20.0
Xylene (Total)	0.569	0.546	0.010	-4.1	20.0
Styrene	0.976	0.938	0.010	-3.9	20.0
Bromoform	0.292	0.302	0.010	3.5	20.0
Isopropylbenzene	1.375	1.336	0.300	-2.9	20.0
1,1,2,2-Tetrachloroethane	1.213	1.200	0.300	-1.1	20.0
Bromobenzene	0.721	0.702	0.010	-2.6	20.0
1,2,3-Trichloropropane	0.971	0.816	0.010	-16.0	20.0
n-Propylbenzene	0.683	0.645	0.010	-5.5	20.0
2-Chlorotoluene	0.654	0.606	0.010	-7.2	20.0
1,3,5-Trimethylbenzene	2.043	1.930	0.010	-5.6	20.0
4-Chlorotoluene	0.704	0.658	0.010	-6.6	20.0
tert-Butylbenzene	2.368	1.982	0.010	-16.3	20.0
1,2,4-Trimethylbenzene	2.081	1.979	0.010	-4.9	20.0
sec-Butylbenzene	2.461	2.305	0.010	-6.4	20.0
4-Isopropyltoluene	2.087	1.982	0.010	-5.1	20.0
1,3-Dichlorobenzene	1.309	1.254	0.010	-4.2	20.0
1,4-Dichlorobenzene	1.486	1.381	0.010	-7.1	20.0
n-Butylbenzene	1.876	1.832	0.100	-2.3	20.0
1,2-Dichlorobenzene	1.354	1.315	0.010	-2.9	20.0
1,2-Dibromo-3-chloropropane	0.171	0.165	0.010	-3.2	20.0
1,2,4-Trichlorobenzene	0.810	0.800	0.010	-1.2	20.0
Hexachlorobutadiene	0.306	0.279	0.010	-8.8	20.0
1,2,3-Trichlorobenzene	0.731	0.706	0.010	-3.5	20.0
Naphthalene	2.240	2.202	0.010	-1.7	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/28/2012 Time: 14:07

Lab File ID: V6I9332.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VSTD0506A Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.294	0.292	0.010	-0.6	20.0
1,2-Dichloroethane-d4	0.063	0.065	0.010	3.1	20.0
Toluene-d8	1.183	1.181	0.010	-0.2	20.0
Bromofluorobenzene	0.519	0.521	0.010	0.4	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/29/2012 Time: 9:50

Lab File ID: V6I9362.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VSTD0506B Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.195	0.198	0.100	1.1	20.0
Chloromethane	0.411	0.464	0.010	13.0	20.0
Vinyl chloride	0.361	0.391	0.010	8.3	20.0
Bromomethane	0.255	0.268	0.010	4.9	20.0
Chloroethane	0.207	0.223	0.010	7.7	20.0
Trichlorofluoromethane	0.472	0.529	0.010	12.1	20.0
1,1-Dichloroethene	0.288	0.192	0.100	-33.2	20.0
Acetone	0.036	0.026	0.010	-27.2	20.0
Iodomethane	0.624	0.660	0.010	5.7	20.0
Carbon disulfide	1.185	1.293	0.010	9.1	20.0
Methylene chloride	0.392	0.356	0.010	-9.2	20.0
trans-1,2-Dichloroethene	0.282	0.311	0.010	10.4	20.0
Methyl tert-butyl ether	0.781	0.811	0.010	3.9	20.0
1,1-Dichloroethane	0.487	0.538	0.010	10.5	20.0
Vinyl acetate	0.918	0.993	0.010	8.1	20.0
2-Butanone	0.038	0.033	0.010	-13.5	20.0
cis-1,2-Dichloroethene	0.281	0.317	0.010	12.9	20.0
2,2-Dichloropropane	0.239	0.265	0.010	10.5	20.0
Bromochloromethane	0.154	0.172	0.010	12.0	20.0
Chloroform	0.474	0.526	0.010	10.8	20.0
1,1,1-Trichloroethane	0.409	0.418	0.010	2.1	20.0
1,1-Dichloropropene	0.136	0.152	0.010	12.2	20.0
Carbon tetrachloride	0.422	0.448	0.010	6.1	20.0
1,2-Dichloroethane	0.395	0.439	0.010	11.1	20.0
Benzene	0.967	1.069	0.010	10.5	20.0
Trichloroethene	0.298	0.316	0.010	6.2	20.0
1,2-Dichloropropane	0.261	0.295	0.010	13.1	20.0
Dibromomethane	0.178	0.195	0.010	9.4	20.0
Bromodichloromethane	0.373	0.407	0.010	9.2	20.0
cis-1,3-Dichloropropene	0.413	0.473	0.010	14.6	20.0
4-Methyl-2-pentanone	0.304	0.273	0.010	-10.1	20.0
Toluene	1.054	1.164	0.010	10.4	20.0
trans-1,3-Dichloropropene	0.374	0.437	0.010	16.9	20.0
1,1,2-Trichloroethane	0.240	0.256	0.010	6.8	20.0
1,3-Dichloropropane	0.478	0.509	0.010	6.6	20.0
Tetrachloroethene	0.313	0.307	0.010	-1.8	20.0
2-Hexanone	0.255	0.209	0.010	-18.0	20.0
Dibromochloromethane	0.398	0.427	0.010	7.1	20.0
1,2-Dibromoethane	0.337	0.352	0.010	4.4	20.0
Chlorobenzene	0.886	0.964	0.010	8.8	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/29/2012 Time: 9:50

Lab File ID: V6I9362.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VSTD0506B Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.369	0.390	0.010	5.7	20.0
Ethylbenzene	0.466	0.505	0.010	8.4	20.0
m,p-Xylene	0.570	0.612	0.010	7.3	20.0
o-Xylene	0.566	0.615	0.010	8.5	20.0
Xylene (Total)	0.569	0.613	0.010	7.7	20.0
Styrene	0.976	1.050	0.010	7.5	20.0
Bromoform	0.292	0.304	0.010	4.1	20.0
Isopropylbenzene	1.375	1.480	0.300	7.6	20.0
1,1,2,2-Tetrachloroethane	1.213	1.248	0.300	2.9	20.0
Bromobenzene	0.721	0.753	0.010	4.5	20.0
1,2,3-Trichloropropane	0.971	0.868	0.010	-10.6	20.0
n-Propylbenzene	0.683	0.703	0.010	2.9	20.0
2-Chlorotoluene	0.654	0.668	0.010	2.2	20.0
1,3,5-Trimethylbenzene	2.043	2.085	0.010	2.0	20.0
4-Chlorotoluene	0.704	0.731	0.010	3.8	20.0
tert-Butylbenzene	2.368	2.170	0.010	-8.4	20.0
1,2,4-Trimethylbenzene	2.081	2.141	0.010	2.9	20.0
sec-Butylbenzene	2.461	2.490	0.010	1.2	20.0
4-Isopropyltoluene	2.087	2.170	0.010	4.0	20.0
1,3-Dichlorobenzene	1.309	1.343	0.010	2.6	20.0
1,4-Dichlorobenzene	1.486	1.480	0.010	-0.4	20.0
n-Butylbenzene	1.876	1.996	0.100	6.4	20.0
1,2-Dichlorobenzene	1.354	1.369	0.010	1.1	20.0
1,2-Dibromo-3-chloropropane	0.171	0.143	0.010	-16.3	20.0
1,2,4-Trichlorobenzene	0.810	0.834	0.010	2.9	20.0
Hexachlorobutadiene	0.306	0.320	0.010	4.5	20.0
1,2,3-Trichlorobenzene	0.731	0.691	0.010	-5.6	20.0
Naphthalene	2.240	1.948	0.010	-13.0	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Instrument ID: V6 Calibration Date: 08/29/2012 Time: 9:50

Lab File ID: V6I9362.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VSTD0506B Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.294	0.301	0.010	2.4	20.0
1,2-Dichloroethane-d4	0.063	0.068	0.010	8.2	20.0
Toluene-d8	1.183	1.168	0.010	-1.2	20.0
Bromofluorobenzene	0.519	0.504	0.010	-2.9	20.0

Data File: \\avogadro\organics\V6.i\120816.B\V6I9071.D
Report Date: 17-Aug-2012 10:31

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120816.B\V6I9071.D
Lab Smp Id: VICV0506R Client Smp ID: VICV0506R
Inj Date : 16-AUG-2012 20:52
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VICV0506R,VICV0506R
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120816.B\v68260Gadd-6lvl.m
Meth Date : 17-Aug-2012 10:30 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
Als bottle: 22 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.603	1.603 (0.313)		94144	50.0000	43
2 Freon114	85	1.697	1.697 (0.331)		153182	50.0000	42
3 Chloromethane	50	1.768	1.768 (0.345)		309943	50.0000	46
4 Vinyl Chloride	62	1.863	1.863 (0.363)		260651	50.0000	49
5 Bromomethane	94	2.135	2.135 (0.416)		166584	50.0000	46(Q)
6 Chloroethane	64	2.218	2.218 (0.433)		164450	50.0000	48(Q)
7 Trichlorofluoromethane	101	2.407	2.407 (0.469)		336844	50.0000	46
126 Ethanol	46	2.538	2.538 (0.495)		48963	5000.00	8200(AQ)
8 Ether	59	2.608	2.608 (0.509)		204732	50.0000	50
9 Acrolein	56	2.727	2.727 (0.532)		131995	250.000	270(A)
10 1,1-Dichloroethene	96	2.821	2.821 (0.550)		252745	50.0000	50
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.810	2.810 (0.548)		202568	50.0000	45
12 Acetone	58	2.845	2.845 (0.555)		33208	50.0000	57
13 Iodomethane	142	2.952	2.952 (0.576)		490316	50.0000	52
14 Carbon Disulfide	76	2.999	2.999 (0.585)		885626	50.0000	49
15 Acetonitrile	41	3.070	3.070 (0.599)		478551	500.000	470(A)
16 Allyl Chloride	39	3.070	3.070 (0.599)		244299	50.0000	49(Q)
17 Methyl Acetate	43	3.082	3.082 (0.601)		294135	50.0000	51
18 Methylene Chloride	84	3.188	3.188 (0.622)		276288	50.0000	50
19 tert-Butanol	59	3.236	3.236 (0.631)		61918	100.000	99
20 Acrylonitrile	53	3.366	3.366 (0.656)		117397	50.0000	52
21 trans-1,2-Dichloroethene	96	3.378	3.378 (0.659)		244280	50.0000	51
22 Methyl tert-butyl ether	73	3.366	3.366 (0.656)		716999	50.0000	49

Data File: \\avogadro\organics\V6.i\120816.B\V6I9071.D
Report Date: 17-Aug-2012 10:31

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.709	3.709	(0.723)	433688		50.0000	49
24 Vinyl acetate	43	3.733	3.733	(0.728)	893013		50.0000	52
25 Diisopropyl Ether	45	3.733	3.733	(0.728)	852713		50.0000	51
26 2-Chloro-1,3-Butadiene	53	3.780	3.780	(0.737)	370114		50.0000	51
27 Ethyl tert-butyl ether	59	4.017	4.017	(0.783)	777386		50.0000	50
29 2,2-Dichloropropane	77	4.170	4.170	(0.813)	173325		50.0000	46
28 cis-1,2-Dichloroethene	96	4.170	4.170	(0.813)	260048		50.0000	48(Q)
30 2-Butanone	72	4.170	4.170	(0.813)	34403		50.0000	48(Q)
32 Propionitrile	54	4.230	4.230	(0.825)	440820		500.000	540(A)
33 Methacrylonitrile	41	4.348	4.348	(0.848)	352045		100.000	100
34 Bromochloromethane	128	4.372	4.372	(0.852)	140913		50.0000	52
31 Tetrahydrofuran	72	4.407	4.407	(0.859)	73795		100.000	98
35 Chloroform	83	4.419	4.419	(0.862)	419268		50.0000	51
\$ 36 Dibromofluoromethane	113	4.549	4.549	(0.887)	279223		50.0000	50
37 1,1,1-Trichloroethane	97	4.585	4.585	(0.894)	375506		50.0000	52
38 Cyclohexane	56	4.632	4.632	(0.903)	325378		50.0000	40
39 1,1-Dichloropropene	110	4.715	4.715	(0.919)	117588		50.0000	48
40 Carbon Tetrachloride	117	4.727	4.727	(0.922)	365522		50.0000	50
41 Isobutyl Alcohol	43	4.774	4.774	(0.931)	273556		1000.00	1000(A)
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.845	(0.945)	65393		50.0000	52
43 Benzene	78	4.892	4.892	(0.954)	865488		50.0000	50
44 1,2-Dichloroethane	62	4.904	4.904	(0.956)	357147		50.0000	50
45 tert-Amyl methyl ether	73	4.963	4.963	(0.968)	699594		50.0000	49
M 50 1,2-Dichloroethene (Total)	96				504328		100.000	100
* 46 Fluorobenzene	96	5.129	5.129	(1.000)	979012		50.0000	
47 Trichloroethene	130	5.448	5.448	(1.062)	260093		50.0000	50
48 Methylcyclohexane	83	5.626	5.626	(1.097)	258052		50.0000	43
49 1,2-Dichloropropane	63	5.661	5.661	(1.104)	250037		50.0000	52(Q)
51 Methyl Methacrylate	69	5.732	5.732	(1.118)	208421		50.0000	50
52 Dibromomethane	93	5.780	5.780	(1.127)	160241		50.0000	51
53 1,4-Dioxane	88	5.780	5.780	(1.127)	40692		1000.00	1100(A)
54 Bromodichloromethane	83	5.910	5.910	(1.152)	341252		50.0000	51
55 2-Chloroethyl vinyl ether	63	6.655	6.655	(1.298)	83623		50.0000	48(Q)
56 cis-1,3-Dichloropropene	75	6.324	6.324	(1.233)	391440		50.0000	52
57 4-Methyl-2-pentanone	43	6.466	6.466	(1.261)	316041		50.0000	50
\$ 58 Toluene-d8	98	6.596	6.596	(0.814)	956046		50.0000	50
59 Toluene	91	6.655	6.655	(1.298)	955210		50.0000	51
60 trans-1,3-Dichloropropene	75	6.880	6.880	(1.341)	372603		50.0000	52
61 Ethyl Methacrylate	69	6.951	6.951	(1.355)	295531		50.0000	52
62 1,1,2-Trichloroethane	97	7.069	7.069	(1.378)	228467		50.0000	51
63 Tetrachloroethene	164	7.211	7.211	(0.890)	239203		50.0000	53
64 1,3-Dichloropropane	76	7.235	7.235	(0.893)	368718		50.0000	52
65 2-Hexanone	43	7.318	7.318	(0.904)	218496		50.0000	51(Q)
66 Dibromochloromethane	129	7.484	7.484	(0.924)	309361		50.0000	52
67 1,2-Dibromoethane	107	7.614	7.614	(0.940)	272421		50.0000	54
69 1-Chlorohexane	91	8.087	8.087	(0.999)	291558		50.0000	47
* 68 Chlorobenzene-d5	117	8.099	8.099	(1.000)	789454		50.0000	
70 Chlorobenzene	112	8.134	8.134	(1.004)	685314		50.0000	52
71 1,1,1,2-Tetrachloroethane	131	8.217	8.217	(1.015)	279578		50.0000	50
72 Ethylbenzene	106	8.241	8.241	(1.018)	350243		50.0000	50
73 m,p-Xylene	106	8.371	8.371	(1.034)	863231		100.000	100
74 o-Xylene	106	8.821	8.821	(1.089)	432067		50.0000	50
75 Styrene	104	8.833	8.833	(1.091)	750064		50.0000	51
76 Bromoform	173	9.057	9.057	(1.118)	237286		50.0000	54

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.235	9.235	(1.140)	1045994		50.0000	49
78 trans-1,4-Dichloro-2-butene	75	9.318	9.318	(1.150)	103518		50.0000	50(Q)
\$ 79 Bromofluorobenzene	95	9.401	9.401	(1.161)	411784		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.566	9.566	(0.901)	571011		50.0000	53
81 Bromobenzene	156	9.578	9.578	(0.902)	329676		50.0000	51
82 1,2,3-Trichloropropane	75	9.614	9.614	(0.905)	418296		50.0000	47
83 n-Propylbenzene	120	9.685	9.685	(0.912)	301882		50.0000	50
84 2-Chlorotoluene	126	9.779	9.779	(0.921)	290085		50.0000	50
85 1,3,5-Trimethylbenzene	105	9.874	9.874	(0.930)	902741		50.0000	48
86 4-Chlorotoluene	126	9.898	9.898	(0.932)	314081		50.0000	50
M 94 Xylene (Total)	106				1295298		150.000	150
87 tert-Butylbenzene	119	10.584	10.584	(0.997)	913872		50.0000	48
88 1,2,4-Trimethylbenzene	105	10.264	10.264	(0.967)	924411		50.0000	49
89 sec-Butylbenzene	105	10.442	10.442	(0.983)	1044709		50.0000	48
90 1,3-Dichlorobenzene	146	10.548	10.548	(0.993)	585981		50.0000	49
91 4-Isopropyltoluene	119	10.584	10.584	(0.997)	913872		50.0000	48
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619	(1.000)	460126		50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.643	(1.002)	637285		50.0000	49
95 n-Butylbenzene	91	10.986	10.986	(1.035)	801347		50.0000	49
96 1,2-Dichlorobenzene	146	11.010	11.010	(1.037)	606168		50.0000	50
97 Hexachloroethane	117	11.246	11.246	(1.059)	202564		50.0000	48
98 1,2-Dibromo-3-chloropropane	75	11.743	11.743	(1.106)	83745		50.0000	50
141 1,3,5-Trichlorobenzene	182	12.489	12.489	(2.435)	347715		50.0000	53(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.489	(1.176)	358340		50.0000	51
100 Hexachlorobutadiene	225	12.631	12.631	(1.189)	125464		50.0000	51
101 Naphthalene	128	12.714	12.714	(1.197)	1030114		50.0000	51
102 1,2,3-Trichlorobenzene	180	12.915	12.915	(1.216)	314630		50.0000	50

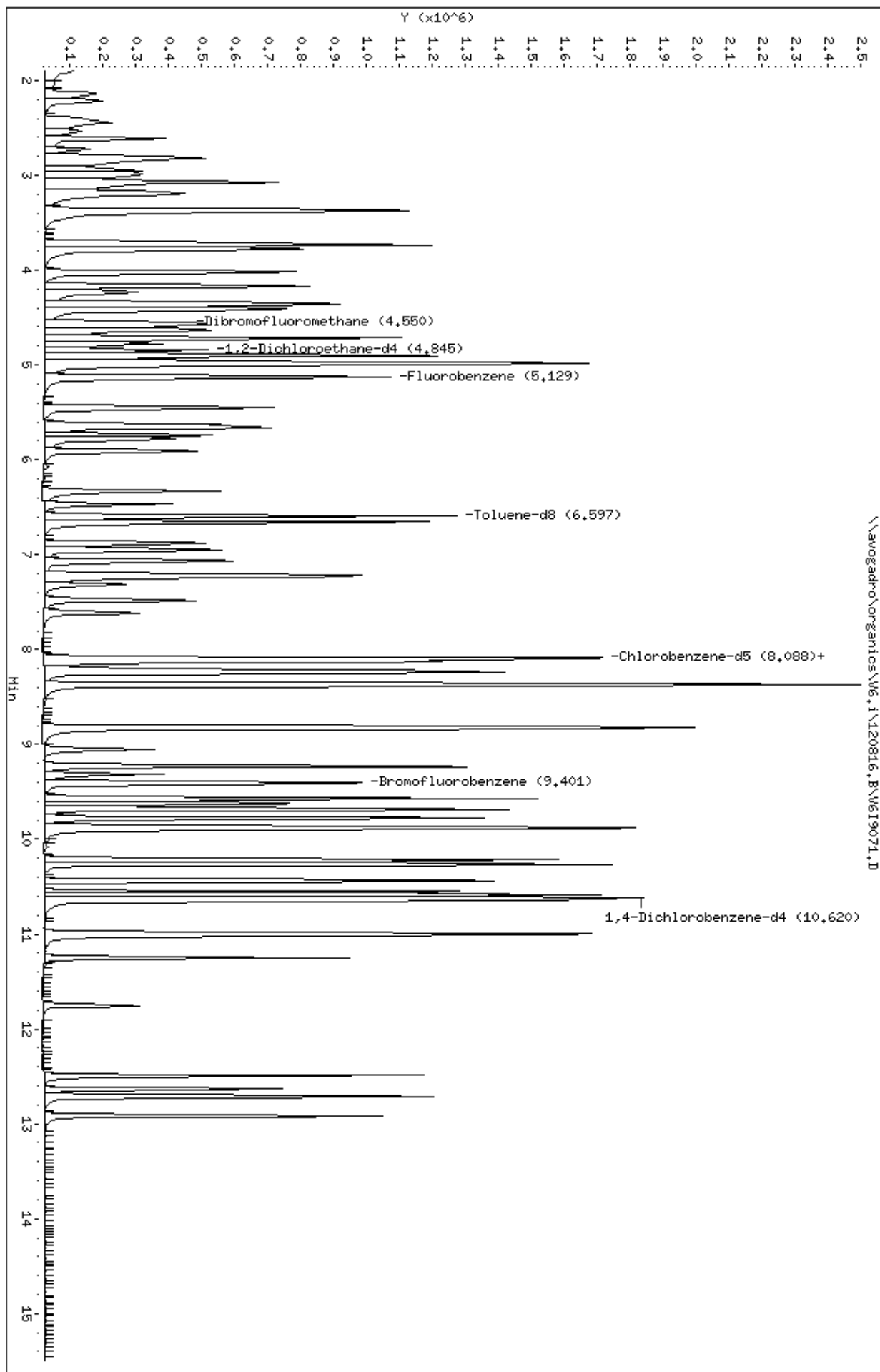
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120816.B\W6I9071.D
Date : 16-AUG-2012 20:52
Client ID: VICV0506R
Sample Info: 5HL,VICV0506R,VICV0506R
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120823.B\V6I9212.D
Report Date: 24-Aug-2012 10:53

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120823.B\V6I9212.D
Lab Smp Id: VSTD0506W Client Smp ID: VSTD0506W
Inj Date : 23-AUG-2012 10:03
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0506W,VSTD0506W
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120823.B\v68260Gadd-6lvl.m
Meth Date : 24-Aug-2012 10:51 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.591	1.592 (0.310)		110319	50.0000	52
2 Freon114	85	1.698	1.699 (0.331)		185346	50.0000	53
3 Chloromethane	50	1.769	1.770 (0.345)		261547	50.0000	41
4 Vinyl Chloride	62	1.852	1.853 (0.361)		230601	50.0000	46
5 Bromomethane	94	2.136	2.137 (0.416)		160979	50.0000	46(Q)
6 Chloroethane	64	2.218	2.219 (0.433)		146622	50.0000	44(Q)
7 Trichlorofluoromethane	101	2.408	2.397 (0.469)		382677	50.0000	54
126 Ethanol	46	2.538	2.539 (0.495)		95057	5000.00	17000(AQ)
8 Ether	59	2.609	2.610 (0.509)		168577	50.0000	43(Q)
9 Acrolein	56	2.727	2.728 (0.532)		65588	250.000	130
10 1,1-Dichloroethene	96	2.810	2.811 (0.548)		253365	50.0000	52
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.810	2.799 (0.548)		244532	50.0000	56
12 Acetone	58	2.834	2.835 (0.552)		24220	50.0000	43
13 Iodomethane	142	2.952	2.953 (0.576)		439343	50.0000	49
14 Carbon Disulfide	76	2.988	2.989 (0.582)		530130	50.0000	31
15 Acetonitrile	41	3.070	3.071 (0.599)		621284	500.000	630(A)
16 Allyl Chloride	39	3.070	3.071 (0.599)		308402	50.0000	64(Q)
17 Methyl Acetate	43	3.082	3.083 (0.601)		224031	50.0000	40
18 Methylene Chloride	84	3.165	3.166 (0.617)		258199	50.0000	49
19 tert-Butanol	59	3.236	3.237 (0.631)		58116	100.000	97
20 Acrylonitrile	53	3.366	3.355 (0.656)		93761	50.0000	43
21 trans-1,2-Dichloroethene	96	3.378	3.379 (0.659)		219960	50.0000	48
22 Methyl tert-butyl ether	73	3.366	3.367 (0.656)		613470	50.0000	44

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.697	3.699 (0.721)		396020		50.0000	47
24 Vinyl acetate	43	3.733	3.722 (0.728)		736360		50.0000	44
25 Diisopropyl Ether	45	3.733	3.734 (0.728)		709395		50.0000	44
26 2-Chloro-1,3-Butadiene	53	3.768	3.770 (0.735)		333805		50.0000	48
27 Ethyl tert-butyl ether	59	4.017	4.018 (0.783)		673750		50.0000	45
29 2,2-Dichloropropane	77	4.159	4.160 (0.811)		197486		50.0000	55
28 cis-1,2-Dichloroethene	96	4.159	4.160 (0.811)		228024		50.0000	44(Q)
30 2-Butanone	72	4.171	4.172 (0.813)		25873		50.0000	38
32 Propionitrile	54	4.230	4.231 (0.825)		341460		500.000	440(A)
33 Methacrylonitrile	41	4.348	4.349 (0.848)		250323		100.000	78
34 Bromochloromethane	128	4.360	4.361 (0.850)		128521		50.0000	49
31 Tetrahydrofuran	72	4.396	4.397 (0.857)		57593		100.000	80
35 Chloroform	83	4.419	4.409 (0.862)		387013		50.0000	49
\$ 36 Dibromofluoromethane	113	4.549	4.551 (0.887)		279072		50.0000	52
37 1,1,1-Trichloroethane	97	4.573	4.574 (0.892)		327317		50.0000	48
38 Cyclohexane	56	4.620	4.622 (0.901)		353173		50.0000	45
39 1,1-Dichloropropene	110	4.715	4.716 (0.919)		112279		50.0000	48
40 Carbon Tetrachloride	117	4.715	4.716 (0.919)		348670		50.0000	50
41 Isobutyl Alcohol	43	4.774	4.775 (0.931)		218251		1000.00	850(A)
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.846 (0.945)		59361		50.0000	49
43 Benzene	78	4.893	4.894 (0.954)		773989		50.0000	47
44 1,2-Dichloroethane	62	4.904	4.906 (0.956)		332010		50.0000	49
45 tert-Amyl methyl ether	73	4.964	4.965 (0.968)		611754		50.0000	44
M 50 1,2-Dichloroethene (Total)	96				447984		100.000	(a)
* 46 Fluorobenzene	96	5.129	5.130 (1.000)		941114		50.0000	
47 Trichloroethene	130	5.449	5.450 (1.062)		244617		50.0000	49
48 Methylcyclohexane	83	5.626	5.627 (1.097)		292534		50.0000	51
49 1,2-Dichloropropane	63	5.662	5.651 (1.104)		218307		50.0000	47(Q)
51 Methyl Methacrylate	69	5.733	5.734 (1.118)		170498		50.0000	42
52 Dibromomethane	93	5.768	5.769 (1.125)		146982		50.0000	48
53 1,4-Dioxane	88	5.780	5.781 (1.127)		40555		1000.00	1100(A)
54 Bromodichloromethane	83	5.898	5.899 (1.150)		313380		50.0000	49
55 2-Chloroethyl vinyl ether	63	6.656	6.657 (1.298)		80204		50.0000	47(Q)
56 cis-1,3-Dichloropropene	75	6.324	6.325 (1.233)		354706		50.0000	49
57 4-Methyl-2-pentanone	43	6.466	6.467 (1.261)		229287		50.0000	38
\$ 58 Toluene-d8	98	6.597	6.586 (0.814)		903666		50.0000	50
59 Toluene	91	6.656	6.657 (1.298)		847698		50.0000	47
60 trans-1,3-Dichloropropene	75	6.881	6.870 (1.341)		333065		50.0000	48
61 Ethyl Methacrylate	69	6.940	6.941 (1.353)		239710		50.0000	43
62 1,1,2-Trichloroethane	97	7.058	7.059 (1.376)		195461		50.0000	45
63 Tetrachloroethene	164	7.212	7.213 (0.890)		203787		50.0000	47
64 1,3-Dichloropropane	76	7.236	7.237 (0.893)		318870		50.0000	47
65 2-Hexanone	43	7.306	7.308 (0.902)		151335		50.0000	37(Q)
66 Dibromochloromethane	129	7.484	7.473 (0.924)		279852		50.0000	49
67 1,2-Dibromoethane	107	7.614	7.603 (0.940)		232764		50.0000	48
69 1-Chlorohexane	91	8.087	8.089 (0.999)		285868		50.0000	48
* 68 Chlorobenzene-d5	117	8.099	8.100 (1.000)		753944		50.0000	
70 Chlorobenzene	112	8.123	8.124 (1.003)		600638		50.0000	48
71 1,1,1,2-Tetrachloroethane	131	8.206	8.207 (1.013)		255110		50.0000	48
72 Ethylbenzene	106	8.241	8.242 (1.018)		321953		50.0000	48
73 m,p-Xylene	106	8.371	8.361 (1.034)		767973		100.000	95
74 o-Xylene	106	8.809	8.810 (1.088)		387251		50.0000	47
75 Styrene	104	8.833	8.834 (1.091)		657839		50.0000	47
76 Bromoform	173	9.046	9.047 (1.117)		203645		50.0000	49

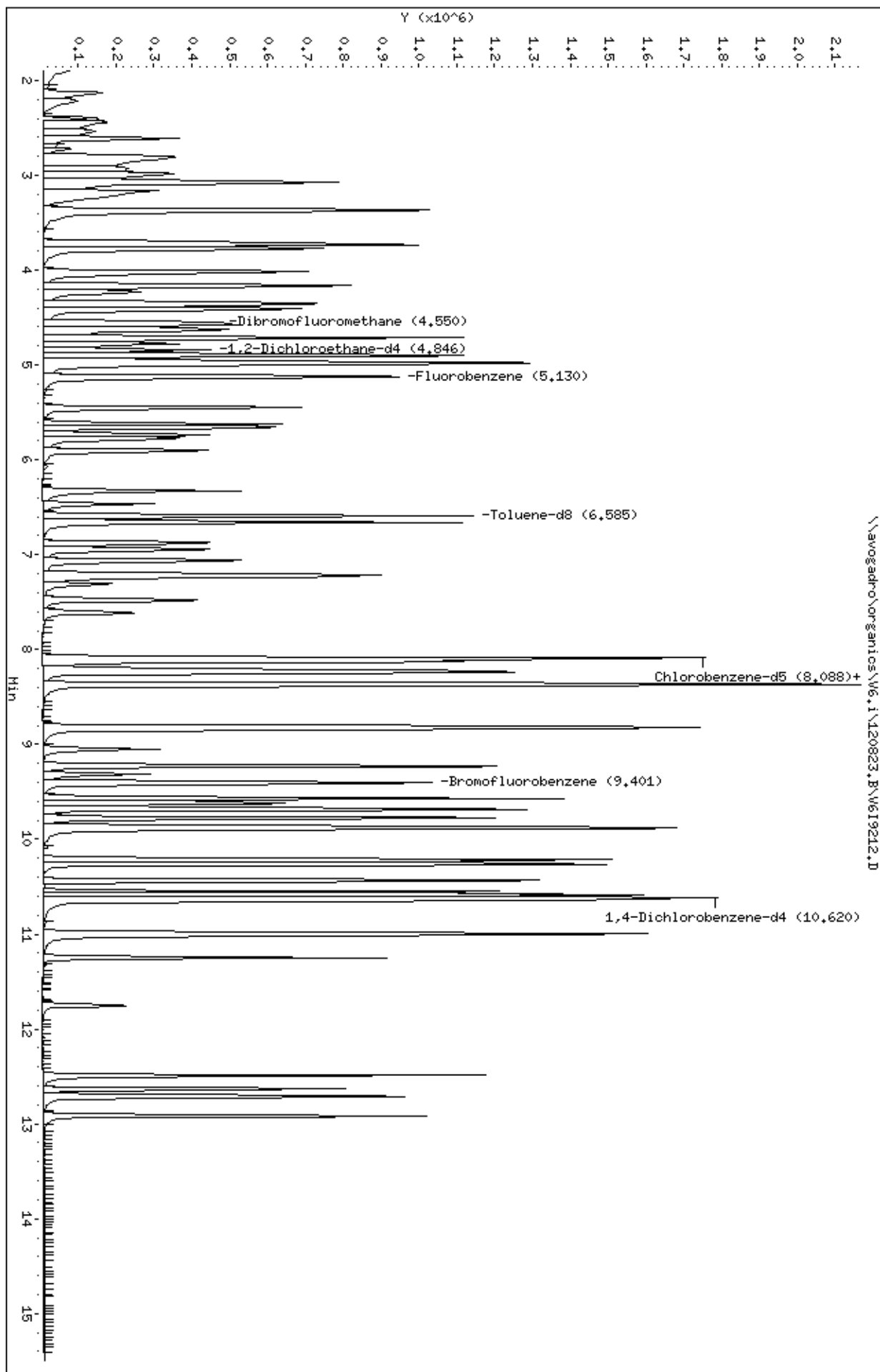
Compounds	QUANT SIG	AMOUNTS					
		CAL-AMT	ON-COL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 Isopropylbenzene	105	9.223	9.224 (1.139)		956746	50.0000	47
78 trans-1,4-Dichloro-2-butene	75	9.318	9.307 (1.150)		81914	50.0000	42(Q)
\$ 79 Bromofluorobenzene	95	9.401	9.402 (1.161)		402244	50.0000	51
80 1,1,2,2-Tetrachloroethane	77	9.567	9.568 (0.901)		506898	50.0000	47
81 Bromobenzene	156	9.578	9.568 (0.902)		294896	50.0000	46
82 1,2,3-Trichloropropane	75	9.614	9.615 (0.905)		344490	50.0000	39
83 n-Propylbenzene	120	9.685	9.686 (0.912)		270955	50.0000	45
84 2-Chlorotoluene	126	9.780	9.781 (0.921)		264414	50.0000	46
85 1,3,5-Trimethylbenzene	105	9.874	9.863 (0.930)		824292	50.0000	44
86 4-Chlorotoluene	126	9.898	9.887 (0.932)		277815	50.0000	44
M 94 Xylene (Total)	106				1155224	150.000	(a)
87 tert-Butylbenzene	119	10.584	10.585 (0.997)		860077	50.0000	45
88 1,2,4-Trimethylbenzene	105	10.265	10.266 (0.967)		838783	50.0000	44
89 sec-Butylbenzene	105	10.430	10.431 (0.982)		993507	50.0000	46
90 1,3-Dichlorobenzene	146	10.549	10.550 (0.993)		539242	50.0000	46
91 4-Isopropyltoluene	119	10.584	10.585 (0.997)		860077	50.0000	45
* 92 1,4-Dichlorobenzene-d4	152	10.620	10.621 (1.000)		457182	50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.644 (1.002)		577570	50.0000	45
95 n-Butylbenzene	91	10.986	10.988 (1.035)		770874	50.0000	48
96 1,2-Dichlorobenzene	146	11.010	11.011 (1.037)		551232	50.0000	46
97 Hexachloroethane	117	11.247	11.248 (1.059)		190361	50.0000	45
98 1,2-Dibromo-3-chloropropane	75	11.744	11.745 (1.106)		68098	50.0000	41
141 1,3,5-Trichlorobenzene	182	12.489	12.490 (2.435)		331688	50.0000	52(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.490 (1.176)		354659	50.0000	50
100 Hexachlorobutadiene	225	12.631	12.632 (1.189)		133134	50.0000	54
101 Naphthalene	128	12.714	12.703 (1.197)		864513	50.0000	43
102 1,2,3-Trichlorobenzene	180	12.915	12.916 (1.216)		301972	50.0000	48

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120823.B\W6I9212.D
 Date : 23-AUG-2012 10:03
 Client ID: VSTD0506M
 Sample Info: 5M,VSTD0506M,VSTD0506M
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W6,i
 Operator: AH SRC: AH
 Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120824.B\V6I9252.D
Report Date: 27-Aug-2012 10:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120824.B\V6I9252.D
Lab Smp Id: VSTD0506X Client Smp ID: VSTD0506X
Inj Date : 24-AUG-2012 09:46
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0506X,VSTD0506X
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120824.B\v68260Gadd-6lvl.m
Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.603	1.603 (0.313)		103685	50.0000	51
2 Freon114	85	1.697	1.697 (0.331)		175540	50.0000	53
3 Chloromethane	50	1.768	1.768 (0.345)		268573	50.0000	44
4 Vinyl Chloride	62	1.851	1.851 (0.361)		236444	50.0000	49
5 Bromomethane	94	2.135	2.135 (0.416)		169296	50.0000	50(Q)
6 Chloroethane	64	2.230	2.230 (0.435)		149677	50.0000	47(Q)
7 Trichlorofluoromethane	101	2.407	2.407 (0.469)		384216	50.0000	57
126 Ethanol	46	2.537	2.537 (0.495)		40056	5000.00	7300(AQ)
8 Ether	59	2.608	2.608 (0.509)		169732	50.0000	45
9 Acrolein	56	2.727	2.727 (0.532)		120887	250.000	260(A)
10 1,1-Dichloroethene	96	2.810	2.810 (0.548)		144497	50.0000	31
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.810	2.810 (0.548)		246197	50.0000	59
12 Acetone	58	2.833	2.833 (0.552)		22725	50.0000	42
13 Iodomethane	142	2.952	2.952 (0.576)		452231	50.0000	52
14 Carbon Disulfide	76	2.987	2.987 (0.582)		841417	50.0000	51
15 Acetonitrile	41	3.070	3.070 (0.599)		631042	500.000	670(A)
16 Allyl Chloride	39	3.070	3.070 (0.599)		301646	50.0000	65(Q)
17 Methyl Acetate	43	3.082	3.082 (0.601)		227602	50.0000	43
18 Methylene Chloride	84	3.165	3.165 (0.617)		267316	50.0000	53
19 tert-Butanol	59	3.236	3.236 (0.631)		49760	100.000	87
20 Acrylonitrile	53	3.366	3.366 (0.656)		90316	50.0000	43
21 trans-1,2-Dichloroethene	96	3.378	3.378 (0.659)		226676	50.0000	52
22 Methyl tert-butyl ether	73	3.366	3.366 (0.656)		633447	50.0000	47

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.697	3.697	(0.721)	402613		50.0000	50
24 Vinyl acetate	43	3.733	3.733	(0.728)	742973		50.0000	47
25 Diisopropyl Ether	45	3.733	3.733	(0.728)	729999		50.0000	47
26 2-Chloro-1,3-Butadiene	53	3.768	3.768	(0.735)	336822		50.0000	50
27 Ethyl tert-butyl ether	59	4.016	4.016	(0.783)	686842		50.0000	48
29 2,2-Dichloropropane	77	4.158	4.158	(0.811)	200249		50.0000	58
28 cis-1,2-Dichloroethene	96	4.158	4.158	(0.811)	243235		50.0000	49(Q)
30 2-Butanone	72	4.170	4.170	(0.813)	29134		50.0000	44(Q)
32 Propionitrile	54	4.229	4.229	(0.825)	345187		500.000	460(A)
33 Methacrylonitrile	41	4.348	4.348	(0.848)	256258		100.000	83
34 Bromochloromethane	128	4.360	4.360	(0.850)	132178		50.0000	53
31 Tetrahydrofuran	72	4.395	4.395	(0.857)	60212		100.000	87
35 Chloroform	83	4.419	4.419	(0.862)	401395		50.0000	53
\$ 36 Dibromofluoromethane	113	4.549	4.549	(0.887)	273846		50.0000	54
37 1,1,1-Trichloroethane	97	4.573	4.573	(0.892)	331126		50.0000	50
38 Cyclohexane	56	4.620	4.620	(0.901)	351321		50.0000	47
39 1,1-Dichloropropene	110	4.715	4.715	(0.919)	113723		50.0000	50
40 Carbon Tetrachloride	117	4.715	4.715	(0.919)	348144		50.0000	52
41 Isobutyl Alcohol	43	4.774	4.774	(0.931)	200978		1000.00	810(A)
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.845	(0.945)	60335		50.0000	52
43 Benzene	78	4.892	4.892	(0.954)	800420		50.0000	50
44 1,2-Dichloroethane	62	4.904	4.904	(0.956)	338526		50.0000	52
45 tert-Amyl methyl ether	73	4.963	4.963	(0.968)	629799		50.0000	48
M 50 1,2-Dichloroethene (Total)	96				469911		100.000	100
* 46 Fluorobenzene	96	5.129	5.129	(1.000)	902147		50.0000	
47 Trichloroethene	130	5.448	5.448	(1.062)	245448		50.0000	52
48 Methylcyclohexane	83	5.626	5.626	(1.097)	289993		50.0000	53
49 1,2-Dichloropropane	63	5.661	5.661	(1.104)	224366		50.0000	50(Q)
51 Methyl Methacrylate	69	5.732	5.732	(1.118)	174921		50.0000	45
52 Dibromomethane	93	5.768	5.768	(1.125)	152095		50.0000	52
53 1,4-Dioxane	88	5.780	5.780	(1.127)	32859		1000.00	950(A)
54 Bromodichloromethane	83	5.898	5.898	(1.150)	327974		50.0000	54
55 2-Chloroethyl vinyl ether	63	6.655	6.655	(1.298)	79559		50.0000	49(Q)
56 cis-1,3-Dichloropropene	75	6.324	6.324	(1.233)	365144		50.0000	53
57 4-Methyl-2-pentanone	43	6.466	6.466	(1.261)	233619		50.0000	40
\$ 58 Toluene-d8	98	6.584	6.584	(0.813)	878364		50.0000	50
59 Toluene	91	6.655	6.655	(1.298)	876399		50.0000	50
60 trans-1,3-Dichloropropene	75	6.880	6.880	(1.341)	342939		50.0000	52
61 Ethyl Methacrylate	69	6.951	6.951	(1.355)	245556		50.0000	46
62 1,1,2-Trichloroethane	97	7.058	7.058	(1.376)	203165		50.0000	49
63 Tetrachloroethene	164	7.211	7.211	(0.890)	205655		50.0000	49
64 1,3-Dichloropropane	76	7.235	7.235	(0.893)	342151		50.0000	52
65 2-Hexanone	43	7.306	7.306	(0.902)	165349		50.0000	42(Q)
66 Dibromochloromethane	129	7.483	7.483	(0.924)	287569		50.0000	52
67 1,2-Dibromoethane	107	7.614	7.614	(0.940)	244829		50.0000	52
69 1-Chlorohexane	91	8.087	8.087	(0.999)	285317		50.0000	49
* 68 Chlorobenzene-d5	117	8.099	8.099	(1.000)	736115		50.0000	
70 Chlorobenzene	112	8.122	8.122	(1.003)	612483		50.0000	50
71 1,1,1,2-Tetrachloroethane	131	8.205	8.205	(1.013)	262247		50.0000	51
72 Ethylbenzene	106	8.241	8.241	(1.018)	325037		50.0000	50
73 m,p-Xylene	106	8.371	8.371	(1.034)	785126		100.000	99
74 o-Xylene	106	8.809	8.809	(1.088)	402384		50.0000	50
75 Styrene	104	8.832	8.832	(1.091)	676107		50.0000	50
76 Bromoform	173	9.045	9.045	(1.117)	208127		50.0000	51

Compounds	QUANT SIG	AMOUNTS					
		CAL-AMT	ON-COL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 Isopropylbenzene	105	9.235	9.235	(1.140)	967780	50.0000	49
78 trans-1,4-Dichloro-2-butene	75	9.318	9.318	(1.150)	84888	50.0000	44(Q)
\$ 79 Bromofluorobenzene	95	9.400	9.400	(1.161)	387574	50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.566	9.566	(0.901)	519950	50.0000	50
81 Bromobenzene	156	9.566	9.566	(0.901)	307602	50.0000	50
82 1,2,3-Trichloropropane	75	9.613	9.613	(0.905)	359419	50.0000	42
83 n-Propylbenzene	120	9.684	9.684	(0.912)	282001	50.0000	49
84 2-Chlorotoluene	126	9.779	9.779	(0.921)	264324	50.0000	48
85 1,3,5-Trimethylbenzene	105	9.874	9.874	(0.930)	832994	50.0000	46
86 4-Chlorotoluene	126	9.897	9.897	(0.932)	284880	50.0000	47
M 94 Xylene (Total)	106				1187510	150.000	150
87 tert-Butylbenzene	119	10.584	10.584	(0.997)	853905	50.0000	47
88 1,2,4-Trimethylbenzene	105	10.264	10.264	(0.967)	852129	50.0000	47
89 sec-Butylbenzene	105	10.430	10.430	(0.982)	992444	50.0000	48
90 1,3-Dichlorobenzene	146	10.548	10.548	(0.993)	539108	50.0000	48
91 4-Isopropyltoluene	119	10.584	10.584	(0.997)	853905	50.0000	47
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619	(1.000)	438961	50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.643	(1.002)	587332	50.0000	48
95 n-Butylbenzene	91	10.986	10.986	(1.035)	787832	50.0000	51
96 1,2-Dichlorobenzene	146	11.010	11.010	(1.037)	553739	50.0000	48
97 Hexachloroethane	117	11.246	11.246	(1.059)	193309	50.0000	48
98 1,2-Dibromo-3-chloropropane	75	11.743	11.743	(1.106)	68543	50.0000	43
141 1,3,5-Trichlorobenzene	182	12.489	12.489	(2.435)	323841	50.0000	53(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.489	(1.176)	337082	50.0000	50
100 Hexachlorobutadiene	225	12.631	12.631	(1.189)	124466	50.0000	53
101 Naphthalene	128	12.714	12.714	(1.197)	872488	50.0000	45
102 1,2,3-Trichlorobenzene	180	12.915	12.915	(1.216)	291162	50.0000	48

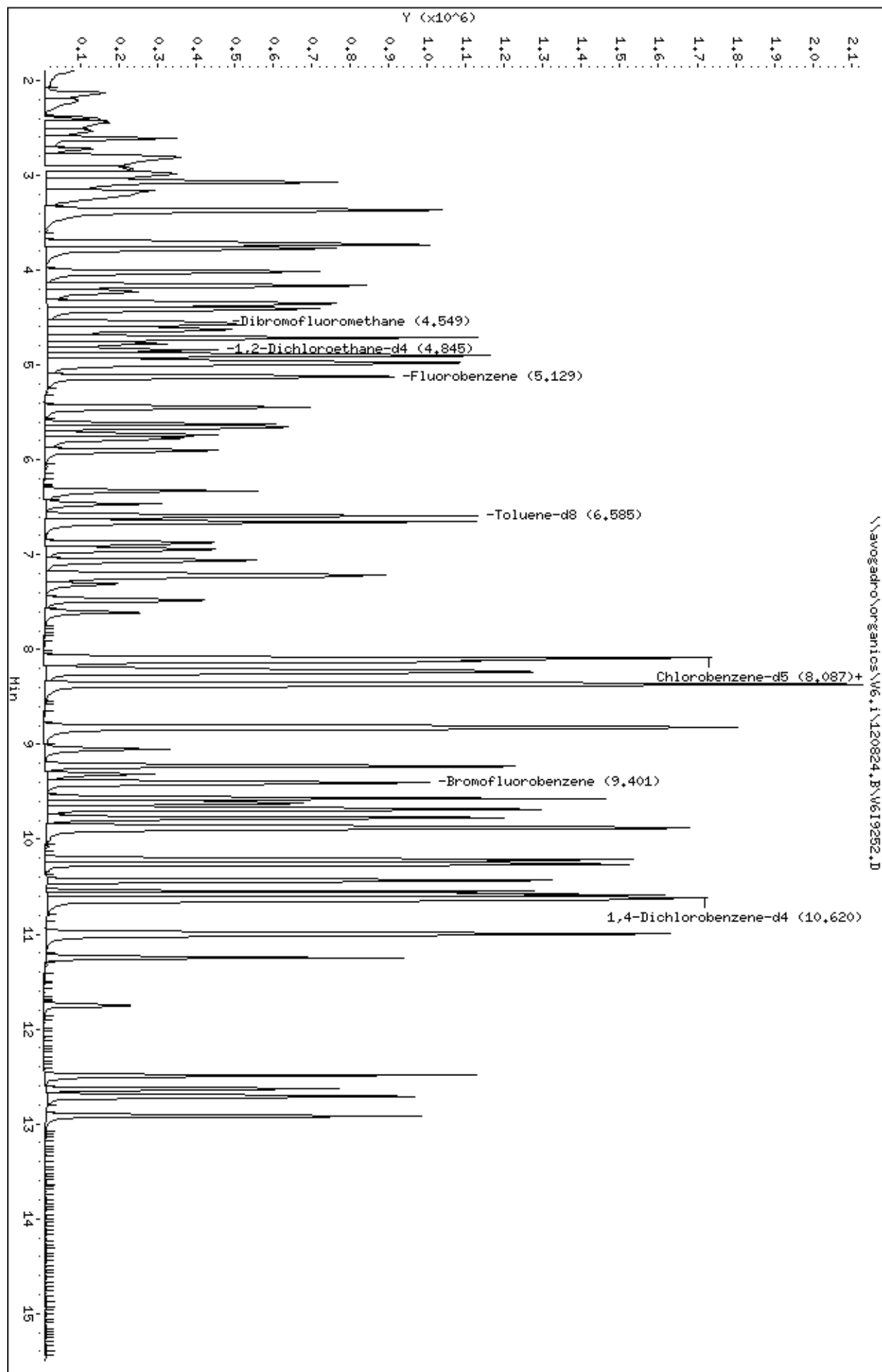
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120824,B\W619252.D
Date : 24-AUG-2012 09:46
Client ID: VSTD0506X
Sample Info: 5HL,VSTD0506X,VSTD0506X
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120828.B\V6I9329.D
Report Date: 28-Aug-2012 16:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828.B\V6I9329.D
Lab Smp Id: VICV0506Z Client Smp ID: VICV0506Z
Inj Date : 28-AUG-2012 12:57
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VICV0506Z,VICV0506Z
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120828.B\v68260Gadd-6lvl.m
Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.590	1.590 (0.310)		141473	50.0000	41
2 Freon114	85	1.697	1.697 (0.331)		274825	50.0000	42
3 Chloromethane	50	1.768	1.768 (0.345)		321367	50.0000	44
4 Vinyl Chloride	62	1.850	1.850 (0.361)		260956	50.0000	41
5 Bromomethane	94	2.134	2.134 (0.416)		181038	50.0000	40
6 Chloroethane	64	2.217	2.217 (0.432)		146528	50.0000	40
7 Trichlorofluoromethane	101	2.407	2.407 (0.469)		357018	50.0000	43
126 Ethanol	46	2.537	2.537 (0.495)		35107	5000.00	4300(A)
8 Ether	59	2.620	2.620 (0.511)		177279	50.0000	47
9 Acrolein	56	2.726	2.726 (0.532)		208904	250.000	230(A)
10 1,1-Dichloroethene	96	2.809	2.809 (0.548)		243964	50.0000	48
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.809	2.809 (0.548)		225506	50.0000	40
12 Acetone	58	2.844	2.844 (0.555)		32948	50.0000	51
13 Iodomethane	142	2.963	2.963 (0.578)		405339	50.0000	37
14 Carbon Disulfide	76	2.998	2.998 (0.585)		876820	50.0000	42
15 Acetonitrile	41	3.069	3.069 (0.599)		579770	500.000	420(A)
16 Allyl Chloride	39	3.069	3.069 (0.599)		285537	50.0000	43
17 Methyl Acetate	43	3.081	3.081 (0.601)		248536	50.0000	50
18 Methylene Chloride	84	3.199	3.199 (0.624)		254902	50.0000	37
19 tert-Butanol	59	3.235	3.235 (0.631)		55692	100.000	100
20 Acrylonitrile	53	3.365	3.365 (0.656)		105805	50.0000	52
21 trans-1,2-Dichloroethene	96	3.377	3.377 (0.659)		209703	50.0000	42
22 Methyl tert-butyl ether	73	3.377	3.377 (0.659)		649709	50.0000	47

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.708	3.708	(0.723)	363944		50.0000	42
24 Vinyl acetate	43	3.732	3.732	(0.728)	755441		50.0000	46
25 Diisopropyl Ether	45	3.732	3.732	(0.728)	693613		50.0000	44
26 2-Chloro-1,3-Butadiene	53	3.779	3.779	(0.737)	305176		50.0000	41
27 Ethyl tert-butyl ether	59	4.028	4.028	(0.785)	659541		50.0000	45
29 2,2-Dichloropropane	77	4.170	4.170	(0.813)	168428		50.0000	40
28 cis-1,2-Dichloroethene	96	4.170	4.170	(0.813)	222741		50.0000	45
30 2-Butanone	72	4.170	4.170	(0.813)	35680		50.0000	53
32 Propionitrile	54	4.229	4.229	(0.825)	364558		500.000	480(A)
33 Methacrylonitrile	41	4.347	4.347	(0.848)	287917		100.000	98
34 Bromochloromethane	128	4.371	4.371	(0.852)	123541		50.0000	45
31 Tetrahydrofuran	72	4.406	4.406	(0.859)	69691		100.000	98
35 Chloroform	83	4.418	4.418	(0.862)	363566		50.0000	43
\$ 36 Dibromofluoromethane	113	4.548	4.548	(0.887)	260744		50.0000	50
37 1,1,1-Trichloroethane	97	4.584	4.584	(0.894)	285325		50.0000	39
38 Cyclohexane	56	4.631	4.631	(0.903)	319991		50.0000	40
39 1,1-Dichloropropene	110	4.714	4.714	(0.919)	100330		50.0000	42
40 Carbon Tetrachloride	117	4.726	4.726	(0.922)	296290		50.0000	40
41 Isobutyl Alcohol	43	4.785	4.785	(0.933)	240421		1000.00	1000(A)
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.844	(0.945)	56315		50.0000	50
43 Benzene	78	4.903	4.903	(0.956)	730878		50.0000	43
44 1,2-Dichloroethane	62	4.915	4.915	(0.958)	318759		50.0000	46
45 tert-Amyl methyl ether	73	4.962	4.962	(0.968)	623188		50.0000	45
M 50 1,2-Dichloroethene (Total)	96				432444		100.000	87
* 46 Fluorobenzene	96	5.128	5.128	(1.000)	883468		50.0000	
47 Trichloroethene	130	5.448	5.448	(1.062)	206382		50.0000	39
48 Methylcyclohexane	83	5.625	5.625	(1.097)	270828		50.0000	43
49 1,2-Dichloropropane	63	5.661	5.661	(1.104)	206917		50.0000	44
51 Methyl Methacrylate	69	5.743	5.743	(1.120)	186910		50.0000	49
52 Dibromomethane	93	5.779	5.779	(1.127)	144763		50.0000	46
53 1,4-Dioxane	88	5.779	5.779	(1.127)	40408		1000.00	1200(A)
54 Bromodichloromethane	83	5.909	5.909	(1.152)	291100		50.0000	44
55 2-Chloroethyl vinyl ether	63	6.655	6.655	(1.298)	72532		50.0000	240(AQ)
56 cis-1,3-Dichloropropene	75	6.335	6.335	(1.235)	331136		50.0000	45
57 4-Methyl-2-pentanone	43	6.465	6.465	(1.261)	255617		50.0000	48
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	854554		50.0000	50
59 Toluene	91	6.655	6.655	(1.298)	790057		50.0000	42
60 trans-1,3-Dichloropropene	75	6.879	6.879	(1.341)	316702		50.0000	48
61 Ethyl Methacrylate	69	6.950	6.950	(1.355)	258599		50.0000	48
62 1,1,2-Trichloroethane	97	7.069	7.069	(1.378)	195955		50.0000	46
63 Tetrachloroethene	164	7.211	7.211	(0.890)	176724		50.0000	39
64 1,3-Dichloropropane	76	7.246	7.246	(0.895)	320464		50.0000	47
65 2-Hexanone	43	7.317	7.317	(0.904)	197172		50.0000	54
66 Dibromochloromethane	129	7.483	7.483	(0.924)	268078		50.0000	47
67 1,2-Dibromoethane	107	7.613	7.613	(0.940)	233252		50.0000	48
69 1-Chlorohexane	91	8.086	8.086	(0.999)	271379		50.0000	42
* 68 Chlorobenzene-d5	117	8.098	8.098	(1.000)	715870		50.0000	
70 Chlorobenzene	112	8.134	8.134	(1.004)	555568		50.0000	44
71 1,1,1,2-Tetrachloroethane	131	8.216	8.216	(1.015)	229409		50.0000	43
72 Ethylbenzene	106	8.240	8.240	(1.018)	286645		50.0000	43
73 m,p-Xylene	106	8.370	8.370	(1.034)	717876		100.000	88
74 o-Xylene	106	8.820	8.820	(1.089)	348184		50.0000	43
75 Styrene	104	8.832	8.832	(1.091)	611990		50.0000	44
76 Bromoform	173	9.057	9.057	(1.118)	208868		50.0000	50

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.234	9.234	(1.140)	882993		50.0000	45
78 trans-1,4-Dichloro-2-butene	75	9.317	9.317	(1.150)	90187		50.0000	49
\$ 79 Bromofluorobenzene	95	9.400	9.400	(1.161)	369042		50.0000	49
80 1,1,2,2-Tetrachloroethane	77	9.565	9.565	(0.901)	477021		50.0000	46
81 Bromobenzene	156	9.577	9.577	(0.902)	277332		50.0000	45
82 1,2,3-Trichloropropane	75	9.613	9.613	(0.905)	375999		50.0000	46
83 n-Propylbenzene	120	9.684	9.684	(0.912)	247081		50.0000	42
84 2-Chlorotoluene	126	9.778	9.778	(0.921)	237603		50.0000	43
85 1,3,5-Trimethylbenzene	105	9.873	9.873	(0.930)	771638		50.0000	44
86 4-Chlorotoluene	126	9.897	9.897	(0.932)	258926		50.0000	43
M 94 Xylene (Total)	106				1066060		150.000	130
87 tert-Butylbenzene	119	10.583	10.583	(0.997)	800919		50.0000	40
88 1,2,4-Trimethylbenzene	105	10.264	10.264	(0.967)	794837		50.0000	45
89 sec-Butylbenzene	105	10.441	10.441	(0.983)	928065		50.0000	44
90 1,3-Dichlorobenzene	146	10.548	10.548	(0.993)	490101		50.0000	44
91 4-Isopropyltoluene	119	10.583	10.583	(0.997)	800919		50.0000	45
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619	(1.000)	425139		50.0000	
93 1,4-Dichlorobenzene	146	10.642	10.642	(1.002)	544021		50.0000	43
95 n-Butylbenzene	91	10.985	10.985	(1.035)	741455		50.0000	46
96 1,2-Dichlorobenzene	146	11.009	11.009	(1.037)	518493		50.0000	45
97 Hexachloroethane	117	11.246	11.246	(1.059)	185966		50.0000	45
98 1,2-Dibromo-3-chloropropane	75	11.754	11.754	(1.107)	70809		50.0000	49
141 1,3,5-Trichlorobenzene	182	12.488	12.488	(2.435)	310705		50.0000	48(A)
99 1,2,4-Trichlorobenzene	180	12.488	12.488	(1.176)	324917		50.0000	47
100 Hexachlorobutadiene	225	12.630	12.630	(1.189)	115617		50.0000	46
101 Naphthalene	128	12.713	12.713	(1.197)	947183		50.0000	50
102 1,2,3-Trichlorobenzene	180	12.914	12.914	(1.216)	290384		50.0000	47

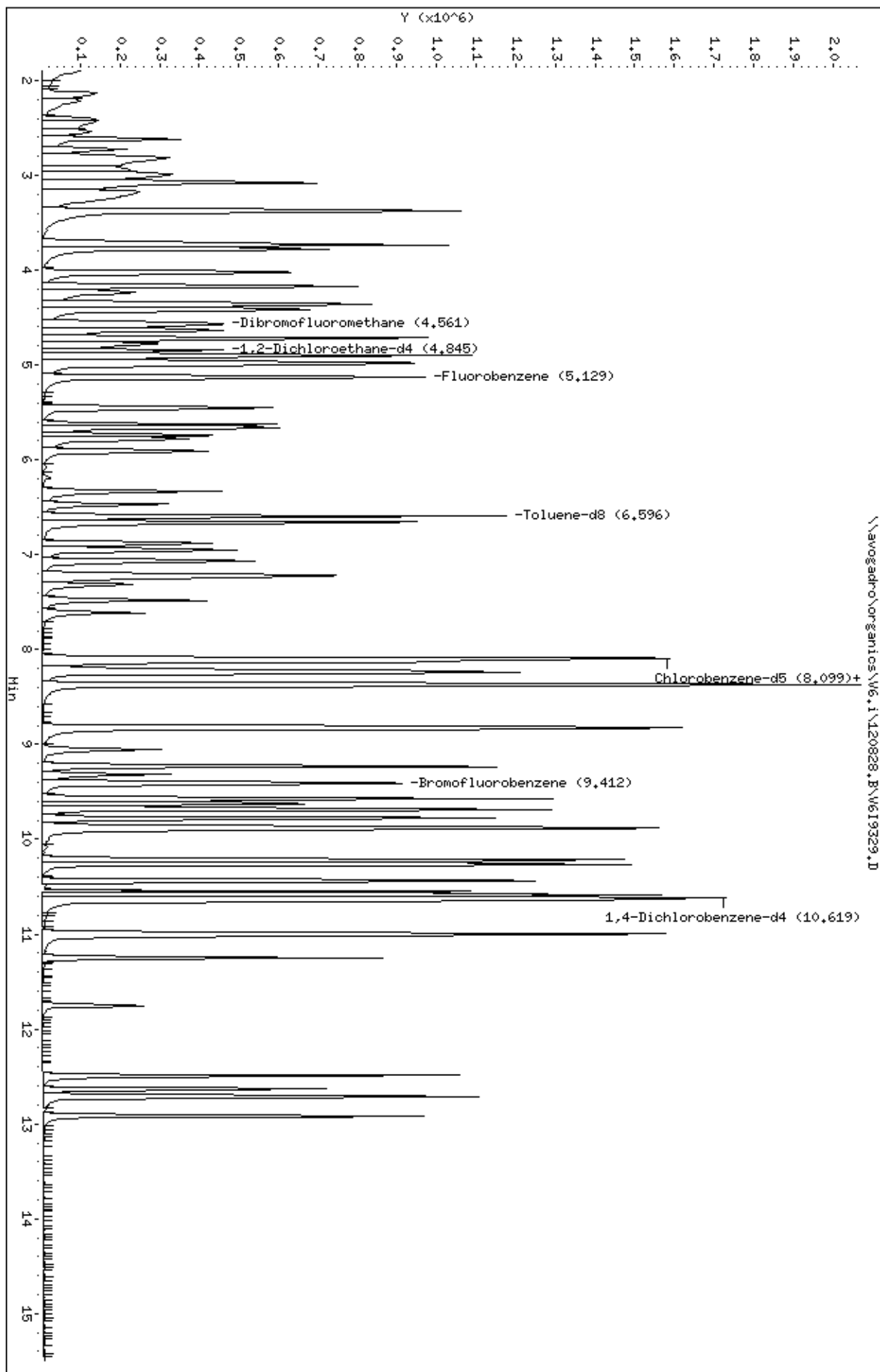
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120828.B\W6I9329.D
 Date : 28-AUG-2012 12:57
 Client ID: VICV0506Z
 Sample Info: 5HL,VICV0506Z,VICV0506Z
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W6,i
 Operator: AH SRC: AH
 Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120828A.B\V6I9332.D
 Lab Smp Id: VSTD0506A Client Smp ID: VSTD0506A
 Inj Date : 28-AUG-2012 14:07
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML,VSTD0506A,VSTD0506A
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120828A.B\v68260Gadd-6lvl.m
 Meth Date : 29-Aug-2012 10:43 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 13 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.590	1.601 (0.310)		166727	50.0000	47
2 Freon114	85	1.697	1.696 (0.331)		322708	50.0000	49
3 Chloromethane	50	1.768	1.779 (0.345)		370025	50.0000	50
4 Vinyl Chloride	62	1.851	1.861 (0.361)		302474	50.0000	46
5 Bromomethane	94	2.135	2.145 (0.416)		208375	50.0000	45
6 Chloroethane	64	2.218	2.216 (0.432)		168197	50.0000	45
7 Trichlorofluoromethane	101	2.407	2.406 (0.469)		421109	50.0000	49
126 Ethanol	46	2.537	2.536 (0.495)		35122	5000.00	4200(A)
8 Ether	59	2.608	2.619 (0.509)		195204	50.0000	51
9 Acrolein	56	2.726	2.725 (0.532)		209392	250.000	220(A)
10 1,1-Dichloroethene	96	2.809	2.820 (0.548)		294839	50.0000	57
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.809	2.808 (0.548)		266245	50.0000	46
12 Acetone	58	2.845	2.844 (0.555)		42692	50.0000	65
13 Iodomethane	142	2.951	2.962 (0.576)		495146	50.0000	44
14 Carbon Disulfide	76	2.987	2.997 (0.582)		1027897	50.0000	48
15 Acetonitrile	41	3.070	3.068 (0.599)		693518	500.000	490(A)
16 Allyl Chloride	39	3.070	3.068 (0.599)		315306	50.0000	47(Q)
17 Methyl Acetate	43	3.081	3.080 (0.601)		265506	50.0000	52
18 Methylene Chloride	84	3.188	3.199 (0.622)		290459	50.0000	41
19 tert-Butanol	59	3.235	3.234 (0.631)		54887	100.000	100
20 Acrylonitrile	53	3.365	3.364 (0.656)		105514	50.0000	50
21 trans-1,2-Dichloroethene	96	3.377	3.376 (0.659)		247042	50.0000	48

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
22 Methyl tert-butyl ether	73	3.365	3.364 (0.656)		712854		50.0000	50
23 1,1-Dichloroethane	63	3.709	3.707 (0.723)		417205		50.0000	47
24 Vinyl acetate	43	3.732	3.731 (0.728)		822722		50.0000	50
25 Diisopropyl Ether	45	3.732	3.731 (0.728)		769466		50.0000	48
26 2-Chloro-1,3-Butadiene	53	3.780	3.778 (0.737)		359698		50.0000	48
27 Ethyl tert-butyl ether	59	4.016	4.027 (0.783)		733251		50.0000	49
29 2,2-Dichloropropane	77	4.170	4.169 (0.813)		198460		50.0000	46
28 cis-1,2-Dichloroethene	96	4.170	4.169 (0.813)		250081		50.0000	49
30 2-Butanone	72	4.170	4.169 (0.813)		37362		50.0000	54
32 Propionitrile	54	4.229	4.240 (0.825)		387618		500.000	500(A)
33 Methacrylonitrile	41	4.348	4.346 (0.848)		303220		100.000	100
34 Bromochloromethane	128	4.371	4.370 (0.852)		137405		50.0000	49
31 Tetrahydrofuran	72	4.407	4.406 (0.859)		70815		100.000	97
35 Chloroform	83	4.419	4.417 (0.862)		412557		50.0000	48
\$ 36 Dibromofluoromethane	113	4.549	4.548 (0.887)		264129		50.0000	50
37 1,1,1-Trichloroethane	97	4.584	4.583 (0.894)		328964		50.0000	44
38 Cyclohexane	56	4.632	4.630 (0.903)		374038		50.0000	46
39 1,1-Dichloropropene	110	4.714	4.713 (0.919)		119249		50.0000	49
40 Carbon Tetrachloride	117	4.714	4.725 (0.919)		348085		50.0000	46
41 Isobutyl Alcohol	43	4.774	4.784 (0.931)		234035		1000.00	990(A)
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.843 (0.945)		58784		50.0000	52
43 Benzene	78	4.892	4.891 (0.954)		838925		50.0000	48
44 1,2-Dichloroethane	62	4.904	4.914 (0.956)		349984		50.0000	49
45 tert-Amyl methyl ether	73	4.963	4.962 (0.968)		684176		50.0000	49
M 50 1,2-Dichloroethene (Total)	96				497123		100.000	98
* 46 Fluorobenzene	96	5.129	5.127 (1.000)		903533		50.0000	
47 Trichloroethene	130	5.448	5.447 (1.062)		245858		50.0000	46
48 Methylcyclohexane	83	5.625	5.624 (1.097)		298364		50.0000	47
49 1,2-Dichloropropane	63	5.661	5.660 (1.104)		230907		50.0000	48
51 Methyl Methacrylate	69	5.732	5.743 (1.118)		188628		50.0000	48
52 Dibromomethane	93	5.779	5.778 (1.127)		157753		50.0000	49
53 1,4-Dioxane	88	5.779	5.778 (1.127)		29379		1000.00	850(A)
54 Bromodichloromethane	83	5.909	5.908 (1.152)		325439		50.0000	48
55 2-Chloroethyl vinyl ether	63	6.655	6.654 (1.298)		82485		50.0000	49
56 cis-1,3-Dichloropropene	75	6.324	6.334 (1.233)		366067		50.0000	49
57 4-Methyl-2-pentanone	43	6.466	6.464 (1.261)		264948		50.0000	48
\$ 58 Toluene-d8	98	6.596	6.595 (0.814)		865643		50.0000	50
59 Toluene	91	6.655	6.654 (1.298)		911798		50.0000	48
60 trans-1,3-Dichloropropene	75	6.880	6.879 (1.341)		346073		50.0000	51
61 Ethyl Methacrylate	69	6.951	6.950 (1.355)		274765		50.0000	49
62 1,1,2-Trichloroethane	97	7.069	7.068 (1.378)		214917		50.0000	50
63 Tetrachloroethene	164	7.211	7.210 (0.890)		203340		50.0000	44
64 1,3-Dichloropropane	76	7.247	7.245 (0.895)		350674		50.0000	50
65 2-Hexanone	43	7.318	7.316 (0.904)		200538		50.0000	54
66 Dibromochloromethane	129	7.483	7.482 (0.924)		295876		50.0000	51
67 1,2-Dibromoethane	107	7.613	7.612 (0.940)		256559		50.0000	52
69 1-Chlorohexane	91	8.087	8.086 (0.999)		299850		50.0000	45
* 68 Chlorobenzene-d5	117	8.099	8.097 (1.000)		733143		50.0000	
70 Chlorobenzene	112	8.134	8.133 (1.004)		636780		50.0000	49
71 1,1,1,2-Tetrachloroethane	131	8.217	8.216 (1.015)		261466		50.0000	48
72 Ethylbenzene	106	8.241	8.239 (1.018)		332742		50.0000	49
73 m,p-Xylene	106	8.371	8.370 (1.034)		802153		100.000	96
74 o-Xylene	106	8.820	8.819 (1.089)		398648		50.0000	48
75 Styrene	104	8.832	8.831 (1.091)		687605		50.0000	48

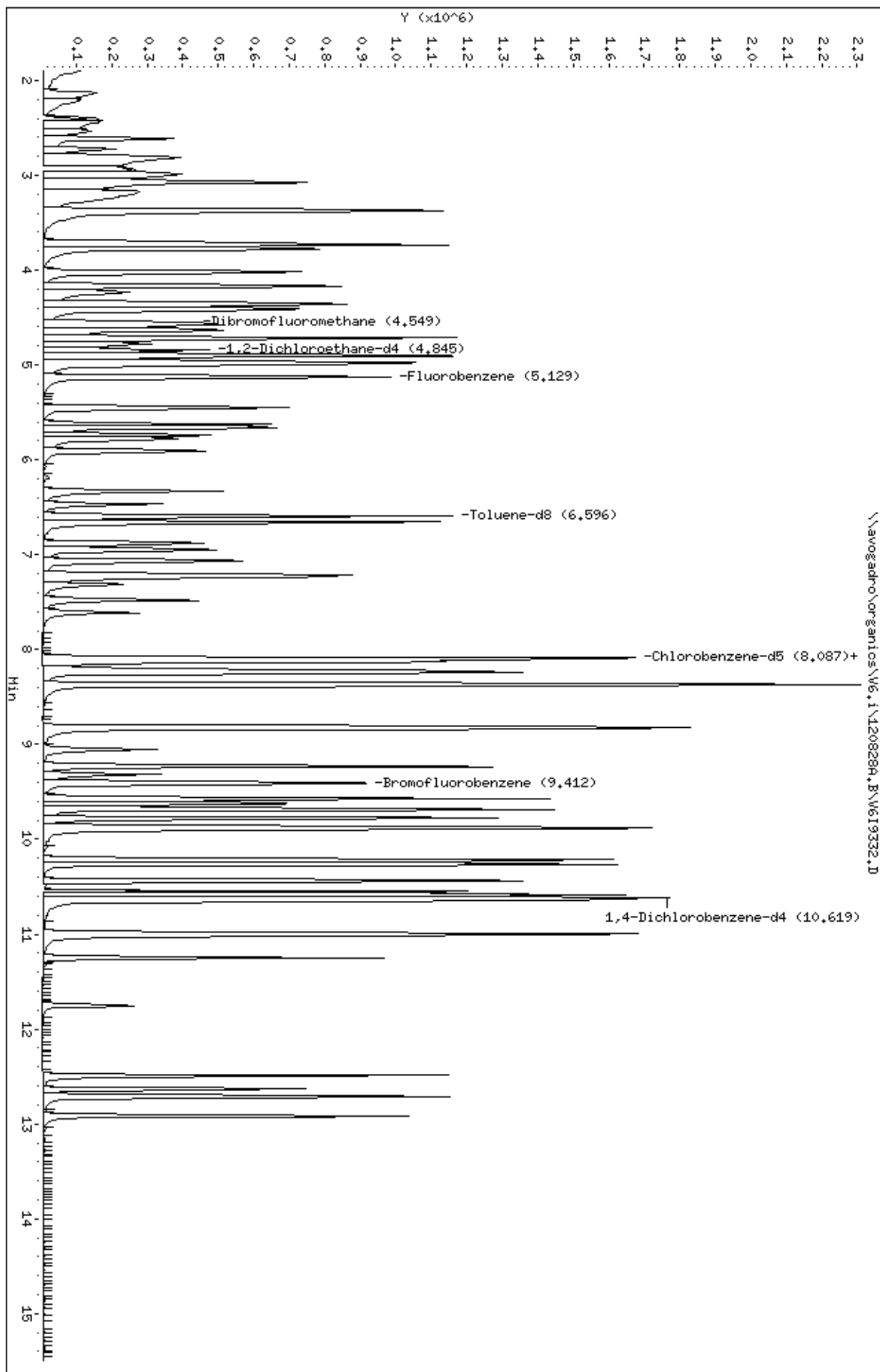
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 Bromoform	173	9.057	9.056 (1.118)		221305		50.0000	52
77 Isopropylbenzene	105	9.234	9.233 (1.140)		979160		50.0000	48
78 trans-1,4-Dichloro-2-butene	75	9.317	9.316 (1.150)		95773		50.0000	50
\$ 79 Bromofluorobenzene	95	9.400	9.399 (1.161)		381676		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.566	9.576 (0.901)		526558		50.0000	49
81 Bromobenzene	156	9.578	9.576 (0.902)		308199		50.0000	49
82 1,2,3-Trichloropropane	75	9.613	9.612 (0.905)		358104		50.0000	42
83 n-Propylbenzene	120	9.684	9.683 (0.912)		283146		50.0000	47
84 2-Chlorotoluene	126	9.779	9.778 (0.921)		266157		50.0000	46
85 1,3,5-Trimethylbenzene	105	9.873	9.872 (0.930)		846947		50.0000	47
86 4-Chlorotoluene	126	9.897	9.896 (0.932)		288717		50.0000	47
M 94 Xylene (Total)	106				1200801		150.000	140
87 tert-Butylbenzene	119	10.583	10.582 (0.997)		869718		50.0000	47
88 1,2,4-Trimethylbenzene	105	10.264	10.263 (0.967)		868625		50.0000	48
89 sec-Butylbenzene	105	10.441	10.440 (0.983)		1011410		50.0000	47
90 1,3-Dichlorobenzene	146	10.548	10.559 (0.993)		550369		50.0000	48
91 4-Isopropyltoluene	119	10.583	10.582 (0.997)		869718		50.0000	47
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.618 (1.000)		438865		50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.641 (1.002)		605926		50.0000	46
95 n-Butylbenzene	91	10.986	10.985 (1.035)		804127		50.0000	49
96 1,2-Dichlorobenzene	146	11.009	11.008 (1.037)		577163		50.0000	48
97 Hexachloroethane	117	11.246	11.245 (1.059)		200103		50.0000	47
98 1,2-Dibromo-3-chloropropane	75	11.755	11.754 (1.107)		72610		50.0000	48
141 1,3,5-Trichlorobenzene	182	12.489	12.487 (2.435)		337703		50.0000	51(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.487 (1.176)		351239		50.0000	49
100 Hexachlorobutadiene	225	12.630	12.629 (1.189)		122661		50.0000	48
101 Naphthalene	128	12.713	12.712 (1.197)		966487		50.0000	49
102 1,2,3-Trichlorobenzene	180	12.914	12.913 (1.216)		309826		50.0000	48

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
 Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6.1\1208284.B\W619332.D
Date : 28-AUG-2012 14:07
Client ID: VSTD0506A
Sample Info: 5HL,VSTD0506A,VSTD0506A
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120829.B\V6I9362.D
Report Date: 30-Aug-2012 10:06

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120829.B\V6I9362.D
Lab Smp Id: VSTD0506B Client Smp ID: VSTD0506B
Inj Date : 29-AUG-2012 09:50
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0506B,VSTD0506B
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120829.B\v68260Gadd-6lvl.m
Meth Date : 30-Aug-2012 10:03 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.591	1.590 (0.310)		173083	50.0000	50
2 Freon114	85	1.697	1.696 (0.331)		324008	50.0000	50
3 Chloromethane	50	1.780	1.779 (0.347)		406612	50.0000	56
4 Vinyl Chloride	62	1.851	1.850 (0.361)		342252	50.0000	54
5 Bromomethane	94	2.135	2.134 (0.416)		234631	50.0000	52
6 Chloroethane	64	2.218	2.217 (0.432)		195551	50.0000	54
7 Trichlorofluoromethane	101	2.407	2.406 (0.469)		463991	50.0000	56
126 Ethanol	46	2.537	2.536 (0.495)		95981	5000.00	12000(AQ)
8 Ether	59	2.608	2.607 (0.509)		209260	50.0000	56(Q)
9 Acrolein	56	2.726	2.726 (0.532)		235991	250.000	260(A)
10 1,1-Dichloroethene	96	2.809	2.808 (0.548)		168482	50.0000	33
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.809	2.808 (0.548)		284057	50.0000	51
12 Acetone	58	2.833	2.844 (0.552)		23160	50.0000	36
13 Iodomethane	142	2.963	2.962 (0.578)		578204	50.0000	53
14 Carbon Disulfide	76	2.987	2.986 (0.582)		1133042	50.0000	54
15 Acetonitrile	41	3.070	3.069 (0.599)		723632	500.000	520(A)
16 Allyl Chloride	39	3.070	3.069 (0.599)		376714	50.0000	58
17 Methyl Acetate	43	3.081	3.081 (0.601)		240005	50.0000	48
18 Methylene Chloride	84	3.164	3.163 (0.617)		311792	50.0000	45
19 tert-Butanol	59	3.235	3.234 (0.631)		55989	100.000	110
20 Acrylonitrile	53	3.365	3.365 (0.656)		97076	50.0000	48
21 trans-1,2-Dichloroethene	96	3.377	3.376 (0.659)		272565	50.0000	55
22 Methyl tert-butyl ether	73	3.365	3.365 (0.656)		710962	50.0000	52

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.709	3.708 (0.723)		471836		50.0000	55
24 Vinyl acetate	43	3.732	3.731 (0.728)		870196		50.0000	54
25 Diisopropyl Ether	45	3.732	3.731 (0.728)		856738		50.0000	55
26 2-Chloro-1,3-Butadiene	53	3.768	3.779 (0.735)		406240		50.0000	55
27 Ethyl tert-butyl ether	59	4.016	4.015 (0.783)		771217		50.0000	53
29 2,2-Dichloropropane	77	4.170	4.169 (0.813)		231793		50.0000	55
28 cis-1,2-Dichloroethene	96	4.170	4.169 (0.813)		277596		50.0000	56
30 2-Butanone	72	4.170	4.169 (0.813)		28978		50.0000	43
32 Propionitrile	54	4.229	4.228 (0.825)		343472		500.000	450(A)
33 Methacrylonitrile	41	4.348	4.347 (0.848)		298481		100.000	100
34 Bromochloromethane	128	4.359	4.358 (0.850)		150892		50.0000	56
31 Tetrahydrofuran	72	4.395	4.394 (0.857)		64788		100.000	92
35 Chloroform	83	4.419	4.418 (0.862)		460539		50.0000	55
\$ 36 Dibromofluoromethane	113	4.549	4.548 (0.887)		263920		50.0000	51
37 1,1,1-Trichloroethane	97	4.584	4.583 (0.894)		366213		50.0000	51
38 Cyclohexane	56	4.632	4.631 (0.903)		399574		50.0000	50
39 1,1-Dichloropropene	110	4.714	4.713 (0.919)		133544		50.0000	56
40 Carbon Tetrachloride	117	4.714	4.713 (0.919)		392191		50.0000	53
41 Isobutyl Alcohol	43	4.774	4.773 (0.931)		213303		1000.00	930(A)
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.844 (0.945)		59859		50.0000	54
43 Benzene	78	4.892	4.891 (0.954)		936379		50.0000	55
44 1,2-Dichloroethane	62	4.904	4.903 (0.956)		385097		50.0000	56
45 tert-Amyl methyl ether	73	4.963	4.962 (0.968)		709845		50.0000	52
M 50 1,2-Dichloroethene (Total)	96				550161		100.000	(a)
* 46 Fluorobenzene	96	5.129	5.128 (1.000)		876337		50.0000	
47 Trichloroethene	130	5.448	5.447 (1.062)		277198		50.0000	53
48 Methylcyclohexane	83	5.626	5.625 (1.097)		322959		50.0000	52
49 1,2-Dichloropropane	63	5.661	5.660 (1.104)		258411		50.0000	56
51 Methyl Methacrylate	69	5.732	5.731 (1.118)		187750		50.0000	49
52 Dibromomethane	93	5.779	5.778 (1.127)		170627		50.0000	55
53 1,4-Dioxane	88	5.779	5.778 (1.127)		35093		1000.00	1000(A)
54 Bromodichloromethane	83	5.909	5.909 (1.152)		356750		50.0000	55
55 2-Chloroethyl vinyl ether	63	6.655	6.654 (1.298)		94913		50.0000	58
56 cis-1,3-Dichloropropene	75	6.324	6.323 (1.233)		414575		50.0000	57
57 4-Methyl-2-pentanone	43	6.466	6.465 (1.261)		239268		50.0000	45
\$ 58 Toluene-d8	98	6.596	6.595 (0.814)		867462		50.0000	49
59 Toluene	91	6.655	6.654 (1.298)		1019849		50.0000	55
60 trans-1,3-Dichloropropene	75	6.880	6.879 (1.341)		382825		50.0000	58
61 Ethyl Methacrylate	69	6.951	6.950 (1.355)		271261		50.0000	50
62 1,1,2-Trichloroethane	97	7.069	7.068 (1.378)		224437		50.0000	53
63 Tetrachloroethene	164	7.211	7.210 (0.890)		228152		50.0000	49
64 1,3-Dichloropropane	76	7.235	7.234 (0.893)		377981		50.0000	53
65 2-Hexanone	43	7.318	7.317 (0.904)		155091		50.0000	41
66 Dibromochloromethane	129	7.483	7.482 (0.924)		316743		50.0000	54
67 1,2-Dibromoethane	107	7.613	7.613 (0.940)		261339		50.0000	52
69 1-Chlorohexane	91	8.087	8.086 (0.999)		338633		50.0000	50
* 68 Chlorobenzene-d5	117	8.099	8.098 (1.000)		742438		50.0000	
70 Chlorobenzene	112	8.122	8.133 (1.003)		715798		50.0000	54
71 1,1,1,2-Tetrachloroethane	131	8.217	8.216 (1.015)		289308		50.0000	53
72 Ethylbenzene	106	8.241	8.240 (1.018)		374635		50.0000	54
73 m,p-Xylene	106	8.371	8.370 (1.034)		908878		100.000	110
74 o-Xylene	106	8.809	8.819 (1.088)		456246		50.0000	54
75 Styrene	104	8.832	8.831 (1.091)		779205		50.0000	54
76 Bromoform	173	9.057	9.056 (1.118)		225442		50.0000	52

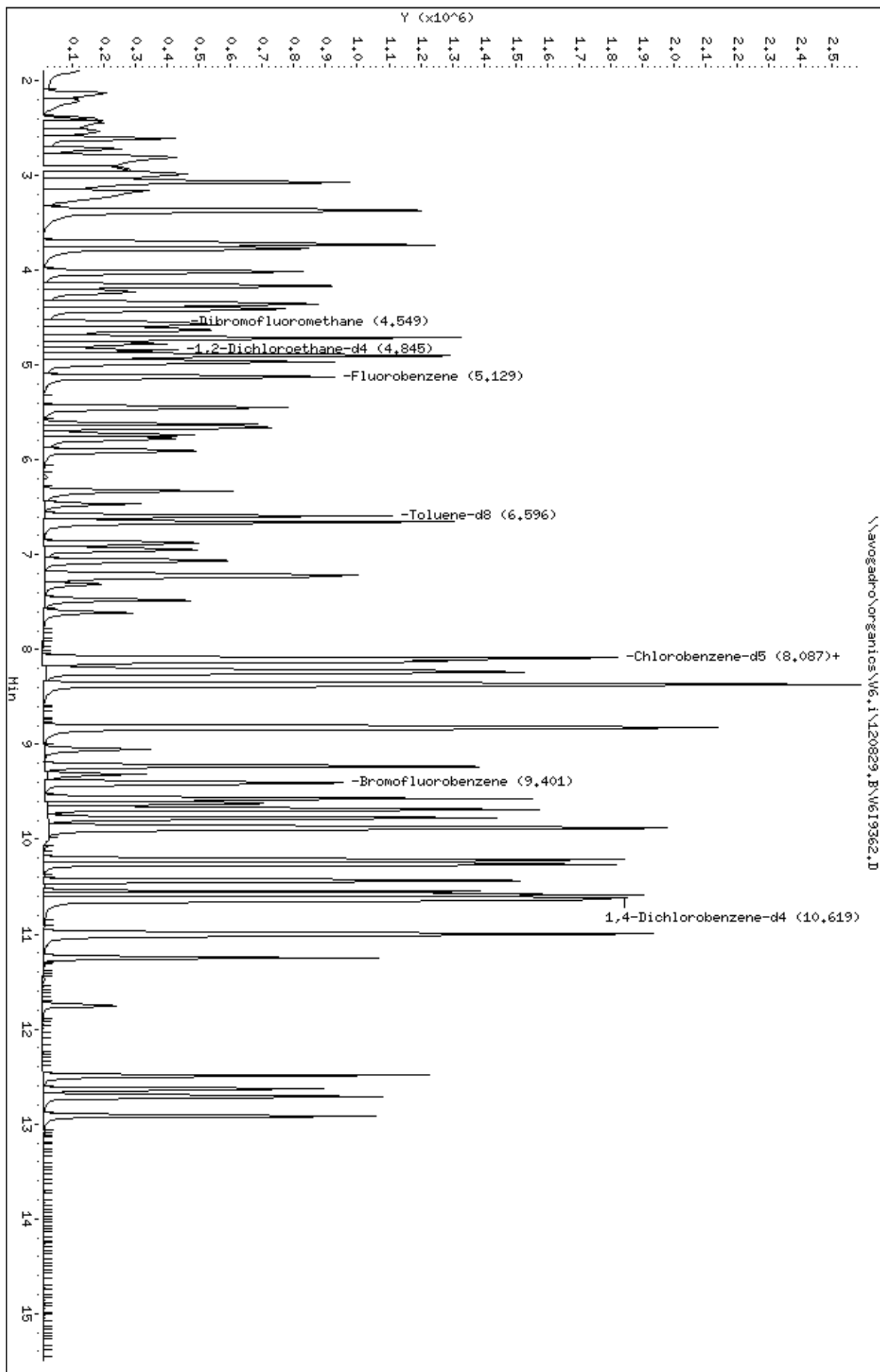
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.235	9.234 (1.140)		1098788		50.0000	54
78 trans-1,4-Dichloro-2-butene	75	9.317	9.316 (1.150)		93318		50.0000	48
\$ 79 Bromofluorobenzene	95	9.400	9.399 (1.161)		373907		50.0000	48
80 1,1,2,2-Tetrachloroethane	77	9.566	9.565 (0.901)		572953		50.0000	51
81 Bromobenzene	156	9.578	9.577 (0.902)		345860		50.0000	52
82 1,2,3-Trichloropropane	75	9.613	9.612 (0.905)		398555		50.0000	45
83 n-Propylbenzene	120	9.684	9.683 (0.912)		322539		50.0000	51
84 2-Chlorotoluene	126	9.779	9.778 (0.921)		306761		50.0000	51
85 1,3,5-Trimethylbenzene	105	9.873	9.873 (0.930)		957036		50.0000	51
86 4-Chlorotoluene	126	9.897	9.896 (0.932)		335583		50.0000	52
M 94 Xylene (Total)	106				1365124		150.000	(a)
87 tert-Butylbenzene	119	10.583	10.583 (0.997)		996273		50.0000	52
88 1,2,4-Trimethylbenzene	105	10.264	10.263 (0.967)		982825		50.0000	51
89 sec-Butylbenzene	105	10.441	10.441 (0.983)		1142777		50.0000	50
90 1,3-Dichlorobenzene	146	10.548	10.547 (0.993)		616313		50.0000	51
91 4-Isopropyltoluene	119	10.583	10.583 (0.997)		996273		50.0000	52
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.618 (1.000)		459008		50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.642 (1.002)		679238		50.0000	50
95 n-Butylbenzene	91	10.986	10.985 (1.035)		915957		50.0000	53
96 1,2-Dichlorobenzene	146	11.009	11.009 (1.037)		628225		50.0000	50
97 Hexachloroethane	117	11.246	11.245 (1.059)		225978		50.0000	51
98 1,2-Dibromo-3-chloropropane	75	11.743	11.754 (1.106)		65663		50.0000	42
141 1,3,5-Trichlorobenzene	182	12.489	12.488 (2.435)		365741		50.0000	57(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.488 (1.176)		382650		50.0000	51
100 Hexachlorobutadiene	225	12.631	12.630 (1.189)		146956		50.0000	55
101 Naphthalene	128	12.713	12.712 (1.197)		894318		50.0000	43
102 1,2,3-Trichlorobenzene	180	12.915	12.914 (1.216)		316976		50.0000	47

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120829,B\W6I9362.D
Date : 29-AUG-2012 09:50
Client ID: WSTD0506B
Sample Info: 5HL,WSTD0506B,WSTD0506B
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120816.B\V6I9063.D
 Lab Smp Id: BFB6R Client Smp ID: BFB6R
 Inj Date : 16-AUG-2012 17:27
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML, BFB6R, BFB6R
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120816.B\bfb8260.m
 Meth Date : 17-Aug-2012 10:29 adatta Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
				ON-COL		FINAL			
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb				CAS #: 460-00-4					
9.411	9.340 (0.000)	95	137600				0.00-	100.00	100.00
9.411	9.340 (0.000)	50	27064				15.00-	40.00	19.67
9.411	9.340 (0.000)	75	63360				30.00-	60.00	46.05
9.411	9.340 (0.000)	96	9120				5.00-	9.00	6.63
9.411	9.340 (0.000)	173	403				0.00-	2.00	0.33
9.411	9.340 (0.000)	174	121816				50.00-	100.00	88.53
9.411	9.340 (0.000)	175	9074				5.00-	9.00	7.45
9.411	9.340 (0.000)	176	117072				95.00-	101.00	96.11
9.411	9.340 (0.000)	177	7681				5.00-	9.00	6.56

Date : 16-AUG-2012 17:27

Client ID: BFB6R

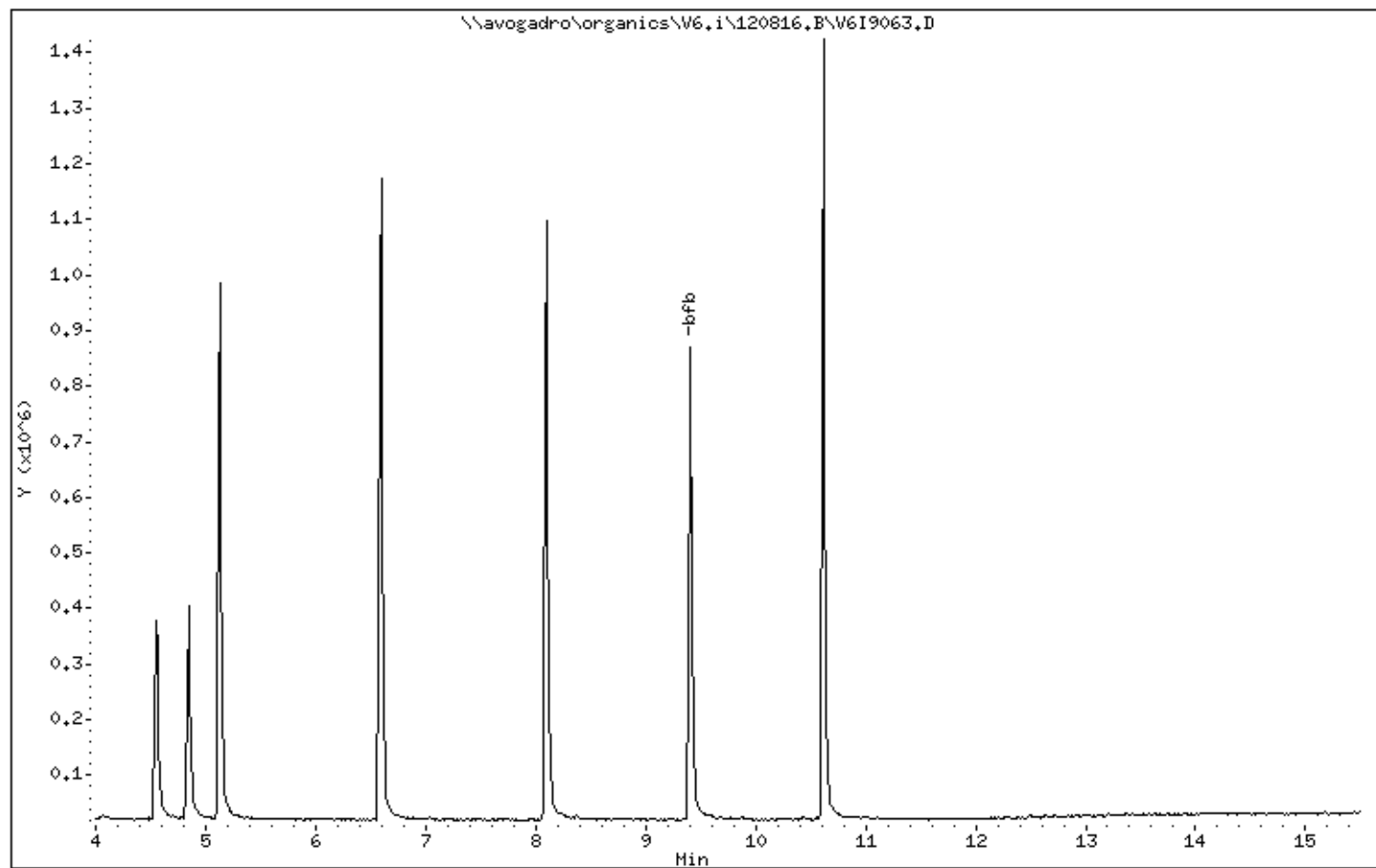
Instrument: V6.i

Sample Info: 5HL,BFB6R,BFB6R

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Date : 16-AUG-2012 17:27

Client ID: BFB6R

Instrument: V6.i

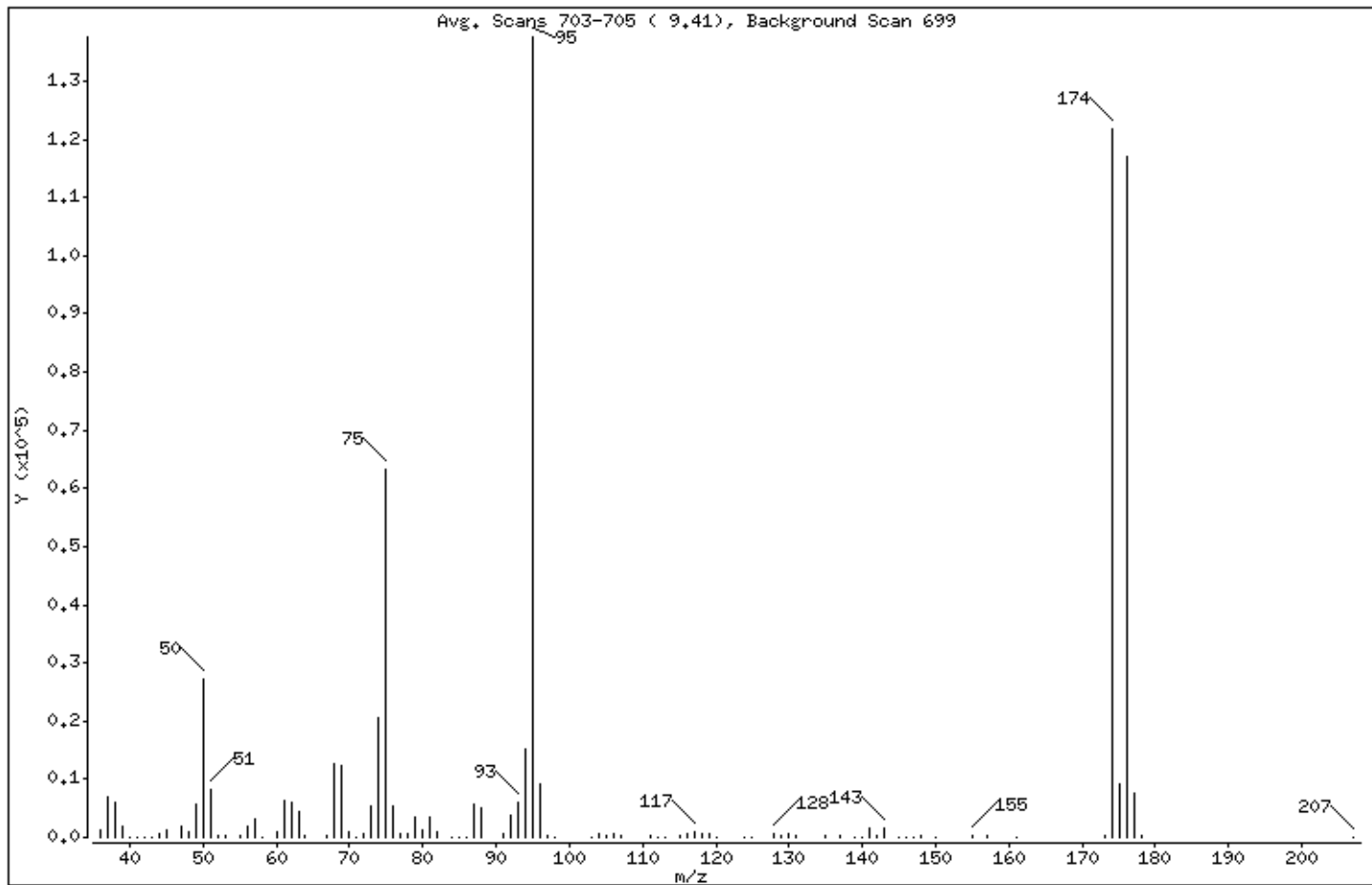
Sample Info: 5HL,BFB6R,BFB6R

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.67
75	30.00 - 60.00% of mass 95	46.05
96	5.00 - 9.00% of mass 95	6.63
173	Less than 2.00% of mass 174	0.29 (0.33)
174	50.00 - 100.00% of mass 95	88.53
175	5.00 - 9.00% of mass 174	6.59 (7.45)
176	95.00 - 101.00% of mass 174	85.08 (96.11)
177	5.00 - 9.00% of mass 176	5.58 (6.56)

Date : 16-AUG-2012 17:27

Client ID: BFB6R

Instrument: V6.i

Sample Info: 5HL,BFB6R,BFB6R

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

Data File: V6I9063.D

Spectrum: Avg. Scans 703-705 (9.41), Background Scan 699

Location of Maximum: 95.00

Number of points: 97

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	1236	64.00	474	94.00	15332	135.00	398
37.00	6942	67.00	295	95.00	137600	137.00	312
38.00	5919	68.00	12561	96.00	9120	139.00	71
39.00	1960	69.00	12395	97.00	292	140.00	67
40.00	117	70.00	980	98.00	40	141.00	1617

41.00	41	71.00	128	103.00	72	142.00	267
42.00	100	72.00	749	104.00	746	143.00	1698
43.00	32	73.00	5519	105.00	173	145.00	148
44.00	531	74.00	20584	106.00	696	146.00	67
45.00	1197	75.00	63360	107.00	167	147.00	69

47.00	1825	76.00	5426	111.00	303	148.00	214
48.00	849	77.00	556	112.00	105	150.00	147
49.00	5819	78.00	536	113.00	150	155.00	413
50.00	27064	79.00	3490	115.00	241	157.00	313
51.00	8240	80.00	1127	116.00	544	161.00	98

52.00	373	81.00	3603	117.00	1021	173.00	403
53.00	223	82.00	843	118.00	645	174.00	121816
55.00	309	84.00	9	119.00	692	175.00	9074
56.00	2030	85.00	23	120.00	84	176.00	117072
57.00	3204	86.00	80	124.00	68	177.00	7681

58.00	45	87.00	5586	125.00	74	178.00	171
60.00	1098	88.00	5094	128.00	529	207.00	37
61.00	6368	91.00	502	129.00	362		
62.00	6098	92.00	3737	130.00	528		
63.00	4435	93.00	5976	131.00	226		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120823.B\V6I9210.D
 Lab Smp Id: BFB6W Client Smp ID: BFB6W
 Inj Date : 23-AUG-2012 09:02
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML, BFB6W, BFB6W
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120823.B\bfb8260.m
 Meth Date : 24-Aug-2012 10:51 adatta Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
				ON-COL	FINAL				
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb					CAS #: 460-00-4				
6.193	6.300 (0.000)	95	468224				0.00-	100.00	100.00
6.193	6.300 (0.000)	50	96560				15.00-	40.00	20.62
6.193	6.300 (0.000)	75	235840				30.00-	60.00	50.37
6.193	6.300 (0.000)	96	35192				5.00-	9.00	7.52
6.193	6.300 (0.000)	173	4199				0.00-	2.00	1.03
6.193	6.300 (0.000)	174	406016				50.00-	100.00	86.71
6.193	6.300 (0.000)	175	33328				5.00-	9.00	8.21
6.193	6.300 (0.000)	176	395776				95.00-	101.00	97.48
6.193	6.300 (0.000)	177	28272				5.00-	9.00	7.14

Date : 23-AUG-2012 09:02

Client ID: BFB6W

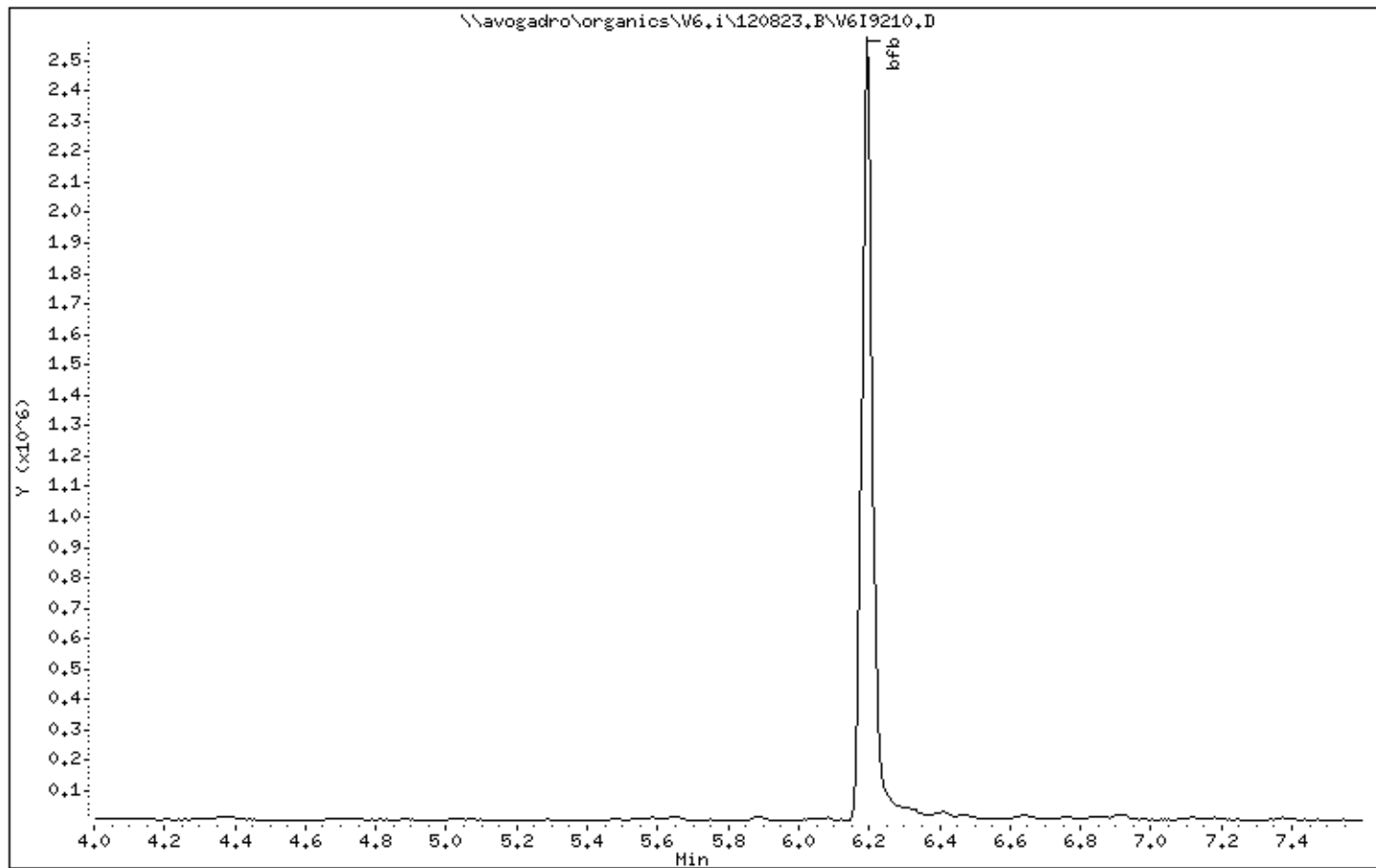
Instrument: V6.i

Sample Info: 5HL,BFB6W,BFB6W

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Date : 23-AUG-2012 09:02

Client ID: BFB6W

Instrument: V6.i

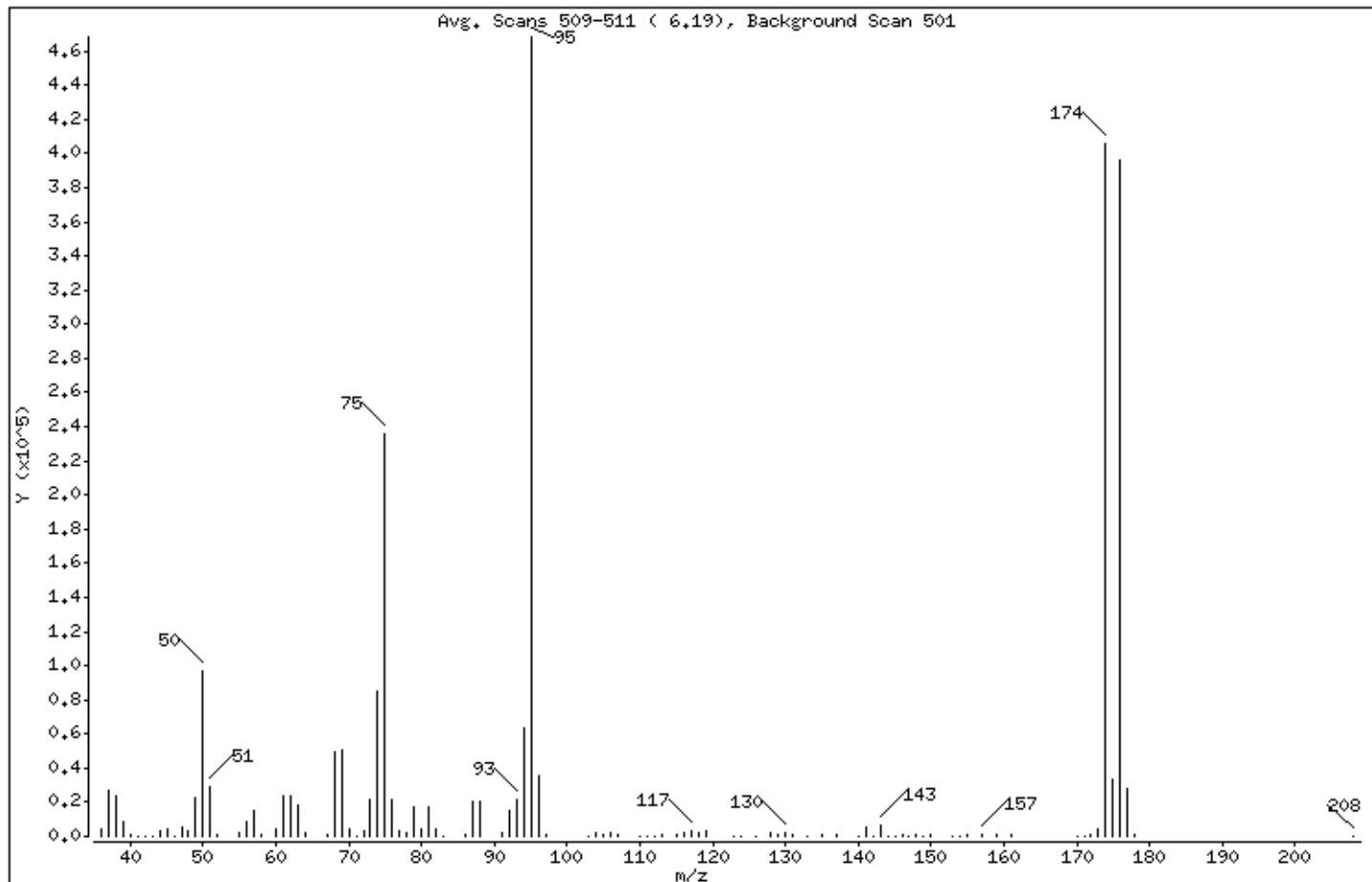
Sample Info: 5HL,BFB6W,BFB6W

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.62
75	30.00 - 60.00% of mass 95	50.37
96	5.00 - 9.00% of mass 95	7.52
173	Less than 2.00% of mass 174	0.90 (1.03)
174	50.00 - 100.00% of mass 95	86.71
175	5.00 - 9.00% of mass 174	7.12 (8.21)
176	95.00 - 101.00% of mass 174	84.53 (97.48)
177	5.00 - 9.00% of mass 176	6.04 (7.14)

Date : 23-AUG-2012 09:02

Client ID: BFB6W

Instrument: V6.i

Sample Info: 5HL,BFB6W,BFB6W

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

Data File: V6I9210.D

Spectrum: Avg. Scans 509-511 (6.19), Background Scan 501

Location of Maximum: 95.00

Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	4330	68.00	49248	104.00	2358	144.00	266
37.00	26848	69.00	50696	105.00	771	145.00	438
38.00	23880	70.00	4085	106.00	2476	146.00	955
39.00	8553	71.00	263	107.00	622	147.00	272
40.00	634	72.00	2793	110.00	273	148.00	1479

41.00	329	73.00	21664	111.00	505	149.00	474
42.00	121	74.00	84664	112.00	239	150.00	579
43.00	349	75.00	235840	113.00	565	153.00	382
44.00	3184	76.00	21248	115.00	685	154.00	453
45.00	4554	77.00	2861	116.00	1994	155.00	1077

46.00	446	78.00	2003	117.00	3267	157.00	1123
47.00	5718	79.00	17496	118.00	2107	159.00	729
48.00	3260	80.00	4625	119.00	3161	161.00	731
49.00	22648	81.00	17432	123.00	107	170.00	264
50.00	96560	82.00	3929	124.00	289	171.00	108

51.00	28880	83.00	533	126.00	100	172.00	563
52.00	1331	86.00	734	128.00	1900	173.00	4199
55.00	1789	87.00	20216	129.00	969	174.00	406016
56.00	8151	88.00	20328	130.00	2144	175.00	33328
57.00	14582	91.00	2518	131.00	942	176.00	395776

58.00	602	92.00	15224	133.00	220	177.00	28272
60.00	4681	93.00	21568	135.00	1112	178.00	660
61.00	23848	94.00	63232	137.00	1047	208.00	130
62.00	24064	95.00	468224	140.00	409		
63.00	17912	96.00	35192	141.00	5632		

64.00	1702	97.00	1130	142.00	522		
67.00	1419	103.00	131	143.00	6013		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120824.B\V6I9250.D
 Lab Smp Id: BFB6X Client Smp ID: BFB6X
 Inj Date : 24-AUG-2012 08:48
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML, BFB6X, BFB6X
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120824.B\bfb8260.m
 Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
				ON-COL	FINAL				
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb					CAS #: 460-00-4				
6.198	6.300 (0.000)	95	322176				0.00-	100.00	100.00
6.198	6.300 (0.000)	50	62280				15.00-	40.00	19.33
6.198	6.300 (0.000)	75	153664				30.00-	60.00	47.70
6.198	6.300 (0.000)	96	22560				5.00-	9.00	7.00
6.198	6.300 (0.000)	173	2987				0.00-	2.00	1.02
6.198	6.300 (0.000)	174	291712				50.00-	100.00	90.54
6.198	6.300 (0.000)	175	23192				5.00-	9.00	7.95
6.198	6.300 (0.000)	176	283904				95.00-	101.00	97.32
6.198	6.300 (0.000)	177	19392				5.00-	9.00	6.83

Date : 24-AUG-2012 08:48

Client ID: BFB6X

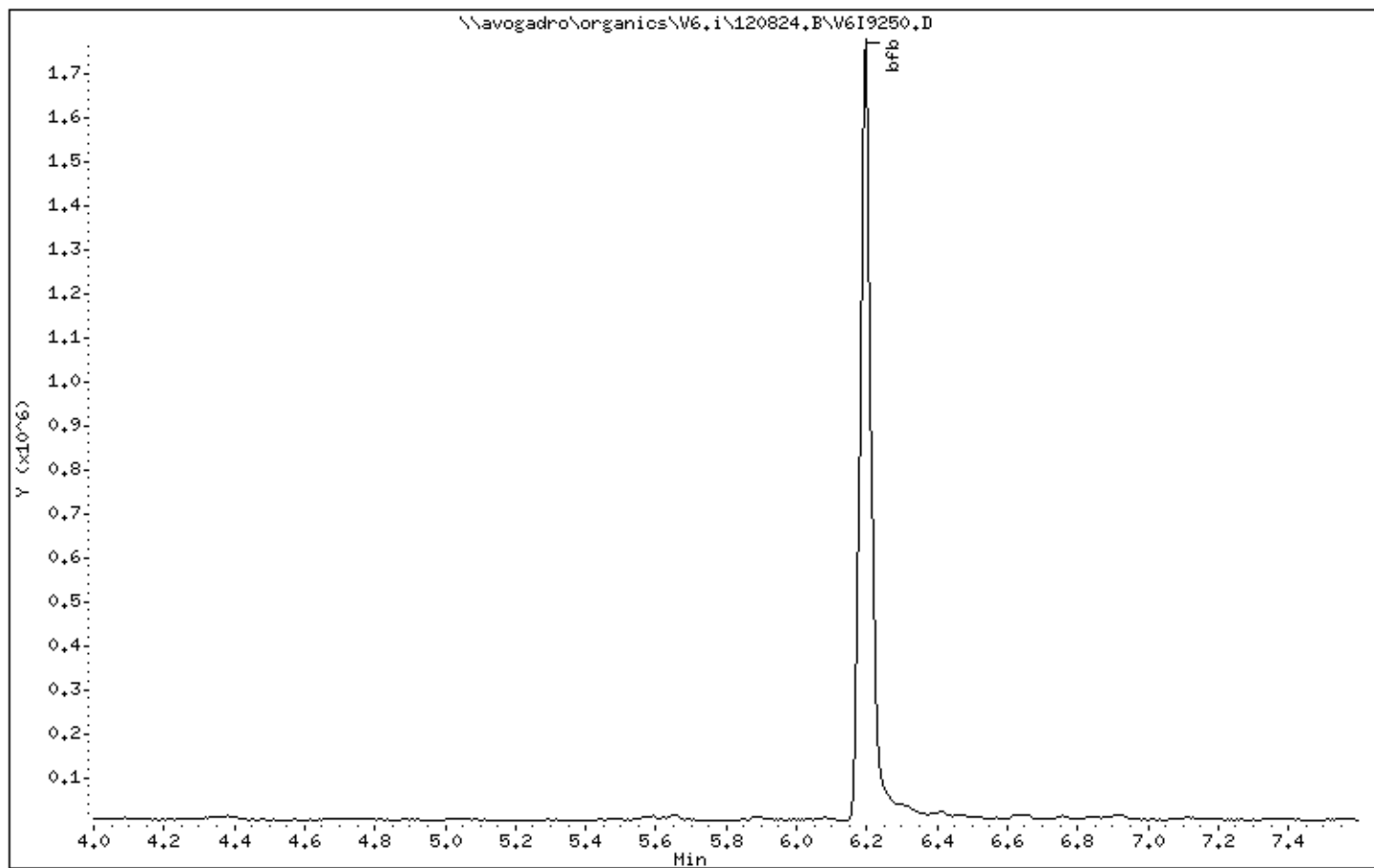
Instrument: V6.i

Sample Info: 5HL,BFB6X,BFB6X

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Date : 24-AUG-2012 08:48

Client ID: BFB6X

Instrument: V6.i

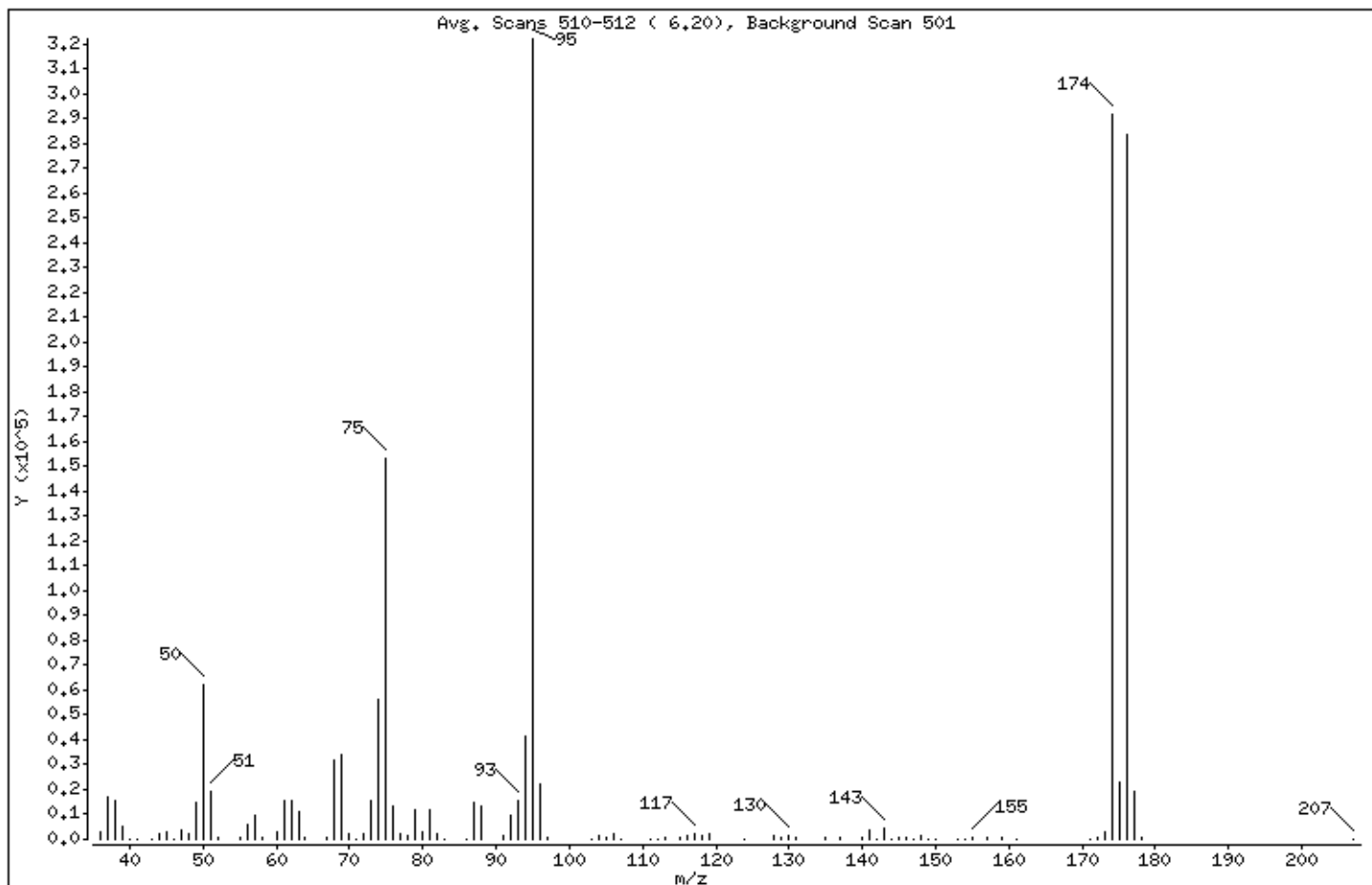
Sample Info: 5HL,BFB6X,BFB6X

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.33
75	30.00 - 60.00% of mass 95	47.70
96	5.00 - 9.00% of mass 95	7.00
173	Less than 2.00% of mass 174	0.93 (1.02)
174	50.00 - 100.00% of mass 95	90.54
175	5.00 - 9.00% of mass 174	7.20 (7.95)
176	95.00 - 101.00% of mass 174	88.12 (97.32)
177	5.00 - 9.00% of mass 176	6.02 (6.83)

Date : 24-AUG-2012 08:48

Client ID: BFB6X

Instrument: V6.i

Sample Info: 5HL,BFB6X,BFB6X

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

Data File: V6I9250.D

Spectrum: Avg. Scans 510-512 (6.20), Background Scan 501

Location of Maximum: 95.00

Number of points: 98

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	2903	67.00	759	96.00	22560	143.00	4772
37.00	16920	68.00	31936	97.00	737	144.00	312
38.00	15257	69.00	34048	103.00	118	145.00	406
39.00	5428	70.00	2535	104.00	1785	146.00	609
40.00	79	71.00	116	105.00	579	147.00	266

41.00	130	72.00	1988	106.00	2144	148.00	1210
43.00	258	73.00	15238	107.00	266	149.00	129
44.00	2044	74.00	55944	111.00	293	150.00	307
45.00	2890	75.00	153664	112.00	150	153.00	201
46.00	143	76.00	13561	113.00	390	154.00	136

47.00	3371	77.00	2057	115.00	456	155.00	953
48.00	2059	78.00	1314	116.00	1304	157.00	695
49.00	14720	79.00	11687	117.00	2414	159.00	418
50.00	62280	80.00	3080	118.00	1376	161.00	243
51.00	18960	81.00	11578	119.00	2141	171.00	335

52.00	735	82.00	2515	124.00	141	172.00	431
55.00	963	83.00	311	128.00	1448	173.00	2987
56.00	5807	86.00	240	129.00	711	174.00	291712
57.00	9776	87.00	14486	130.00	1499	175.00	23192
58.00	373	88.00	13144	131.00	517	176.00	283904

60.00	3250	91.00	1460	135.00	881	177.00	19392
61.00	15484	92.00	9833	137.00	719	178.00	588
62.00	15544	93.00	15226	140.00	381	207.00	87
63.00	11451	94.00	41512	141.00	3926		
64.00	853	95.00	322176	142.00	341		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120828.B\V6I9320.D
 Lab Smp Id: BFB6Z Client Smp ID: BFB6Z
 Inj Date : 28-AUG-2012 08:48
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML, BFB6Z, BFB6Z
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120828.B\bfb8260.m
 Meth Date : 28-Aug-2012 16:12 adatta Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
ON-COL FINAL									
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb					CAS #: 460-00-4				
6.385	6.300 (0.000)	95	375808				0.00-	100.00	100.00
6.385	6.300 (0.000)	50	76224				15.00-	40.00	20.28
6.385	6.300 (0.000)	75	191360				30.00-	60.00	50.92
6.385	6.300 (0.000)	96	26936				5.00-	9.00	7.17
6.385	6.300 (0.000)	173	3279				0.00-	2.00	1.03
6.385	6.300 (0.000)	174	319488				50.00-	100.00	85.01
6.385	6.300 (0.000)	175	25992				5.00-	9.00	8.14
6.385	6.300 (0.000)	176	305920				95.00-	101.00	95.75
6.385	6.300 (0.000)	177	21320				5.00-	9.00	6.97

Date : 28-AUG-2012 08:48

Client ID: BFB6Z

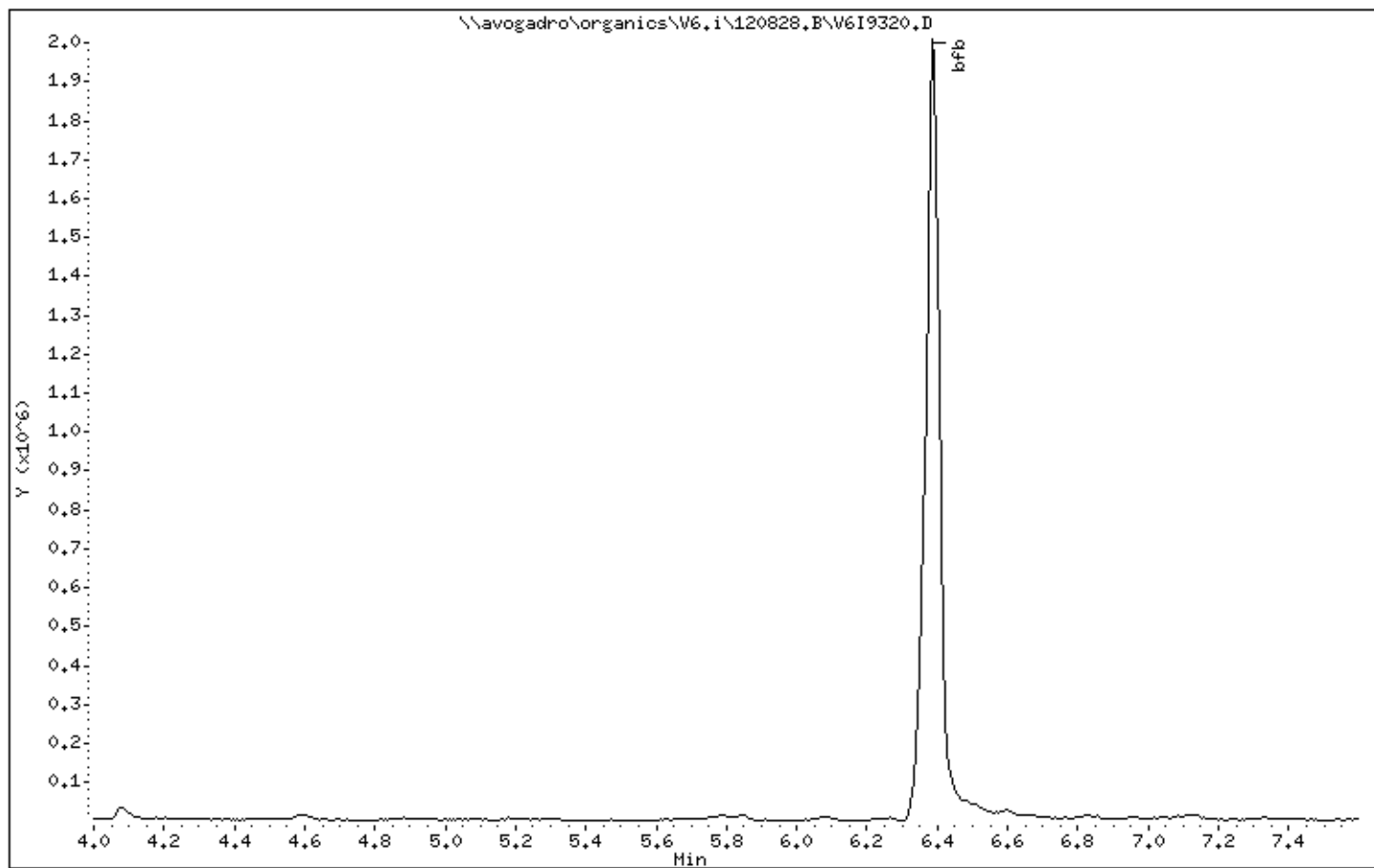
Instrument: V6.i

Sample Info: 5HL,BFB6Z,BFB6Z

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Date : 28-AUG-2012 08:48

Client ID: BFB6Z

Instrument: V6.i

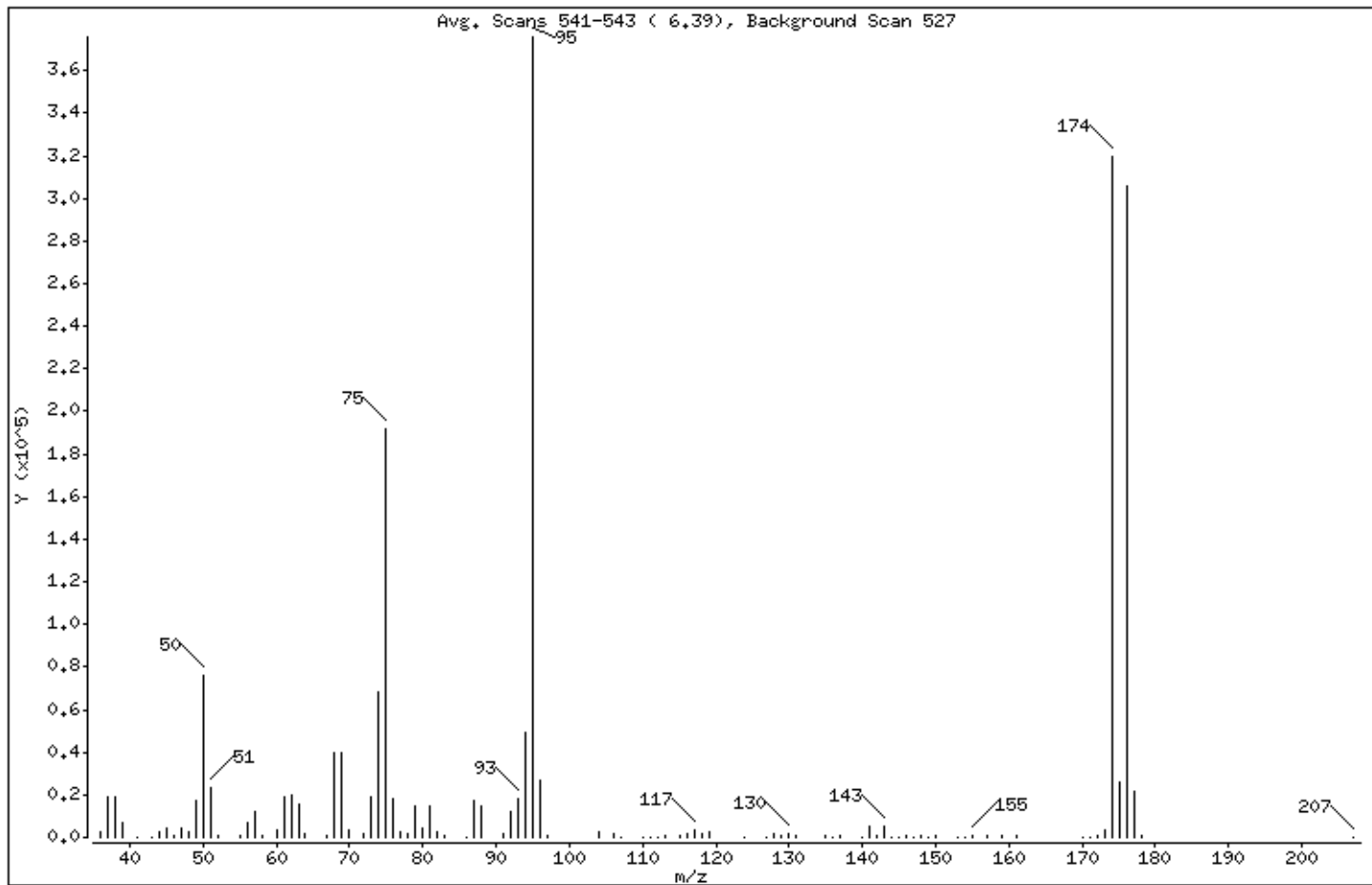
Sample Info: 5HL,BFB6Z,BFB6Z

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.28
75	30.00 - 60.00% of mass 95	50.92
96	5.00 - 9.00% of mass 95	7.17
173	Less than 2.00% of mass 174	0.87 (1.03)
174	50.00 - 100.00% of mass 95	85.01
175	5.00 - 9.00% of mass 174	6.92 (8.14)
176	95.00 - 101.00% of mass 174	81.40 (95.75)
177	5.00 - 9.00% of mass 176	5.67 (6.97)

Date : 28-AUG-2012 08:48

Client ID: BFB6Z

Instrument: V6.i

Sample Info: 5HL,BFB6Z,BFB6Z

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

Data File: V6I9320.D

Spectrum: Avg. Scans 541-543 (6.39), Background Scan 527

Location of Maximum: 95.00

Number of points: 98

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	3008	68.00	39792	104.00	2175	144.00	257
37.00	19320	69.00	39760	106.00	2069	145.00	391
38.00	19256	70.00	3520	107.00	330	146.00	565
39.00	6514	72.00	1859	110.00	122	147.00	101
41.00	104	73.00	19032	111.00	376	148.00	1244

43.00	386	74.00	68032	112.00	133	149.00	322
44.00	2881	75.00	191360	113.00	498	150.00	473
45.00	4246	76.00	17808	115.00	645	153.00	227
46.00	462	77.00	2203	116.00	1749	154.00	154
47.00	4062	78.00	1474	117.00	3404	155.00	957

48.00	2509	79.00	14382	118.00	1608	157.00	638
49.00	17376	80.00	3902	119.00	2319	159.00	507
50.00	76224	81.00	14255	124.00	243	161.00	685
51.00	23648	82.00	2618	127.00	133	170.00	151
52.00	1050	83.00	507	128.00	1488	171.00	119

55.00	1253	86.00	367	129.00	746	172.00	612
56.00	7000	87.00	17304	130.00	1515	173.00	3279
57.00	11673	88.00	14937	131.00	523	174.00	319488
58.00	600	91.00	1878	135.00	810	175.00	25992
60.00	3610	92.00	12162	136.00	124	176.00	305920

61.00	19216	93.00	17960	137.00	897	177.00	21320
62.00	19624	94.00	49632	140.00	138	178.00	609
63.00	15404	95.00	375808	141.00	4958	207.00	177
64.00	1419	96.00	26936	142.00	623		
67.00	1029	97.00	1001	143.00	5067		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120828A.B\V6I9331.D
 Lab Smp Id: BFB6A Client Smp ID: BFB6A
 Inj Date : 28-AUG-2012 13:34
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML, BFB6A, BFB6A
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120828A.B\bfb8260.m
 Meth Date : 29-Aug-2012 10:41 adatta Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 12 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
ON-COL FINAL									
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb					CAS #: 460-00-4				
9.401	9.340 (0.000)	95	140800				0.00-	100.00	100.00
9.401	9.340 (0.000)	50	29488				15.00-	40.00	20.94
9.401	9.340 (0.000)	75	67272				30.00-	60.00	47.78
9.401	9.340 (0.000)	96	10240				5.00-	9.00	7.27
9.401	9.340 (0.000)	173	415				0.00-	2.00	0.36
9.401	9.340 (0.000)	174	114408				50.00-	100.00	81.26
9.401	9.340 (0.000)	175	8846				5.00-	9.00	7.73
9.401	9.340 (0.000)	176	111864				95.00-	101.00	97.78
9.401	9.340 (0.000)	177	7704				5.00-	9.00	6.89

Date : 28-AUG-2012 13:34

Client ID: BFB6A

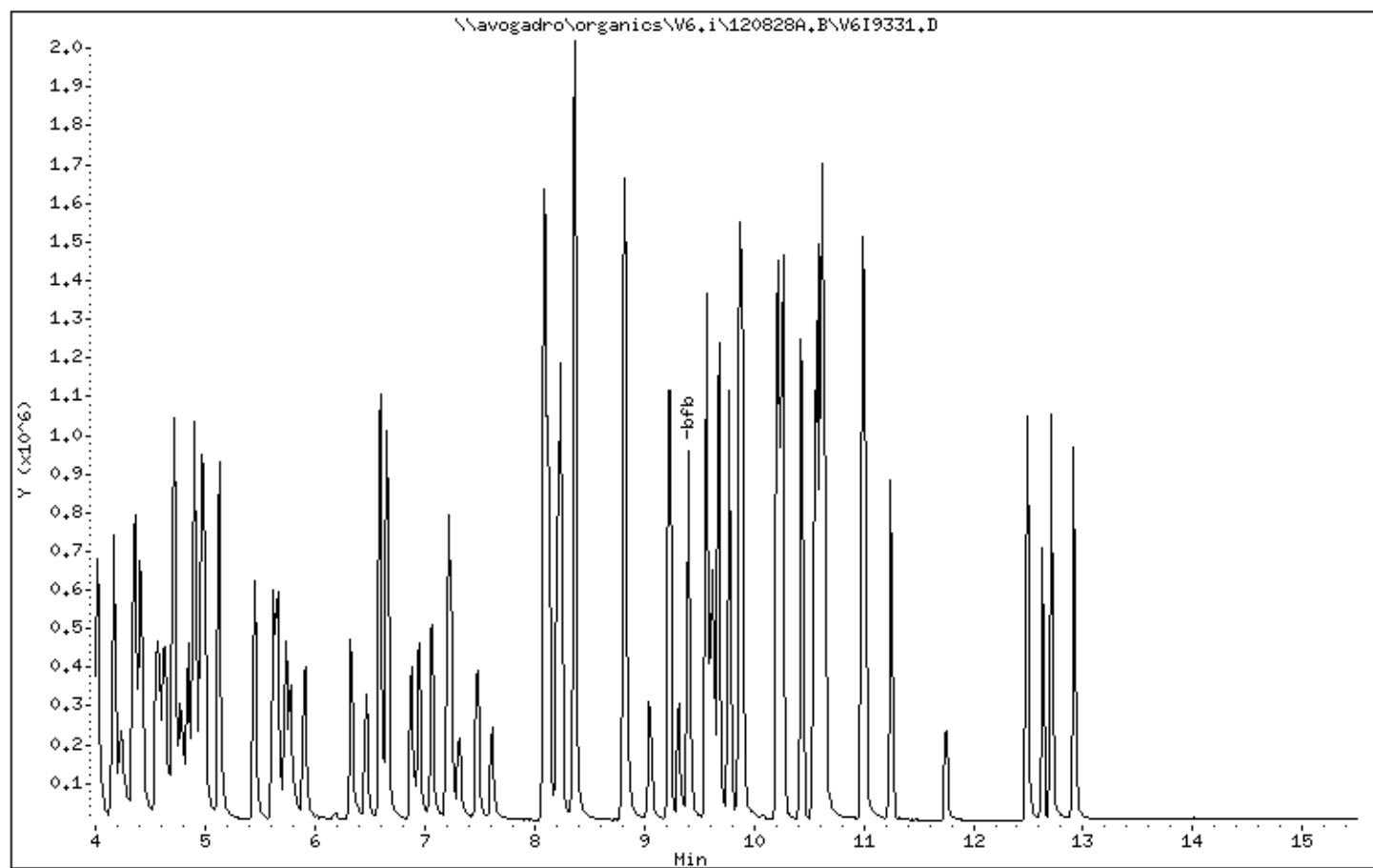
Instrument: V6.i

Sample Info: 5HL,BFB6A,BFB6A

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Date : 28-AUG-2012 13:34

Client ID: BFB6A

Instrument: V6.i

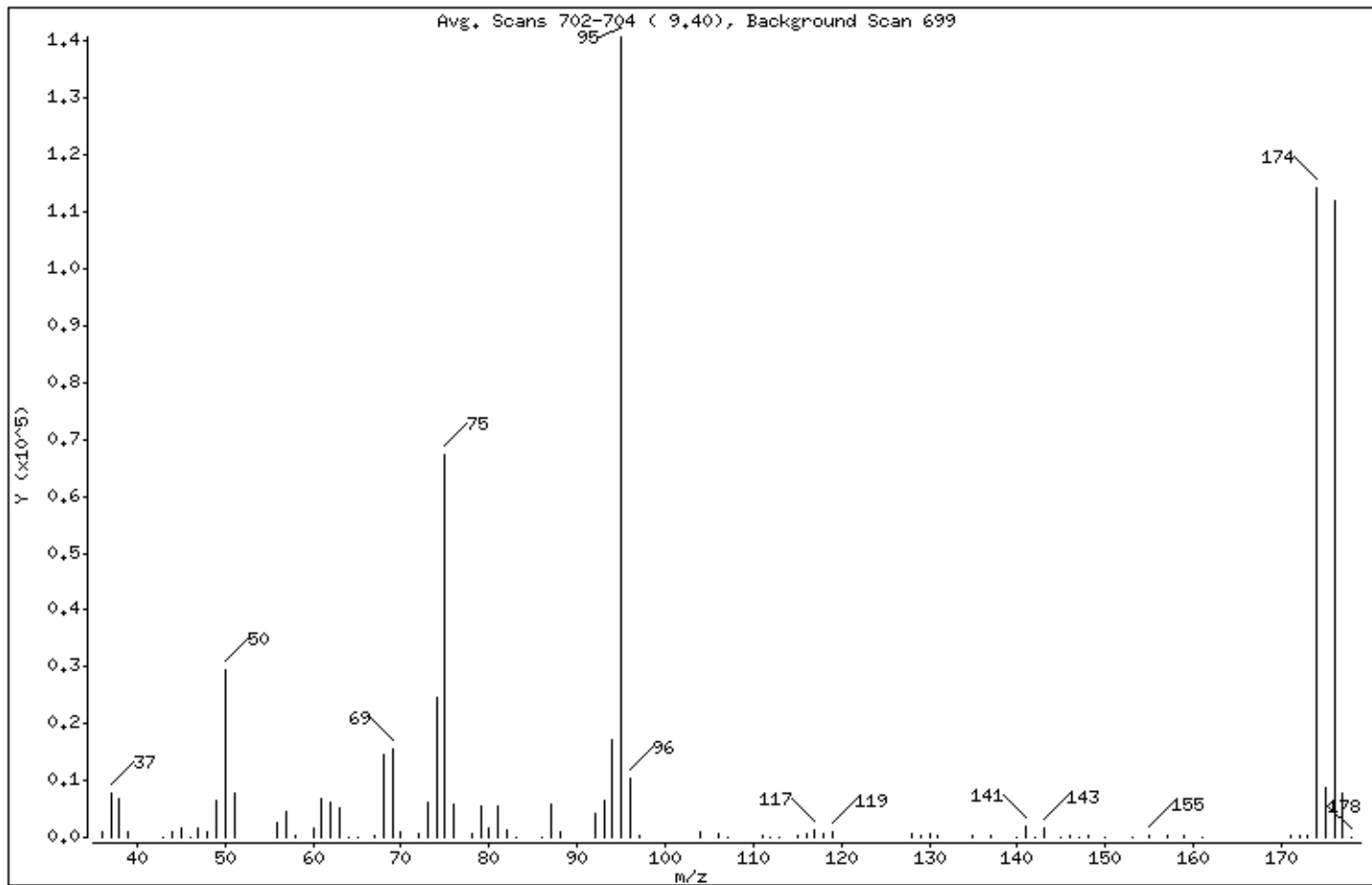
Sample Info: 5HL,BFB6A,BFB6A

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.94
75	30.00 - 60.00% of mass 95	47.78
96	5.00 - 9.00% of mass 95	7.27
173	Less than 2.00% of mass 174	0.29 (0.36)
174	50.00 - 100.00% of mass 95	81.26
175	5.00 - 9.00% of mass 174	6.28 (7.73)
176	95.00 - 101.00% of mass 174	79.45 (97.78)
177	5.00 - 9.00% of mass 176	5.47 (6.89)

Date : 28-AUG-2012 13:34

Client ID: BFB6A

Instrument: V6.i

Sample Info: 5HL,BFB6A,BFB6A

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

Data File: V6I9331.D

Spectrum: Avg. Scans 702-704 (9.40), Background Scan 699

Location of Maximum: 95.00

Number of points: 85

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	1068	67.00	434	96.00	10240	143.00	1675
37.00	7827	68.00	14505	97.00	199	145.00	69
38.00	6751	69.00	15386	104.00	928	146.00	195
39.00	1125	70.00	1071	106.00	694	147.00	85
43.00	30	72.00	679	107.00	99	148.00	365

44.00	844	73.00	6191	111.00	187	150.00	149
45.00	1489	74.00	24488	112.00	125	153.00	78
46.00	70	75.00	67272	113.00	152	155.00	379
47.00	1712	76.00	5696	115.00	180	157.00	232
48.00	927	78.00	520	116.00	548	159.00	173

49.00	6355	79.00	5407	117.00	1180	161.00	67
50.00	29488	80.00	1624	118.00	701	171.00	228
51.00	7873	81.00	5520	119.00	908	172.00	334
56.00	2620	82.00	1184	128.00	624	173.00	415
57.00	4586	83.00	160	129.00	264	174.00	114408

58.00	219	86.00	69	130.00	642	175.00	8846
60.00	1491	87.00	5858	131.00	213	176.00	111864
61.00	6797	88.00	1080	135.00	270	177.00	7704
62.00	6166	92.00	4346	137.00	243	178.00	156
63.00	5118	93.00	6354	140.00	69		

64.00	101	94.00	17112	141.00	1802		
65.00	79	95.00	140800	142.00	146		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120829.B\V6I9360.D
 Lab Smp Id: BFB6B Client Smp ID: BFB6B
 Inj Date : 29-AUG-2012 08:47
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML, BFB6B, BFB6B
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120829.B\bfb8260.m
 Meth Date : 30-Aug-2012 10:03 adatta Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
ON-COL FINAL									
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb					CAS #: 460-00-4				
6.324	6.300 (0.000)	95	111960				0.00-	100.00	100.00
6.324	6.300 (0.000)	50	23504				15.00-	40.00	20.99
6.324	6.300 (0.000)	75	55448				30.00-	60.00	49.52
6.324	6.300 (0.000)	96	7579				5.00-	9.00	6.77
6.324	6.300 (0.000)	173	759				0.00-	2.00	0.83
6.324	6.300 (0.000)	174	91808				50.00-	100.00	82.00
6.324	6.300 (0.000)	175	6732				5.00-	9.00	7.33
6.324	6.300 (0.000)	176	89496				95.00-	101.00	97.48
6.324	6.300 (0.000)	177	5890				5.00-	9.00	6.58

Date : 29-AUG-2012 08:47

Client ID: BFB6B

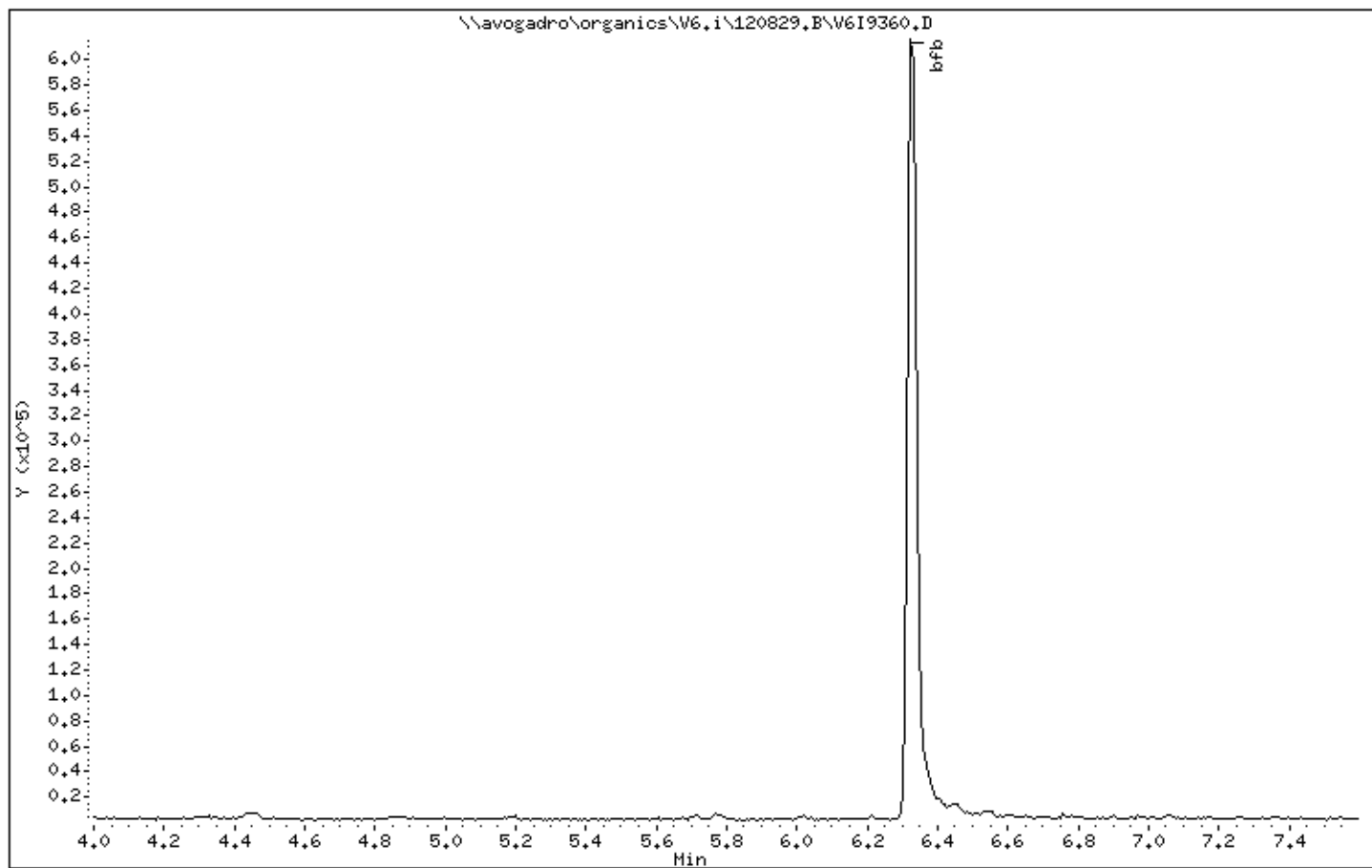
Instrument: V6.i

Sample Info: 5HL,BFB6B,BFB6B

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Date : 29-AUG-2012 08:47

Client ID: BFB6B

Instrument: V6.i

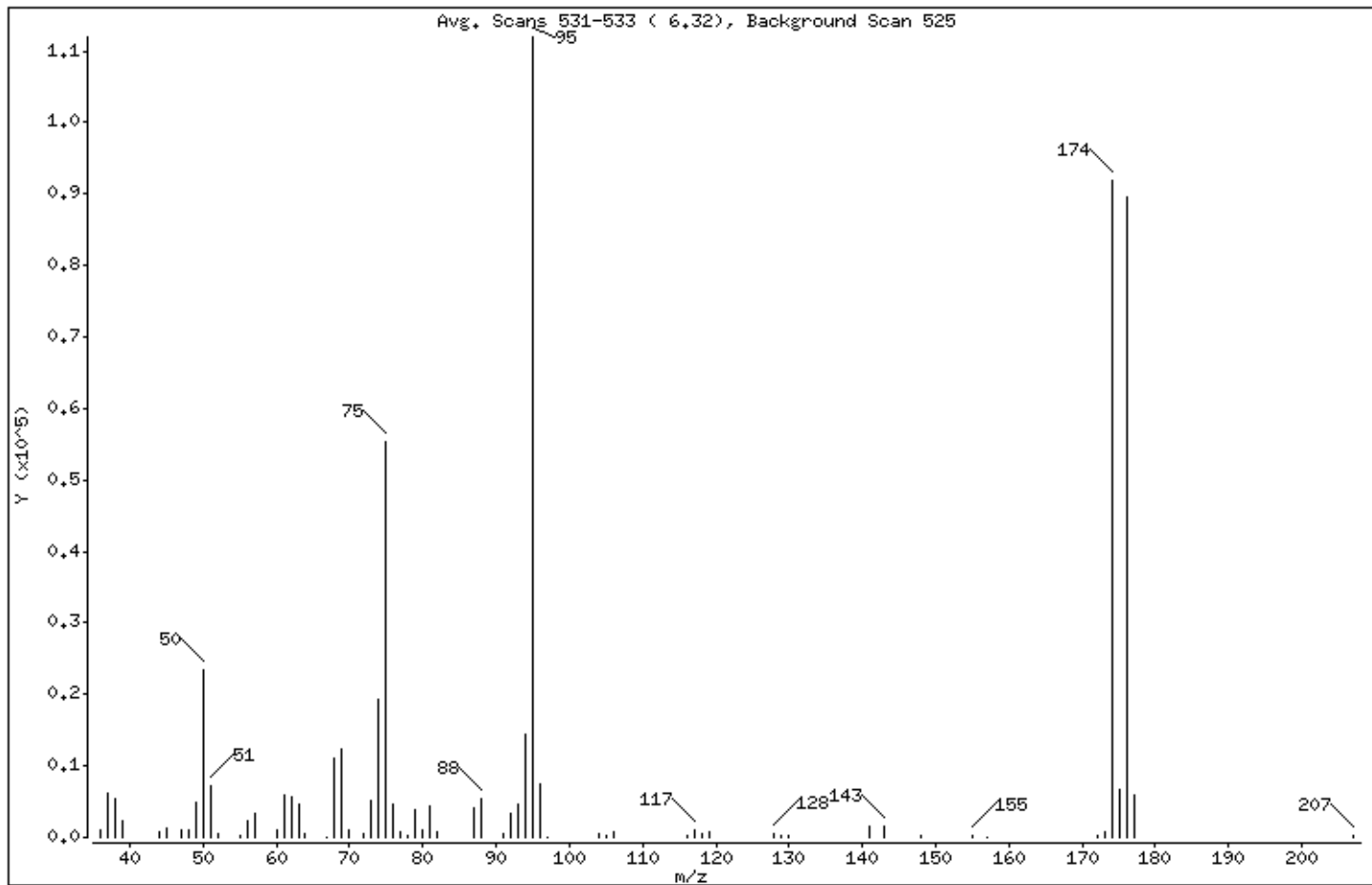
Sample Info: 5HL,BFB6B,BFB6B

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.99
75	30.00 - 60.00% of mass 95	49.52
96	5.00 - 9.00% of mass 95	6.77
173	Less than 2.00% of mass 174	0.68 (0.83)
174	50.00 - 100.00% of mass 95	82.00
175	5.00 - 9.00% of mass 174	6.01 (7.33)
176	95.00 - 101.00% of mass 174	79.94 (97.48)
177	5.00 - 9.00% of mass 176	5.26 (6.58)

Date : 29-AUG-2012 08:47

Client ID: BFB6B

Instrument: V6.i

Sample Info: 5HL,BFB6B,BFB6B

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

Data File: V6I9360.D

Spectrum: Avg. Scans 531-533 (6.32), Background Scan 525

Location of Maximum: 95.00

Number of points: 66

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	978	62.00	5740	82.00	707	128.00	512
37.00	6049	63.00	4589	87.00	4205	129.00	132
38.00	5444	64.00	455	88.00	5449	130.00	294
39.00	2218	67.00	117	91.00	514	141.00	1432
44.00	742	68.00	11009	92.00	3407	143.00	1619

45.00	1171	69.00	12241	93.00	4677	148.00	333
47.00	1108	70.00	1006	94.00	14474	155.00	130
48.00	906	72.00	460	95.00	111960	157.00	124
49.00	4768	73.00	5051	96.00	7579	172.00	141
50.00	23504	74.00	19384	97.00	126	173.00	759

51.00	7267	75.00	55448	104.00	582	174.00	91808
52.00	390	76.00	4671	105.00	136	175.00	6732
55.00	352	77.00	752	106.00	666	176.00	89496
56.00	2225	78.00	277	116.00	250	177.00	5890
57.00	3435	79.00	3965	117.00	986	207.00	227

60.00	1096	80.00	1007	118.00	492		
61.00	5997	81.00	4261	119.00	660		

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-67814

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67814

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9217.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/23/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-67814

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67814

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9217.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/23/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-67814

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67814
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9217.D
Level: (TRACE or LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 08/23/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120823.B\V6I9217.D
 Report Date: 24-Aug-2012 10:53

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120823.B\V6I9217.D
 Lab Smp Id: MB-67814 Client Smp ID: MB-67814
 Inj Date : 23-AUG-2012 12:18
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,MB-67814,MB-67814,67814
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120823.B\v68260Gadd-6lvl.m
 Meth Date : 24-Aug-2012 10:51 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 8 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

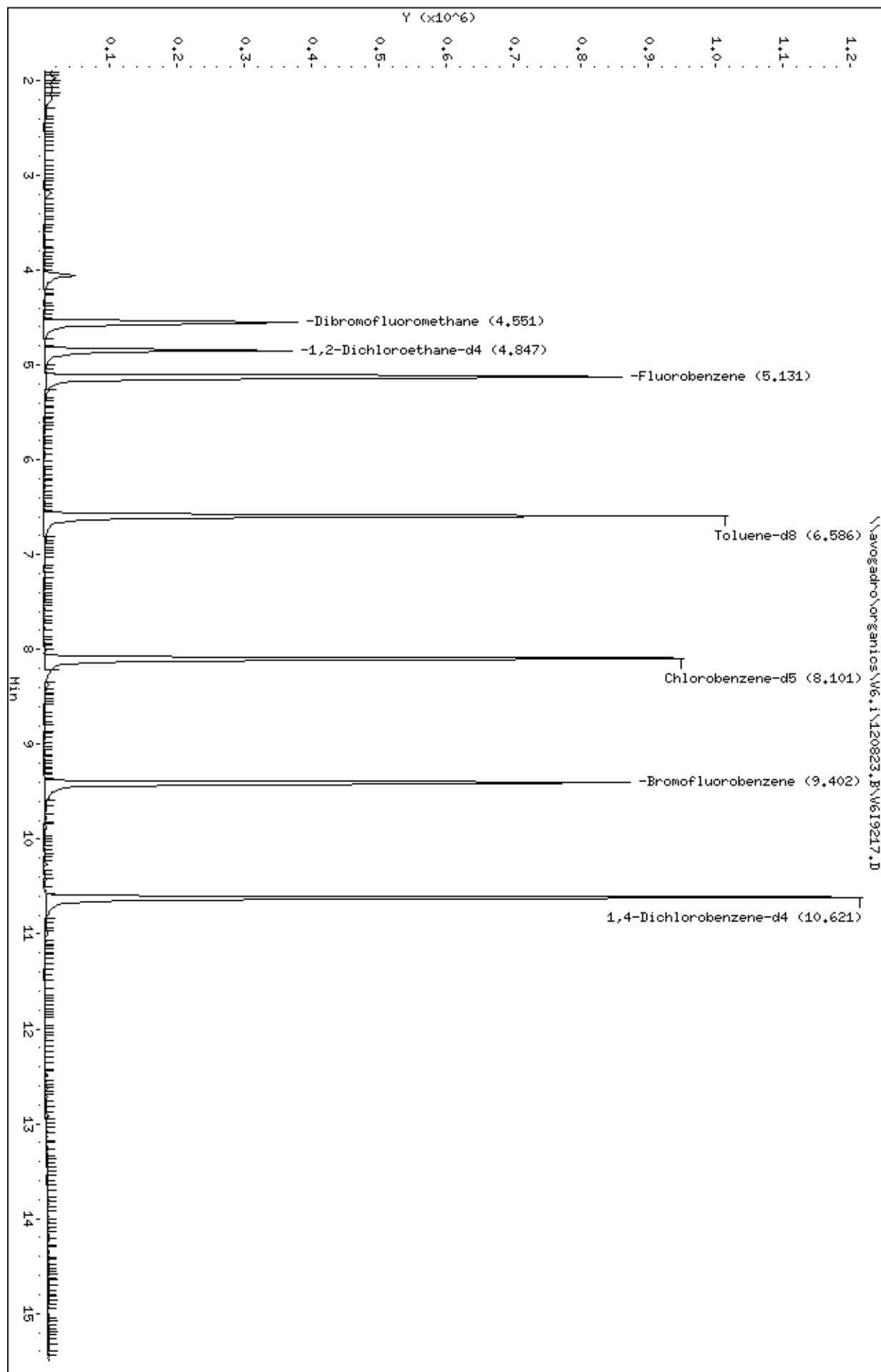
Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ug/L)	(ug/L)
\$ 36 Dibromofluoromethane	113	4.551	4.551	(0.887)	264593	53.8674	54
\$ 42 1,2-Dichloroethane-d4	102	4.846	4.846	(0.945)	54961	49.4635	49
* 46 Fluorobenzene	96	5.130	5.130	(1.000)	867204	50.0000	
\$ 58 Toluene-d8	98	6.598	6.586	(0.814)	827896	48.3084	48
* 68 Chlorobenzene-d5	117	8.100	8.100	(1.000)	714179	50.0000	
\$ 79 Bromofluorobenzene	95	9.402	9.402	(1.161)	365525	48.7751	49
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.621	(1.000)	397510	50.0000	

Data File: \\avogadro\organics\W6,i\120823.B\W6I9217.D
Date : 23-AUG-2012 12:18
Client ID: MB-67814
Sample Info: 5ML,MB-67814,MB-67814,67814
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-67828

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67828
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9257.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-67828

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67828

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9257.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/24/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-67828

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67828
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9257.D
Level: (TRACE or LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120824.B\V6I9257.D
 Report Date: 27-Aug-2012 10:39

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120824.B\V6I9257.D
 Lab Smp Id: MB-67828 Client Smp ID: MB-67828
 Inj Date : 24-AUG-2012 12:20
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,MB-67828,MB-67828,67828
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
 Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 8 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.549	4.549	(0.887)	254739	53.2068	53
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.845	(0.945)	52942	48.8826	49
* 46 Fluorobenzene	96	5.129	5.129	(1.000)	845274	50.0000	
\$ 58 Toluene-d8	98	6.596	6.584	(0.814)	808153	48.0824	48
* 68 Chlorobenzene-d5	117	8.099	8.099	(1.000)	700424	50.0000	
\$ 79 Bromofluorobenzene	95	9.400	9.400	(1.161)	353576	48.1072	48
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619	(1.000)	386785	50.0000	

Data File: \\avogadro\organics\V6.i\120824.B\V6I9257.D
Report Date: 27-Aug-2012 10:39

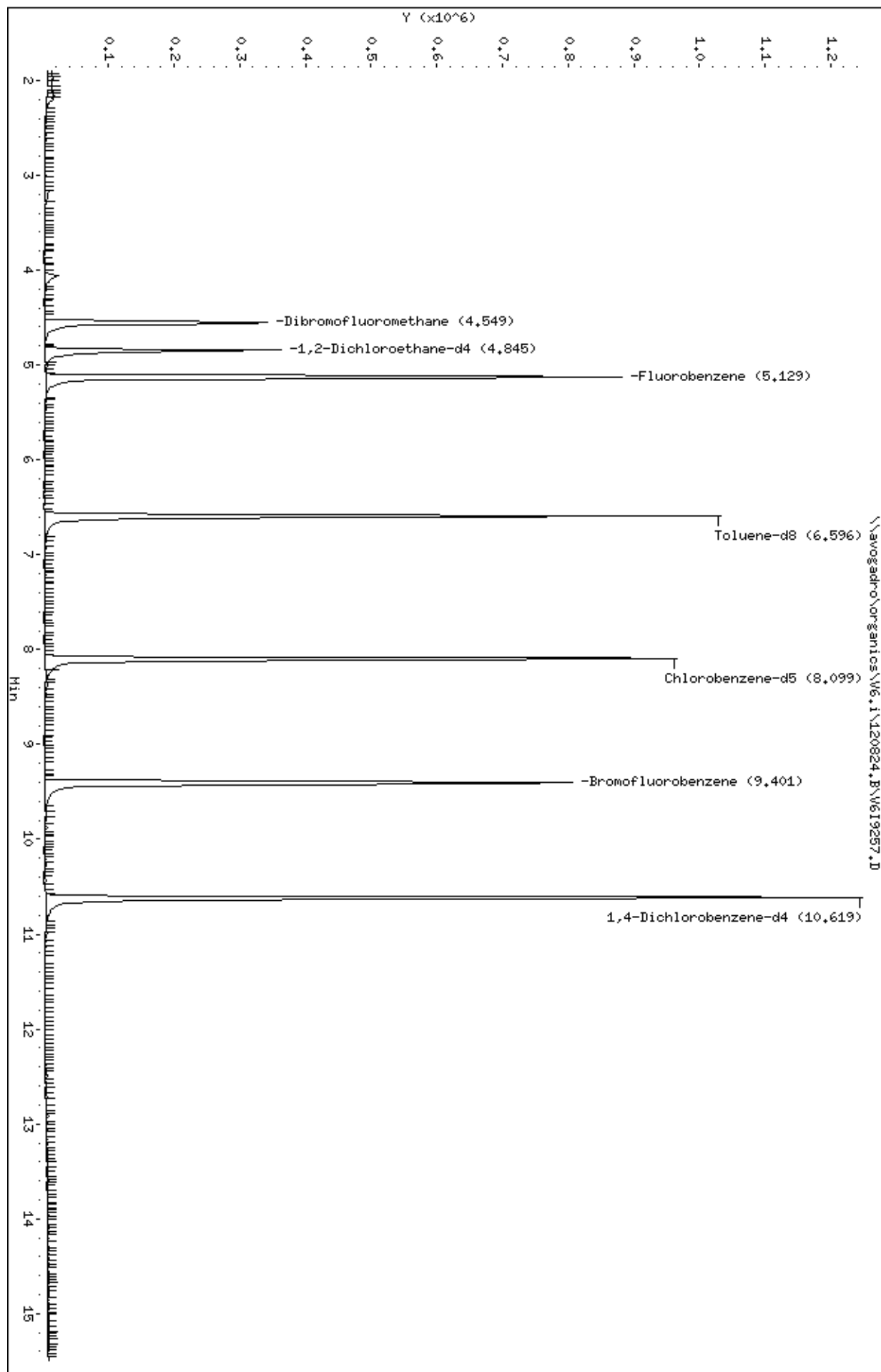
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120824.B\V6I9257.D
Lab Smp Id: MB-67828 Client Smp ID: MB-67828
Inj Date : 24-AUG-2012 12:20
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,MB-67828,MB-67828,67828
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120824,B\W6I9257.D
Date : 24-AUG-2012 12:20
Client ID: MB-67828
Sample Info: 5HL,MB-67828,MB-67828,67828
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-67875

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67875

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9336.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/28/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-67875

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67875

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9336.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/28/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-67875

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67875
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9336.D
Level: (TRACE or LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 08/28/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120828A.B\V6I9336.D
 Report Date: 29-Aug-2012 10:44

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120828A.B\V6I9336.D
 Lab Smp Id: MB-67875 Client Smp ID: MB-67875
 Inj Date : 28-AUG-2012 15:49
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,MB-67875,MB-67875,67875
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120828A.B\v68260Gadd-6lvl.m
 Meth Date : 29-Aug-2012 10:43 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 17 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.549	4.548	(0.887)	256165	51.3077	51
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.843	(0.945)	53068	49.5483	50
* 46 Fluorobenzene	96	5.128	5.127	(1.000)	849083	50.0000	
\$ 58 Toluene-d8	98	6.596	6.595	(0.814)	815664	48.2096	48
* 68 Chlorobenzene-d5	117	8.098	8.097	(1.000)	712792	50.0000	
\$ 79 Bromofluorobenzene	95	9.400	9.399	(1.161)	348581	46.6604	47
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.618	(1.000)	396673	50.0000	

Data File: \\avogadro\organics\V6.i\120828A.B\V6I9336.D
Report Date: 29-Aug-2012 10:44

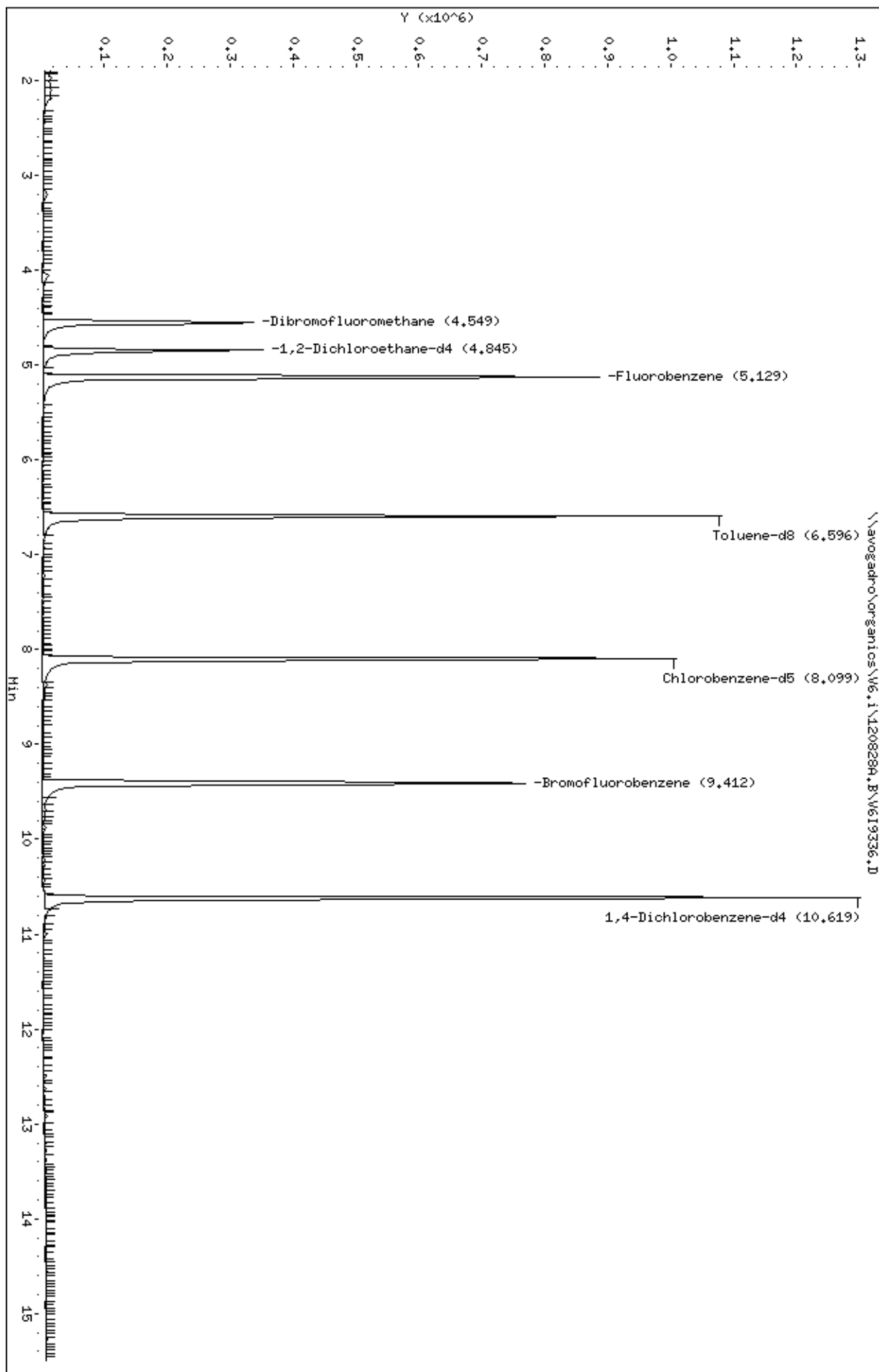
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828A.B\V6I9336.D
Lab Smp Id: MB-67875 Client Smp ID: MB-67875
Inj Date : 28-AUG-2012 15:49
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,MB-67875,MB-67875,67875
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120828A.B\v68260Gadd-6lv1.m
Meth Date : 29-Aug-2012 10:43 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 17 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6.1\1208284.B\W619336.D
Date : 28-AUG-2012 15:49
Client ID: MB-67875
Sample Info: 5HL,MB-67875,MB-67875,67875
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-67894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9366.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/29/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-67894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9366.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/29/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-67894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67894
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9366.D
Level: (TRACE or LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 08/29/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120829.B\V6I9366.D
 Report Date: 30-Aug-2012 10:06

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120829.B\V6I9366.D
 Lab Smp Id: MB-67894 Client Smp ID: MB-67894
 Inj Date : 29-AUG-2012 11:53
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML,MB-67894,MB-67894,67894
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120829.B\v68260Gadd-6lvl.m
 Meth Date : 30-Aug-2012 10:03 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 7 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.550	4.548	(0.887)	238695	50.7055	51
\$ 42 1,2-Dichloroethane-d4	102	4.846	4.844	(0.945)	49481	48.9986	49
* 46 Fluorobenzene	96	5.130	5.128	(1.000)	800573	50.0000	
\$ 58 Toluene-d8	98	6.585	6.595	(0.813)	789341	49.3358	49
* 68 Chlorobenzene-d5	117	8.100	8.098	(1.000)	674043	50.0000	
\$ 79 Bromofluorobenzene	95	9.402	9.399	(1.161)	327573	46.3691	46
* 92 1,4-Dichlorobenzene-d4	152	10.620	10.618	(1.000)	369525	50.0000	

Data File: \\avogadro\organics\V6.i\120829.B\V6I9366.D
Report Date: 30-Aug-2012 10:06

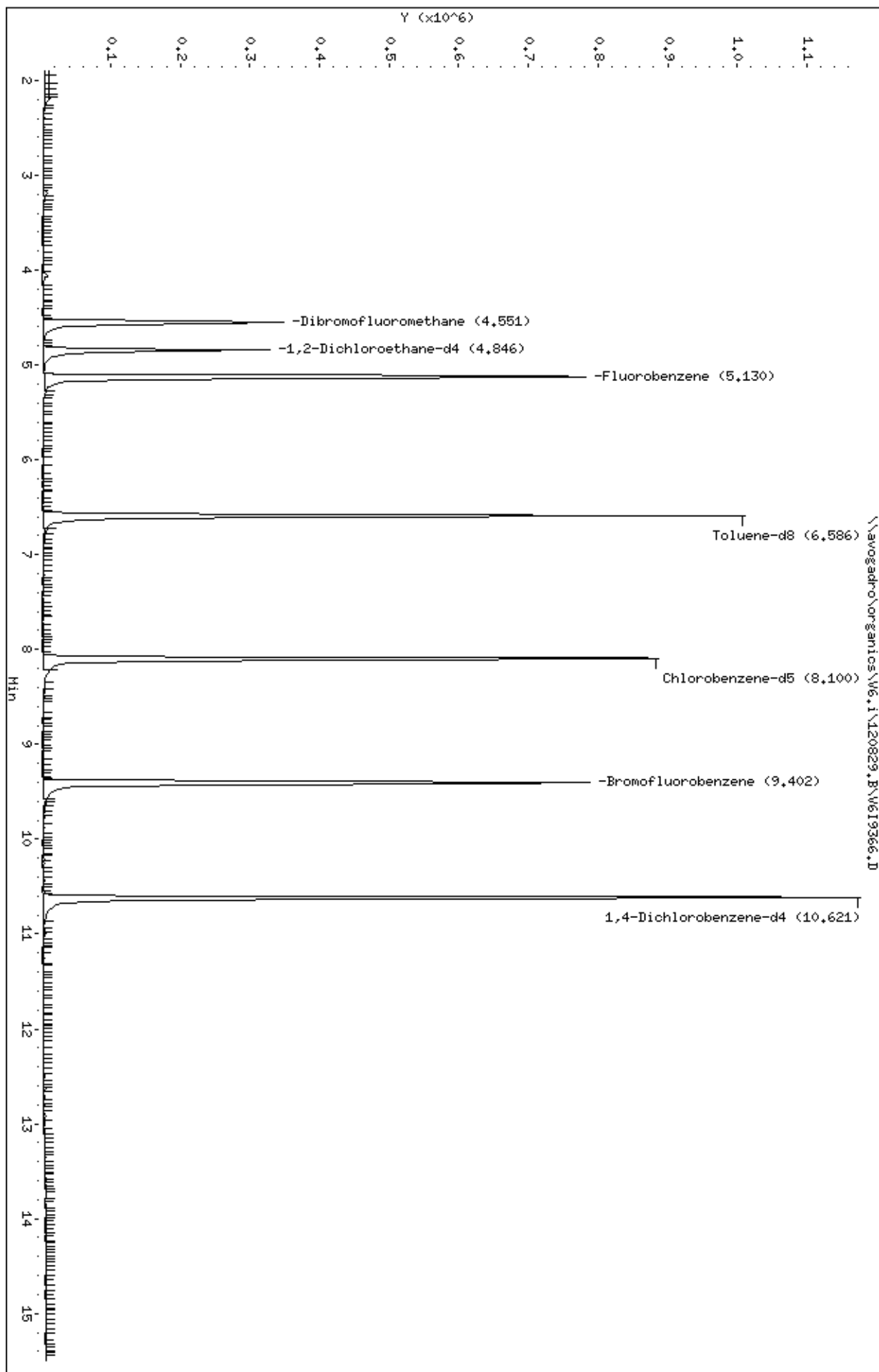
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120829.B\V6I9366.D
Lab Smp Id: MB-67894 Client Smp ID: MB-67894
Inj Date : 29-AUG-2012 11:53
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML, MB-67894, MB-67894, 67894
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120829.B\v68260Gadd-6lvl.m
Meth Date : 30-Aug-2012 10:03 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: TARGET105

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120829,B\W6I9366.D
Date : 29-AUG-2012 11:53
Client ID: MB-67894
Sample Info: 5HL,MB-67894,MB-67894,67894
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SL-MW-16MS

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L1786</u>	Mod. Ref No.: _____ SDG No.: <u>SL1786</u>
Matrix: (SOIL/SED/WATER) <u>WATER</u>	Lab Sample ID: <u>L1786-09AMS</u>
Sample wt/vol: <u>5.00</u> (g/mL) <u>ML</u>	Lab File ID: <u>V6I9368.D</u>
Level: (TRACE/LOW/MED) <u>LOW</u>	Date Received: <u>08/23/2012</u>
% Moisture: not dec. _____	Date Analyzed: <u>08/29/2012</u>
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor: <u>1.0</u>
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: <u>5.0</u> (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
75-71-8	Dichlorodifluoromethane	51	
74-87-3	Chloromethane	49	
75-01-4	Vinyl chloride	50	
74-83-9	Bromomethane	43	
75-00-3	Chloroethane	46	
75-69-4	Trichlorofluoromethane	51	
75-35-4	1,1-Dichloroethene	30	
67-64-1	Acetone	37	
74-88-4	Iodomethane	43	
75-15-0	Carbon disulfide	46	
75-09-2	Methylene chloride	38	
156-60-5	trans-1,2-Dichloroethene	47	
1634-04-4	Methyl tert-butyl ether	48	
75-34-3	1,1-Dichloroethane	47	
108-05-4	Vinyl acetate	36	
78-93-3	2-Butanone	42	
156-59-2	cis-1,2-Dichloroethene	69	
594-20-7	2,2-Dichloropropane	21	
74-97-5	Bromochloromethane	48	
67-66-3	Chloroform	48	
71-55-6	1,1,1-Trichloroethane	47	
563-58-6	1,1-Dichloropropene	47	
56-23-5	Carbon tetrachloride	46	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	48	
79-01-6	Trichloroethene	55	
78-87-5	1,2-Dichloropropane	47	
74-95-3	Dibromomethane	49	
75-27-4	Bromodichloromethane	48	
10061-01-5	cis-1,3-Dichloropropene	43	
108-10-1	4-Methyl-2-pentanone	42	
108-88-3	Toluene	47	
10061-02-6	trans-1,3-Dichloropropene	44	
79-00-5	1,1,2-Trichloroethane	48	
142-28-9	1,3-Dichloropropane	47	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SL-MW-16MS

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L1786</u>	Mod. Ref No.: _____ SDG No.: <u>SL1786</u>
Matrix: (SOIL/SED/WATER) <u>WATER</u>	Lab Sample ID: <u>L1786-09AMS</u>
Sample wt/vol: <u>5.00</u> (g/mL) <u>ML</u>	Lab File ID: <u>V6I9368.D</u>
Level: (TRACE/LOW/MED) <u>LOW</u>	Date Received: <u>08/23/2012</u>
% Moisture: not dec. _____	Date Analyzed: <u>08/29/2012</u>
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor: <u>1.0</u>
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: <u>5.0</u> (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
127-18-4	Tetrachloroethene	140	
591-78-6	2-Hexanone	40	
124-48-1	Dibromochloromethane	46	
106-93-4	1,2-Dibromoethane	47	
108-90-7	Chlorobenzene	47	
630-20-6	1,1,1,2-Tetrachloroethane	46	
100-41-4	Ethylbenzene	45	
179601-23-1	m,p-Xylene	91	
95-47-6	o-Xylene	46	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	46	
75-25-2	Bromoform	45	
98-82-8	Isopropylbenzene	47	
79-34-5	1,1,2,2-Tetrachloroethane	45	
108-86-1	Bromobenzene	46	
96-18-4	1,2,3-Trichloropropane	38	
103-65-1	n-Propylbenzene	44	
95-49-8	2-Chlorotoluene	44	
108-67-8	1,3,5-Trimethylbenzene	44	
106-43-4	4-Chlorotoluene	45	
98-06-6	tert-Butylbenzene	44	
95-63-6	1,2,4-Trimethylbenzene	45	
135-98-8	sec-Butylbenzene	45	
99-87-6	4-Isopropyltoluene	44	
541-73-1	1,3-Dichlorobenzene	45	
106-46-7	1,4-Dichlorobenzene	44	
104-51-8	n-Butylbenzene	45	
95-50-1	1,2-Dichlorobenzene	45	
96-12-8	1,2-Dibromo-3-chloropropane	41	
120-82-1	1,2,4-Trichlorobenzene	44	
87-68-3	Hexachlorobutadiene	41	
87-61-6	1,2,3-Trichlorobenzene	41	
91-20-3	Naphthalene	42	

Data File: \\avogadro\organics\V6.i\120829.B\V6I9368.D
 Report Date: 30-Aug-2012 10:06

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120829.B\V6I9368.D
 Lab Smp Id: L1786-09AMS Client Smp ID: SL-MW-16MS
 Inj Date : 29-AUG-2012 12:40
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1786-09AMS,,67894
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120829.B\v68260Gadd-6lvl.m
 Meth Date : 30-Aug-2012 10:03 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 9 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.590	1.590 (0.310)		163468	50.0000	51
3 Chloromethane	50	1.768	1.779 (0.345)		331294	50.0000	49
4 Vinyl Chloride	62	1.850	1.850 (0.361)		293283	50.0000	50
5 Bromomethane	94	2.134	2.134 (0.416)		178225	50.0000	43
6 Chloroethane	64	2.217	2.217 (0.432)		155566	50.0000	46
7 Trichlorofluoromethane	101	2.407	2.406 (0.469)		393228	50.0000	51
10 1,1-Dichloroethene	96	2.809	2.808 (0.548)		143045	50.0000	30
12 Acetone	58	2.833	2.844 (0.552)		21762	50.0000	37
13 Iodomethane	142	2.951	2.962 (0.575)		441621	50.0000	43
14 Carbon Disulfide	76	2.986	2.986 (0.582)		892698	50.0000	46
18 Methylene Chloride	84	3.176	3.163 (0.619)		242999	50.0000	38
21 trans-1,2-Dichloroethene	96	3.377	3.376 (0.659)		214561	50.0000	46
22 Methyl tert-butyl ether	73	3.365	3.365 (0.656)		615644	50.0000	48
23 1,1-Dichloroethane	63	3.708	3.708 (0.723)		371213	50.0000	46
24 Vinyl acetate	43	3.732	3.731 (0.728)		534994	50.0000	36
28 cis-1,2-Dichloroethene	96	4.170	4.169 (0.813)		318971	50.0000	69
29 2,2-Dichloropropane	77	4.170	4.169 (0.813)		80902	50.0000	21
30 2-Butanone	72	4.170	4.169 (0.813)		26249	50.0000	42(Q)
34 Bromochloromethane	128	4.359	4.358 (0.850)		121237	50.0000	48
35 Chloroform	83	4.418	4.418 (0.862)		371836	50.0000	48
\$ 36 Dibromofluoromethane	113	4.548	4.548 (0.887)		242228	50.0000	50
37 1,1,1-Trichloroethane	97	4.584	4.583 (0.894)		315514	50.0000	47
39 1,1-Dichloropropene	110	4.714	4.713 (0.919)		104079	50.0000	47

Data File: \\avogadro\organics\V6.i\120829.B\V6I9368.D
Report Date: 30-Aug-2012 10:06

							AMOUNTS	
QUANT SIG							CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
40 Carbon Tetrachloride	117	4.714	4.713	(0.919)	319682	50.0000	46	
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.844	(0.945)	54425	50.0000	53	
43 Benzene	78	4.891	4.891	(0.954)	758951	50.0000	48	
44 1,2-Dichloroethane	62	4.903	4.903	(0.956)	313171	50.0000	48	
* 46 Fluorobenzene	96	5.128	5.128	(1.000)	817736	50.0000		
47 Trichloroethene	130	5.448	5.447	(1.062)	270204	50.0000	55	
49 1,2-Dichloropropane	63	5.661	5.660	(1.104)	204725	50.0000	47	
52 Dibromomethane	93	5.779	5.778	(1.127)	142508	50.0000	49	
54 Bromodichloromethane	83	5.897	5.909	(1.150)	293011	50.0000	48	
56 cis-1,3-Dichloropropene	75	6.323	6.323	(1.233)	291078	50.0000	43	
57 4-Methyl-2-pentanone	43	6.465	6.465	(1.261)	208206	50.0000	42	
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	805889	50.0000	49	
59 Toluene	91	6.655	6.654	(1.298)	816341	50.0000	47	
60 trans-1,3-Dichloropropene	75	6.879	6.879	(1.341)	268574	50.0000	44	
62 1,1,2-Trichloroethane	97	7.069	7.068	(1.378)	188479	50.0000	48	
63 Tetrachloroethene	164	7.211	7.210	(0.890)	610066	50.0000	140	
64 1,3-Dichloropropane	76	7.234	7.234	(0.893)	309365	50.0000	47	
65 2-Hexanone	43	7.317	7.317	(0.904)	140512	50.0000	40	
66 Dibromochloromethane	129	7.483	7.482	(0.924)	254654	50.0000	46	
67 1,2-Dibromoethane	107	7.613	7.613	(0.940)	218640	50.0000	47	
* 68 Chlorobenzene-d5	117	8.098	8.098	(1.000)	688821	50.0000		
70 Chlorobenzene	112	8.122	8.133	(1.003)	570477	50.0000	47	
71 1,1,1,2-Tetrachloroethane	131	8.217	8.216	(1.015)	232321	50.0000	46	
72 Ethylbenzene	106	8.240	8.240	(1.018)	289562	50.0000	45	
73 m,p-Xylene	106	8.370	8.370	(1.034)	718651	100.000	91	
74 o-Xylene	106	8.808	8.819	(1.088)	358214	50.0000	46	
75 Styrene	104	8.832	8.831	(1.091)	613381	50.0000	46	
76 Bromoform	173	9.057	9.056	(1.118)	180391	50.0000	45	
77 Isopropylbenzene	105	9.234	9.234	(1.140)	882894	50.0000	47	
\$ 79 Bromofluorobenzene	95	9.400	9.399	(1.161)	354416	50.0000	49	
80 1,1,2,2-Tetrachloroethane	77	9.565	9.565	(0.901)	452671	50.0000	45	
81 Bromobenzene	156	9.577	9.577	(0.902)	273780	50.0000	46	
82 1,2,3-Trichloropropane	75	9.613	9.612	(0.905)	304427	50.0000	38	
83 n-Propylbenzene	120	9.684	9.683	(0.912)	247686	50.0000	44	
84 2-Chlorotoluene	126	9.778	9.778	(0.921)	236973	50.0000	44	
85 1,3,5-Trimethylbenzene	105	9.873	9.873	(0.930)	745536	50.0000	44	
86 4-Chlorotoluene	126	9.897	9.896	(0.932)	263281	50.0000	45	
87 tert-Butylbenzene	119	10.583	10.583	(0.997)	759462	50.0000	44	
M 94 Xylene (Total)	106				1076865	150.000	140	
88 1,2,4-Trimethylbenzene	105	10.264	10.263	(0.967)	769290	50.0000	45	
89 sec-Butylbenzene	105	10.429	10.441	(0.982)	910667	50.0000	45	
90 1,3-Dichlorobenzene	146	10.548	10.547	(0.993)	483652	50.0000	45	
91 4-Isopropyltoluene	119	10.583	10.583	(0.997)	759462	50.0000	44	
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.618	(1.000)	412937	50.0000		
93 1,4-Dichlorobenzene	146	10.642	10.642	(1.002)	534121	50.0000	44	
95 n-Butylbenzene	91	10.985	10.985	(1.035)	690700	50.0000	44	
96 1,2-Dichlorobenzene	146	11.009	11.009	(1.037)	503814	50.0000	45	
98 1,2-Dibromo-3-chloropropane	75	11.743	11.754	(1.106)	58129	50.0000	41	
99 1,2,4-Trichlorobenzene	180	12.488	12.488	(1.176)	291405	50.0000	44	
100 Hexachlorobutadiene	225	12.630	12.630	(1.189)	99053	50.0000	41	
101 Naphthalene	128	12.713	12.712	(1.197)	772965	50.0000	42	
102 1,2,3-Trichlorobenzene	180	12.914	12.914	(1.216)	249988	50.0000	41	

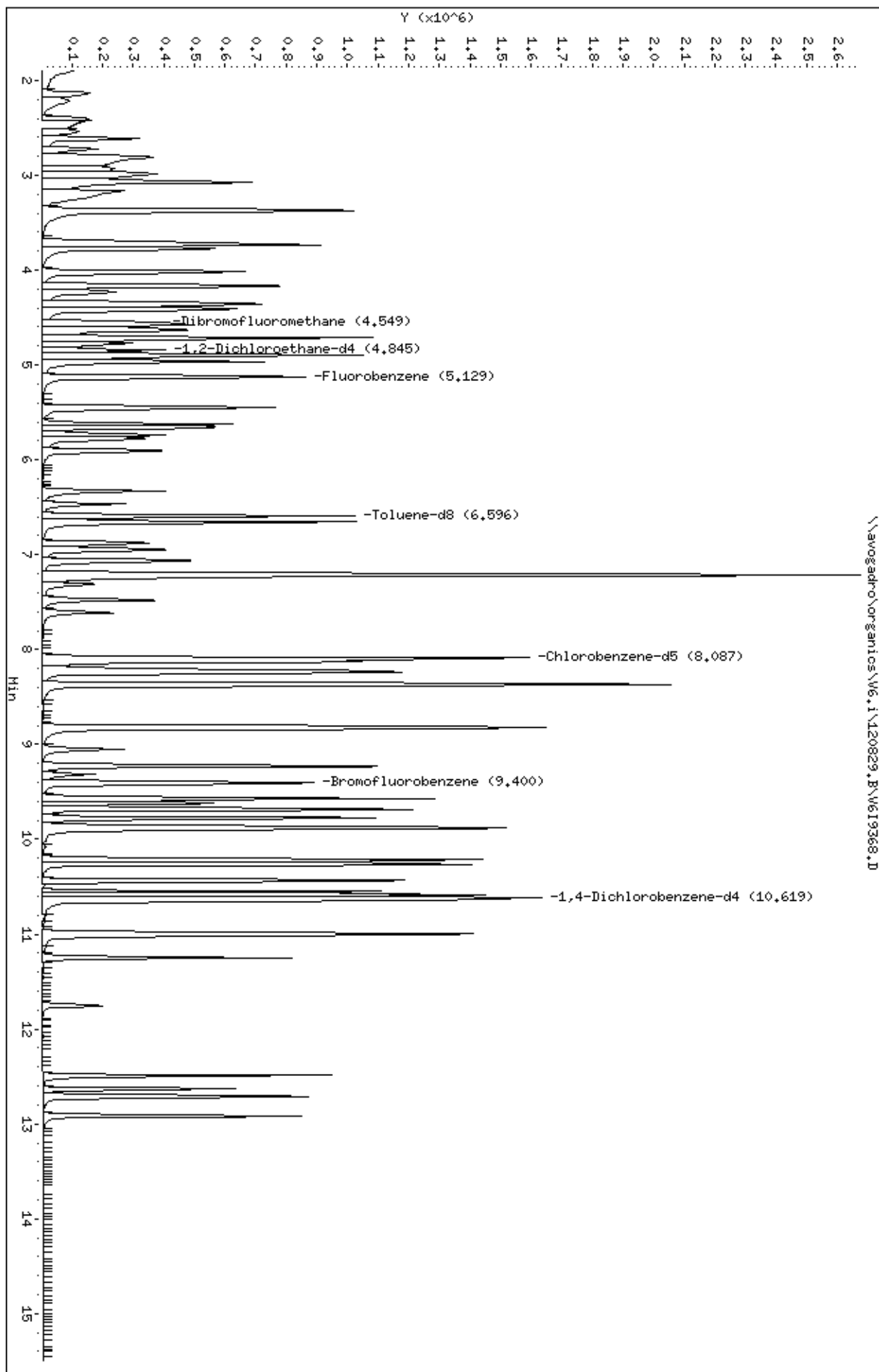
Data File: \\avogadro\organics\V6.i\120829.B\V6I9368.D
Report Date: 30-Aug-2012 10:06

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120829,B\W6I9368.D
Date : 29-AUG-2012 12:40
Client ID: SL-MM-16MS
Sample Info: 5ML, L1786-09AMS, 67894
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-16MSD

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1786-09AMSD

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9369.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/23/2012

% Moisture: not dec. Date Analyzed: 08/29/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	51	
74-87-3	Chloromethane	49	
75-01-4	Vinyl chloride	51	
74-83-9	Bromomethane	43	
75-00-3	Chloroethane	47	
75-69-4	Trichlorofluoromethane	52	
75-35-4	1,1-Dichloroethene	56	
67-64-1	Acetone	36	
74-88-4	Iodomethane	45	
75-15-0	Carbon disulfide	46	
75-09-2	Methylene chloride	37	
156-60-5	trans-1,2-Dichloroethene	47	
1634-04-4	Methyl tert-butyl ether	48	
75-34-3	1,1-Dichloroethane	48	
108-05-4	Vinyl acetate	32	
78-93-3	2-Butanone	42	
156-59-2	cis-1,2-Dichloroethene	69	
594-20-7	2,2-Dichloropropane	21	
74-97-5	Bromochloromethane	48	
67-66-3	Chloroform	48	
71-55-6	1,1,1-Trichloroethane	48	
563-58-6	1,1-Dichloropropene	47	
56-23-5	Carbon tetrachloride	48	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	48	
79-01-6	Trichloroethene	55	
78-87-5	1,2-Dichloropropane	48	
74-95-3	Dibromomethane	48	
75-27-4	Bromodichloromethane	48	
10061-01-5	cis-1,3-Dichloropropene	42	
108-10-1	4-Methyl-2-pentanone	42	
108-88-3	Toluene	48	
10061-02-6	trans-1,3-Dichloropropene	43	
79-00-5	1,1,2-Trichloroethane	47	
142-28-9	1,3-Dichloropropane	48	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
SL-MW-16MSD

Lab Name: <u>SPECTRUM ANALYTICAL, INC.</u>	Contract: _____
Lab Code: <u>MITKEM</u> Case No.: <u>L1786</u>	Mod. Ref No.: _____ SDG No.: <u>SL1786</u>
Matrix: (SOIL/SED/WATER) <u>WATER</u>	Lab Sample ID: <u>L1786-09AMSD</u>
Sample wt/vol: <u>5.00</u> (g/mL) <u>ML</u>	Lab File ID: <u>V6I9369.D</u>
Level: (TRACE/LOW/MED) <u>LOW</u>	Date Received: <u>08/23/2012</u>
% Moisture: not dec. _____	Date Analyzed: <u>08/29/2012</u>
GC Column: <u>DB-624</u> ID: <u>0.25</u> (mm)	Dilution Factor: <u>1.0</u>
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: <u>5.0</u> (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
127-18-4	Tetrachloroethene	140	
591-78-6	2-Hexanone	39	
124-48-1	Dibromochloromethane	46	
106-93-4	1,2-Dibromoethane	47	
108-90-7	Chlorobenzene	48	
630-20-6	1,1,1,2-Tetrachloroethane	46	
100-41-4	Ethylbenzene	47	
179601-23-1	m,p-Xylene	93	
95-47-6	o-Xylene	47	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	47	
75-25-2	Bromoform	45	
98-82-8	Isopropylbenzene	47	
79-34-5	1,1,2,2-Tetrachloroethane	46	
108-86-1	Bromobenzene	47	
96-18-4	1,2,3-Trichloropropane	34	
103-65-1	n-Propylbenzene	45	
95-49-8	2-Chlorotoluene	46	
108-67-8	1,3,5-Trimethylbenzene	46	
106-43-4	4-Chlorotoluene	45	
98-06-6	tert-Butylbenzene	46	
95-63-6	1,2,4-Trimethylbenzene	46	
135-98-8	sec-Butylbenzene	46	
99-87-6	4-Isopropyltoluene	46	
541-73-1	1,3-Dichlorobenzene	46	
106-46-7	1,4-Dichlorobenzene	44	
104-51-8	n-Butylbenzene	46	
95-50-1	1,2-Dichlorobenzene	46	
96-12-8	1,2-Dibromo-3-chloropropane	42	
120-82-1	1,2,4-Trichlorobenzene	46	
87-68-3	Hexachlorobutadiene	43	
87-61-6	1,2,3-Trichlorobenzene	44	
91-20-3	Naphthalene	43	

Data File: \\avogadro\organics\V6.i\120829.B\V6I9369.D
Report Date: 30-Aug-2012 10:06

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120829.B\V6I9369.D
Lab Smp Id: L1786-09AMSD Client Smp ID: SL-MW-16MSD
Inj Date : 29-AUG-2012 13:04
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1786-09AMSD,,67894
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120829.B\v68260Gadd-6lv1.m
Meth Date : 30-Aug-2012 10:03 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.589	1.590 (0.310)		162883	50.0000	51
3 Chloromethane	50	1.767	1.779 (0.345)		332890	50.0000	49
4 Vinyl Chloride	62	1.850	1.850 (0.361)		302583	50.0000	51
5 Bromomethane	94	2.134	2.134 (0.416)		182036	50.0000	43
6 Chloroethane	64	2.217	2.217 (0.432)		159524	50.0000	47
7 Trichlorofluoromethane	101	2.406	2.406 (0.469)		403575	50.0000	52
10 1,1-Dichloroethene	96	2.808	2.808 (0.548)		264633	50.0000	56(Q)
12 Acetone	58	2.844	2.844 (0.555)		21722	50.0000	36
13 Iodomethane	142	2.950	2.962 (0.575)		459996	50.0000	45
14 Carbon Disulfide	76	2.986	2.986 (0.582)		902343	50.0000	46
18 Methylene Chloride	84	3.163	3.163 (0.617)		239693	50.0000	37
21 trans-1,2-Dichloroethene	96	3.376	3.376 (0.658)		216035	50.0000	47
22 Methyl tert-butyl ether	73	3.364	3.365 (0.656)		612516	50.0000	48
23 1,1-Dichloroethane	63	3.708	3.708 (0.723)		380735	50.0000	48
24 Vinyl acetate	43	3.731	3.731 (0.728)		487976	50.0000	32
28 cis-1,2-Dichloroethene	96	4.169	4.169 (0.813)		316847	50.0000	69
29 2,2-Dichloropropane	77	4.169	4.169 (0.813)		83382	50.0000	21
30 2-Butanone	72	4.169	4.169 (0.813)		26647	50.0000	42
34 Bromochloromethane	128	4.358	4.358 (0.850)		120391	50.0000	48
35 Chloroform	83	4.418	4.418 (0.862)		374482	50.0000	48
\$ 36 Dibromofluoromethane	113	4.548	4.548 (0.887)		242020	50.0000	50
37 1,1,1-Trichloroethane	97	4.583	4.583 (0.894)		324123	50.0000	48
39 1,1-Dichloropropene	110	4.713	4.713 (0.919)		105146	50.0000	47

Data File: \\avogadro\organics\V6.i\120829.B\V6I9369.D
Report Date: 30-Aug-2012 10:06

							AMOUNTS	
QUANT SIG							CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
40 Carbon Tetrachloride	117	4.713	4.713	(0.919)	329620	50.0000	48	
\$ 42 1,2-Dichloroethane-d4	102	4.843	4.844	(0.945)	53083	50.0000	51	
43 Benzene	78	4.891	4.891	(0.954)	757864	50.0000	48	
44 1,2-Dichloroethane	62	4.903	4.903	(0.956)	310079	50.0000	48	
* 46 Fluorobenzene	96	5.127	5.128	(1.000)	820889	50.0000		
47 Trichloroethene	130	5.447	5.447	(1.062)	267872	50.0000	55	
49 1,2-Dichloropropane	63	5.660	5.660	(1.104)	209379	50.0000	48	
52 Dibromomethane	93	5.778	5.778	(1.127)	140957	50.0000	48	
54 Bromodichloromethane	83	5.908	5.909	(1.152)	292093	50.0000	48	
56 cis-1,3-Dichloropropene	75	6.323	6.323	(1.233)	284184	50.0000	42	
57 4-Methyl-2-pentanone	43	6.465	6.465	(1.261)	210066	50.0000	42	
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	802634	50.0000	50	
59 Toluene	91	6.654	6.654	(1.298)	829352	50.0000	48	
60 trans-1,3-Dichloropropene	75	6.879	6.879	(1.342)	266256	50.0000	43	
62 1,1,2-Trichloroethane	97	7.068	7.068	(1.378)	185548	50.0000	47	
63 Tetrachloroethene	164	7.210	7.210	(0.890)	611244	50.0000	140	
64 1,3-Dichloropropane	76	7.234	7.234	(0.893)	309582	50.0000	48	
65 2-Hexanone	43	7.317	7.317	(0.904)	136223	50.0000	39	
66 Dibromochloromethane	129	7.482	7.482	(0.924)	249386	50.0000	46	
67 1,2-Dibromoethane	107	7.612	7.613	(0.940)	215854	50.0000	47	
* 68 Chlorobenzene-d5	117	8.098	8.098	(1.000)	681626	50.0000		
70 Chlorobenzene	112	8.121	8.133	(1.003)	579521	50.0000	48	
71 1,1,1,2-Tetrachloroethane	131	8.216	8.216	(1.015)	230514	50.0000	46	
72 Ethylbenzene	106	8.240	8.240	(1.018)	297982	50.0000	47	
73 m,p-Xylene	106	8.370	8.370	(1.034)	724377	100.000	93	
74 o-Xylene	106	8.807	8.819	(1.088)	365050	50.0000	47	
75 Styrene	104	8.831	8.831	(1.091)	625876	50.0000	47	
76 Bromoform	173	9.056	9.056	(1.118)	179691	50.0000	45	
77 Isopropylbenzene	105	9.233	9.234	(1.140)	889469	50.0000	47	
\$ 79 Bromofluorobenzene	95	9.399	9.399	(1.161)	344496	50.0000	48	
80 1,1,2,2-Tetrachloroethane	77	9.565	9.565	(0.901)	458772	50.0000	46	
81 Bromobenzene	156	9.577	9.577	(0.902)	274633	50.0000	47	
82 1,2,3-Trichloropropane	75	9.612	9.612	(0.905)	272321	50.0000	34	
83 n-Propylbenzene	120	9.683	9.683	(0.912)	251028	50.0000	45	
84 2-Chlorotoluene	126	9.778	9.778	(0.921)	243533	50.0000	46	
85 1,3,5-Trimethylbenzene	105	9.872	9.873	(0.930)	759487	50.0000	46	
86 4-Chlorotoluene	126	9.896	9.896	(0.932)	258596	50.0000	45	
87 tert-Butylbenzene	119	10.582	10.583	(0.997)	776701	50.0000	46	
M 94 Xylene (Total)	106				1089427	150.000	140	
88 1,2,4-Trimethylbenzene	105	10.263	10.263	(0.967)	781845	50.0000	46	
89 sec-Butylbenzene	105	10.440	10.441	(0.983)	921472	50.0000	46	
90 1,3-Dichlorobenzene	146	10.547	10.547	(0.993)	490666	50.0000	46	
91 4-Isopropyltoluene	119	10.582	10.583	(0.997)	776701	50.0000	46	
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.618	(1.000)	407672	50.0000		
93 1,4-Dichlorobenzene	146	10.642	10.642	(1.002)	532336	50.0000	44	
95 n-Butylbenzene	91	10.985	10.985	(1.035)	702971	50.0000	46	
96 1,2-Dichlorobenzene	146	11.008	11.009	(1.037)	506540	50.0000	46	
98 1,2-Dibromo-3-chloropropane	75	11.754	11.754	(1.107)	58232	50.0000	42	
99 1,2,4-Trichlorobenzene	180	12.487	12.488	(1.176)	302234	50.0000	46	
100 Hexachlorobutadiene	225	12.629	12.630	(1.189)	102048	50.0000	43	
101 Naphthalene	128	12.712	12.712	(1.197)	792740	50.0000	43	
102 1,2,3-Trichlorobenzene	180	12.913	12.914	(1.216)	261092	50.0000	44	

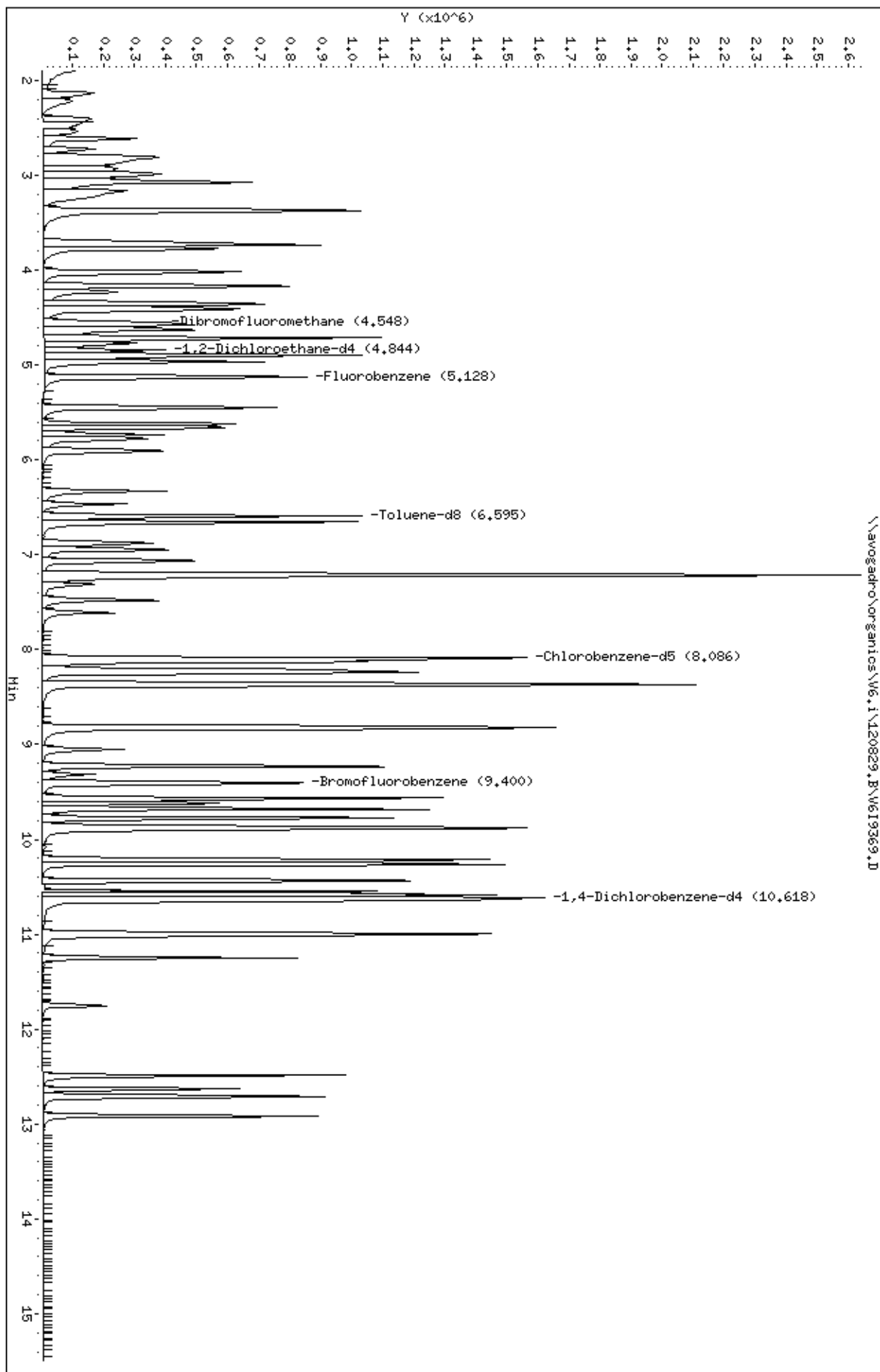
Data File: \\avogadro\organics\V6.i\120829.B\V6I9369.D
Report Date: 30-Aug-2012 10:06

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120829,B\W6I9369.D
Date : 29-AUG-2012 13:04
Client ID: SL-MM-16MSD
Sample Info: 5HL, L1786-094MSD, 67894
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-67814

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-67814

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9213.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/23/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	49	
74-87-3	Chloromethane	44	
75-01-4	Vinyl chloride	49	
74-83-9	Bromomethane	50	
75-00-3	Chloroethane	48	
75-69-4	Trichlorofluoromethane	59	
75-35-4	1,1-Dichloroethene	57	
67-64-1	Acetone	44	
74-88-4	Iodomethane	55	
75-15-0	Carbon disulfide	33	
75-09-2	Methylene chloride	53	
156-60-5	trans-1,2-Dichloroethene	53	
1634-04-4	Methyl tert-butyl ether	47	
75-34-3	1,1-Dichloroethane	50	
108-05-4	Vinyl acetate	47	
78-93-3	2-Butanone	42	
156-59-2	cis-1,2-Dichloroethene	48	
594-20-7	2,2-Dichloropropane	59	
74-97-5	Bromochloromethane	51	
67-66-3	Chloroform	53	
71-55-6	1,1,1-Trichloroethane	51	
563-58-6	1,1-Dichloropropene	51	
56-23-5	Carbon tetrachloride	54	
107-06-2	1,2-Dichloroethane	53	
71-43-2	Benzene	50	
79-01-6	Trichloroethene	53	
78-87-5	1,2-Dichloropropane	50	
74-95-3	Dibromomethane	52	
75-27-4	Bromodichloromethane	52	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	41	
108-88-3	Toluene	50	
10061-02-6	trans-1,3-Dichloropropene	53	
79-00-5	1,1,2-Trichloroethane	49	
142-28-9	1,3-Dichloropropane	51	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-67814

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-67814

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9213.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/23/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	50	
591-78-6	2-Hexanone	41	
124-48-1	Dibromochloromethane	52	
106-93-4	1,2-Dibromoethane	52	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	49	
179601-23-1	m,p-Xylene	98	
95-47-6	o-Xylene	50	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	50	
75-25-2	Bromoform	52	
98-82-8	Isopropylbenzene	49	
79-34-5	1,1,2,2-Tetrachloroethane	49	
108-86-1	Bromobenzene	49	
96-18-4	1,2,3-Trichloropropane	41	
103-65-1	n-Propylbenzene	49	
95-49-8	2-Chlorotoluene	48	
108-67-8	1,3,5-Trimethylbenzene	46	
106-43-4	4-Chlorotoluene	47	
98-06-6	tert-Butylbenzene	47	
95-63-6	1,2,4-Trimethylbenzene	47	
135-98-8	sec-Butylbenzene	47	
99-87-6	4-Isopropyltoluene	47	
541-73-1	1,3-Dichlorobenzene	48	
106-46-7	1,4-Dichlorobenzene	48	
104-51-8	n-Butylbenzene	50	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	43	
120-82-1	1,2,4-Trichlorobenzene	51	
87-68-3	Hexachlorobutadiene	56	
87-61-6	1,2,3-Trichlorobenzene	50	
91-20-3	Naphthalene	46	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120823.B\V6I9213.D
 Lab Smp Id: LCS-67814 Client Smp ID: LCS-67814
 Inj Date : 23-AUG-2012 10:43
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML, LCS-67814, LCS-67814, 67814
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120823.B\v68260Gadd-6lvl.m
 Meth Date : 24-Aug-2012 10:51 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 4 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.593	1.592 (0.311)		102720	50.0000	49
2 Freon114	85	1.699	1.699 (0.332)		198347	50.0000	58
3 Chloromethane	50	1.770	1.770 (0.346)		274659	50.0000	44
4 Vinyl Chloride	62	1.853	1.853 (0.362)		240648	50.0000	48
5 Bromomethane	94	2.137	2.137 (0.418)		169691	50.0000	50(Q)
6 Chloroethane	64	2.220	2.219 (0.434)		154631	50.0000	48(Q)
7 Trichlorofluoromethane	101	2.397	2.397 (0.468)		402712	50.0000	59
126 Ethanol	46	2.539	2.539 (0.496)		72038	5000.00	13000(AQ)
8 Ether	59	2.610	2.610 (0.510)		176050	50.0000	46
9 Acrolein	56	2.717	2.728 (0.531)		68299	250.000	140
10 1,1-Dichloroethene	96	2.812	2.811 (0.549)		269460	50.0000	57
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.812	2.799 (0.549)		255740	50.0000	60
12 Acetone	58	2.835	2.835 (0.554)		24347	50.0000	44
13 Iodomethane	142	2.954	2.953 (0.577)		480081	50.0000	55
14 Carbon Disulfide	76	2.989	2.989 (0.584)		555524	50.0000	33
15 Acetonitrile	41	3.072	3.071 (0.600)		605656	500.000	630(A)
16 Allyl Chloride	39	3.072	3.071 (0.600)		318208	50.0000	67(Q)
17 Methyl Acetate	43	3.084	3.083 (0.602)		227148	50.0000	42
18 Methylene Chloride	84	3.167	3.166 (0.619)		271394	50.0000	53
19 tert-Butanol	59	3.238	3.237 (0.633)		57884	100.000	99
20 Acrylonitrile	53	3.356	3.355 (0.656)		98056	50.0000	46
21 trans-1,2-Dichloroethene	96	3.380	3.379 (0.660)		236365	50.0000	53
22 Methyl tert-butyl ether	73	3.368	3.367 (0.658)		649137	50.0000	47

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.699	3.699	(0.723)	413420		50.0000	50
24 Vinyl acetate	43	3.723	3.722	(0.727)	763703		50.0000	47
25 Diisopropyl Ether	45	3.735	3.734	(0.730)	745669		50.0000	47
26 2-Chloro-1,3-Butadiene	53	3.770	3.770	(0.737)	345865		50.0000	51
27 Ethyl tert-butyl ether	59	4.019	4.018	(0.785)	694917		50.0000	48
29 2,2-Dichloropropane	77	4.161	4.160	(0.813)	209001		50.0000	59
28 cis-1,2-Dichloroethene	96	4.161	4.160	(0.813)	239698		50.0000	48(Q)
30 2-Butanone	72	4.172	4.172	(0.815)	27966		50.0000	42(Q)
32 Propionitrile	54	4.232	4.231	(0.827)	338186		500.000	440(A)
33 Methacrylonitrile	41	4.350	4.349	(0.850)	264477		100.000	84
34 Bromochloromethane	128	4.362	4.361	(0.852)	131587		50.0000	51
31 Tetrahydrofuran	72	4.397	4.397	(0.859)	60088		100.000	85
35 Chloroform	83	4.409	4.409	(0.861)	405222		50.0000	53
\$ 36 Dibromofluoromethane	113	4.551	4.551	(0.889)	276316		50.0000	53
37 1,1,1-Trichloroethane	97	4.575	4.574	(0.894)	345476		50.0000	51
38 Cyclohexane	56	4.622	4.622	(0.903)	361846		50.0000	47
39 1,1-Dichloropropene	110	4.717	4.716	(0.921)	116862		50.0000	51
40 Carbon Tetrachloride	117	4.717	4.716	(0.921)	367216		50.0000	54
41 Isobutyl Alcohol	43	4.776	4.775	(0.933)	220041		1000.00	880(A)
\$ 42 1,2-Dichloroethane-d4	102	4.847	4.846	(0.947)	62265		50.0000	53
43 Benzene	78	4.894	4.894	(0.956)	814779		50.0000	50
44 1,2-Dichloroethane	62	4.906	4.906	(0.958)	348438		50.0000	52
45 tert-Amyl methyl ether	73	4.965	4.965	(0.970)	636608		50.0000	47
M 50 1,2-Dichloroethene (Total)	96				476063		100.000	100
* 46 Fluorobenzene	96	5.119	5.130	(1.000)	919822		50.0000	
47 Trichloroethene	130	5.450	5.450	(1.065)	256185		50.0000	53
48 Methylcyclohexane	83	5.628	5.627	(1.099)	297705		50.0000	53
49 1,2-Dichloropropane	63	5.651	5.651	(1.104)	228713		50.0000	50(Q)
51 Methyl Methacrylate	69	5.734	5.734	(1.120)	178422		50.0000	45
52 Dibromomethane	93	5.770	5.769	(1.127)	152555		50.0000	52
53 1,4-Dioxane	88	5.782	5.781	(1.129)	34758		1000.00	980(A)
54 Bromodichloromethane	83	5.900	5.899	(1.153)	325522		50.0000	52
55 2-Chloroethyl vinyl ether	63	6.657	6.657	(1.300)	82418		50.0000	50(Q)
56 cis-1,3-Dichloropropene	75	6.326	6.325	(1.236)	374169		50.0000	53
57 4-Methyl-2-pentanone	43	6.468	6.467	(1.263)	240114		50.0000	41
\$ 58 Toluene-d8	98	6.586	6.586	(0.813)	902666		50.0000	50
59 Toluene	91	6.657	6.657	(1.300)	891311		50.0000	50
60 trans-1,3-Dichloropropene	75	6.870	6.870	(1.342)	353296		50.0000	53
61 Ethyl Methacrylate	69	6.941	6.941	(1.356)	256340		50.0000	48
62 1,1,2-Trichloroethane	97	7.060	7.059	(1.379)	207536		50.0000	49
63 Tetrachloroethene	164	7.213	7.213	(0.890)	214129		50.0000	50
64 1,3-Dichloropropane	76	7.237	7.237	(0.893)	338481		50.0000	51
65 2-Hexanone	43	7.308	7.308	(0.902)	163883		50.0000	41(Q)
66 Dibromochloromethane	129	7.474	7.473	(0.923)	292615		50.0000	52
67 1,2-Dibromoethane	107	7.604	7.603	(0.939)	246831		50.0000	52
69 1-Chlorohexane	91	8.089	8.089	(0.999)	294577		50.0000	50
* 68 Chlorobenzene-d5	117	8.101	8.100	(1.000)	745577		50.0000	
70 Chlorobenzene	112	8.125	8.124	(1.003)	626705		50.0000	50
71 1,1,1,2-Tetrachloroethane	131	8.207	8.207	(1.013)	262328		50.0000	50
72 Ethylbenzene	106	8.243	8.242	(1.018)	326803		50.0000	49
73 m,p-Xylene	106	8.361	8.361	(1.032)	787559		100.000	98
74 o-Xylene	106	8.811	8.810	(1.088)	402939		50.0000	50
75 Styrene	104	8.835	8.834	(1.091)	690052		50.0000	50
76 Bromoform	173	9.048	9.047	(1.117)	215370		50.0000	52

Compounds	QUANT SIG	AMOUNTS					
		CAL-AMT	ON-COL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 Isopropylbenzene	105	9.225	9.224 (1.139)		990347	50.0000	49
78 trans-1,4-Dichloro-2-butene	75	9.308	9.307 (1.149)		89955	50.0000	46(Q)
\$ 79 Bromofluorobenzene	95	9.402	9.402 (1.161)		397094	50.0000	51
80 1,1,2,2-Tetrachloroethane	77	9.568	9.568 (0.901)		515837	50.0000	49
81 Bromobenzene	156	9.568	9.568 (0.901)		308681	50.0000	49
82 1,2,3-Trichloropropane	75	9.615	9.615 (0.905)		360852	50.0000	41
83 n-Propylbenzene	120	9.686	9.686 (0.912)		290547	50.0000	49
84 2-Chlorotoluene	126	9.781	9.781 (0.921)		272269	50.0000	48
85 1,3,5-Trimethylbenzene	105	9.876	9.863 (0.930)		851483	50.0000	46
86 4-Chlorotoluene	126	9.888	9.887 (0.931)		290995	50.0000	47
M 94 Xylene (Total)	106				1190498	150.000	150
87 tert-Butylbenzene	119	10.586	10.585 (0.997)		882459	50.0000	47
88 1,2,4-Trimethylbenzene	105	10.266	10.266 (0.967)		875549	50.0000	47
89 sec-Butylbenzene	105	10.432	10.431 (0.982)		1013703	50.0000	47
90 1,3-Dichlorobenzene	146	10.550	10.550 (0.993)		556510	50.0000	48
91 4-Isopropyltoluene	119	10.586	10.585 (0.997)		882459	50.0000	47
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.621 (1.000)		450014	50.0000	
93 1,4-Dichlorobenzene	146	10.645	10.644 (1.002)		603113	50.0000	48
95 n-Butylbenzene	91	10.988	10.988 (1.035)		792883	50.0000	50
96 1,2-Dichlorobenzene	146	11.012	11.011 (1.037)		568617	50.0000	48
97 Hexachloroethane	117	11.248	11.248 (1.059)		198404	50.0000	48
98 1,2-Dibromo-3-chloropropane	75	11.745	11.745 (1.106)		70217	50.0000	43
141 1,3,5-Trichlorobenzene	182	12.491	12.490 (2.440)		341155	50.0000	55(A)
99 1,2,4-Trichlorobenzene	180	12.491	12.490 (1.176)		356366	50.0000	51
100 Hexachlorobutadiene	225	12.633	12.632 (1.189)		134505	50.0000	56
101 Naphthalene	128	12.704	12.703 (1.196)		900886	50.0000	46
102 1,2,3-Trichlorobenzene	180	12.917	12.916 (1.216)		309760	50.0000	50

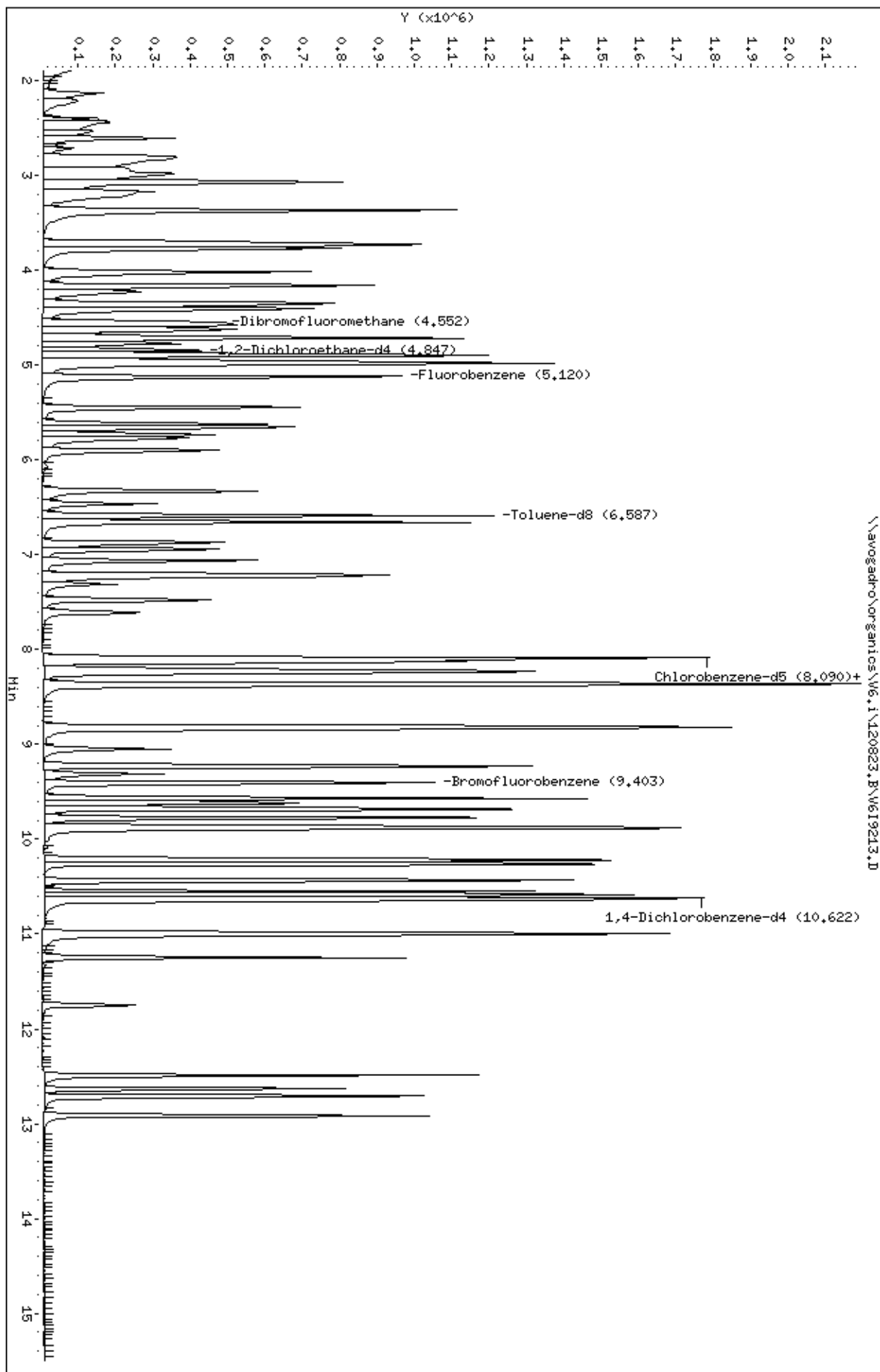
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120823.B\W619213.D
Date : 23-AUG-2012 10:43
Client ID: LCS-67814
Sample Info: 5ML,LCS-67814,LCS-67814,67814
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-67828

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-67828
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9253.D
Level: (TRACE/LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	50	
74-87-3	Chloromethane	43	
75-01-4	Vinyl chloride	49	
74-83-9	Bromomethane	49	
75-00-3	Chloroethane	48	
75-69-4	Trichlorofluoromethane	56	
75-35-4	1,1-Dichloroethene	57	
67-64-1	Acetone	48	
74-88-4	Iodomethane	52	
75-15-0	Carbon disulfide	31	
75-09-2	Methylene chloride	53	
156-60-5	trans-1,2-Dichloroethene	51	
1634-04-4	Methyl tert-butyl ether	47	
75-34-3	1,1-Dichloroethane	49	
108-05-4	Vinyl acetate	47	
78-93-3	2-Butanone	42	
156-59-2	cis-1,2-Dichloroethene	47	
594-20-7	2,2-Dichloropropane	55	
74-97-5	Bromochloromethane	49	
67-66-3	Chloroform	51	
71-55-6	1,1,1-Trichloroethane	49	
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	50	
71-43-2	Benzene	49	
79-01-6	Trichloroethene	51	
78-87-5	1,2-Dichloropropane	50	
74-95-3	Dibromomethane	51	
75-27-4	Bromodichloromethane	51	
10061-01-5	cis-1,3-Dichloropropene	52	
108-10-1	4-Methyl-2-pentanone	40	
108-88-3	Toluene	49	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	48	
142-28-9	1,3-Dichloropropane	50	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-67828

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: LCS-67828
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9253.D
Level: (TRACE/LOW/MED) LOW	Date Received:
% Moisture: not dec.	Date Analyzed: 08/24/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	49	
591-78-6	2-Hexanone	42	
124-48-1	Dibromochloromethane	50	
106-93-4	1,2-Dibromoethane	50	
108-90-7	Chlorobenzene	49	
630-20-6	1,1,1,2-Tetrachloroethane	48	
100-41-4	Ethylbenzene	48	
179601-23-1	m,p-Xylene	97	
95-47-6	o-Xylene	48	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	48	
75-25-2	Bromoform	52	
98-82-8	Isopropylbenzene	48	
79-34-5	1,1,2,2-Tetrachloroethane	50	
108-86-1	Bromobenzene	49	
96-18-4	1,2,3-Trichloropropane	43	
103-65-1	n-Propylbenzene	48	
95-49-8	2-Chlorotoluene	48	
108-67-8	1,3,5-Trimethylbenzene	47	
106-43-4	4-Chlorotoluene	47	
98-06-6	tert-Butylbenzene	47	
95-63-6	1,2,4-Trimethylbenzene	47	
135-98-8	sec-Butylbenzene	48	
99-87-6	4-Isopropyltoluene	47	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	47	
104-51-8	n-Butylbenzene	51	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	43	
120-82-1	1,2,4-Trichlorobenzene	51	
87-68-3	Hexachlorobutadiene	56	
87-61-6	1,2,3-Trichlorobenzene	49	
91-20-3	Naphthalene	46	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120824.B\V6I9253.D
 Lab Smp Id: LCS-67828 Client Smp ID: LCS-67828
 Inj Date : 24-AUG-2012 10:45
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML, LCS-67828, LCS-67828, 67828
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
 Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 4 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Dichlorodifluoromethane	85		1.603	1.603 (0.313)		99774	50.0000	50
2 Freon114	85		1.697	1.697 (0.331)		174729	50.0000	53
3 Chloromethane	50		1.780	1.768 (0.347)		261137	50.0000	43
4 Vinyl Chloride	62		1.851	1.851 (0.361)		232150	50.0000	48
5 Bromomethane	94		2.135	2.135 (0.416)		161425	50.0000	49(Q)
6 Chloroethane	64		2.218	2.230 (0.433)		149462	50.0000	48(Q)
7 Trichlorofluoromethane	101		2.407	2.407 (0.469)		373094	50.0000	56
126 Ethanol	46		2.538	2.537 (0.495)		34759	5000.00	6400(AQ)
8 Ether	59		2.609	2.608 (0.509)		166949	50.0000	45
9 Acrolein	56		2.727	2.727 (0.532)		120960	250.000	270(A)
10 1,1-Dichloroethene	96		2.810	2.810 (0.548)		261976	50.0000	57(Q)
11 1,1,2-Trichloro-1,2,2-Trifluo	101		2.810	2.810 (0.548)		240519	50.0000	58
12 Acetone	58		2.833	2.833 (0.552)		25331	50.0000	48(Q)
13 Iodomethane	142		2.964	2.952 (0.578)		439367	50.0000	52
14 Carbon Disulfide	76		2.987	2.987 (0.582)		509951	50.0000	31
15 Acetonitrile	41		3.070	3.070 (0.599)		556908	500.000	600(A)
16 Allyl Chloride	39		3.070	3.070 (0.599)		292220	50.0000	64(Q)
17 Methyl Acetate	43		3.082	3.082 (0.601)		229064	50.0000	44
18 Methylene Chloride	84		3.200	3.165 (0.624)		263361	50.0000	53
19 tert-Butanol	59		3.236	3.236 (0.631)		50645	100.000	90
20 Acrylonitrile	53		3.366	3.366 (0.656)		90768	50.0000	44
21 trans-1,2-Dichloroethene	96		3.378	3.378 (0.659)		221225	50.0000	51
22 Methyl tert-butyl ether	73		3.366	3.366 (0.656)		623142	50.0000	47

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.697	3.697	(0.721)	394747		50.0000	49
24 Vinyl acetate	43	3.733	3.733	(0.728)	730382		50.0000	46
25 Diisopropyl Ether	45	3.733	3.733	(0.728)	706670		50.0000	46
26 2-Chloro-1,3-Butadiene	53	3.768	3.768	(0.735)	323466		50.0000	49
27 Ethyl tert-butyl ether	59	4.017	4.016	(0.783)	665699		50.0000	47
29 2,2-Dichloropropane	77	4.159	4.158	(0.811)	188938		50.0000	55
28 cis-1,2-Dichloroethene	96	4.159	4.158	(0.811)	229375		50.0000	47(Q)
30 2-Butanone	72	4.170	4.170	(0.813)	27494		50.0000	42(Q)
32 Propionitrile	54	4.230	4.229	(0.825)	333707		500.000	450(A)
33 Methacrylonitrile	41	4.348	4.348	(0.848)	249047		100.000	82
34 Bromochloromethane	128	4.360	4.360	(0.850)	121476		50.0000	49
31 Tetrahydrofuran	72	4.395	4.395	(0.857)	58409		100.000	86
35 Chloroform	83	4.419	4.419	(0.862)	383279		50.0000	51
\$ 36 Dibromofluoromethane	113	4.549	4.549	(0.887)	266661		50.0000	53
37 1,1,1-Trichloroethane	97	4.573	4.573	(0.892)	318335		50.0000	49
38 Cyclohexane	56	4.620	4.620	(0.901)	350058		50.0000	47
39 1,1-Dichloropropene	110	4.715	4.715	(0.919)	110200		50.0000	50
40 Carbon Tetrachloride	117	4.715	4.715	(0.919)	337477		50.0000	51
41 Isobutyl Alcohol	43	4.774	4.774	(0.931)	207715		1000.00	850(A)
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.845	(0.945)	60709		50.0000	53
43 Benzene	78	4.892	4.892	(0.954)	763383		50.0000	49
44 1,2-Dichloroethane	62	4.904	4.904	(0.956)	323148		50.0000	50
45 tert-Amyl methyl ether	73	4.963	4.963	(0.968)	604510		50.0000	46
M 50 1,2-Dichloroethene (Total)	96				450600		100.000	98
* 46 Fluorobenzene	96	5.129	5.129	(1.000)	888960		50.0000	
47 Trichloroethene	130	5.448	5.448	(1.062)	236380		50.0000	50
48 Methylcyclohexane	83	5.626	5.626	(1.097)	284802		50.0000	53
49 1,2-Dichloropropane	63	5.661	5.661	(1.104)	218691		50.0000	50(Q)
51 Methyl Methacrylate	69	5.732	5.732	(1.118)	174481		50.0000	46
52 Dibromomethane	93	5.768	5.768	(1.125)	146389		50.0000	51
53 1,4-Dioxane	88	5.780	5.780	(1.127)	31948		1000.00	940(A)
54 Bromodichloromethane	83	5.898	5.898	(1.150)	308517		50.0000	51
55 2-Chloroethyl vinyl ether	63	6.655	6.655	(1.298)	79802		50.0000	50(Q)
56 cis-1,3-Dichloropropene	75	6.324	6.324	(1.233)	352789		50.0000	52
57 4-Methyl-2-pentanone	43	6.466	6.466	(1.261)	228829		50.0000	40
\$ 58 Toluene-d8	98	6.596	6.584	(0.814)	867840		50.0000	50
59 Toluene	91	6.655	6.655	(1.298)	833530		50.0000	49
60 trans-1,3-Dichloropropene	75	6.880	6.880	(1.341)	330379		50.0000	51
61 Ethyl Methacrylate	69	6.951	6.951	(1.355)	242580		50.0000	46
62 1,1,2-Trichloroethane	97	7.058	7.058	(1.376)	197199		50.0000	48
63 Tetrachloroethene	164	7.211	7.211	(0.890)	199590		50.0000	48
64 1,3-Dichloropropane	76	7.235	7.235	(0.893)	321534		50.0000	50
65 2-Hexanone	43	7.306	7.306	(0.902)	165370		50.0000	42(Q)
66 Dibromochloromethane	129	7.484	7.483	(0.924)	271058		50.0000	50
67 1,2-Dibromoethane	107	7.614	7.614	(0.940)	231874		50.0000	50
69 1-Chlorohexane	91	8.087	8.087	(0.999)	285914		50.0000	50
* 68 Chlorobenzene-d5	117	8.099	8.099	(1.000)	721915		50.0000	
70 Chlorobenzene	112	8.123	8.122	(1.003)	591023		50.0000	49
71 1,1,1,2-Tetrachloroethane	131	8.217	8.205	(1.015)	244040		50.0000	48
72 Ethylbenzene	106	8.241	8.241	(1.018)	310630		50.0000	48
73 m,p-Xylene	106	8.371	8.371	(1.034)	753887		100.000	97
74 o-Xylene	106	8.809	8.809	(1.088)	375968		50.0000	48
75 Styrene	104	8.833	8.832	(1.091)	644846		50.0000	48
76 Bromoform	173	9.046	9.045	(1.117)	206879		50.0000	52

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.223	9.235 (1.139)		933262		50.0000	48
78 trans-1,4-Dichloro-2-butene	75	9.318	9.318 (1.150)		85315		50.0000	45(Q)
\$ 79 Bromofluorobenzene	95	9.401	9.400 (1.161)		381730		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.566	9.566 (0.901)		499775		50.0000	50
81 Bromobenzene	156	9.578	9.566 (0.902)		293601		50.0000	49
82 1,2,3-Trichloropropane	75	9.614	9.613 (0.905)		353742		50.0000	43
83 n-Propylbenzene	120	9.685	9.684 (0.912)		266686		50.0000	48
84 2-Chlorotoluene	126	9.779	9.779 (0.921)		257696		50.0000	48
85 1,3,5-Trimethylbenzene	105	9.874	9.874 (0.930)		809496		50.0000	47
86 4-Chlorotoluene	126	9.898	9.897 (0.932)		272304		50.0000	47
M 94 Xylene (Total)	106				1129855		150.000	140
87 tert-Butylbenzene	119	10.584	10.584 (0.997)		830040		50.0000	47
88 1,2,4-Trimethylbenzene	105	10.264	10.264 (0.967)		823618		50.0000	47
89 sec-Butylbenzene	105	10.430	10.430 (0.982)		971074		50.0000	48
90 1,3-Dichlorobenzene	146	10.548	10.548 (0.993)		519116		50.0000	47
91 4-Isopropyltoluene	119	10.584	10.584 (0.997)		830040		50.0000	47
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619 (1.000)		425012		50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.643 (1.002)		561880		50.0000	47
95 n-Butylbenzene	91	10.986	10.986 (1.035)		765628		50.0000	51
96 1,2-Dichlorobenzene	146	11.010	11.010 (1.037)		532227		50.0000	48
97 Hexachloroethane	117	11.246	11.246 (1.059)		189951		50.0000	49
98 1,2-Dibromo-3-chloropropane	75	11.743	11.743 (1.106)		66690		50.0000	43
141 1,3,5-Trichlorobenzene	182	12.489	12.489 (2.435)		321887		50.0000	54(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.489 (1.176)		336335		50.0000	51
100 Hexachlorobutadiene	225	12.631	12.631 (1.189)		126783		50.0000	56
101 Naphthalene	128	12.714	12.714 (1.197)		858150		50.0000	46
102 1,2,3-Trichlorobenzene	180	12.915	12.915 (1.216)		284386		50.0000	49

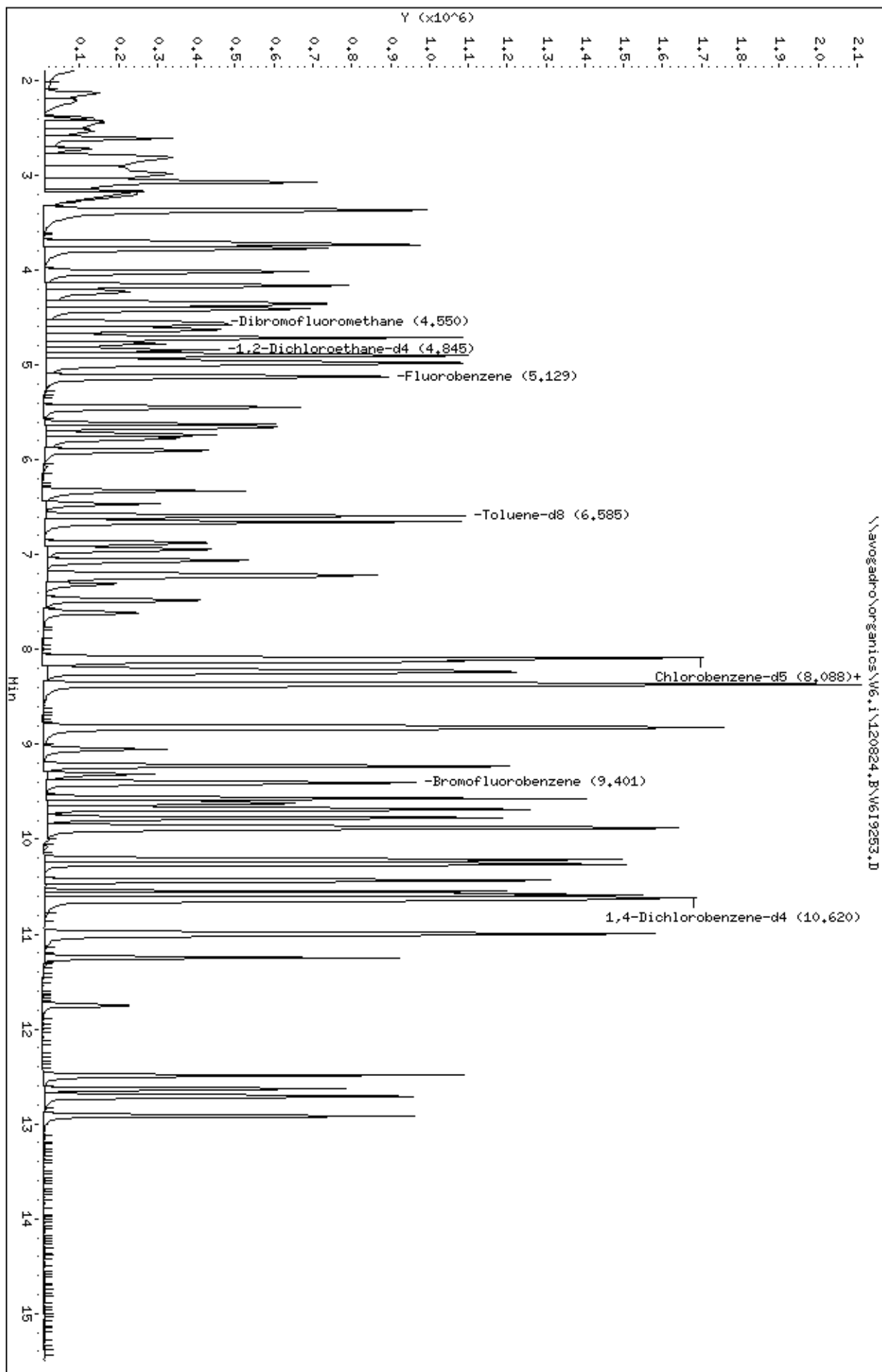
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120824,B\W619253.D
Date : 24-AUG-2012 10:45
Client ID: LCS-67828
Sample Info: 5ML,LCS-67828,LCS-67828,67828
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-67875

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: LCS-67875
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9333.D
Level: (TRACE/LOW/MED) LOW	Date Received:
% Moisture: not dec.	Date Analyzed: 08/28/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	46	
74-87-3	Chloromethane	46	
75-01-4	Vinyl chloride	44	
74-83-9	Bromomethane	42	
75-00-3	Chloroethane	44	
75-69-4	Trichlorofluoromethane	48	
75-35-4	1,1-Dichloroethene	53	
67-64-1	Acetone	53	
74-88-4	Iodomethane	47	
75-15-0	Carbon disulfide	46	
75-09-2	Methylene chloride	41	
156-60-5	trans-1,2-Dichloroethene	47	
1634-04-4	Methyl tert-butyl ether	50	
75-34-3	1,1-Dichloroethane	47	
108-05-4	Vinyl acetate	49	
78-93-3	2-Butanone	55	
156-59-2	cis-1,2-Dichloroethene	48	
594-20-7	2,2-Dichloropropane	47	
74-97-5	Bromochloromethane	48	
67-66-3	Chloroform	47	
71-55-6	1,1,1-Trichloroethane	45	
563-58-6	1,1-Dichloropropene	46	
56-23-5	Carbon tetrachloride	46	
107-06-2	1,2-Dichloroethane	48	
71-43-2	Benzene	47	
79-01-6	Trichloroethene	45	
78-87-5	1,2-Dichloropropane	48	
74-95-3	Dibromomethane	49	
75-27-4	Bromodichloromethane	47	
10061-01-5	cis-1,3-Dichloropropene	49	
108-10-1	4-Methyl-2-pentanone	50	
108-88-3	Toluene	47	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	49	
142-28-9	1,3-Dichloropropane	49	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-67875

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: LCS-67875
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9333.D
Level: (TRACE/LOW/MED) LOW	Date Received:
% Moisture: not dec.	Date Analyzed: 08/28/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	43	
591-78-6	2-Hexanone	53	
124-48-1	Dibromochloromethane	49	
106-93-4	1,2-Dibromoethane	50	
108-90-7	Chlorobenzene	46	
630-20-6	1,1,1,2-Tetrachloroethane	47	
100-41-4	Ethylbenzene	46	
179601-23-1	m,p-Xylene	93	
95-47-6	o-Xylene	47	
1330-20-7	Xylene (Total)	140	
100-42-5	Styrene	47	
75-25-2	Bromoform	52	
98-82-8	Isopropylbenzene	47	
79-34-5	1,1,2,2-Tetrachloroethane	49	
108-86-1	Bromobenzene	48	
96-18-4	1,2,3-Trichloropropane	42	
103-65-1	n-Propylbenzene	46	
95-49-8	2-Chlorotoluene	47	
108-67-8	1,3,5-Trimethylbenzene	46	
106-43-4	4-Chlorotoluene	46	
98-06-6	tert-Butylbenzene	47	
95-63-6	1,2,4-Trimethylbenzene	46	
135-98-8	sec-Butylbenzene	46	
99-87-6	4-Isopropyltoluene	47	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	45	
104-51-8	n-Butylbenzene	47	
95-50-1	1,2-Dichlorobenzene	47	
96-12-8	1,2-Dibromo-3-chloropropane	53	
120-82-1	1,2,4-Trichlorobenzene	46	
87-68-3	Hexachlorobutadiene	45	
87-61-6	1,2,3-Trichlorobenzene	45	
91-20-3	Naphthalene	48	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120828A.B\V6I9333.D
 Lab Smp Id: LCS-67875 Client Smp ID: LCS-67875
 Inj Date : 28-AUG-2012 14:33
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,LCS-67875,LCS-67875,67875
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120828A.B\v68260Gadd-6lvl.m
 Meth Date : 29-Aug-2012 10:43 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 14 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	=====
1 Dichlorodifluoromethane	85		1.601	1.601 (0.312)		165360	50.0000	46
2 Freon114	85		1.696	1.696 (0.331)		307464	50.0000	46
3 Chloromethane	50		1.779	1.779 (0.347)		348250	50.0000	46
4 Vinyl Chloride	62		1.861	1.861 (0.363)		294845	50.0000	44
5 Bromomethane	94		2.145	2.145 (0.418)		197985	50.0000	42
6 Chloroethane	64		2.216	2.216 (0.432)		169831	50.0000	44
7 Trichlorofluoromethane	101		2.406	2.406 (0.469)		421487	50.0000	48
126 Ethanol	46		2.536	2.536 (0.495)		28610	5000.00	3400(A)
8 Ether	59		2.619	2.619 (0.511)		193613	50.0000	49
9 Acrolein	56		2.725	2.725 (0.532)		201410	250.000	210(A)
10 1,1-Dichloroethene	96		2.820	2.820 (0.550)		283937	50.0000	53
11 1,1,2-Trichloro-1,2,2-Trifluo	101		2.808	2.808 (0.548)		269379	50.0000	46
12 Acetone	58		2.844	2.844 (0.555)		35785	50.0000	53
13 Iodomethane	142		2.962	2.962 (0.578)		543625	50.0000	47
14 Carbon Disulfide	76		2.997	2.997 (0.585)		1010760	50.0000	46
15 Acetonitrile	41		3.068	3.068 (0.598)		622570	500.000	430(A)
16 Allyl Chloride	39		3.068	3.068 (0.598)		317756	50.0000	46
17 Methyl Acetate	43		3.080	3.080 (0.601)		269721	50.0000	52
18 Methylene Chloride	84		3.199	3.199 (0.624)		293543	50.0000	41
19 tert-Butanol	59		3.234	3.234 (0.631)		52926	100.000	95
20 Acrylonitrile	53		3.364	3.364 (0.656)		110065	50.0000	51
21 trans-1,2-Dichloroethene	96		3.376	3.376 (0.658)		243172	50.0000	47

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
22 Methyl tert-butyl ether	73	3.364	3.364	(0.656)	714749		50.0000	50
23 1,1-Dichloroethane	63	3.707	3.707	(0.723)	420734		50.0000	47
24 Vinyl acetate	43	3.731	3.731	(0.728)	830766		50.0000	49
25 Diisopropyl Ether	45	3.731	3.731	(0.728)	773174		50.0000	47
26 2-Chloro-1,3-Butadiene	53	3.778	3.778	(0.737)	358454		50.0000	46
27 Ethyl tert-butyl ether	59	4.027	4.027	(0.785)	721451		50.0000	47
29 2,2-Dichloropropane	77	4.169	4.169	(0.813)	205462		50.0000	46
28 cis-1,2-Dichloroethene	96	4.169	4.169	(0.813)	247169		50.0000	48
30 2-Butanone	72	4.169	4.169	(0.813)	38945		50.0000	55
32 Propionitrile	54	4.240	4.240	(0.827)	403802		500.000	510(A)
33 Methacrylonitrile	41	4.346	4.346	(0.848)	295610		100.000	96
34 Bromochloromethane	128	4.370	4.370	(0.852)	135383		50.0000	48
31 Tetrahydrofuran	72	4.406	4.406	(0.859)	75824		100.000	100
35 Chloroform	83	4.417	4.417	(0.862)	415505		50.0000	47
\$ 36 Dibromofluoromethane	113	4.548	4.548	(0.887)	273433		50.0000	50
37 1,1,1-Trichloroethane	97	4.583	4.583	(0.894)	338879		50.0000	45
38 Cyclohexane	56	4.630	4.630	(0.903)	381638		50.0000	46
39 1,1-Dichloropropene	110	4.713	4.713	(0.919)	116474		50.0000	46
40 Carbon Tetrachloride	117	4.725	4.725	(0.922)	355805		50.0000	46
41 Isobutyl Alcohol	43	4.784	4.784	(0.933)	240532		1000.00	990(A)
\$ 42 1,2-Dichloroethane-d4	102	4.843	4.843	(0.945)	53144		50.0000	46
43 Benzene	78	4.891	4.891	(0.954)	829991		50.0000	46
44 1,2-Dichloroethane	62	4.914	4.914	(0.958)	347064		50.0000	48
45 tert-Amyl methyl ether	73	4.962	4.962	(0.968)	685830		50.0000	48
M 50 1,2-Dichloroethene (Total)	96				490341		100.000	94
* 46 Fluorobenzene	96	5.127	5.127	(1.000)	922596		50.0000	
47 Trichloroethene	130	5.447	5.447	(1.062)	247628		50.0000	45
48 Methylcyclohexane	83	5.624	5.624	(1.097)	307975		50.0000	47
49 1,2-Dichloropropane	63	5.660	5.660	(1.104)	233430		50.0000	48
51 Methyl Methacrylate	69	5.743	5.743	(1.120)	201620		50.0000	50
52 Dibromomethane	93	5.778	5.778	(1.127)	159705		50.0000	49
53 1,4-Dioxane	88	5.778	5.778	(1.127)	17641		1000.00	500(A)
54 Bromodichloromethane	83	5.908	5.908	(1.152)	326281		50.0000	47
55 2-Chloroethyl vinyl ether	63	6.654	6.654	(1.298)	83716		50.0000	48
56 cis-1,3-Dichloropropene	75	6.334	6.334	(1.235)	371825		50.0000	49
57 4-Methyl-2-pentanone	43	6.464	6.464	(1.261)	280469		50.0000	50
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	893678		50.0000	50
59 Toluene	91	6.654	6.654	(1.298)	907213		50.0000	47
60 trans-1,3-Dichloropropene	75	6.879	6.879	(1.342)	353161		50.0000	51
61 Ethyl Methacrylate	69	6.950	6.950	(1.355)	286507		50.0000	50
62 1,1,2-Trichloroethane	97	7.068	7.068	(1.378)	216182		50.0000	49
63 Tetrachloroethene	164	7.210	7.210	(0.890)	201739		50.0000	42
64 1,3-Dichloropropane	76	7.245	7.245	(0.895)	351808		50.0000	49
65 2-Hexanone	43	7.316	7.316	(0.904)	204301		50.0000	53
66 Dibromochloromethane	129	7.482	7.482	(0.924)	296932		50.0000	49
67 1,2-Dibromoethane	107	7.612	7.612	(0.940)	254514		50.0000	50
69 1-Chlorohexane	91	8.086	8.086	(0.999)	302795		50.0000	44
* 68 Chlorobenzene-d5	117	8.097	8.097	(1.000)	756683		50.0000	
70 Chlorobenzene	112	8.133	8.133	(1.004)	614833		50.0000	46
71 1,1,1,2-Tetrachloroethane	131	8.216	8.216	(1.015)	260019		50.0000	46
72 Ethylbenzene	106	8.239	8.239	(1.018)	327647		50.0000	46
73 m,p-Xylene	106	8.370	8.370	(1.034)	800828		100.000	93
74 o-Xylene	106	8.819	8.819	(1.089)	400701		50.0000	47
75 Styrene	104	8.831	8.831	(1.091)	700302		50.0000	47

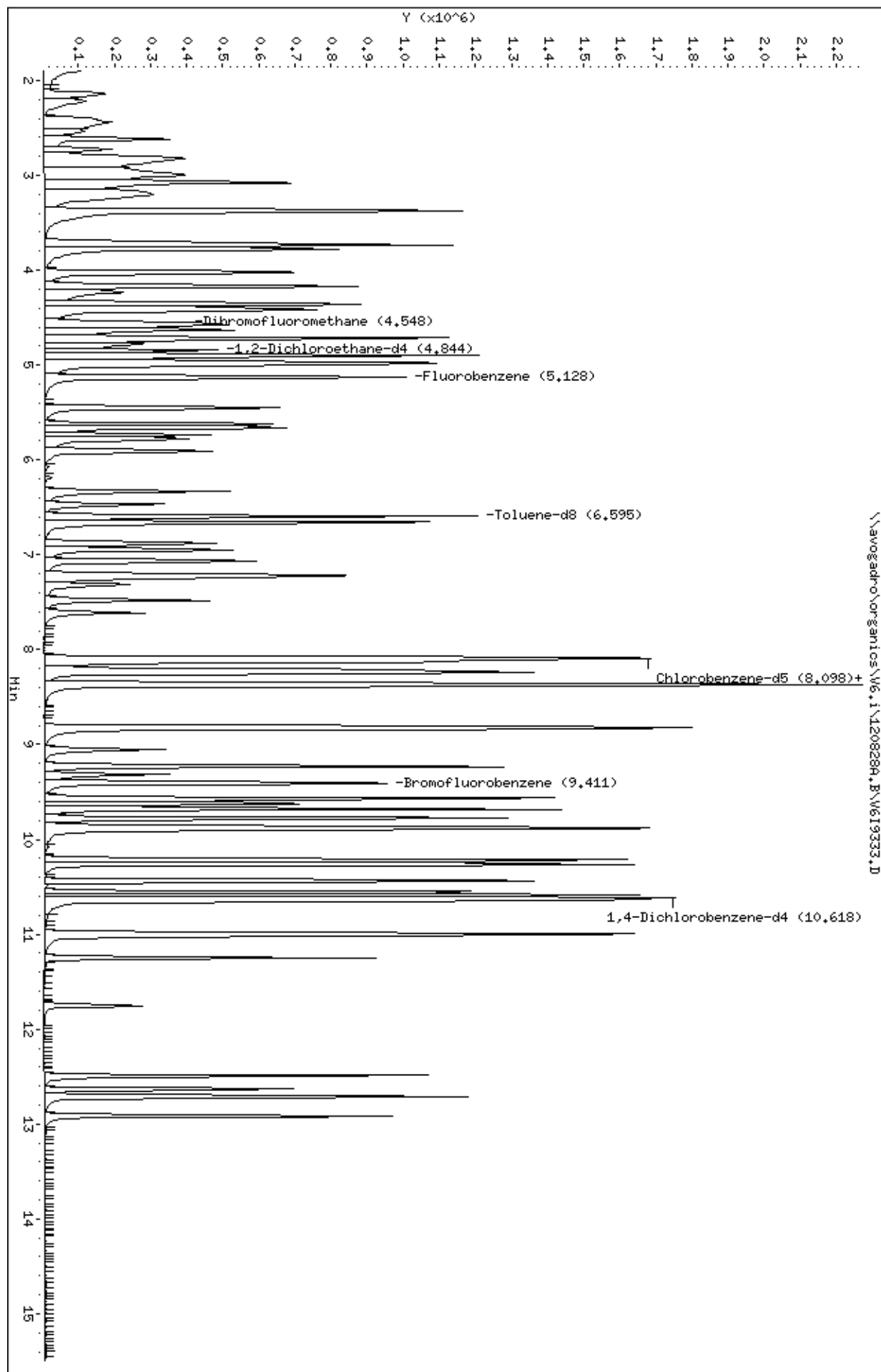
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
76 Bromoform	173	9.056	9.056 (1.118)		228230		50.0000	52
77 Isopropylbenzene	105	9.233	9.233 (1.140)		982732		50.0000	47
78 trans-1,4-Dichloro-2-butene	75	9.316	9.316 (1.151)		100361		50.0000	51
\$ 79 Bromofluorobenzene	95	9.399	9.399 (1.161)		393029		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.576	9.576 (0.902)		526538		50.0000	48
81 Bromobenzene	156	9.576	9.576 (0.902)		308779		50.0000	48
82 1,2,3-Trichloropropane	75	9.612	9.612 (0.905)		367125		50.0000	42
83 n-Propylbenzene	120	9.683	9.683 (0.912)		281888		50.0000	46
84 2-Chlorotoluene	126	9.778	9.778 (0.921)		272036		50.0000	46
85 1,3,5-Trimethylbenzene	105	9.872	9.872 (0.930)		848900		50.0000	46
86 4-Chlorotoluene	126	9.896	9.896 (0.932)		291768		50.0000	46
M 94 Xylene (Total)	106				1201529		150.000	140
87 tert-Butylbenzene	119	10.582	10.582 (0.997)		870638		50.0000	47
88 1,2,4-Trimethylbenzene	105	10.263	10.263 (0.967)		860824		50.0000	46
89 sec-Butylbenzene	105	10.440	10.440 (0.983)		1008973		50.0000	46
90 1,3-Dichlorobenzene	146	10.559	10.559 (0.994)		547779		50.0000	47
91 4-Isopropyltoluene	119	10.582	10.582 (0.997)		870638		50.0000	47
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.618 (1.000)		447017		50.0000	
93 1,4-Dichlorobenzene	146	10.641	10.641 (1.002)		604083		50.0000	45
95 n-Butylbenzene	91	10.985	10.985 (1.035)		786807		50.0000	47
96 1,2-Dichlorobenzene	146	11.008	11.008 (1.037)		570241		50.0000	47
97 Hexachloroethane	117	11.245	11.245 (1.059)		199260		50.0000	46
98 1,2-Dibromo-3-chloropropane	75	11.754	11.754 (1.107)		80934		50.0000	53
141 1,3,5-Trichlorobenzene	182	12.487	12.487 (2.435)		322734		50.0000	48(A)
99 1,2,4-Trichlorobenzene	180	12.487	12.487 (1.176)		330231		50.0000	46
100 Hexachlorobutadiene	225	12.629	12.629 (1.189)		117486		50.0000	45
101 Naphthalene	128	12.712	12.712 (1.197)		956599		50.0000	48
102 1,2,3-Trichlorobenzene	180	12.913	12.913 (1.216)		295686		50.0000	45

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W6,i\1208284,B\W619333.D
Date : 28-AUG-2012 14:33
Client ID: LCS-67875
Sample Info: 5ML,LCS-67875,LCS-67875,67875
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-67894

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: LCS-67894
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9363.D
Level: (TRACE/LOW/MED) LOW	Date Received:
% Moisture: not dec.	Date Analyzed: 08/29/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	51	
74-87-3	Chloromethane	56	
75-01-4	Vinyl chloride	53	
74-83-9	Bromomethane	54	
75-00-3	Chloroethane	54	
75-69-4	Trichlorofluoromethane	55	
75-35-4	1,1-Dichloroethene	63	
67-64-1	Acetone	38	
74-88-4	Iodomethane	54	
75-15-0	Carbon disulfide	54	
75-09-2	Methylene chloride	46	
156-60-5	trans-1,2-Dichloroethene	55	
1634-04-4	Methyl tert-butyl ether	52	
75-34-3	1,1-Dichloroethane	55	
108-05-4	Vinyl acetate	54	
78-93-3	2-Butanone	42	
156-59-2	cis-1,2-Dichloroethene	57	
594-20-7	2,2-Dichloropropane	56	
74-97-5	Bromochloromethane	56	
67-66-3	Chloroform	56	
71-55-6	1,1,1-Trichloroethane	52	
563-58-6	1,1-Dichloropropene	55	
56-23-5	Carbon tetrachloride	54	
107-06-2	1,2-Dichloroethane	55	
71-43-2	Benzene	56	
79-01-6	Trichloroethene	54	
78-87-5	1,2-Dichloropropane	56	
74-95-3	Dibromomethane	55	
75-27-4	Bromodichloromethane	56	
10061-01-5	cis-1,3-Dichloropropene	58	
108-10-1	4-Methyl-2-pentanone	45	
108-88-3	Toluene	55	
10061-02-6	trans-1,3-Dichloropropene	59	
79-00-5	1,1,2-Trichloroethane	54	
142-28-9	1,3-Dichloropropane	53	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-67894

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1786	Mod. Ref No.: _____ SDG No.: SL1786
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: LCS-67894
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9363.D
Level: (TRACE/LOW/MED) LOW	Date Received: _____
% Moisture: not dec.	Date Analyzed: 08/29/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	50	
591-78-6	2-Hexanone	42	
124-48-1	Dibromochloromethane	54	
106-93-4	1,2-Dibromoethane	53	
108-90-7	Chlorobenzene	56	
630-20-6	1,1,1,2-Tetrachloroethane	55	
100-41-4	Ethylbenzene	55	
179601-23-1	m,p-Xylene	110	
95-47-6	o-Xylene	54	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	54	
75-25-2	Bromoform	54	
98-82-8	Isopropylbenzene	54	
79-34-5	1,1,2,2-Tetrachloroethane	54	
108-86-1	Bromobenzene	56	
96-18-4	1,2,3-Trichloropropane	43	
103-65-1	n-Propylbenzene	53	
95-49-8	2-Chlorotoluene	54	
108-67-8	1,3,5-Trimethylbenzene	53	
106-43-4	4-Chlorotoluene	54	
98-06-6	tert-Butylbenzene	53	
95-63-6	1,2,4-Trimethylbenzene	53	
135-98-8	sec-Butylbenzene	52	
99-87-6	4-Isopropyltoluene	53	
541-73-1	1,3-Dichlorobenzene	53	
106-46-7	1,4-Dichlorobenzene	51	
104-51-8	n-Butylbenzene	53	
95-50-1	1,2-Dichlorobenzene	53	
96-12-8	1,2-Dibromo-3-chloropropane	44	
120-82-1	1,2,4-Trichlorobenzene	52	
87-68-3	Hexachlorobutadiene	51	
87-61-6	1,2,3-Trichlorobenzene	49	
91-20-3	Naphthalene	46	

Data File: \\avogadro\organics\V6.i\120829.B\V6I9363.D
 Report Date: 30-Aug-2012 10:06

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120829.B\V6I9363.D
 Lab Smp Id: 2911LCS Client Smp ID: 2911LCS
 Inj Date : 29-AUG-2012 10:42
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML,2911LCS,2911LCS,147
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120829.B\v68260Gadd-6lvl.m
 Meth Date : 30-Aug-2012 10:03 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 4 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.590	1.590 (0.310)		173328	50.0000	51
2 Freon114	85	1.696	1.696 (0.331)		341357	50.0000	53
3 Chloromethane	50	1.779	1.779 (0.347)		402917	50.0000	56
4 Vinyl Chloride	62	1.850	1.850 (0.361)		337266	50.0000	53
5 Bromomethane	94	2.134	2.134 (0.416)		239691	50.0000	54
6 Chloroethane	64	2.217	2.217 (0.432)		194451	50.0000	54
7 Trichlorofluoromethane	101	2.406	2.406 (0.469)		456999	50.0000	55
126 Ethanol	46	2.536	2.536 (0.495)		69746	5000.00	8600(A)
8 Ether	59	2.607	2.607 (0.509)		208286	50.0000	56
9 Acrolein	56	2.726	2.726 (0.532)		197997	250.000	220(A)
10 1,1-Dichloroethene	96	2.808	2.808 (0.548)		316019	50.0000	63
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.808	2.808 (0.548)		292874	50.0000	53
12 Acetone	58	2.844	2.844 (0.555)		23852	50.0000	38
13 Iodomethane	142	2.962	2.962 (0.578)		586383	50.0000	54
14 Carbon Disulfide	76	2.986	2.986 (0.582)		1127840	50.0000	54
15 Acetonitrile	41	3.069	3.069 (0.599)		735903	500.000	530(A)
16 Allyl Chloride	39	3.069	3.069 (0.599)		378486	50.0000	58
17 Methyl Acetate	43	3.081	3.081 (0.601)		236240	50.0000	48
18 Methylene Chloride	84	3.163	3.163 (0.617)		317159	50.0000	46
19 tert-Butanol	59	3.234	3.234 (0.631)		56141	100.000	110
20 Acrylonitrile	53	3.365	3.365 (0.656)		99653	50.0000	49
21 trans-1,2-Dichloroethene	96	3.376	3.376 (0.659)		270082	50.0000	55
22 Methyl tert-butyl ether	73	3.365	3.365 (0.656)		713964	50.0000	52

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.708	3.708	(0.723)	470812		50.0000	55
24 Vinyl acetate	43	3.731	3.731	(0.728)	865251		50.0000	54
25 Diisopropyl Ether	45	3.731	3.731	(0.728)	850484		50.0000	55
26 2-Chloro-1,3-Butadiene	53	3.779	3.779	(0.737)	401314		50.0000	55
27 Ethyl tert-butyl ether	59	4.015	4.015	(0.783)	772204		50.0000	53
29 2,2-Dichloropropane	77	4.169	4.169	(0.813)	235369		50.0000	56
28 cis-1,2-Dichloroethene	96	4.169	4.169	(0.813)	278199		50.0000	57
30 2-Butanone	72	4.169	4.169	(0.813)	28189		50.0000	42
32 Propionitrile	54	4.228	4.228	(0.825)	352310		500.000	470(A)
33 Methacrylonitrile	41	4.347	4.347	(0.848)	292227		100.000	100
34 Bromochloromethane	128	4.358	4.358	(0.850)	151021		50.0000	56
31 Tetrahydrofuran	72	4.394	4.394	(0.857)	63578		100.000	90
35 Chloroform	83	4.418	4.418	(0.862)	461492		50.0000	56
\$ 36 Dibromofluoromethane	113	4.548	4.548	(0.887)	256641		50.0000	50
37 1,1,1-Trichloroethane	97	4.583	4.583	(0.894)	373810		50.0000	52
38 Cyclohexane	56	4.631	4.631	(0.903)	405053		50.0000	51
39 1,1-Dichloropropene	110	4.713	4.713	(0.919)	131016		50.0000	55
40 Carbon Tetrachloride	117	4.713	4.713	(0.919)	395908		50.0000	54
41 Isobutyl Alcohol	43	4.773	4.773	(0.931)	215029		1000.00	940(A)
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.844	(0.945)	57725		50.0000	52
43 Benzene	78	4.891	4.891	(0.954)	948738		50.0000	56
44 1,2-Dichloroethane	62	4.903	4.903	(0.956)	377408		50.0000	54
45 tert-Amyl methyl ether	73	4.962	4.962	(0.968)	711647		50.0000	52
M 50 1,2-Dichloroethene (Total)	96				548281		100.000	110
* 46 Fluorobenzene	96	5.128	5.128	(1.000)	874846		50.0000	
47 Trichloroethene	130	5.447	5.447	(1.062)	279370		50.0000	54
48 Methylcyclohexane	83	5.625	5.625	(1.097)	325972		50.0000	53
49 1,2-Dichloropropane	63	5.660	5.660	(1.104)	259430		50.0000	56
51 Methyl Methacrylate	69	5.731	5.731	(1.118)	189042		50.0000	50
52 Dibromomethane	93	5.778	5.778	(1.127)	169803		50.0000	54
53 1,4-Dioxane	88	5.778	5.778	(1.127)	52801		1000.00	1600(A)
54 Bromodichloromethane	83	5.909	5.909	(1.152)	366616		50.0000	56
55 2-Chloroethyl vinyl ether	63	6.654	6.654	(1.298)	92382		50.0000	56
56 cis-1,3-Dichloropropene	75	6.323	6.323	(1.233)	418454		50.0000	58
57 4-Methyl-2-pentanone	43	6.465	6.465	(1.261)	237106		50.0000	45
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	851898		50.0000	50
59 Toluene	91	6.654	6.654	(1.298)	1012148		50.0000	55
60 trans-1,3-Dichloropropene	75	6.879	6.879	(1.341)	384970		50.0000	59
61 Ethyl Methacrylate	69	6.950	6.950	(1.355)	275763		50.0000	51
62 1,1,2-Trichloroethane	97	7.068	7.068	(1.378)	224883		50.0000	54
63 Tetrachloroethene	164	7.210	7.210	(0.890)	224869		50.0000	50
64 1,3-Dichloropropane	76	7.234	7.234	(0.893)	368824		50.0000	53
65 2-Hexanone	43	7.317	7.317	(0.904)	153296		50.0000	42
66 Dibromochloromethane	129	7.482	7.482	(0.924)	311036		50.0000	54
67 1,2-Dibromoethane	107	7.613	7.613	(0.940)	259195		50.0000	53
69 1-Chlorohexane	91	8.086	8.086	(0.999)	336708		50.0000	51
* 68 Chlorobenzene-d5	117	8.098	8.098	(1.000)	722062		50.0000	
70 Chlorobenzene	112	8.133	8.133	(1.004)	714857		50.0000	56
71 1,1,1,2-Tetrachloroethane	131	8.216	8.216	(1.015)	291843		50.0000	55
72 Ethylbenzene	106	8.240	8.240	(1.018)	371694		50.0000	55
73 m,p-Xylene	106	8.370	8.370	(1.034)	896758		100.000	110
74 o-Xylene	106	8.819	8.819	(1.089)	445738		50.0000	54
75 Styrene	104	8.831	8.831	(1.091)	768183		50.0000	54
76 Bromoform	173	9.056	9.056	(1.118)	229296		50.0000	54

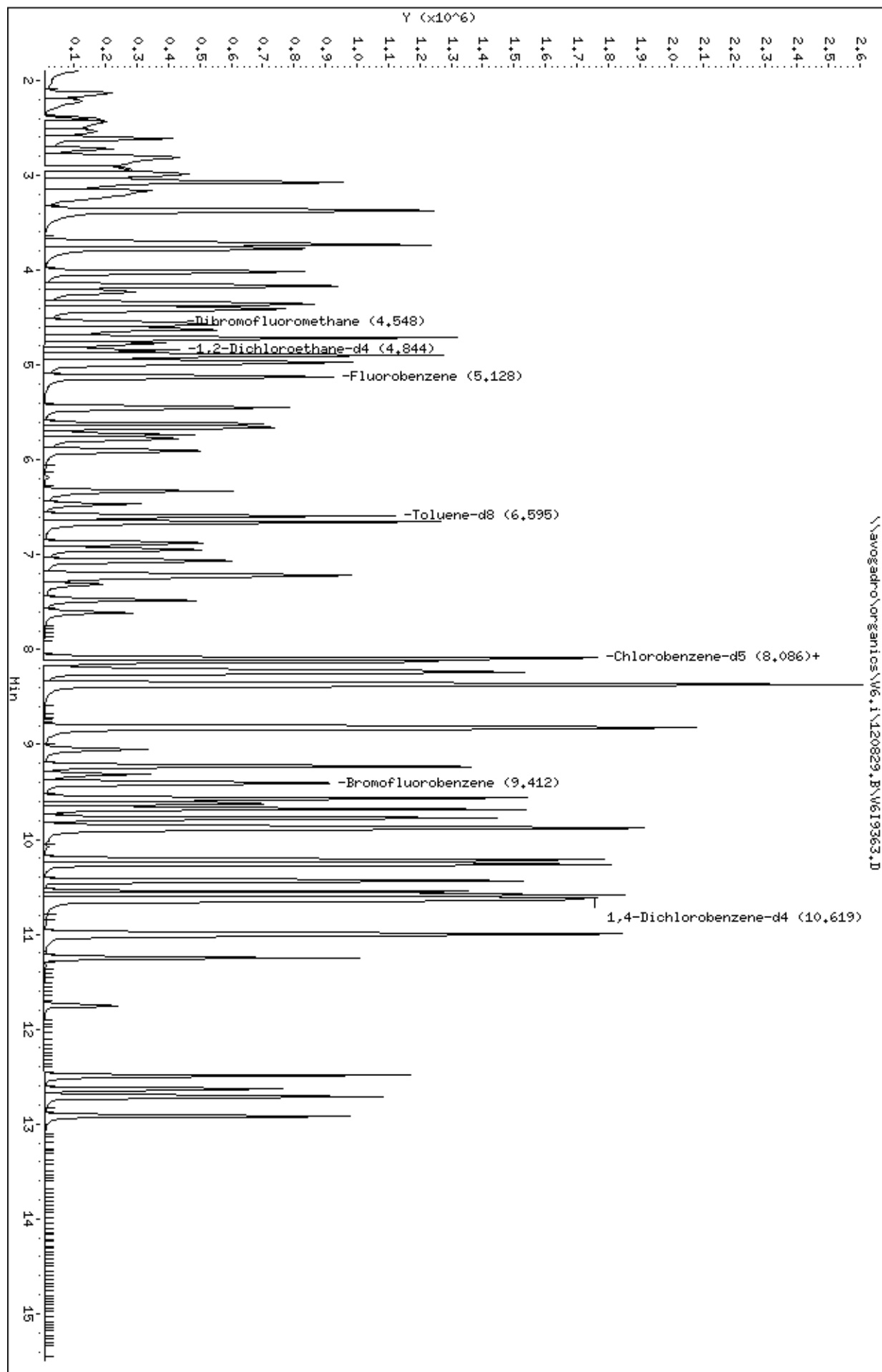
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.234	9.234	(1.140)	1079783		50.0000	54
78 trans-1,4-Dichloro-2-butene	75	9.316	9.316	(1.150)	97137		50.0000	52
\$ 79 Bromofluorobenzene	95	9.399	9.399	(1.161)	369996		50.0000	49
80 1,1,2,2-Tetrachloroethane	77	9.565	9.565	(0.901)	567187		50.0000	54
81 Bromobenzene	156	9.577	9.577	(0.902)	346522		50.0000	56
82 1,2,3-Trichloropropane	75	9.612	9.612	(0.905)	363420		50.0000	43
83 n-Propylbenzene	120	9.683	9.683	(0.912)	311352		50.0000	53
84 2-Chlorotoluene	126	9.778	9.778	(0.921)	302442		50.0000	54
85 1,3,5-Trimethylbenzene	105	9.873	9.873	(0.930)	931466		50.0000	53
86 4-Chlorotoluene	126	9.896	9.896	(0.932)	327899		50.0000	54
M 94 Xylene (Total)	106				1342496		150.000	160
87 tert-Butylbenzene	119	10.583	10.583	(0.997)	956246		50.0000	53
88 1,2,4-Trimethylbenzene	105	10.263	10.263	(0.967)	955057		50.0000	53
89 sec-Butylbenzene	105	10.441	10.441	(0.983)	1097172		50.0000	52
90 1,3-Dichlorobenzene	146	10.547	10.547	(0.993)	602865		50.0000	53
91 4-Isopropyltoluene	119	10.583	10.583	(0.997)	956246		50.0000	53
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.618	(1.000)	430981		50.0000	
93 1,4-Dichlorobenzene	146	10.642	10.642	(1.002)	658019		50.0000	51
95 n-Butylbenzene	91	10.985	10.985	(1.035)	858931		50.0000	53
96 1,2-Dichlorobenzene	146	11.009	11.009	(1.037)	621717		50.0000	53
97 Hexachloroethane	117	11.245	11.245	(1.059)	213142		50.0000	51
98 1,2-Dibromo-3-chloropropane	75	11.754	11.754	(1.107)	65026		50.0000	44
141 1,3,5-Trichlorobenzene	182	12.488	12.488	(2.435)	343705		50.0000	53(A)
99 1,2,4-Trichlorobenzene	180	12.488	12.488	(1.176)	361287		50.0000	52
100 Hexachlorobutadiene	225	12.630	12.630	(1.189)	127401		50.0000	51
101 Naphthalene	128	12.712	12.712	(1.197)	894300		50.0000	46
102 1,2,3-Trichlorobenzene	180	12.914	12.914	(1.216)	307309		50.0000	49

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\avogadro\organics\W6,i\120829,B\W6I9363.D
Date : 29-AUG-2012 10:42
Client ID: 2911LCS
Sample Info: 5M,2911LCS,2911LCS,147
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-67814

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-67814

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9214.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/23/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	48	
74-87-3	Chloromethane	41	
75-01-4	Vinyl chloride	48	
74-83-9	Bromomethane	49	
75-00-3	Chloroethane	46	
75-69-4	Trichlorofluoromethane	57	
75-35-4	1,1-Dichloroethene	55	
67-64-1	Acetone	44	
74-88-4	Iodomethane	52	
75-15-0	Carbon disulfide	31	
75-09-2	Methylene chloride	51	
156-60-5	trans-1,2-Dichloroethene	51	
1634-04-4	Methyl tert-butyl ether	47	
75-34-3	1,1-Dichloroethane	49	
108-05-4	Vinyl acetate	47	
78-93-3	2-Butanone	43	
156-59-2	cis-1,2-Dichloroethene	48	
594-20-7	2,2-Dichloropropane	58	
74-97-5	Bromochloromethane	51	
67-66-3	Chloroform	52	
71-55-6	1,1,1-Trichloroethane	51	
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon tetrachloride	52	
107-06-2	1,2-Dichloroethane	52	
71-43-2	Benzene	50	
79-01-6	Trichloroethene	51	
78-87-5	1,2-Dichloropropane	50	
74-95-3	Dibromomethane	52	
75-27-4	Bromodichloromethane	53	
10061-01-5	cis-1,3-Dichloropropene	52	
108-10-1	4-Methyl-2-pentanone	41	
108-88-3	Toluene	50	
10061-02-6	trans-1,3-Dichloropropene	51	
79-00-5	1,1,2-Trichloroethane	49	
142-28-9	1,3-Dichloropropane	50	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-67814

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-67814

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9214.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/23/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	49	
591-78-6	2-Hexanone	40	
124-48-1	Dibromochloromethane	51	
106-93-4	1,2-Dibromoethane	52	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	48	
179601-23-1	m,p-Xylene	99	
95-47-6	o-Xylene	49	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	50	
75-25-2	Bromoform	52	
98-82-8	Isopropylbenzene	49	
79-34-5	1,1,2,2-Tetrachloroethane	48	
108-86-1	Bromobenzene	48	
96-18-4	1,2,3-Trichloropropane	41	
103-65-1	n-Propylbenzene	47	
95-49-8	2-Chlorotoluene	47	
108-67-8	1,3,5-Trimethylbenzene	46	
106-43-4	4-Chlorotoluene	47	
98-06-6	tert-Butylbenzene	46	
95-63-6	1,2,4-Trimethylbenzene	46	
135-98-8	sec-Butylbenzene	47	
99-87-6	4-Isopropyltoluene	46	
541-73-1	1,3-Dichlorobenzene	46	
106-46-7	1,4-Dichlorobenzene	46	
104-51-8	n-Butylbenzene	50	
95-50-1	1,2-Dichlorobenzene	47	
96-12-8	1,2-Dibromo-3-chloropropane	44	
120-82-1	1,2,4-Trichlorobenzene	52	
87-68-3	Hexachlorobutadiene	54	
87-61-6	1,2,3-Trichlorobenzene	50	
91-20-3	Naphthalene	46	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120823.B\V6I9214.D
 Lab Smp Id: LCSD-67814 Client Smp ID: LCSD-67814
 Inj Date : 23-AUG-2012 11:07
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,LCSD-67814,LCSD-67814,67814
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120823.B\v68260Gadd-6lv1.m
 Meth Date : 24-Aug-2012 10:51 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 5 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.592	1.592 (0.310)		97161	50.0000	48
2 Freon114	85	1.699	1.699 (0.331)		186741	50.0000	56
3 Chloromethane	50	1.770	1.770 (0.345)		252643	50.0000	41
4 Vinyl Chloride	62	1.853	1.853 (0.361)		232286	50.0000	48
5 Bromomethane	94	2.137	2.137 (0.417)		164248	50.0000	49(Q)
6 Chloroethane	64	2.219	2.219 (0.433)		146385	50.0000	46(Q)
7 Trichlorofluoromethane	101	2.397	2.397 (0.467)		382639	50.0000	57
126 Ethanol	46	2.539	2.539 (0.495)		74155	5000.00	14000(AQ)
8 Ether	59	2.610	2.610 (0.509)		170406	50.0000	45
9 Acrolein	56	2.728	2.728 (0.532)		68379	250.000	140
10 1,1-Dichloroethene	96	2.811	2.811 (0.548)		258314	50.0000	55
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.799	2.799 (0.546)		236940	50.0000	56
12 Acetone	58	2.835	2.835 (0.553)		23895	50.0000	44
13 Iodomethane	142	2.953	2.953 (0.576)		447344	50.0000	52
14 Carbon Disulfide	76	2.989	2.989 (0.583)		515703	50.0000	31
15 Acetonitrile	41	3.071	3.071 (0.599)		600142	500.000	630(A)
16 Allyl Chloride	39	3.071	3.071 (0.599)		308313	50.0000	66(Q)
17 Methyl Acetate	43	3.083	3.083 (0.601)		225604	50.0000	42
18 Methylene Chloride	84	3.166	3.166 (0.617)		259384	50.0000	51
19 tert-Butanol	59	3.237	3.237 (0.631)		55877	100.000	97
20 Acrylonitrile	53	3.355	3.355 (0.654)		92851	50.0000	44
21 trans-1,2-Dichloroethene	96	3.379	3.379 (0.659)		225566	50.0000	51
22 Methyl tert-butyl ether	73	3.367	3.367 (0.656)		626783	50.0000	47

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.699	3.699	(0.721)	396651		50.0000	49
24 Vinyl acetate	43	3.722	3.722	(0.726)	745421		50.0000	47
25 Diisopropyl Ether	45	3.734	3.734	(0.728)	726188		50.0000	47
26 2-Chloro-1,3-Butadiene	53	3.770	3.770	(0.735)	338247		50.0000	50
27 Ethyl tert-butyl ether	59	4.018	4.018	(0.783)	682525		50.0000	48
29 2,2-Dichloropropane	77	4.160	4.160	(0.811)	199616		50.0000	58
28 cis-1,2-Dichloroethene	96	4.160	4.160	(0.811)	238409		50.0000	48(Q)
30 2-Butanone	72	4.172	4.172	(0.813)	28559		50.0000	43(Q)
32 Propionitrile	54	4.231	4.231	(0.825)	346813		500.000	460(A)
33 Methacrylonitrile	41	4.349	4.349	(0.848)	254115		100.000	82
34 Bromochloromethane	128	4.361	4.361	(0.850)	129511		50.0000	51
31 Tetrahydrofuran	72	4.397	4.397	(0.857)	61988		100.000	89
35 Chloroform	83	4.409	4.409	(0.859)	391518		50.0000	52
\$ 36 Dibromofluoromethane	113	4.551	4.551	(0.887)	267796		50.0000	52
37 1,1,1-Trichloroethane	97	4.574	4.574	(0.892)	337595		50.0000	51
38 Cyclohexane	56	4.622	4.622	(0.901)	352557		50.0000	47
39 1,1-Dichloropropene	110	4.716	4.716	(0.919)	113051		50.0000	50
40 Carbon Tetrachloride	117	4.716	4.716	(0.919)	349749		50.0000	52
41 Isobutyl Alcohol	43	4.775	4.775	(0.931)	220207		1000.00	890(A)
\$ 42 1,2-Dichloroethane-d4	102	4.846	4.846	(0.945)	61596		50.0000	53
43 Benzene	78	4.894	4.894	(0.954)	789583		50.0000	50
44 1,2-Dichloroethane	62	4.906	4.906	(0.956)	337409		50.0000	52
45 tert-Amyl methyl ether	73	4.965	4.965	(0.968)	620313		50.0000	47
M 50 1,2-Dichloroethene (Total)	96				463975		100.000	99
* 46 Fluorobenzene	96	5.130	5.130	(1.000)	904113		50.0000	
47 Trichloroethene	130	5.450	5.450	(1.062)	243975		50.0000	51
48 Methylcyclohexane	83	5.627	5.627	(1.097)	286443		50.0000	52
49 1,2-Dichloropropane	63	5.651	5.651	(1.101)	224229		50.0000	50(Q)
51 Methyl Methacrylate	69	5.734	5.734	(1.118)	170125		50.0000	44
52 Dibromomethane	93	5.769	5.769	(1.125)	150211		50.0000	52
53 1,4-Dioxane	88	5.781	5.781	(1.127)	37260		1000.00	1100(A)
54 Bromodichloromethane	83	5.899	5.899	(1.150)	322607		50.0000	52
55 2-Chloroethyl vinyl ether	63	6.657	6.657	(1.298)	79957		50.0000	49(Q)
56 cis-1,3-Dichloropropene	75	6.325	6.325	(1.233)	358892		50.0000	52
57 4-Methyl-2-pentanone	43	6.467	6.467	(1.261)	235978		50.0000	41
\$ 58 Toluene-d8	98	6.586	6.586	(0.813)	890122		50.0000	50
59 Toluene	91	6.657	6.657	(1.298)	869028		50.0000	50
60 trans-1,3-Dichloropropene	75	6.870	6.870	(1.339)	333009		50.0000	50
61 Ethyl Methacrylate	69	6.941	6.941	(1.353)	247838		50.0000	47
62 1,1,2-Trichloroethane	97	7.059	7.059	(1.376)	201224		50.0000	48
63 Tetrachloroethene	164	7.213	7.213	(0.890)	206869		50.0000	49
64 1,3-Dichloropropane	76	7.237	7.237	(0.893)	331535		50.0000	50
65 2-Hexanone	43	7.308	7.308	(0.902)	160612		50.0000	40(Q)
66 Dibromochloromethane	129	7.473	7.473	(0.923)	287408		50.0000	51
67 1,2-Dibromoethane	107	7.603	7.603	(0.939)	242933		50.0000	52
69 1-Chlorohexane	91	8.089	8.089	(0.999)	283171		50.0000	48
* 68 Chlorobenzene-d5	117	8.100	8.100	(1.000)	739983		50.0000	
70 Chlorobenzene	112	8.124	8.124	(1.003)	617307		50.0000	50
71 1,1,1,2-Tetrachloroethane	131	8.207	8.207	(1.013)	258261		50.0000	50
72 Ethylbenzene	106	8.242	8.242	(1.018)	319248		50.0000	48
73 m,p-Xylene	106	8.361	8.361	(1.032)	789015		100.000	99
74 o-Xylene	106	8.810	8.810	(1.088)	390950		50.0000	49
75 Styrene	104	8.834	8.834	(1.091)	685775		50.0000	50
76 Bromoform	173	9.047	9.047	(1.117)	212993		50.0000	52

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.224	9.224	(1.139)	972486		50.0000	49
78 trans-1,4-Dichloro-2-butene	75	9.307	9.307	(1.149)	87645		50.0000	45(Q)
\$ 79 Bromofluorobenzene	95	9.402	9.402	(1.161)	397520		50.0000	51
80 1,1,2,2-Tetrachloroethane	77	9.568	9.568	(0.901)	503980		50.0000	48
81 Bromobenzene	156	9.568	9.568	(0.901)	300494		50.0000	48
82 1,2,3-Trichloropropane	75	9.615	9.615	(0.905)	356785		50.0000	41
83 n-Propylbenzene	120	9.686	9.686	(0.912)	276420		50.0000	47
84 2-Chlorotoluene	126	9.781	9.781	(0.921)	263751		50.0000	47
85 1,3,5-Trimethylbenzene	105	9.863	9.863	(0.929)	831282		50.0000	46
86 4-Chlorotoluene	126	9.887	9.887	(0.931)	284681		50.0000	46
M 94 Xylene (Total)	106				1179965		150.000	150
87 tert-Butylbenzene	119	10.585	10.585	(0.997)	858421		50.0000	46
88 1,2,4-Trimethylbenzene	105	10.266	10.266	(0.967)	848142		50.0000	46
89 sec-Butylbenzene	105	10.431	10.431	(0.982)	1002573		50.0000	47
90 1,3-Dichlorobenzene	146	10.550	10.550	(0.993)	535861		50.0000	46
91 4-Isopropyltoluene	119	10.585	10.585	(0.997)	858421		50.0000	46
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.621	(1.000)	446865		50.0000	
93 1,4-Dichlorobenzene	146	10.644	10.644	(1.002)	579904		50.0000	46
95 n-Butylbenzene	91	10.988	10.988	(1.035)	785482		50.0000	50
96 1,2-Dichlorobenzene	146	11.011	11.011	(1.037)	550291		50.0000	47
97 Hexachloroethane	117	11.248	11.248	(1.059)	193652		50.0000	47
98 1,2-Dibromo-3-chloropropane	75	11.745	11.745	(1.106)	72042		50.0000	44
141 1,3,5-Trichlorobenzene	182	12.490	12.490	(2.434)	337188		50.0000	55(A)
99 1,2,4-Trichlorobenzene	180	12.490	12.490	(1.176)	354889		50.0000	52
100 Hexachlorobutadiene	225	12.632	12.632	(1.189)	128569		50.0000	54
101 Naphthalene	128	12.703	12.703	(1.196)	909633		50.0000	46
102 1,2,3-Trichlorobenzene	180	12.916	12.916	(1.216)	309128		50.0000	50

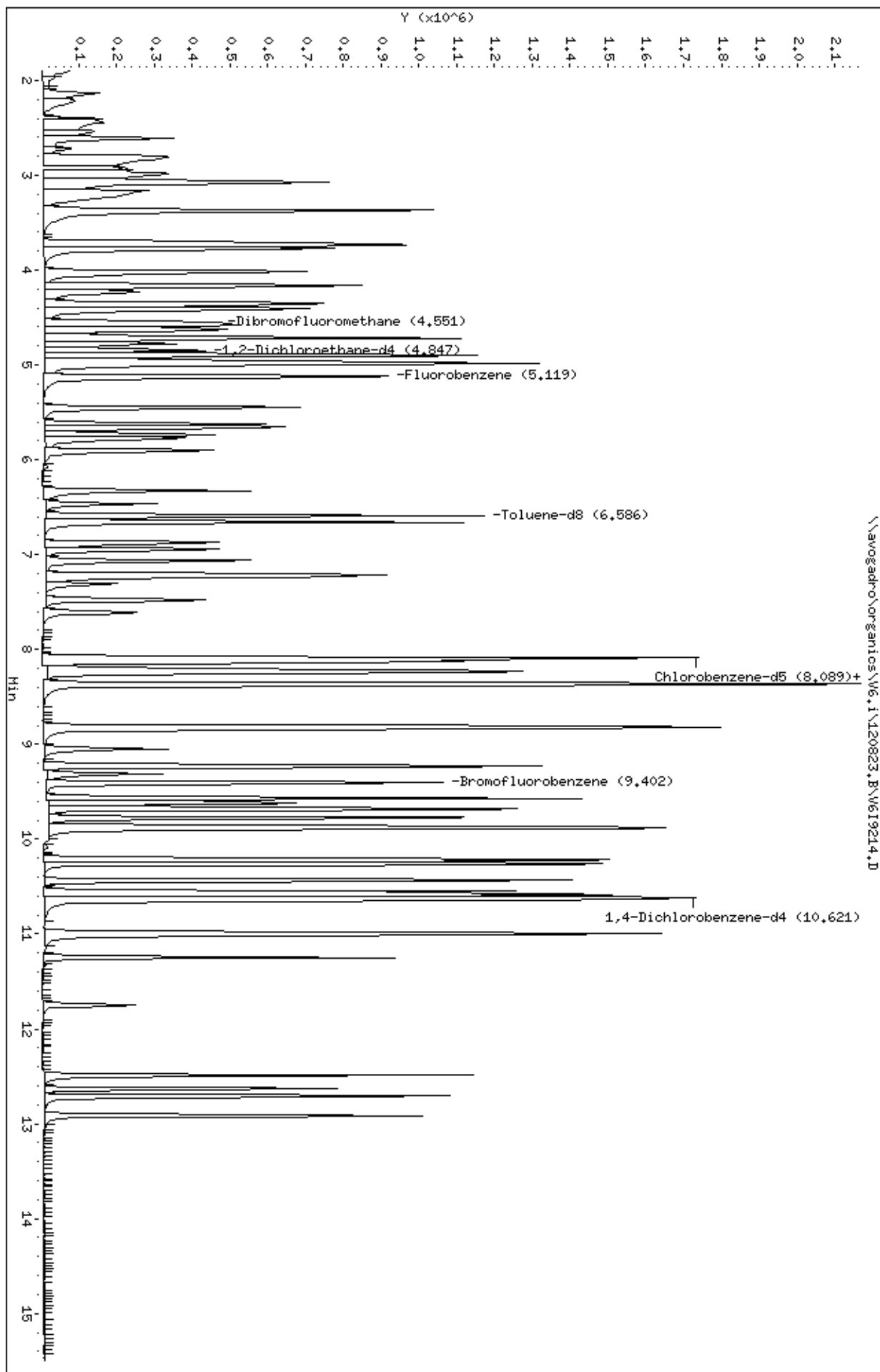
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120823.B\W619214.D
 Date : 23-AUG-2012 11:07
 Client ID: LCSD-67814
 Sample Info: 5HL,LCSD-67814,LCSD-67814,67814
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W6,i
 Operator: AH SRC: LIMS
 Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-67828

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-67828

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9254.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/24/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	49	
74-87-3	Chloromethane	44	
75-01-4	Vinyl chloride	48	
74-83-9	Bromomethane	50	
75-00-3	Chloroethane	46	
75-69-4	Trichlorofluoromethane	56	
75-35-4	1,1-Dichloroethene	57	
67-64-1	Acetone	49	
74-88-4	Iodomethane	50	
75-15-0	Carbon disulfide	30	
75-09-2	Methylene chloride	53	
156-60-5	trans-1,2-Dichloroethene	53	
1634-04-4	Methyl tert-butyl ether	48	
75-34-3	1,1-Dichloroethane	51	
108-05-4	Vinyl acetate	48	
78-93-3	2-Butanone	47	
156-59-2	cis-1,2-Dichloroethene	50	
594-20-7	2,2-Dichloropropane	57	
74-97-5	Bromochloromethane	54	
67-66-3	Chloroform	53	
71-55-6	1,1,1-Trichloroethane	49	
563-58-6	1,1-Dichloropropene	51	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	52	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	52	
78-87-5	1,2-Dichloropropane	51	
74-95-3	Dibromomethane	53	
75-27-4	Bromodichloromethane	53	
10061-01-5	cis-1,3-Dichloropropene	54	
108-10-1	4-Methyl-2-pentanone	43	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	52	
79-00-5	1,1,2-Trichloroethane	50	
142-28-9	1,3-Dichloropropane	53	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-67828

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1786 Mod. Ref No.: _____ SDG No.: SL1786

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-67828

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9254.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/24/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	49	
591-78-6	2-Hexanone	45	
124-48-1	Dibromochloromethane	53	
106-93-4	1,2-Dibromoethane	53	
108-90-7	Chlorobenzene	51	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	50	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	50	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	51	
75-25-2	Bromoform	54	
98-82-8	Isopropylbenzene	50	
79-34-5	1,1,2,2-Tetrachloroethane	51	
108-86-1	Bromobenzene	50	
96-18-4	1,2,3-Trichloropropane	44	
103-65-1	n-Propylbenzene	49	
95-49-8	2-Chlorotoluene	49	
108-67-8	1,3,5-Trimethylbenzene	48	
106-43-4	4-Chlorotoluene	49	
98-06-6	tert-Butylbenzene	48	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	49	
99-87-6	4-Isopropyltoluene	48	
541-73-1	1,3-Dichlorobenzene	49	
106-46-7	1,4-Dichlorobenzene	48	
104-51-8	n-Butylbenzene	51	
95-50-1	1,2-Dichlorobenzene	49	
96-12-8	1,2-Dibromo-3-chloropropane	46	
120-82-1	1,2,4-Trichlorobenzene	53	
87-68-3	Hexachlorobutadiene	53	
87-61-6	1,2,3-Trichlorobenzene	51	
91-20-3	Naphthalene	49	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120824.B\V6I9254.D
 Lab Smp Id: LCSD-67828 Client Smp ID: LCSD-67828
 Inj Date : 24-AUG-2012 11:09
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,LCSD-67828,LCSD-67828,67828
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120824.B\v68260Gadd-6lvl.m
 Meth Date : 27-Aug-2012 10:38 adatta Quant Type: ISTD
 Cal Date : 16-AUG-2012 19:37 Cal File: V6I9068.D
 Als bottle: 5 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.591	1.603 (0.310)		99755	50.0000	49
2 Freon114	85	1.697	1.697 (0.331)		171963	50.0000	52
3 Chloromethane	50	1.768	1.768 (0.345)		270714	50.0000	44
4 Vinyl Chloride	62	1.851	1.851 (0.361)		230782	50.0000	48
5 Bromomethane	94	2.135	2.135 (0.416)		168343	50.0000	50(Q)
6 Chloroethane	64	2.218	2.230 (0.432)		147039	50.0000	46(Q)
7 Trichlorofluoromethane	101	2.407	2.407 (0.469)		377875	50.0000	56
126 Ethanol	46	2.537	2.537 (0.495)		32599	5000.00	6000(AQ)
8 Ether	59	2.608	2.608 (0.509)		175861	50.0000	47
9 Acrolein	56	2.726	2.727 (0.532)		128622	250.000	280(A)
10 1,1-Dichloroethene	96	2.809	2.810 (0.548)		263736	50.0000	57(Q)
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.809	2.810 (0.548)		238288	50.0000	57
12 Acetone	58	2.833	2.833 (0.552)		26458	50.0000	49(Q)
13 Iodomethane	142	2.951	2.952 (0.576)		426863	50.0000	50
14 Carbon Disulfide	76	2.987	2.987 (0.582)		495861	50.0000	30
15 Acetonitrile	41	3.070	3.070 (0.599)		571983	500.000	610(A)
16 Allyl Chloride	39	3.070	3.070 (0.599)		298292	50.0000	65(Q)
17 Methyl Acetate	43	3.081	3.082 (0.601)		235287	50.0000	44
18 Methylene Chloride	84	3.176	3.165 (0.619)		267929	50.0000	53
19 tert-Butanol	59	3.235	3.236 (0.631)		52704	100.000	92
20 Acrylonitrile	53	3.365	3.366 (0.656)		99062	50.0000	47
21 trans-1,2-Dichloroethene	96	3.377	3.378 (0.659)		232100	50.0000	53
22 Methyl tert-butyl ether	73	3.365	3.366 (0.656)		639933	50.0000	48

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.697	3.697	(0.721)	410814		50.0000	51
24 Vinyl acetate	43	3.732	3.733	(0.728)	757402		50.0000	48
25 Diisopropyl Ether	45	3.732	3.733	(0.728)	733331		50.0000	47
26 2-Chloro-1,3-Butadiene	53	3.768	3.768	(0.735)	340307		50.0000	51
27 Ethyl tert-butyl ether	59	4.016	4.016	(0.783)	688708		50.0000	48
29 2,2-Dichloropropane	77	4.158	4.158	(0.811)	198460		50.0000	57
28 cis-1,2-Dichloroethene	96	4.170	4.158	(0.813)	244750		50.0000	50(Q)
30 2-Butanone	72	4.170	4.170	(0.813)	30676		50.0000	46(Q)
32 Propionitrile	54	4.229	4.229	(0.825)	362921		500.000	480(A)
33 Methacrylonitrile	41	4.348	4.348	(0.848)	284735		100.000	92
34 Bromochloromethane	128	4.359	4.360	(0.850)	135643		50.0000	54
31 Tetrahydrofuran	72	4.395	4.395	(0.857)	62119		100.000	90
35 Chloroform	83	4.419	4.419	(0.862)	398199		50.0000	53
\$ 36 Dibromofluoromethane	113	4.549	4.549	(0.887)	265644		50.0000	52
37 1,1,1-Trichloroethane	97	4.584	4.573	(0.894)	323943		50.0000	49
38 Cyclohexane	56	4.632	4.620	(0.903)	347891		50.0000	46
39 1,1-Dichloropropene	110	4.714	4.715	(0.919)	114812		50.0000	51
40 Carbon Tetrachloride	117	4.714	4.715	(0.919)	342734		50.0000	51
41 Isobutyl Alcohol	43	4.774	4.774	(0.931)	215089		1000.00	870(A)
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.845	(0.945)	58791		50.0000	51
43 Benzene	78	4.892	4.892	(0.954)	805365		50.0000	51
44 1,2-Dichloroethane	62	4.904	4.904	(0.956)	337824		50.0000	52
45 tert-Amyl methyl ether	73	4.963	4.963	(0.968)	639317		50.0000	49
M 50 1,2-Dichloroethene (Total)	96				476850		100.000	100
* 46 Fluorobenzene	96	5.129	5.129	(1.000)	900379		50.0000	
47 Trichloroethene	130	5.448	5.448	(1.062)	248322		50.0000	52
48 Methylcyclohexane	83	5.626	5.626	(1.097)	286098		50.0000	52
49 1,2-Dichloropropane	63	5.661	5.661	(1.104)	227296		50.0000	51(Q)
51 Methyl Methacrylate	69	5.732	5.732	(1.118)	183200		50.0000	47
52 Dibromomethane	93	5.768	5.768	(1.125)	152918		50.0000	53
53 1,4-Dioxane	88	5.779	5.780	(1.127)	34571		1000.00	1000(A)
54 Bromodichloromethane	83	5.898	5.898	(1.150)	321656		50.0000	53
55 2-Chloroethyl vinyl ether	63	6.655	6.655	(1.298)	81979		50.0000	51(Q)
56 cis-1,3-Dichloropropene	75	6.324	6.324	(1.233)	372594		50.0000	54
57 4-Methyl-2-pentanone	43	6.466	6.466	(1.261)	246934		50.0000	43
\$ 58 Toluene-d8	98	6.596	6.584	(0.814)	870948		50.0000	50
59 Toluene	91	6.655	6.655	(1.298)	887785		50.0000	51
60 trans-1,3-Dichloropropene	75	6.880	6.880	(1.341)	341784		50.0000	52
61 Ethyl Methacrylate	69	6.951	6.951	(1.355)	256858		50.0000	49
62 1,1,2-Trichloroethane	97	7.057	7.058	(1.376)	205020		50.0000	50
63 Tetrachloroethene	164	7.211	7.211	(0.890)	205456		50.0000	49
64 1,3-Dichloropropane	76	7.235	7.235	(0.893)	344799		50.0000	53
65 2-Hexanone	43	7.306	7.306	(0.902)	176960		50.0000	45(Q)
66 Dibromochloromethane	129	7.483	7.483	(0.924)	289203		50.0000	52
67 1,2-Dibromoethane	107	7.613	7.614	(0.940)	248194		50.0000	53
69 1-Chlorohexane	91	8.087	8.087	(0.999)	286850		50.0000	50
* 68 Chlorobenzene-d5	117	8.099	8.099	(1.000)	729267		50.0000	
70 Chlorobenzene	112	8.122	8.122	(1.003)	627342		50.0000	51
71 1,1,1,2-Tetrachloroethane	131	8.205	8.205	(1.013)	255509		50.0000	50
72 Ethylbenzene	106	8.241	8.241	(1.018)	324917		50.0000	50
73 m,p-Xylene	106	8.371	8.371	(1.034)	789373		100.000	100
74 o-Xylene	106	8.809	8.809	(1.088)	398135		50.0000	50
75 Styrene	104	8.832	8.832	(1.091)	690007		50.0000	51
76 Bromoform	173	9.045	9.045	(1.117)	216977		50.0000	54

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.223	9.235 (1.139)		977283		50.0000	50
78 trans-1,4-Dichloro-2-butene	75	9.317	9.318 (1.150)		86429		50.0000	45(Q)
\$ 79 Bromofluorobenzene	95	9.400	9.400 (1.161)		379673		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.566	9.566 (0.901)		515409		50.0000	51
81 Bromobenzene	156	9.566	9.566 (0.901)		299832		50.0000	50
82 1,2,3-Trichloropropane	75	9.613	9.613 (0.905)		368754		50.0000	44
83 n-Propylbenzene	120	9.684	9.684 (0.912)		275537		50.0000	49
84 2-Chlorotoluene	126	9.779	9.779 (0.921)		263895		50.0000	49
85 1,3,5-Trimethylbenzene	105	9.874	9.874 (0.930)		835079		50.0000	48
86 4-Chlorotoluene	126	9.897	9.897 (0.932)		287538		50.0000	49
M 94 Xylene (Total)	106				1187508		150.000	150
87 tert-Butylbenzene	119	10.583	10.584 (0.997)		849183		50.0000	48
88 1,2,4-Trimethylbenzene	105	10.264	10.264 (0.967)		854175		50.0000	48
89 sec-Butylbenzene	105	10.430	10.430 (0.982)		997244		50.0000	49
90 1,3-Dichlorobenzene	146	10.548	10.548 (0.993)		540244		50.0000	49
91 4-Isopropyltoluene	119	10.583	10.584 (0.997)		849183		50.0000	48
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619 (1.000)		426553		50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.643 (1.002)		573447		50.0000	48
95 n-Butylbenzene	91	10.986	10.986 (1.035)		774788		50.0000	51
96 1,2-Dichlorobenzene	146	11.009	11.010 (1.037)		545916		50.0000	49
97 Hexachloroethane	117	11.246	11.246 (1.059)		189918		50.0000	48
98 1,2-Dibromo-3-chloropropane	75	11.743	11.743 (1.106)		71104		50.0000	46
141 1,3,5-Trichlorobenzene	182	12.489	12.489 (2.435)		324512		50.0000	54(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.489 (1.176)		349420		50.0000	53
100 Hexachlorobutadiene	225	12.631	12.631 (1.189)		122212		50.0000	53
101 Naphthalene	128	12.713	12.714 (1.197)		919495		50.0000	49
102 1,2,3-Trichlorobenzene	180	12.915	12.915 (1.216)		296785		50.0000	50

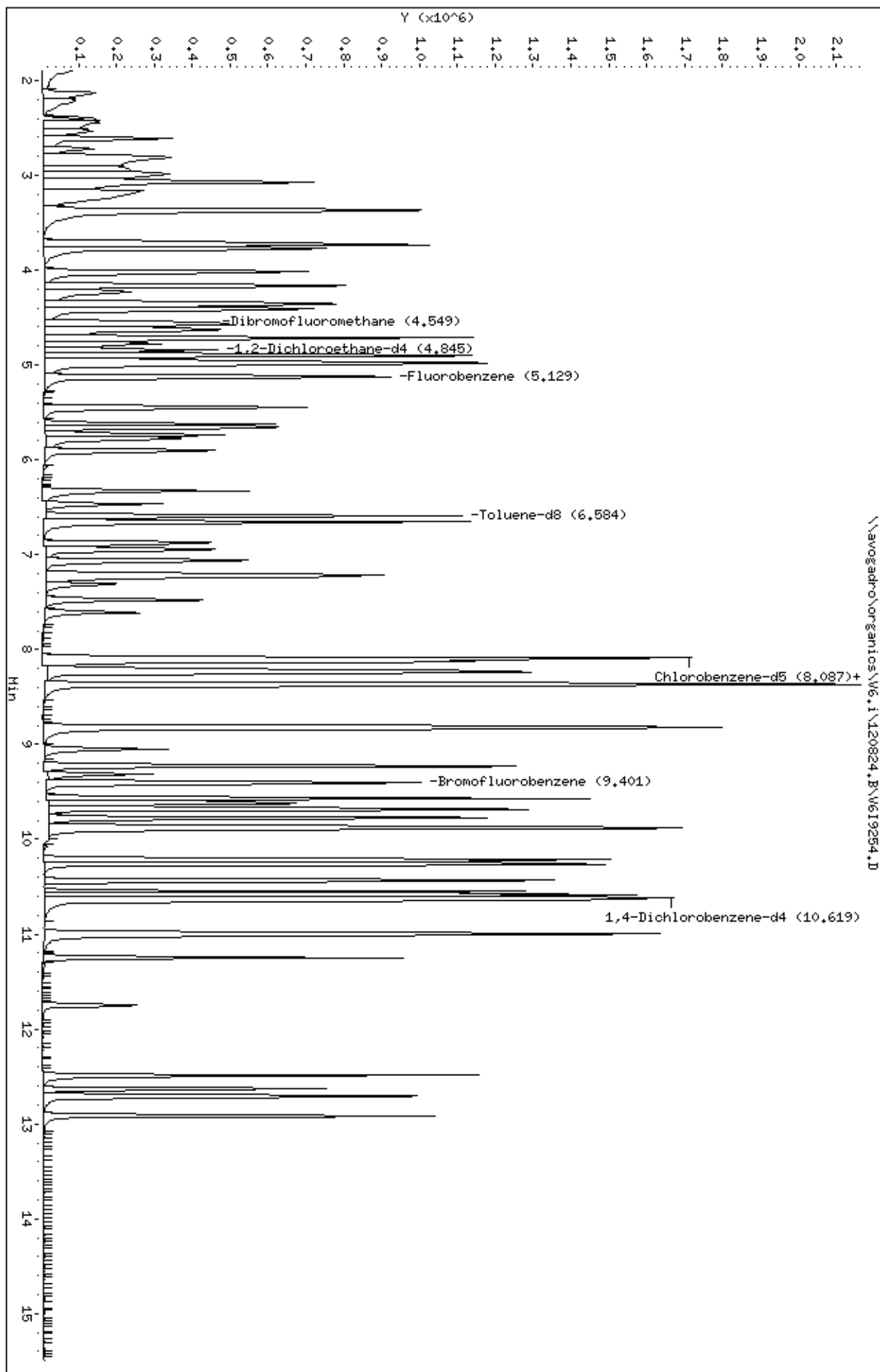
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120824,B\W619254.D
Date : 24-AUG-2012 11:09
Client ID: LCSD-67828
Sample Info: 5HL,LCSD-67828,LCSD-67828,67828
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



INJECTION LOG

Spectrum Analytical, Inc. RI Division V6 Injection Log
 Volatiles Laboratory
 METHOD: 8260W ANALYST: AED
 BATCH: 120816.B
 Start: 16-AUG-12 17:27
 End: 16-AUG-12 20:52

Comments:

Standards: BFB VW120816A 2 uL
 KSS VW120816A 20 uL
 STD VW120816A 20 uL
 CV VW120816A 20 uL

Reviewed By: 181W Manual Integration: N/A MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	BN	INTERNAL	STDS	SURROGATES	DILN	FLG	COMMENTS	pH
				BATCH			FBZ	CBZ	DCB	DFM	DCE	TOL	BFB
V6I9063	17:27	BFB6R											
V6I9064	17:53	VSTD0506R											
V6I9065	18:19	VSTD0206R											
V6I9066	18:45	VSTD0056R											
V6I9067	19:11	VSTD0016R											
V6I9068	19:37	VSTD0016R											
V6I9069	20:03	VSTD2006R											
V6I9070	20:28	VSTD1006R											
V6I9071	20:52	VICV0506R											

E - One or more target compounds are above the calibration range
 R - One or more spike compounds are outside of control limits
 T - Sample was injected outside of the 12 hour sequence
 * - Internal Standard or Surrogate outside of control limit
 D - Surrogates are diluted

AED 8/17/12

Spectrum Analytical, Inc. RI Division
Volatiles Laboratory

V6 Injection Log

METHOD: 8260W

ANALYST: AED

BATCH: 120823.B

Start: 23-AUG-12 09:02
End: 23-AUG-12 20:46

Comments:

Standards: 8FB VW120404A 2 uL
KFS VW120805A AUCD uL
STD VW120803A 20 uL
uLReviewed By: AM 8244 Manual Integration: NIA MI Review: NIA

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	BN	INTERNAL STDS				SURROGATES				DILN	FLG	COMMENTS	pH
				BATCH			FBZ	CBZ	DCB	DFM	DCE	TOL	BFB					
V6I9210	09:02	BFB6W	BFB6W															
V6I9211	09:21	VSTD0506W	VSTD0506W				100	100	100						1		OK	
V6I9212	10:03	VSTD0506W	VSTD0506W														NOT USED	
V6I9213	10:43	LCS-67814	LCS-67814				98	99	98	106	106	101	102		1		OK	
V6I9214	11:07	LCS-67814	LCS-67814				96	98	98	104	106	100	102		1		OK	
V6I9215	11:30	MB-67814	MB-67814				93	96	89	106	101	96	100		1		OK	
V6I9216	11:54	MB-67814	MB-67814				91	96	87	106	102	94	98		1		NOT USED	
V6I9217	12:18	MB-67814	MB-67814				92	95	87	108	99	97	98		1		OK	
V6I9218	12:42	L1786-06A	TB-01				90	94	85	106	98	96	98		1		OK	
V6I9219	13:06	L1788-06A	TRIPBLANK (8/21)				92	95	87	105	96	96	96		1		OK	2
V6I9220	13:30	L1791-01A	TB081812				91	94	85	104	102	96	96		1		OK	
V6I9221	13:54	L1786-01A	SL-MW-23D				91	95	87	107	97	97	99		1		OK	
V6I9222	14:19	L1786-02A	SL-MW-73D				90	96	86	107	100	94	95		1		OK	
V6I9223	14:44	L1786-03A	SL-MW-23S				90	94	86	108	102	96	98		1		OK	
V6I9224	15:09	L1786-04A	SL-MW-13				89	93	85	108	100	98	97		1		RR @ 1X	
V6I9225	15:35	L1786-05A	RB-01				88	91	83	105	101	96	95		1		RR @ 1X	
V6I9226	16:01	L1788-01A	MW-14 (65FT)				90	93	85	107	99	96	99		1		RR @ 1X	
V6I9227	16:27	L1788-02A	MW-14 (70FT)				89	92	87	107	100	97	96		1		OK	
V6I9228	16:54	L1788-03A	MW-14 (75FT)				90	91	84	108	100	98	97		1		OK	
V6I9229	17:21	L1788-04A	MW-14 (80FT)				92	96	88	105	97	95	95		1		OK	
V6I9230	17:47	L1788-05A	MW-14 (85FT)				90	91	83	105	98	97	97		1		OK	
V6I9231	18:13	L1791-03A	B1				93	96	88	106	101	95	96		1		OK	
V6I9232	18:39	L1791-05A	B2				89	91	83	107	95	98	96		1		OK	
V6I9233	19:05	L1791-07A	B3				89	90	83	106	98	97	97		1		OK	
V6I9234	19:31	L1791-09A	B4				90	93	84	106	101	97	94		1		OK	
V6I9235	19:56	L1791-11A	B5				89	91	83	107	105	97	96		1		OK	
V6I9236	20:22	L1791-13A	B6				89	91	82	107	97	97	97		1		OK	
V6I9237	20:46	L1777-02A	KGS-GW				90	92	86	106	97	97	96		50		OK, Neg the base = 60	2

E - One or more target compounds are above the calibration range

R - One or more spike compounds are outside of control limits

T - Sample was injected outside of the 12 hour sequence

* - Internal Standard or Surrogate outside of control limit

P - Surrogates are diluted

AED 8/24/12

Spectrum Analytical, Inc. RI Division V6 Injection Log
Volatiles Laboratory
METHOD: 8200 W ANALYST: AED
BATCH: 120824.B
Start: 24-AUG-12 08:48
End: 24-AUG-12 20:48

Comments:

Standards: 2 uL
BFB WJ 20404A
SAS WJ 120803A
STD WJ 20803A 20 uL

Reviewed By: JMS-211

Manual Integration: MI Review:

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	BN	INTERNAL STDS				SURROGATES				DILN	FLG	COMMENTS	PH
							FZB	CBZ	DCB	DFM	DCE	TOL	BFB					
V6I9250	08:48	BFB6X	BFB6X	AQ													OK	
V6I9251	09:10	VSTD0506X	VSTD0506X	AQ			100	100								1	NONUSED	
V6I9252	09:46	VSTD0506X	VSTD0506X	AQ			100	100	100							1	OK	
V6I9253	10:45	LCS-67828	LCS-67828	67828	AQ		99	98	97	106	106	100	101				OK	
V6I9254	11:09	LCSD-67828	LCSD-67828	67828	AQ		100	99	97	104	102	100	99			1	OK	
V6I9255	11:33	MB-67828	MB-67828	67828	AQ		96	98	92	105	101	96	96			1	NONUSED	
V6I9256	11:56	MB-67828	MB-67828	67828	AQ		97	100	93	105	100	96	95			1	NONUSED	
V6I9257	12:20	MB-67828	MB-67828	67828	AQ		94	95	88	106	98	96	96			1	OK	
V6I9258	12:44	L1804-04A	L1795-05B-001	67828	AQ		94	97	90	107	99	95	94			1	OK	2
V6I9259	13:09	L1804-05A	L1795-02B-001	67828	AQ		93	94	88	106	99	96	97			1	OK	
V6I9260	13:33	L1804-11A	FB-08212012	67828	AQ		93	93	88	105	96	98	96			1	OK	
V6I9261	13:58	L1804-12A	FB-08212012	67828	AQ		92	94	87	107	100	97	96			1	OK	
V6I9262	14:22	L1786-03ADL	SL-MW-23SDL	67828	AQ		93	94	87	106	98	97	96		20		PRE=88,OK	
V6I9263	14:49	L1786-04A	SL-MW-13	67828	AQ		91	94	85	107	98	97	94		1		OK	
V6I9264	15:15	L1786-05A	RB-01	67828	AQ		93	94	85	106	97	96	96		1		OK	
V6I9265	15:41	L1788-01A	MW-14 (65FT)	67828	AQ		92	93	86	108	101	97	95		1		OK	
V6I9266	16:07	L1786-07A	SL-MW-12	67828	AQ		91	92	86	108	99	97	96		1		OK	
V6I9267	16:32	L1786-08A	SL-MW-14	67828	AQ		92	92	86	106	95	97	96		1		OK	
V6I9268	17:00	L1786-10A	SL-MW-1	67828	AQ		91	92	87	107	100	97	95		1		OK	
V6I9269	17:27	L1786-11A	SL-MW-2	67828	AQ		93	92	87	105	98	97	96		1		OK	
V6I9270	17:53	L1804-01A	L1795-03A-001	67828	AQ		91	92	86	106	100	97	97		1		OK	
V6I9271	18:18	L1804-02A	L1795-06A-001	67828	AQ		91	94	85	104	101	95	92		1		OK	
V6I9272	18:43	L1804-03A	L1795-08B-001	67828	AQ		92	92	86	106	95	97	96		1		OK	
V6I9273	19:09	L1804-06A	L1795-11A-001	67828	AQ		91	92	86	106	100	96	96		1		OK	
V6I9274	19:34	L1804-07A	L1795-14A-001	67828	AQ		92	94	85	106	97	96	97		1		OK	
V6I9275	19:59	L1804-08A	L1795-16B-001	67828	AQ		90	91	84	106	96	97	95		1		OK	
V6I9276	20:24	L1804-09A	L1795-13B-001	67828	AQ		90	92	84	106	96	96	96		1		OK	
V6I9277	20:48	L1804-10A	L1795-10B-001	67828	AQ		90	92	84	107	97	97	97		1		OK	

- One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence

Spectrum Analytical, Inc. RI Division V6 Injection Log
METHOD: 8260W ANALYST: AED
BATCH: 120828.B
Start: 28-AUG-12 08:48
End: 28-AUG-12 12:57

Comments:

Standards: BFB VW120404A 2 uL
IS/SS VW120805A AVO uL
STD VW120820A 20 uL
1 uL

Reviewed By: *PM 8-28-12* Manual Integration: AED 8/28/12 MI Review: *AK*

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	BN	INTERNAL STDS				SURROGATES				DILN	FLG	COMMENTS	pH
				BATCH			FBZ	CBZ	DCB	DFM	DCE	TOL	BFB					
V6I9320	08:48	BFB6Z	BFB6Z			AQ									1		OK	
V6I9321	09:10	VSTD0506Z	VSTD0506Z			AQ	101	101	100						1		NOT USED	
V6I9322	09:45	VSTD0506Z	VSTD0506Z			AQ	100	100	100						1		OK MI 82	
V6I9323	10:31	VSTD0206Z	VSTD0206Z			AQ	98	98	98						1		OK	
V6I9324	10:55	VSTD0056Z	VSTD0056Z			AQ	97	95	93						1		OK	
V6I9325	11:19	VSTD0016Z	VSTD0016Z			AQ	97	99	91						1		OK MI 30_53	
V6I9326	11:43	VSTD0016Z	VSTD0016Z			AQ	96	98	91						1		NOT USED	
V6I9327	12:07	VSTD2006Z	VSTD2006Z			AQ	103	104	108						1		OK	
V6I9328	12:31	VSTD1006Z	VSTD1006Z			AQ	99	100	100						1		OK	
V6I9329	12:57	VICV0506Z	VICV0506Z			AQ	98	97	97	100	101	100	98		1		OK	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limit
D - Surrogates are diluted

AED 8/28/12

Spectrum Analytical, Inc. RI Division V6 Injection Log
Volatiles Laboratory
METHOD: 8260/624 ANALYST: AED
BATCH: 120828A.B Start: 28-AUG-12 13:34
ICAL DATE: 8/28/12 End: 28-AUG-12 22:31

Comments:

Standards: BFB VW120820A 2 uL
BKS VW120805A AED uL
STD VW120820A 20 uL

Reviewed By: [Signature] Manual Integration: N/A MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP [MT BN]	BATCH	FBZ	CBZ	DCB	DFM	DCE	TOL	BFB	DILN FLG	COMMENTS	PH
V6I9331	13:34	BFB6A	BFB6A	1	1	1	1	1	1	1	1	1	1	OK	
V6I9332	14:07	VSTD0506A	VSTD0506A	1	1	1	1	1	1	1	1	1	1	OK	
V6I9333	14:33	LCS-67875	LCS-67875	67875	1	102	103	102	101	91	100	99	1	OK	
V6I9334	14:58	MB-67875	MB-67875	67875	1	97	100	91	101	102	98	95	1	NOT USED	
V6I9335	15:23	MB-67875	MB-67875	67875	1	96	98	89	101	98	98	95	1	NOT USED	
V6I9336	15:49	MB-67875	MB-67875	67875	1	94	97	90	103	99	96	93	1	OK	
V6I9337	16:15	MB-67816	VTBLK	67875	1	92	97	89	101	100	96	93	1	OK	
V6I9338	16:42	L1786-12A	RB-02	67875	1	95	98	90	102	100	98	94	1	OK	
V6I9339	17:08	L1786-13A	TB-02	67875	1	93	95	86	99	100	98	92	1	OK	
V6I9340	17:34	L1819-07A	TB-082712	67875	1	93	95	85	100	100	97	94	1	OK	
V6I9341	18:00	L1784-01C	082112PCB-04	67875	1	90	93	86	99	102	99	95	1	OK	
V6I9342	18:25	L1804-20ADL	NW-301-1-SDL	67875	1	92	97	87	101	99	96	94	5	OK, TCE = 100	
V6I9343	18:51	L1785-02A	NW-161-1-S	67875	1	91	93	87	100	98	100	96	1	OK	
V6I9344	19:17	L1785-02A	WETWELL	67875	1	90	93	87	100	99	98	95	10	OK, FOAMABLE	
V6I9345	19:41	L1811-03ADL	EQ TANK 082412D	67875	1	90	92	85	101	100	101	97	20	OK, PCE = 123	
V6I9346	20:06	L1786-09A	SL-MW-16	67875	1	89	91	84	100	98	99	92	1	OK	
V6I9347	20:31	L1819-01A	NW-MW-03D	67875	1	90	93	84	101	100	100	93	1	OK	
V6I9348	20:55	L1819-02A	NW-MW-03S	67875	1	89	92	84	102	98	99	94	1	OK	
V6I9349	21:20	L1819-03A	NW-MW-11S	67875	1	89	90	81	100	100	98	92	1	OK	
V6I9350	21:44	L1819-04A	NW-MW-11D	67875	1	86	89	80	101	95	99	94	1	OK	
V6I9351	22:08	L1819-05A	NW-MW-08S	67875	1	87	89	81	102	100	100	93	1	OK	
V6I9352	22:31	L1819-06A	NW-MW-12D	67875	1	88	90	83	100	97	98	94	1	OK	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal standard or Surrogate outside of control limit
D - Surrogates are diluted

AED 8/29/12

INJECTION LOG

VOLATILES LABORATORY

Spectrum Analytical, Inc. RI Division V6 Injection Log METHOD: 8260 W ANALYST: AED BATCH: 120829.B Start: 29-AUG-12 08:47
Volatiles Laboratory ICAI DATE: 8/28/12 End: 29-AUG-12 19:45

Comments:

Standards: BFB VW12-404A 2 uL
BSS VW12-605A AUTO uL
STD VW12-820A 20 uL
uL

Reviewed By: 8/30/12 Manual Integration: N/A MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	EN	INTERNAL STDS				SURROGATES				DILN	FLG	COMMENTS	pH
				BATCH			FBZ	CBZ	DCB	DFM	DCE	TOL	BFB					
V6I9360	08:47	BFB6B	BFB6B														OK	
V6I9361	09:05	VSTD0506B	VSTD0506B				100	100	100						1		NOT USED	
V6I9362	09:50	VSTD0506B	VSTD0506B				100	100	100						1		OK	
V6I9363	10:42	LCS-67894	LCS-67894	67894	AQ		100	94	100	105	99	98			1	ER	OK	
V6I9364	11:06	MB-67894	MB-67894	67894	AQ		94	94	85	102	96	98	94		1		NOT USED	
V6I9365	11:29	MB-67894	MB-67894	67894	AQ		92	91	82	102	96	98	93		1		NOT USED	
V6I9366	11:53	MB-67894	MB-67894	67894	AQ		91	91	81	101	98	99	93		1		OK	
V6I9367	12:17	L1784-01CMS	082112PCB-04MS	67894	AQ		93	93	89	103	103	99	97		1		OK	
V6I9368	12:40	L1786-09AMS	SL-MW-16MS	67894	AQ		93	90	101	101	106	98	98		1	R	OK	2
V6I9369	13:04	L1786-09AMS	SL-MW-16MSD	67894	AQ		94	92	89	100	102	99	96		1	R	OK	
V6I9370	13:27	L1804-20AMS	MW-301-1-SMSD	67894	AQ		92	91	88	100	104	99	98		1	ER	OK	
V6I9374	15:02	L1819-03ADL	NM-MW-11SDL	67894	AQ		86	85	76	102	97	98	95		20		OK, C15-112-DCE = 79	
V6I9375	15:26	L1819-04A	NM-MW-11D	67894	AQ		86	85	77	101	99	99	93		1		OK	2
V6I9385	19:22	L1482-04A	R9 week 4	67894	AQ		82	82	72	100	99	97	95		1		OK	
V6I9386	19:45	L1482-04B	R10 week 4	67894	AQ		81	82	72	101	97	98	95		1		OK	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limit
D - Surrogates are diluted

AED 8/30/12

Spectrum Analytical, Inc. RI Division : VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client ID	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R	Returned to R1
8/22/12	L1782	R1RRC	01-10	AED	W	H	R9	
	L1784	CH2MHILL	01			US	R9	
	L1785	R1RRC	02			H	R9	
	L1786	AECOM	01-06			H	R9	
	L1787	SEVENSM	01,02			E	R/F10	
8/22/12	L1788	HRP	01-04	AED	W	H	R9	
8/22/12	L1791	Stantec	01,03,05,07,09,11,13	VEB	AED	H	R9	
8/22/12	L1791	Stantec	02,04,06,08,10,12	VEB		US	R9	
8/22/12	L1794	Stantec	01-08,10	VEB		US	R9	
8/23/12	L1786	AECOM	07-13	JV		H	R9	
	L1798	CAPIH	01-06			H	R9	
	L1771	EPA	01-02 66-11 JV 8/23/12			T	R4	
	L1801	EPA	01,02,07			PE	R4	
8/23/12	L1802	SIEPA	01 01 VEB 8/23/12 JV 8/23/12			PE	R4	

Logbook ID 90.0191-04/12

Reviewed By: AED 8/24/12

"Preservative Used" Key

UA = Unpreserved Aqueous

H = HCL A = Air M = MeOH

E = Encore

US = Unpreserved Soil

N = NaHSO₄

F = Freeze

T = Trace, HCL



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** Metals ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : AECOM Environment

Project: Multi Site G, ServAll

Laboratory Workorder / SDG #: L1786

SW846 6010C, SW846 7470A Total

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 and SW7470A.

V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: FIMS2
Instrument Type: CVAA
Description: FIMS
Manufacturer: Perkin-Elmer
Model: FIMS100

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 sample: SL-MW-16 (L1786-09BMS).

Percent recoveries were within the QC limits.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

Duplicate analyses were performed on sample: SL-MW-16 (L1786-09BDUP).

Relative percent differences were within the QC limits.

F. Serial Dilution (SD):

Serial Dilution analysis was performed on sample: SL-MW-16 (L1786-09BSD).

Percent differences were within the QC limits.

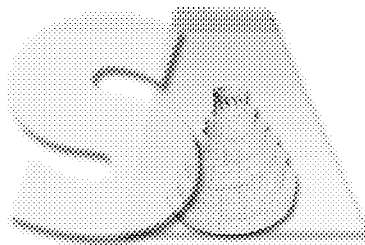
G. Samples:

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 Spectrum, 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:  _____

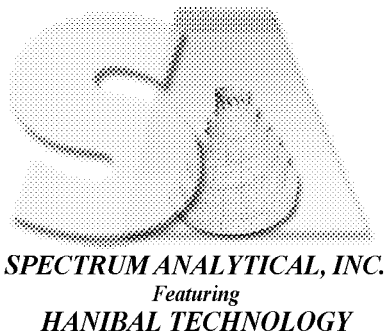
Date: 09/06/2012



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.: SL1786
SOW No.: SW846

EPA Sample No.	Lab Sample ID
<u>RB-02</u>	<u>L1786-12</u>
<u>SL-MW-1</u>	<u>L1786-10</u>
<u>SL-MW-12</u>	<u>L1786-07</u>
<u>SL-MW-13</u>	<u>L1786-04</u>
<u>SL-MW-14</u>	<u>L1786-08</u>
<u>SL-MW-16</u>	<u>L1786-09</u>
<u>SL-MW-16D</u>	<u>L1786-09DUP</u>
<u>SL-MW-16S</u>	<u>L1786-09MS</u>
<u>SL-MW-2</u>	<u>L1786-11</u>
<u>SL-MW-23D</u>	<u>L1786-01</u>
<u>SL-MW-23S</u>	<u>L1786-03</u>
<u>SL-MW-73D</u>	<u>L1786-02</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: *Sharyn B. Lawler* Name: Sharyn B. Lawler
Date: 9/6/12 Title: *QA*

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

RB-02

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

Case No.: _____

SAS No.: _____

SDG No.: SL1786Matrix (soil/water): WATERLab Sample ID: L1786-12Level (low/med): MEDDate Received: 08/23/2012% 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	1.1	U		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	388	B		P
7440-47-3	Chromium	0.79	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		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	105	B		P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	697	B		P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	24.1	B		P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-1

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786

Matrix (soil/water): WATER

Lab Sample ID: L1786-10

Level (low/med): MED

Date Received: 08/23/2012

% 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	4.7	B		P
7440-39-3	Barium	34.2	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	30400			P
7440-47-3	Chromium	1.4	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	132	B		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	4830			P
7439-96-5	Manganese	164			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	0.85	U		P
7440-09-7	Potassium	1360			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	31900			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	7.2	B		P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-12

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786

Matrix (soil/water): WATER

Lab Sample ID: L1786-07

Level (low/med): MED

Date Received: 08/23/2012

% 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	364			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	65.0	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	16100			P
7440-47-3	Chromium	208			P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	5.4	B		P
7439-89-6	Iron	1160			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3100			P
7439-96-5	Manganese	319			P
7439-97-6	Mercury	0.10	B		CV
7440-02-0	Nickel	6.6	B		P
7440-09-7	Potassium	2750			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	37500			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	4.9	U		P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-13

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786

Matrix (soil/water): WATER

Lab Sample ID: L1786-04

Level (low/med): MED

Date Received: 08/22/2012

% 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	279			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	17.3	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	3950			P
7440-47-3	Chromium	40.2			P
7440-48-4	Cobalt	1.1	B		P
7440-50-8	Copper	3.7	B		P
7439-89-6	Iron	376			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	1900			P
7439-96-5	Manganese	26.5	B		P
7439-97-6	Mercury	0.043	B		CV
7440-02-0	Nickel	3.6	B		P
7440-09-7	Potassium	927	B		P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	70900			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.5	B		P
7440-66-6	Zinc	4.9	U		P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-14

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786

Matrix (soil/water): WATER

Lab Sample ID: L1786-08

Level (low/med): MED

Date Received: 08/23/2012

% 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	103	B		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	23.8	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	3510			P
7440-47-3	Chromium	363			P
7440-48-4	Cobalt	3.8	B		P
7440-50-8	Copper	4.5	B		P
7439-89-6	Iron	2000			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	1350			P
7439-96-5	Manganese	52.2			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	29.4	B		P
7440-09-7	Potassium	1650			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	91500			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.7	B		P
7440-66-6	Zinc	4.9	U		P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-16

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786

Matrix (soil/water): WATER

Lab Sample ID: L1786-09

Level (low/med): MED

Date Received: 08/23/2012

% 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	300			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	9.7	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	10300			P
7440-47-3	Chromium	60.1			P
7440-48-4	Cobalt	1.4	B		P
7440-50-8	Copper	13.2	B		P
7439-89-6	Iron	351			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	4920			P
7439-96-5	Manganese	24.0	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	44.1	B		P
7440-09-7	Potassium	1470			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	26300			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	2.2	B		P
7440-66-6	Zinc	9.0	B		P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-2

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786

Matrix (soil/water): WATER

Lab Sample ID: L1786-11

Level (low/med): MED

Date Received: 08/23/2012

% 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	241			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	24.3	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	1.5	B		P
7440-70-2	Calcium	19800			P
7440-47-3	Chromium	127			P
7440-48-4	Cobalt	1.1	B		P
7440-50-8	Copper	5.5	B		P
7439-89-6	Iron	889			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	4010			P
7439-96-5	Manganese	84.0			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	4.9	B		P
7440-09-7	Potassium	1860			P
7782-49-2	Selenium	13.5	B		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	19600			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.3	B		P
7440-66-6	Zinc	6.7	B		P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-23D

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786

Matrix (soil/water): WATER

Lab Sample ID: L1786-01

Level (low/med): MED

Date Received: 08/22/2012

% 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	1590			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	22.9	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	15500			P
7440-47-3	Chromium	3.9	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	7.8	B		P
7439-89-6	Iron	1340			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3440			P
7439-96-5	Manganese	85.0			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	0.93	B		P
7440-09-7	Potassium	2590			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	12600			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	6.3	B		P
7440-66-6	Zinc	6.0	B		P

Comments:

U.S. EPA - CLP

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-23S

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786

Matrix (soil/water): WATER

Lab Sample ID: L1786-03

Level (low/med): MED

Date Received: 08/22/2012

% 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	504			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	15.6	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	17500			P
7440-47-3	Chromium	1.2	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	182	B		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	7320			P
7439-96-5	Manganese	1500			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	7.4	B		P
7440-09-7	Potassium	1330			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	36700			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	16.5	B		P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-73D

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786

Matrix (soil/water): WATER

Lab Sample ID: L1786-02

Level (low/med): MED

Date Received: 08/22/2012

% 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	1480			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	22.8	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	15900			P
7440-47-3	Chromium	3.7	B		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	7.3	B		P
7439-89-6	Iron	1310			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3500			P
7439-96-5	Manganese	80.7			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	0.85	U		P
7440-09-7	Potassium	2690			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	12900			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	6.2	B		P
7440-66-6	Zinc	6.0	B		P

Comments:

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.: SL1786Initial Calibration Source: Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					08/27/12 14:42				
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Mercury				5.0	5.01	100.3			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.:

SL1786

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
	08/30/12 8:02				08/30/12 8:20		08/30/12 08:50		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum	10000.0	9638.94	96.4	10000.0	9841.61	98.4	9863.60	98.6	P
Antimony	500.0	499.52	99.9	500.0	508.50	101.7	518.98	103.8	P
Arsenic	500.0	486.19	97.2	500.0	497.35	99.5	499.04	99.8	P
Barium	10000.0	10129.37	101.3	10000.0	10195.46	102.0	10297.52	103.0	P
Beryllium	250.0	242.83	97.1	250.0	245.19	98.1	249.10	99.6	P
Cadmium	250.0	237.18	94.9	250.0	244.48	97.8	244.05	97.6	P
Calcium	25000.0	23571.43	94.3	25000.0	24277.68	97.1	24536.27	98.1	P
Chromium	1000.0	960.30	96.0	1000.0	976.59	97.7	980.94	98.1	P
Cobalt	2500.0	2510.18	100.4	2500.0	2558.82	102.4	2572.04	102.9	P
Copper	1250.0	1190.93	95.3	1250.0	1233.04	98.6	1211.21	96.9	P
Iron	5000.0	4927.10	98.5	5000.0	5026.57	100.5	5055.71	101.1	P
Lead	500.0	489.63	97.9	500.0	491.64	98.3	507.55	101.5	P
Magnesium	25000.0	24808.10	99.2	25000.0	25066.16	100.3	25377.49	101.5	P
Manganese	2500.0	2475.72	99.0	2500.0	2500.04	100.0	2543.25	101.7	P
Nickel	2500.0	2478.67	99.1	2500.0	2521.03	100.8	2538.51	101.5	P
Potassium	25000.0	24772.22	99.1	25000.0	25184.78	100.7	25896.18	103.6	P
Selenium	500.0	476.55	95.3	500.0	483.87	96.8	493.58	98.7	P
Silver	1250.0	1201.47	96.1	1250.0	1221.99	97.8	1211.13	96.9	P
Sodium	25000.0	24757.66	99.0	25000.0	25141.12	100.6	25712.50	102.8	P
Thallium	500.0	478.85	95.8	500.0	482.83	96.6	493.12	98.6	P
Vanadium	2500.0	2422.00	96.9	2500.0	2482.70	99.3	2474.14	99.0	P
Zinc	2500.0	2475.33	99.0	2500.0	2524.43	101.0	2527.43	101.1	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.:

SL1786

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					08/30/12 9:27		08/30/12 10:08		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	9935.27	99.4	9832.76	98.3	P
Antimony				500.0	521.68	104.3	525.92	105.2	P
Arsenic				500.0	498.12	99.6	499.96	100	P
Barium				10000.0	10199.81	102.0	10314.39	103.1	P
Beryllium				250.0	247.49	99.0	251.40	100.6	P
Cadmium				250.0	246.20	98.5	244.58	97.8	P
Calcium				25000.0	24277.71	97.1	24200.02	96.8	P
Chromium				1000.0	987.98	98.8	979.77	98.0	P
Cobalt				2500.0	2601.37	104.1	2582.67	103.3	P
Copper				1250.0	1219.52	97.6	1199.94	96.0	P
Iron				5000.0	5102.38	102.0	5064.77	101.3	P
Lead				500.0	501.86	100.4	504.02	100.8	P
Magnesium				25000.0	25182.32	100.7	25646.27	102.6	P
Manganese				2500.0	2531.13	101.2	2567.79	102.7	P
Nickel				2500.0	2562.22	102.5	2539.41	101.6	P
Potassium				25000.0	25702.71	102.8	26053.43	104.2	P
Selenium				500.0	488.82	97.8	489.28	97.9	P
Silver				1250.0	1218.14	97.5	1181.60	94.5	P
Sodium				25000.0	25379.86	101.5	25353.99	101.4	P
Thallium				500.0	477.70	95.5	492.98	98.6	P
Vanadium				2500.0	2495.77	99.8	2470.33	98.8	P
Zinc				2500.0	2555.51	102.2	2553.72	102.1	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.:

SL1786

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					08/30/12 10:41				
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	9947.19	99.5			P
Antimony				500.0	531.80	106.4			P
Arsenic				500.0	499.20	99.8			P
Barium				10000.0	10261.94	102.6			P
Beryllium				250.0	249.84	99.9			P
Cadmium				250.0	245.56	98.2			P
Calcium				25000.0	24354.81	97.4			P
Chromium				1000.0	985.14	98.5			P
Cobalt				2500.0	2602.35	104.1			P
Copper				1250.0	1211.71	96.9			P
Iron				5000.0	5103.54	102.1			P
Lead				500.0	504.45	100.9			P
Magnesium				25000.0	25405.61	101.6			P
Manganese				2500.0	2555.15	102.2			P
Nickel				2500.0	2556.95	102.3			P
Potassium				25000.0	26413.83	105.7			P
Selenium				500.0	484.70	96.9			P
Silver				1250.0	1201.44	96.1			P
Sodium				25000.0	25687.39	102.7			P
Thallium				500.0	476.53	95.3			P
Vanadium				2500.0	2488.39	99.5			P
Zinc				2500.0	2560.75	102.4			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: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1786

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-67823**FIMS2_120827A**

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	08/27/12 14:16	C	08/27/12 14:35	C	08/27/12 14:43	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.: SL1786

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-67887

OPTIMA3_120830A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	08/30/12 8:24	C	08/30/12 8:53	C	08/30/12 9:31	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	9.504	B	P
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Barium	1.1	U	1.1	U	1.1	U	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	110.0	U	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
Potassium	76.0	U	76.0	U	76.0	U	76.0	U	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	29.0	U	29.0	U	29.000	U	P
Thallium	6.2	U	6.2	U	-6.2	B	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.: SL1786

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

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

OPTIMA3_120830A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	08/30/12 10:12	C	08/30/12 10:45	C		C		C	
Aluminum			66.0	U	66.0	U					P
Antimony			9.3	U	9.3	U					P
Arsenic			4.3	U	4.3	U					P
Barium			1.1	U	1.1	U					P
Beryllium			0.3	U	0.3	U					P
Cadmium			0.9	U	0.9	U					P
Calcium			110.0	U	111.7	B					P
Chromium			0.6	U	0.6	U					P
Cobalt			0.7	U	0.7	U					P
Copper			3.6	U	3.6	U					P
Iron			31.0	U	31.0	U					P
Lead			4.2	U	4.2	U					P
Magnesium			76.0	U	76.0	U					P
Manganese			10.0	U	10.0	U					P
Nickel			0.8	U	0.8	U					P
Potassium			114.4	B	76.0	U					P
Selenium			12.0	U	12.0	U					P
Silver			6.9	U	6.9	U					P
Sodium			29.0	U	29.0	U					P
Thallium			6.2	U	6.2	U					P
Vanadium			1.1	U	1.1	U					P
Zinc			4.9	U	4.9	U					P

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.:

SL1786

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	527375	517131.7	103.4				
Antimony	0	600	1	633.2	105.5				
Arsenic	0	100	-3	100.4	100.4				
Barium	0	500	0	516.2	103.2				
Beryllium	0	500	0	492.2	98.4				
Cadmium	0	1000	-1	920.6	92.1				
Calcium	500000	500000	535568	524819.9	105.0				
Chromium	0	500	14	503.8	100.8				
Cobalt	0	500	0	465.3	93.1				
Copper	0	500	5	529.3	105.9				
Iron	200000	200000	183767	181511.4	90.8				
Lead	0	500	8	503.9	100.8				
Magnesium	500000	500000	498976	489185.1	97.8				
Manganese	0	500	-5	486	97.2				
Nickel	0	1000	-3	905.9	90.6				
Potassium	0	25000	148	28702.4	114.8				
Selenium	0	500	4	492.5	98.5				
Silver	0	200	-4	211.9	106.0				
Sodium	0	25000	53	28172.9	112.7				
Thallium	0	100	7	93.4	93.4				
Vanadium	0	500	-9	490.8	98.2				
Zinc	0	1000	13	938.1	93.8				

U.S. EPA - CLP

5A

EPA SAMPLE NO.

SPIKE SAMPLE RECOVERY

SL-MW-16S

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786

Matrix (soil/water): WATER

Level (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	9300	300	9100	99		P
Antimony	75-125	474	9.3 U	456	104		P
Arsenic	75-125	476	4.3 U	456	105		P
Barium	75-125	9420	9.7 B	9100	103		P
Beryllium	75-125	233	0.26 U	227	103		P
Cadmium	75-125	225	0.89 U	227	99		P
Chromium	75-125	952	60.1	910	98		P
Cobalt	75-125	2300	1.4 B	2270	101		P
Copper	75-125	1120	13.2 B	1130	98		P
Iron	75-125	5130	351	4550	105		P
Lead	75-125	459	4.2 U	455	101		P
Manganese	75-125	2360	24.0 B	2270	103		P
Nickel	75-125	2330	44.1 B	2270	101		P
Selenium	75-125	450	12.0 U	455	99		P
Silver	75-125	1120	6.9 U	1130	99		P
Thallium	75-125	432	6.2 U	455	95		P
Vanadium	75-125	2240	2.2 B	2270	99		P
Zinc	75-125	2290	9.0 B	2270	101		P
Mercury	75-125	5.1	0.028 U	4.6	112		CV

Comments:

U.S. EPA - CLP

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EPA SAMPLE NO.

DUPLICATES

SL-MW-16D

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786

Matrix (soil/water): WATER

Level (low/med): MED

% Solids for Sample: 0.0

% Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	300.1028		270.7380		10.3		P
Antimony		9.3000	U	9.3000	U			P
Arsenic		4.3000	U	4.3000	U			P
Barium		9.6645	B	9.2664	B	4.2		P
Beryllium		0.2600	U	0.2600	U			P
Cadmium		0.8900	U	0.8900	U			P
Calcium		10332.3938		10155.0817		1.7		P
Chromium	20.0	60.0587		51.6484		15.1		P
Cobalt		1.3645	B	1.3763	B	0.9		P
Copper		13.1926	B	12.4718	B	5.6		P
Iron	200.0	350.7992		331.3120		5.7		P
Lead		4.2000	U	4.2000	U			P
Magnesium		4920.2937		4711.8626		4.3		P
Manganese		23.9837	B	25.7739	B	7.2		P
Nickel		44.1005	B	42.9859	B	2.6		P
Potassium	1000.0	1472.7170		1522.0334		3.3		P
Selenium		12.0000	U	12.0000	U			P
Silver		6.9000	U	6.9000	U			P
Sodium		26267.8315		25081.0099		4.6		P
Thallium		6.2000	U	6.2000	U			P
Vanadium		2.2172	B	2.0687	B	6.9		P
Zinc		8.9934	B	8.9942	B	0		P
Mercury		0.0280	U	0.0280	U			CV

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc.	Contract: 95900-04
Lab Code: MITKEM Case No.:	SAS No.: SDG No.: SL1786
Solid LCS Source:	LCS(D) ID:
Aqueous LCS Source:	LCS-67823

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte	True	Found	%R	True	Found	C	Limits	%R	
Mercury	4.6	5.07	110.2						

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>SL1786</u>
Solid LCS Source: _____	LCS(D) ID:
Aqueous LCS Source:	LCS-67887

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	9372.76	103.0						
Antimony	455.0	489.90	107.7						
Arsenic	455.0	482.48	106.0						
Barium	9100.0	9566.33	105.1						
Beryllium	227.0	237.26	104.5						
Cadmium	227.0	236.94	104.4						
Calcium	22700.0	22739.96	100.2						
Chromium	910.0	940.93	103.4						
Cobalt	2270.0	2370.74	104.4						
Copper	1130.0	1156.42	102.3						
Iron	4550.0	4759.91	104.6						
Lead	455.0	480.93	105.7						
Magnesium	22700.0	23616.19	104.0						
Manganese	2270.0	2357.66	103.9						
Nickel	2270.0	2378.75	104.8						
Potassium	22700.0	23730.72	104.5						
Selenium	455.0	470.71	103.5						
Silver	1130.0	1163.65	103.0						
Sodium	22700.0	23515.20	103.6						
Thallium	455.0	440.97	96.9						
Vanadium	2270.0	2327.01	102.5						
Zinc	2270.0	2350.72	103.6						

U.S. EPA - CLP

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EPA SAMPLE NO.

ICP SERIAL DILUTIONS

SL-MW-16

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786

Matrix (soil/water): WATER

Level (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	300.10		330.00	U	100		P
Antimony	9.30	U	46.50	U			P
Arsenic	4.30	U	21.50	U			P
Barium	9.66	B	11.96	B	24		P
Beryllium	0.26	U	1.30	U			P
Cadmium	0.89	U	4.45	U			P
Calcium	10332.39		10228.68		1		P
Chromium	60.06		57.39		4		P
Cobalt	1.36	B	3.35	U	100		P
Copper	13.19	B	18.00	U	100		P
Iron	350.80		349.69		0		P
Lead	4.20	U	21.00	U			P
Magnesium	4920.29		4951.00		1		P
Manganese	23.98	B	50.00	U	100		P
Nickel	44.10	B	45.22	B	3		P
Potassium	1472.72		1390.38		6		P
Selenium	12.00	U	60.00	U			P
Silver	6.90	U	34.50	U			P
Sodium	26267.83		25737.57		2		P
Thallium	6.20	U	31.00	U			P
Vanadium	2.22	B	5.50	U	100		P
Zinc	8.99	B	24.50	U	100		P

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.: SL1786

Instrument Type: CV InstrumentID: FIMS2 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.: SL1786
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.:

SL1786

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Co
Aluminum	308.21		0.1950780	0.0000000	0.0689271	0.0000000
Antimony	206.83	0.0581013	0.0000000	0.0549587	0.0214185	0.0000000
Arsenic	188.97	0.0098790	-0.0124040	-0.0756686	0.0157247	0.1927900
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	0.0025914	0.0749299	0.0000000	-0.0433049
Calcium	227.54	0.0000000		7.8420900	0.5637690	253.7870000
Chromium	267.71	0.0000000	0.0000000	0.0000000	0.0064696	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0241432	0.0000000	
Copper	324.75	0.0000000	0.0000000	-0.0922443	0.0000000	-0.1349370
Iron	273.95	0.0000000	0.0000000		0.0000000	0.0000000
Lead	220.35	-0.1032270	-0.0123272	0.0209682	-0.0064852	-0.0680890
Magnesium	279.07	0.0000000	0.0000000	0.0000000		0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0301633	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0042808	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0219452	0.0000000	-0.3855700	0.0000000	-0.7432810
Silver	328.06	0.0000000	0.0000000	-0.0362359	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	-0.0153767	-0.0040303	-0.1223880	-0.0549555	5.8333800
Titanium	334.94	0.0000000	-0.0167659	0.0000000	0.0182020	0.0000000
Vanadium	292.40	0.0000000	0.0000000	-0.0307673	0.0000000	0.0000000
Zinc	206.20	-0.0121647	-0.0130048	-0.0501268	-0.0144316	-0.3012520

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.:

SL1786

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	Mn	Ni	Tl
Aluminum	308.21	0.0000000	0.0000000	1.5401500	0.0000000	0.0000000
Antimony	206.83	18.3748000	0.3246940	0.0000000	0.0000000	0.0000000
Arsenic	188.97	-8.8838000	0.0000000	0.2489140	0.0999179	0.1051500
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	0.0000000	-0.2126510	0.0000000
Calcium	227.54	5.3533500	3.5228400	3.8819800	26.7628000	0.0000000
Chromium	267.71		0.0000000	0.2043740	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.1584950	0.0000000
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	-0.0447064	0.3133570	-0.0606043	-0.1219210	-0.1744540
Magnesium	279.07	2.4873800	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000		0.0474986	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000		0.2920460
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.2759200	-0.2480870	0.0000000	-0.1215600	-0.4373880
Silver	328.06	0.0000000	0.0000000	0.2125900	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0860847	-0.1533400	-0.3345200	-0.0729483	
Titanium	334.94	0.1475450	0.0000000	0.0000000	0.0000000	0.1490420
Vanadium	292.40	-2.2898300	0.3129820	0.0000000	0.0000000	0.0000000
Zinc	206.20	-1.8283200	-0.3316020	-0.4006130	-0.1453040	-0.4071760

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.:

SL1786

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Ti	V	_____	_____	_____
Aluminum	308.21	1.6328600	-0.3229200			
Antimony	206.83	-2.3648000	-1.1022500			
Arsenic	188.97	-0.2598760	0.0000000			
Barium	233.52	0.0000000	-1.4206100			
Beryllium	313.10	-1.8417600	-0.0298256			
Cadmium	226.50	0.0000000	0.0000000			
Calcium	227.54	7.1850200	24.4780000			
Chromium	267.71	0.0000000	-0.3095710			
Cobalt	228.61	2.3045300	0.0000000			
Copper	324.75	0.0000000	-0.1578650			
Iron	273.95	0.0000000	-1.6429000			
Lead	220.35	-0.9907230	-0.0982908			
Magnesium	279.07	0.0000000	0.0000000			
Manganese	257.61	0.0000000	0.0000000			
Nickel	231.60	0.5886010	0.0000000			
Potassium	766.49	0.0000000	0.0000000			
Selenium	196.02	-0.6097280	0.0000000			
Silver	328.06	0.0000000	-1.9059700			
Sodium	589.59	0.0000000	0.0000000			
Thallium	190.80	-0.2863380	4.5539900			
Titanium	334.94		0.0000000			
Vanadium	292.40	1.3967000				
Zinc	206.20	-0.8719450	-0.1607790			

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.: SL1786
ICP ID Number: OPTIMA3 Date: 5/10/2012

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	100000	P
Beryllium	0.20	5000	P
Cadmium	0.20	50000	P
Calcium	0.20	500000	P
Chromium	0.20	50000	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	50000	P
Nickel	0.20	100000	P
Potassium	0.20	500000	P
Selenium	0.20	50000	P
Silver	0.20	2500	P
Sodium	0.20	500000	P
Thallium	0.20	50000	P
Vanadium	0.20	50000	P
Zinc	0.20	50000	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.: SL1786
Preparation Method: 7470A Batch ID: 67864

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB	08/24/2012		100
CCV	08/24/2012		100
ICB	08/24/2012		100
ICV	08/24/2012		100
S0	08/24/2012		100
S0.2	08/24/2012		100
S1.0	08/24/2012		100
S10.0	08/24/2012		100
S2.0	08/24/2012		100
S5.0	08/24/2012		100
LCSW	08/24/2012		100
PBW	08/24/2012		100
RB-02	08/24/2012		100
SL-MW-1	08/24/2012		100
SL-MW-12	08/24/2012		100
SL-MW-13	08/24/2012		100
SL-MW-14	08/24/2012		100
SL-MW-16	08/24/2012		100
SL-MW-16D	08/24/2012		100
SL-MW-16S	08/24/2012		100
SL-MW-2	08/24/2012		100
SL-MW-23D	08/24/2012		100
SL-MW-23S	08/24/2012		100
SL-MW-73D	08/24/2012		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.: SL1786
Preparation Method: 3005A Batch ID: 67887

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	08/29/2012		50
PBW	08/29/2012		50
RB-02	08/29/2012		50
SL-MW-1	08/29/2012		50
SL-MW-12	08/29/2012		50
SL-MW-13	08/29/2012		50
SL-MW-14	08/29/2012		50
SL-MW-16	08/29/2012		50
SL-MW-16D	08/29/2012		50
SL-MW-16S	08/29/2012		50
SL-MW-2	08/29/2012		50
SL-MW-23D	08/29/2012		50
SL-MW-23S	08/29/2012		50
SL-MW-73D	08/29/2012		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.: SL1786
 Instrument ID Number: FIMS2 Method: CV
 Start Date: 08/27/2012 End Date: 08/27/2012

FIMS2_120827A

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	1346															X														
S0.2	1.0	1348															X														
S1.0	1.0	1350															X														
S2.0	1.0	1351															X														
S5.0	1.0	1353															X														
S10.0	1.0	1355															X														
ICV	1.0	1356															X														
ICB	1.0	1358															X														
PBW	1.0	1400															X														
LCSW	1.0	1402															X														
ZZZZZZ	1.0	1403																													
ZZZZZZ	1.0	1405																													
ZZZZZZ	1.0	1406																													
ZZZZZZ	1.0	1408																													
ZZZZZZ	1.0	1410																													
SL -MW- 23D	1.0	1411															X														
SL -MW- 73D	1.0	1413															X														
CCV	1.0	1415															X														
CCB	1.0	1416															X														
SL -MW- 23S	1.0	1418															X														
SL -MW- 13	1.0	1420															X														
SL -MW- 12	1.0	1421															X														
SL -MW- 14	1.0	1423															X														
SL -MW- 16	1.0	1425															X														
SL -MW- 16D	1.0	1426															X														
SL -MW- 16S	1.0	1428															X														
SL -MW- 1	1.0	1430															X														
SL -MW- 2	1.0	1431															X														
CCV	1.0	1433															X														
CCB	1.0	1435															X														
RB-02	1.0	1437															X														
ZZZZZZ	1.0	1438																													

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.: SL1786
 Instrument ID Number: FIMS2 Method: CV
 Start Date: 08/27/2012 End Date: 08/27/2012

FIMS2_120827A

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	1440																											
CCV	1.0	1442															X												
CCB	1.0	1443															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.: SL1786
Instrument ID Number: OPTIMA3 Method: P
Start Date: 08/30/2012 End Date: 08/30/2012

OPTIMA3_120830A

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	0747		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
S1	1.0	0750		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
S2	1.0	0754		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
S3	1.0	0758		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ICV	1.0	0802		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ICB	1.0	0805		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0809																													
ICSA	1.0	0813		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ICSAB	1.0	0816		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCV	1.0	0820		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCB	1.0	0824		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
PBW	1.0	0828		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LCSW	1.0	0831		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
SL -MW- 23D	1.0	0835		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0839																													
SL -MW- 73D	1.0	0842		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0846																													
CCV	1.0	0850		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCB	1.0	0853		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
SL -MW- 23S	1.0	0857		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0901																													
SL -MW- 13	1.0	0904		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0908																													
SL -MW- 12	1.0	0912		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0916																													
SL -MW- 14	1.0	0920		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0924																													
CCV	1.0	0927		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCB	1.0	0931		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
SL -MW- 16	1.0	0935		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
SL -MW- 16D	1.0	0939		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
SL -MW- 16S	1.0	0942		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.: SL1786
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 08/30/2012 End Date: 08/30/2012

OPTIMA3_120830A

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				
SL-MW-16L	5.0	0946		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0950																													
ZZZZZZ	1.0	0953																													
ZZZZZZ	1.0	0957																													
ZZZZZZ	1.0	1001																													
ZZZZZZ	5.0	1004																													
CCV	1.0	1008		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
CCB	1.0	1012		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1016																													
SL-MW-1	1.0	1019		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1023																													
SL-MW-2	1.0	1027		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1030																													
RB-02	1.0	1034		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1038																													
CCV	1.0	1041		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
CCB	1.0	1045		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					

Instrument Raw Data

=====

Reprocessing Begun

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Results Data Set (original): B12083001

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

Results Data Set (reprocessed): B12083001A

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

Sequence No.: 1

Sample ID: S0

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 8/30/2012 7:47:13 AM

Data Type: Reprocessed on 8/30/2012 1:59:32 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1897852.2	8791.95	0.46%	100.000	%
Lu 261.542	1226617.4	5991.55	0.49%	100.0	%
Ag 328.068†	-2770.2	56.83	2.05%	[0.00]	mg/L
Al 308.215†	2526.8	80.49	3.19%	[0.00]	mg/L
As 188.979†	-3.6	3.82	105.22%	[0.00]	mg/L
Ba 233.527†	-80.3	9.66	12.03%	[0.00]	mg/L
Be 313.107†	-1343.2	32.54	2.42%	[0.00]	mg/L
Co 228.616†	-15.2	8.58	56.57%	[0.00]	mg/L
Cr 267.716†	52.5	21.03	40.03%	[0.00]	mg/L
Cu 324.752†	3492.2	39.02	1.12%	[0.00]	mg/L
Fe 273.955†	-141.5	13.13	9.28%	[0.00]	mg/L
Mg 279.077†	-911.6	101.36	11.12%	[0.00]	mg/L
Mn 257.610†	-302.7	28.85	9.53%	[0.00]	mg/L
Ni 231.604†	-28.9	3.21	11.14%	[0.00]	mg/L
Pb 220.353†	26.8	6.66	24.90%	[0.00]	mg/L
Sb 206.836†	19.6	2.71	13.86%	[0.00]	mg/L
Se 196.026†	-2.1	5.58	270.57%	[0.00]	mg/L
Tl 190.801	-1.6	4.55	289.15%	[0.00]	mg/L
V 292.402†	-62.2	41.24	66.30%	[0.00]	mg/L
Zn 206.200†	35.8	3.96	11.07%	[0.00]	mg/L
Cd 226.502†	-59.1	1.29	2.19%	[0.00]	mg/L
Ti 334.940†	-125.6	53.27	42.43%	[0.00]	mg/L
Ca 227.546†	155.2	16.50	10.63%	[0.00]	mg/L
Na 589.592†	-509.4	40.41	7.93%	[0.00]	mg/L
K 766.490†	763.9	67.11	8.79%	[0.00]	mg/L

Sequence No.: 2

Sample ID: S1

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 8/30/2012 7:50:52 AM

Data Type: Reprocessed on 8/30/2012 1:59:34 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1736697.1	31850.96	1.83%	91.509	%
Lu 261.542	1130912.2	20922.82	1.85%	92.20	%
Ag 328.068†	430856.2	6524.71	1.51%	[2.5]	mg/L
Al 308.215†	403859.8	9270.55	2.30%	[20]	mg/L
As 188.979†	834.2	10.05	1.20%	[1]	mg/L
Ba 233.527†	1703472.3	25458.56	1.49%	[20]	mg/L
Be 313.107†	1249479.3	19797.46	1.58%	[0.5]	mg/L
Co 228.616†	178107.0	4032.03	2.26%	[5]	mg/L
Cr 267.716†	140539.6	3091.57	2.20%	[2]	mg/L
Cu 324.752†	550204.6	8987.04	1.63%	[2.5]	mg/L
Fe 273.955†	240132.4	5435.31	2.26%	[10]	mg/L

Mg 279.077†	868173.8	12933.81	1.49%	[50]	mg/L
Mn 257.610†	2890681.6	45809.44	1.58%	[5]	mg/L
Ni 231.604†	147659.4	3248.74	2.20%	[5]	mg/L
Pb 220.353†	5079.2	76.59	1.51%	[1]	mg/L
Sb 206.836†	1148.6	19.27	1.68%	[1]	mg/L
Se 196.026†	497.2	4.79	0.96%	[1]	mg/L
Tl 190.801	823.6	5.85	0.71%	[1]	mg/L
V 292.402†	607657.3	9498.25	1.56%	[5]	mg/L
Zn 206.200†	105768.2	2481.24	2.35%	[5]	mg/L
Cd 226.502†	27646.6	634.27	2.29%	[0.5]	mg/L
Ti 334.940†	552732.8	8750.90	1.58%	[1]	mg/L
Ca 227.546†	9670.4	180.52	1.87%	[50]	mg/L
Na 589.592†	241374.3	4113.95	1.70%	[50]	mg/L
K 766.490†	52295.6	966.79	1.85%	[50]	mg/L

Sequence No.: 3

Sample ID: S2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 8/30/2012 7:54:37 AM

Data Type: Reprocessed on 8/30/2012 1:59:34 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1731671.9	18026.94	1.04%	91.244	%
Lu 261.542	1127588.2	12198.37	1.08%	91.93	%
Ag 328.068†	223815.5	940.00	0.42%	[1.25]	mg/L
Al 308.215†	208273.7	831.25	0.40%	[10]	mg/L
As 188.979†	429.0	8.38	1.95%	[0.5]	mg/L
Ba 233.527†	905878.8	2375.81	0.26%	[10]	mg/L
Be 313.107†	651636.3	2422.71	0.37%	[0.25]	mg/L
Co 228.616†	92987.1	1070.11	1.15%	[2.5]	mg/L
Cr 267.716†	72721.8	888.13	1.22%	[1]	mg/L
Cu 324.752†	284676.1	797.82	0.28%	[1.25]	mg/L
Fe 273.955†	124593.6	1591.59	1.28%	[5]	mg/L
Mg 279.077†	454205.4	1128.42	0.25%	[25]	mg/L
Mn 257.610†	1523179.4	5264.06	0.35%	[2.5]	mg/L
Ni 231.604†	77094.1	1051.21	1.36%	[2.5]	mg/L
Pb 220.353†	2635.5	28.19	1.07%	[0.5]	mg/L
Sb 206.836†	606.2	9.62	1.59%	[0.5]	mg/L
Se 196.026†	262.0	5.61	2.14%	[0.5]	mg/L
Tl 190.801	435.2	4.87	1.12%	[0.5]	mg/L
V 292.402†	315282.0	1079.01	0.34%	[2.5]	mg/L
Zn 206.200†	55347.5	747.88	1.35%	[2.5]	mg/L
Cd 226.502†	14401.1	196.78	1.37%	[0.25]	mg/L
Ti 334.940†	288149.5	777.54	0.27%	[0.5]	mg/L
Ca 227.546†	5031.7	91.27	1.81%	[25]	mg/L
Na 589.592†	125152.9	1118.54	0.89%	[25]	mg/L
K 766.490†	26866.2	147.63	0.55%	[25]	mg/L

Sequence No.: 4

Sample ID: S3

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 8/30/2012 7:58:21 AM

Data Type: Reprocessed on 8/30/2012 1:59:35 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1818948.8	23150.78	1.27%	95.842	%
Lu 261.542	1177945.8	14236.14	1.21%	96.03	%
Ag 328.068†	4439.5	40.35	0.91%	[0.025]	mg/L
Al 308.215†	4094.7	22.84	0.56%	[0.2]	mg/L
As 188.979†	7.9	2.64	33.29%	[0.01]	mg/L
Ba 233.527†	18341.0	267.76	1.46%	[0.2]	mg/L

Be 313.107†	12476.7	196.63	1.58%	[0.005]	mg/L
Co 228.616†	1854.7	30.78	1.66%	[0.05]	mg/L
Cr 267.716†	1431.8	16.66	1.16%	[0.02]	mg/L
Cu 324.752†	5561.1	130.68	2.35%	[0.025]	mg/L
Fe 273.955†	2493.0	35.15	1.41%	[0.1]	mg/L
Mg 279.077†	8958.8	214.17	2.39%	[0.5]	mg/L
Mn 257.610†	30825.4	433.60	1.41%	[0.05]	mg/L
Ni 231.604†	1531.3	12.62	0.82%	[0.05]	mg/L
Pb 220.353†	52.1	6.91	13.26%	[0.01]	mg/L
Sb 206.836†	20.0	3.43	17.13%	[0.01]	mg/L
Se 196.026†	3.6	1.85	51.75%	[0.01]	mg/L
Tl 190.801	15.7	6.49	41.41%	[0.01]	mg/L
V 292.402†	6100.4	151.59	2.48%	[0.05]	mg/L
Zn 206.200†	1127.9	12.32	1.09%	[0.05]	mg/L
Cd 226.502†	289.9	5.26	1.82%	[0.005]	mg/L
Ti 334.940†	5663.8	122.76	2.17%	[0.01]	mg/L
Ca 227.546†	108.0	5.95	5.50%	[0.5]	mg/L
Na 589.592†	2448.4	56.38	2.30%	[0.5]	mg/L
K 766.490†	515.3	93.73	18.19%	[0.5]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	173700	0.00000	0.999881	
Al 308.215	3	Lin Thru 0	0.0	20320	0.00000	0.999922	
As 188.979	3	Lin Thru 0	0.0	839.0	0.00000	0.999935	
Ba 233.527	3	Lin Thru 0	0.0	86260	0.00000	0.999685	
Be 313.107	3	Lin Thru 0	0.0	2520000	0.00000	0.999854	
Co 228.616	3	Lin Thru 0	0.0	35940	0.00000	0.999847	
Cr 267.716	3	Lin Thru 0	0.0	70760	0.00000	0.999904	
Cu 324.752	3	Lin Thru 0	0.0	221600	0.00000	0.999904	
Fe 273.955	3	Lin Thru 0	0.0	24190	0.00000	0.999888	
Mg 279.077	3	Lin Thru 0	0.0	17520	0.00000	0.999831	
Mn 257.610	3	Lin Thru 0	0.0	584400	0.00000	0.999773	
Ni 231.604	3	Lin Thru 0	0.0	29790	0.00000	0.999846	
Pb 220.353	3	Lin Thru 0	0.0	5118	0.00000	0.999888	
Sb 206.836	3	Lin Thru 0	0.0	1161	0.00000	0.999738	
Se 196.026	3	Lin Thru 0	0.0	502.5	0.00000	0.999768	
Tl 190.801	3	Lin Thru 0	0.0	833.0	0.00000	0.999715	
V 292.402	3	Lin Thru 0	0.0	122400	0.00000	0.999888	
Zn 206.200	3	Lin Thru 0	0.0	21350	0.00000	0.999830	
Cd 226.502	3	Lin Thru 0	0.0	55760	0.00000	0.999863	
Ti 334.940	3	Lin Thru 0	0.0	557400	0.00000	0.999857	
Ca 227.546	3	Lin Thru 0	0.0	195.0	0.00000	0.999870	
Na 589.592	3	Lin Thru 0	0.0	4863	0.00000	0.999892	
K 766.490	3	Lin Thru 0	0.0	1052	0.00000	0.999940	

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Sequence No.: 5

Sample ID: ICV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 8/30/2012 8:02:02 AM

Data Type: Reprocessed on 8/30/2012 1:59:36 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1799565.7	94.821	%	0.7455			0.79%
Lu 261.542	1172151.9	95.56	%	0.779			0.81%
Ag 328.068†	208010.8	1.2015	mg/L	0.01941	1.2015 mg/L	0.01941	1.62%
QC value within limits for Ag 328.068 Recovery = 96.12%							
Al 308.215†	196071.3	9.6389	mg/L	0.14651	9.6389 mg/L	0.14651	1.52%
QC value within limits for Al 308.215 Recovery = 96.39%							
As 188.979†	400.7	0.48619	mg/L	0.010184	0.48619 mg/L	0.010184	2.09%
QC value within limits for As 188.979 Recovery = 97.24%							
Ba 233.527†	873431.1	10.129	mg/L	0.0995	10.129 mg/L	0.0995	0.98%
QC value within limits for Ba 233.527 Recovery = 101.29%							
Be 313.107†	609616.6	0.24283	mg/L	0.002395	0.24283 mg/L	0.002395	0.99%

Co	QC value within limits for Co	228.616	Recovery = 97.13%				
		228.616†	90265.1	2.5102 mg/L	0.03741	2.5102 mg/L	0.03741 1.49%
Cr	QC value within limits for Cr	267.716	Recovery = 100.41%				
		267.716†	67909.8	0.96030 mg/L	0.015338	0.96030 mg/L	0.015338 1.60%
Cu	QC value within limits for Cu	324.752	Recovery = 96.03%				
		324.752†	263665.0	1.1909 mg/L	0.01657	1.1909 mg/L	0.01657 1.39%
Fe	QC value within limits for Fe	273.955	Recovery = 95.27%				
		273.955†	119112.0	4.9271 mg/L	0.07933	4.9271 mg/L	0.07933 1.61%
Mg	QC value within limits for Mg	279.077	Recovery = 98.54%				
		279.077†	434790.3	24.808 mg/L	0.2487	24.808 mg/L	0.2487 1.00%
Mn	QC value within limits for Mn	257.610	Recovery = 99.23%				
		257.610†	1446939.4	2.4757 mg/L	0.02214	2.4757 mg/L	0.02214 0.89%
Ni	QC value within limits for Ni	231.604	Recovery = 99.03%				
		231.604†	73863.4	2.4787 mg/L	0.03820	2.4787 mg/L	0.03820 1.54%
Pb	QC value within limits for Pb	220.353	Recovery = 99.15%				
		220.353†	2495.5	0.48963 mg/L	0.004248	0.48963 mg/L	0.004248 0.87%
Sb	QC value within limits for Sb	206.836	Recovery = 97.93%				
		206.836†	597.0	0.49952 mg/L	0.001025	0.49952 mg/L	0.001025 0.21%
Se	QC value within limits for Se	196.026	Recovery = 99.90%				
		196.026†	236.8	0.47655 mg/L	0.007768	0.47655 mg/L	0.007768 1.63%
Tl	QC value within limits for Tl	190.801	Recovery = 95.31%				
		190.801†	417.5	0.47885 mg/L	0.007445	0.47885 mg/L	0.007445 1.55%
V	QC value within limits for V	292.402	Recovery = 95.77%				
		292.402†	296410.0	2.4220 mg/L	0.03698	2.4220 mg/L	0.03698 1.53%
Zn	QC value within limits for Zn	206.200	Recovery = 96.88%				
		206.200†	52732.4	2.4753 mg/L	0.03905	2.4753 mg/L	0.03905 1.58%
Cd	QC value within limits for Cd	226.502	Recovery = 99.01%				
		226.502†	13213.0	0.23718 mg/L	0.003626	0.23718 mg/L	0.003626 1.53%
Ti	QC value within limits for Ti	334.940	Recovery = 94.87%				
		334.940†	271405.7	0.48661 mg/L	0.003666	0.48661 mg/L	0.003666 0.75%
Ca	QC value within limits for Ca	227.546	Recovery = Not calculated				
		227.546†	4759.4	23.571 mg/L	0.2080	23.571 mg/L	0.2080 0.88%
Na	QC value within limits for Na	589.592	Recovery = 94.29%				
		589.592†	120401.8	24.758 mg/L	0.2278	24.758 mg/L	0.2278 0.92%
K	QC value within limits for K	766.490	Recovery = 99.03%				
		766.490†	26051.9	24.772 mg/L	0.1861	24.772 mg/L	0.1861 0.75%
	QC value within limits for K	766.490	Recovery = 99.09%				
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: 8/30/2012 8:05:46 AM

Data Type: Reprocessed on 8/30/2012 1:59:37 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1874322.8	98.760 %	0.2984			0.30%
Lu 261.542	1210564.9	98.69 %	0.310			0.31%
Ag 328.068†	57.0	0.00033 mg/L	0.000390	0.00033 mg/L	0.000390	118.49%
	QC value within limits for Ag	328.068	Recovery = Not calculated			
Al 308.215†	72.5	0.00355 mg/L	0.001115	0.00355 mg/L	0.001115	31.38%
	QC value within limits for Al	308.215	Recovery = Not calculated			
As 188.979†	2.5	0.00302 mg/L	0.002796	0.00302 mg/L	0.002796	92.63%
	QC value within limits for As	188.979	Recovery = Not calculated			
Ba 233.527†	70.3	0.00082 mg/L	0.000112	0.00082 mg/L	0.000112	13.77%
	QC value within limits for Ba	233.527	Recovery = Not calculated			
Be 313.107†	9.8	0.00000 mg/L	0.000019	0.00000 mg/L	0.000019	444.74%
	QC value within limits for Be	313.107	Recovery = Not calculated			
Co 228.616†	17.1	0.00047 mg/L	0.000189	0.00047 mg/L	0.000189	39.93%
	QC value within limits for Co	228.616	Recovery = Not calculated			
Cr 267.716†	3.7	0.00005 mg/L	0.000258	0.00005 mg/L	0.000258	492.69%
	QC value within limits for Cr	267.716	Recovery = Not calculated			
Cu 324.752†	178.9	0.00081 mg/L	0.000397	0.00081 mg/L	0.000397	49.14%
	QC value within limits for Cu	324.752	Recovery = Not calculated			
Fe 273.955†	30.6	0.00126 mg/L	0.000202	0.00126 mg/L	0.000202	15.97%
	QC value within limits for Fe	273.955	Recovery = Not calculated			

Mg 279.077†	27.1	0.00154 mg/L	0.004130	0.00154 mg/L	0.004130	267.31%
QC value within limits for Mg 279.077	Recovery = Not calculated					
Mn 257.610†	159.9	0.00027 mg/L	0.000044	0.00027 mg/L	0.000044	16.24%
QC value within limits for Mn 257.610	Recovery = Not calculated					
Ni 231.604†	8.8	0.00029 mg/L	0.000436	0.00029 mg/L	0.000436	148.44%
QC value within limits for Ni 231.604	Recovery = Not calculated					
Pb 220.353†	1.2	0.00024 mg/L	0.000736	0.00024 mg/L	0.000736	307.98%
QC value within limits for Pb 220.353	Recovery = Not calculated					
Sb 206.836†	4.2	0.00363 mg/L	0.003333	0.00363 mg/L	0.003333	91.74%
QC value within limits for Sb 206.836	Recovery = Not calculated					
Se 196.026†	1.0	0.00191 mg/L	0.008871	0.00191 mg/L	0.008871	465.48%
QC value within limits for Se 196.026	Recovery = Not calculated					
Tl 190.801	0.3	0.00032 mg/L	0.003773	0.00032 mg/L	0.003773	>999.9%
QC value within limits for Tl 190.801	Recovery = Not calculated					
V 292.402†	58.3	0.00048 mg/L	0.000057	0.00048 mg/L	0.000057	11.93%
QC value within limits for V 292.402	Recovery = Not calculated					
Zn 206.200†	28.4	0.00133 mg/L	0.000480	0.00133 mg/L	0.000480	36.05%
QC value within limits for Zn 206.200	Recovery = Not calculated					
Cd 226.502†	6.8	0.00012 mg/L	0.000065	0.00012 mg/L	0.000065	53.82%
QC value within limits for Cd 226.502	Recovery = Not calculated					
Ti 334.940†	123.0	0.00022 mg/L	0.000070	0.00022 mg/L	0.000070	31.78%
QC value within limits for Ti 334.940	Recovery = Not calculated					
Ca 227.546†	12.0	0.06120 mg/L	0.041213	0.06120 mg/L	0.041213	67.34%
QC value within limits for Ca 227.546	Recovery = Not calculated					
Na 589.592†	53.4	0.01097 mg/L	0.019869	0.01097 mg/L	0.019869	181.05%
QC value within limits for Na 589.592	Recovery = Not calculated					
K 766.490†	-3.9	-0.00369 mg/L	0.046277	-0.00369 mg/L	0.046277	>999.9%
QC value within limits for K 766.490	Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 8/30/2012 8:09:27 AM

Data Type: Reprocessed on 8/30/2012 1:59:37 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1815107.1	95.640 %		0.8964			0.94%
Lu 261.542	1175931.9	95.87 %		0.997			1.04%
Ag 328.068†	5424.2	0.03131 mg/L		0.000267	0.03131 mg/L	0.000267	0.85%
QC value within limits for Ag 328.068	Recovery = 104.37%						
Al 308.215†	4260.4	0.20937 mg/L		0.006436	0.20937 mg/L	0.006436	3.07%
QC value within limits for Al 308.215	Recovery = 104.68%						
As 188.979†	12.0	0.01452 mg/L		0.001379	0.01452 mg/L	0.001379	9.50%
QC value within limits for As 188.979	Recovery = 72.58%						
Ba 233.527†	18628.1	0.21603 mg/L		0.002085	0.21603 mg/L	0.002085	0.97%
QC value within limits for Ba 233.527	Recovery = 108.02%						
Be 313.107†	12812.1	0.00512 mg/L		0.000017	0.00512 mg/L	0.000017	0.34%
QC value within limits for Be 313.107	Recovery = 102.41%						
Co 228.616†	1899.0	0.05279 mg/L		0.000643	0.05279 mg/L	0.000643	1.22%
QC value within limits for Co 228.616	Recovery = 105.57%						
Cr 267.716†	1457.9	0.02062 mg/L		0.000400	0.02062 mg/L	0.000400	1.94%
QC value within limits for Cr 267.716	Recovery = 103.09%						
Cu 324.752†	6962.0	0.03145 mg/L		0.000555	0.03145 mg/L	0.000555	1.77%
QC value within limits for Cu 324.752	Recovery = 104.83%						
Fe 273.955†	4978.5	0.20585 mg/L		0.002227	0.20585 mg/L	0.002227	1.08%
QC value within limits for Fe 273.955	Recovery = 102.93%						
Mg 279.077†	9375.0	0.53491 mg/L		0.006998	0.53491 mg/L	0.006998	1.31%
QC value within limits for Mg 279.077	Recovery = 106.98%						
Mn 257.610†	31276.7	0.05351 mg/L		0.000441	0.05351 mg/L	0.000441	0.82%
QC value within limits for Mn 257.610	Recovery = 107.03%						
Ni 231.604†	1588.7	0.05330 mg/L		0.000404	0.05330 mg/L	0.000404	0.76%
QC value within limits for Ni 231.604	Recovery = 106.61%						
Pb 220.353†	51.0	0.01001 mg/L		0.000928	0.01001 mg/L	0.000928	9.28%
QC value within limits for Pb 220.353	Recovery = 100.06%						
Sb 206.836†	25.0	0.02127 mg/L		0.002190	0.02127 mg/L	0.002190	10.30%

QC value within limits for Sb 206.836 Recovery = 106.33%
 Se 196.026† 13.5 0.02699 mg/L 0.013286 0.02699 mg/L 0.013286 49.23%
 QC value within limits for Se 196.026 Recovery = 89.96%
 Tl 190.801 19.6 0.02307 mg/L 0.004130 0.02307 mg/L 0.004130 17.90%
 QC value within limits for Tl 190.801 Recovery = 115.34%
 V 292.402† 6268.6 0.05121 mg/L 0.000186 0.05121 mg/L 0.000186 0.36%
 QC value within limits for V 292.402 Recovery = 102.42%
 Zn 206.200† 1133.6 0.05323 mg/L 0.000418 0.05323 mg/L 0.000418 0.79%
 QC value within limits for Zn 206.200 Recovery = 106.47%
 Cd 226.502† 290.3 0.00520 mg/L 0.000005 0.00520 mg/L 0.000005 0.10%
 QC value within limits for Cd 226.502 Recovery = 104.07%
 Ti 334.940† 10787.6 0.01935 mg/L 0.000177 0.01935 mg/L 0.000177 0.91%
 QC value within limits for Ti 334.940 Recovery = 96.75%
 Ca 227.546† 164.9 0.82707 mg/L 0.081237 0.82707 mg/L 0.081237 9.82%
 QC value within limits for Ca 227.546 Recovery = 103.38%
 Na 589.592† 5002.6 1.0287 mg/L 0.01887 1.0287 mg/L 0.01887 1.83%
 QC value within limits for Na 589.592 Recovery = 102.87%
 K 766.490† 1105.8 1.0515 mg/L 0.06987 1.0515 mg/L 0.06987 6.64%
 QC value within limits for K 766.490 Recovery = 105.15%
 All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICSA

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 8/30/2012 8:13:06 AM

Data Type: Reprocessed on 8/30/2012 1:59:38 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1585059.3	83.519 %	1.0546			1.26%
Lu 261.542	1026733.6	83.70 %	1.069			1.28%
Ag 328.068†	206.0	-0.00383 mg/L	0.000209	-0.00383 mg/L	0.000209	5.46%
QC value within limits for Ag 328.068						Not calculated
Al 308.215†	10719023.0	527.37 mg/L	10.975	527.37 mg/L	10.975	2.08%
QC value within limits for Al 308.215						105.47%
As 188.979†	-32.6	-0.00350 mg/L	0.006589	-0.00350 mg/L	0.006589	188.28%
QC value within limits for As 188.979						Not calculated
Ba 233.527†	23.8	0.00026 mg/L	0.000201	0.00026 mg/L	0.000201	78.83%
QC value within limits for Ba 233.527						Not calculated
Be 313.107†	-296.3	-0.00014 mg/L	0.000018	-0.00014 mg/L	0.000018	13.21%
QC value within limits for Be 313.107						Not calculated
Co 228.616†	148.6	-0.00027 mg/L	0.000176	-0.00027 mg/L	0.000176	64.20%
QC value within limits for Co 228.616						Not calculated
Cr 267.716†	213.9	0.01367 mg/L	0.000153	0.01367 mg/L	0.000153	1.12%
QC value within limits for Cr 267.716						Not calculated
Cu 324.752†	-2704.5	0.00475 mg/L	0.000750	0.00475 mg/L	0.000750	15.81%
QC value within limits for Cu 324.752						Not calculated
Fe 273.955†	4446122.9	183.77 mg/L	2.591	183.77 mg/L	2.591	1.41%
QC value within limits for Fe 273.955						91.88%
Mg 279.077†	8744276.4	498.98 mg/L	11.423	498.98 mg/L	11.423	2.29%
QC value within limits for Mg 279.077						99.80%
Mn 257.610†	-119.0	-0.00519 mg/L	0.000203	-0.00519 mg/L	0.000203	3.90%
QC value within limits for Mn 257.610						Not calculated
Ni 231.604†	-12.5	-0.00254 mg/L	0.000190	-0.00254 mg/L	0.000190	7.51%
QC value within limits for Ni 231.604						Not calculated
Pb 220.353†	-220.2	0.00755 mg/L	0.002200	0.00755 mg/L	0.002200	29.15%
QC value within limits for Pb 220.353						Not calculated
Sb 206.836†	17.7	0.00091 mg/L	0.000824	0.00091 mg/L	0.000824	90.67%
QC value within limits for Sb 206.836						Not calculated
Se 196.026†	-39.4	0.00393 mg/L	0.012847	0.00393 mg/L	0.012847	326.99%
QC value within limits for Se 196.026						Not calculated
Tl 190.801	-39.9	0.00681 mg/L	0.006284	0.00681 mg/L	0.006284	92.21%
QC value within limits for Tl 190.801						Not calculated
V 292.402†	-1751.8	-0.00863 mg/L	0.000279	-0.00863 mg/L	0.000279	3.24%
QC value within limits for V 292.402						Not calculated
Zn 206.200†	81.1	0.01298 mg/L	0.000114	0.01298 mg/L	0.000114	0.88%
QC value within limits for Zn 206.200						Not calculated

Cd 226.502† 779.0 -0.00119 mg/L 0.000283 -0.00119 mg/L 0.000283 23.80%
 QC value within limits for Cd 226.502 Recovery = Not calculated
 Ti 334.940† -6568.2 -0.01185 mg/L 0.000266 -0.01185 mg/L 0.000266 2.25%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 104761.9 535.57 mg/L 7.174 535.57 mg/L 7.174 1.34%
 QC value within limits for Ca 227.546 Recovery = 107.11%
 Na 589.592† 257.4 0.05292 mg/L 0.019177 0.05292 mg/L 0.019177 36.24%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490† 155.3 0.14768 mg/L 0.071916 0.14768 mg/L 0.071916 48.70%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSAB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 8/30/2012 8:16:53 AM

Data Type: Reprocessed on 8/30/2012 1:59:39 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	1610334.9	84.850 %		0.6052			0.71%
Lu 261.542	1043810.3	85.10 %		0.539			0.63%
Ag 328.068†	37507.7	0.21188 mg/L		0.001676	0.21188 mg/L	0.001676	0.79%
QC value within limits for Ag 328.068							
Al 308.215†	10510838.4	517.13 mg/L		3.449	517.13 mg/L	3.449	0.67%
QC value within limits for Al 308.215							
As 188.979†	51.7	0.10044 mg/L		0.006084	0.10044 mg/L	0.006084	6.06%
QC value within limits for As 188.979							
Ba 233.527†	44466.8	0.51620 mg/L		0.002091	0.51620 mg/L	0.002091	0.41%
QC value within limits for Ba 233.527							
Be 313.107†	1240678.7	0.49223 mg/L		0.002356	0.49223 mg/L	0.002356	0.48%
QC value within limits for Be 313.107							
Co 228.616†	16881.1	0.46525 mg/L		0.003756	0.46525 mg/L	0.003756	0.81%
QC value within limits for Co 228.616							
Cr 267.716†	34904.9	0.50377 mg/L		0.002253	0.50377 mg/L	0.002253	0.45%
QC value within limits for Cr 267.716							
Cu 324.752†	113555.7	0.52929 mg/L		0.002084	0.52929 mg/L	0.002084	0.39%
QC value within limits for Cu 324.752							
Fe 273.955†	4391538.0	181.51 mg/L		0.699	181.51 mg/L	0.699	0.38%
QC value within limits for Fe 273.955							
Mg 279.077†	8572724.6	489.19 mg/L		3.249	489.19 mg/L	3.249	0.66%
QC value within limits for Mg 279.077							
Mn 257.610†	286875.9	0.48598 mg/L		0.002027	0.48598 mg/L	0.002027	0.42%
QC value within limits for Mn 257.610							
Ni 231.604†	27052.6	0.90591 mg/L		0.006604	0.90591 mg/L	0.006604	0.73%
QC value within limits for Ni 231.604							
Pb 220.353†	2324.5	0.50389 mg/L		0.004337	0.50389 mg/L	0.004337	0.86%
QC value within limits for Pb 220.353							
Sb 206.836†	761.7	0.63317 mg/L		0.006450	0.63317 mg/L	0.006450	1.02%
QC value within limits for Sb 206.836							
Se 196.026†	206.3	0.49252 mg/L		0.028495	0.49252 mg/L	0.028495	5.79%
QC value within limits for Se 196.026							
Tl 190.801	36.9	0.09342 mg/L		0.002715	0.09342 mg/L	0.002715	2.91%
QC value within limits for Tl 190.801							
V 292.402†	59297.3	0.49084 mg/L		0.002084	0.49084 mg/L	0.002084	0.42%
QC value within limits for V 292.402							
Zn 206.200†	19799.3	0.93806 mg/L		0.007574	0.93806 mg/L	0.007574	0.81%
QC value within limits for Zn 206.200							
Cd 226.502†	52152.8	0.92063 mg/L		0.004368	0.92063 mg/L	0.004368	0.47%
QC value within limits for Cd 226.502							
Ti 334.940†	-6383.9	-0.01161 mg/L		0.000176	-0.01161 mg/L	0.000176	1.52%
QC value within limits for Ti 334.940							
Ca 227.546†	102693.0	524.82 mg/L		2.563	524.82 mg/L	2.563	0.49%
QC value within limits for Ca 227.546							
Na 589.592†	137010.6	28.173 mg/L		0.4209	28.173 mg/L	0.4209	1.49%
QC value within limits for Na 589.592							
K 766.490†	30185.1	28.702 mg/L		0.4060	28.702 mg/L	0.4060	1.41%

QC value within limits for K 766.490 Recovery = 114.81%
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 8/30/2012 8:20:39 AM

Data Type: Reprocessed on 8/30/2012 1:59:40 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1768795.7	93.200 %	0.6169			0.66%
Lu 261.542	1152012.6	93.92 %	0.701			0.75%
Ag 328.068†	211556.1	1.2220 mg/L	0.00627	1.2220 mg/L	0.00627	0.51%
QC value within limits for Ag		328.068	Recovery = 97.76%			
Al 308.215†	200193.3	9.8416 mg/L	0.01819	9.8416 mg/L	0.01819	0.18%
QC value within limits for Al		308.215	Recovery = 98.42%			
As 188.979†	409.9	0.49735 mg/L	0.008572	0.49735 mg/L	0.008572	1.72%
QC value within limits for As		188.979	Recovery = 99.47%			
Ba 233.527†	879125.0	10.195 mg/L	0.0128	10.195 mg/L	0.0128	0.13%
QC value within limits for Ba		233.527	Recovery = 101.95%			
Be 313.107†	615540.3	0.24519 mg/L	0.000323	0.24519 mg/L	0.000323	0.13%
QC value within limits for Be		313.107	Recovery = 98.08%			
Co 228.616†	92013.6	2.5588 mg/L	0.02902	2.5588 mg/L	0.02902	1.13%
QC value within limits for Co		228.616	Recovery = 102.35%			
Cr 267.716†	69061.0	0.97659 mg/L	0.012548	0.97659 mg/L	0.012548	1.28%
QC value within limits for Cr		267.716	Recovery = 97.66%			
Cu 324.752†	272992.9	1.2330 mg/L	0.00204	1.2330 mg/L	0.00204	0.17%
QC value within limits for Cu		324.752	Recovery = 98.64%			
Fe 273.955†	121516.3	5.0266 mg/L	0.05292	5.0266 mg/L	0.05292	1.05%
QC value within limits for Fe		273.955	Recovery = 100.53%			
Mg 279.077†	439313.3	25.066 mg/L	0.0419	25.066 mg/L	0.0419	0.17%
QC value within limits for Mg		279.077	Recovery = 100.26%			
Mn 257.610†	1461156.7	2.5000 mg/L	0.00411	2.5000 mg/L	0.00411	0.16%
QC value within limits for Mn		257.610	Recovery = 100.00%			
Ni 231.604†	75125.4	2.5210 mg/L	0.02825	2.5210 mg/L	0.02825	1.12%
QC value within limits for Ni		231.604	Recovery = 100.84%			
Pb 220.353†	2505.7	0.49164 mg/L	0.004631	0.49164 mg/L	0.004631	0.94%
QC value within limits for Pb		220.353	Recovery = 98.33%			
Sb 206.836†	607.7	0.50850 mg/L	0.008577	0.50850 mg/L	0.008577	1.69%
QC value within limits for Sb		206.836	Recovery = 101.70%			
Se 196.026†	240.4	0.48387 mg/L	0.010266	0.48387 mg/L	0.010266	2.12%
QC value within limits for Se		196.026	Recovery = 96.77%			
Tl 190.801	421.2	0.48283 mg/L	0.005511	0.48283 mg/L	0.005511	1.14%
QC value within limits for Tl		190.801	Recovery = 96.57%			
V 292.402†	303838.7	2.4827 mg/L	0.00129	2.4827 mg/L	0.00129	0.05%
QC value within limits for V		292.402	Recovery = 99.31%			
Zn 206.200†	53778.8	2.5244 mg/L	0.02784	2.5244 mg/L	0.02784	1.10%
QC value within limits for Zn		206.200	Recovery = 100.98%			
Cd 226.502†	13619.5	0.24448 mg/L	0.002980	0.24448 mg/L	0.002980	1.22%
QC value within limits for Cd		226.502	Recovery = 97.79%			
Ti 334.940†	272929.0	0.48935 mg/L	0.001196	0.48935 mg/L	0.001196	0.24%
QC value within limits for Ti		334.940	Recovery = Not calculated			
Ca 227.546†	4900.3	24.278 mg/L	0.3055	24.278 mg/L	0.3055	1.26%
QC value within limits for Ca		227.546	Recovery = 97.11%			
Na 589.592†	122266.6	25.141 mg/L	0.2874	25.141 mg/L	0.2874	1.14%
QC value within limits for Na		589.592	Recovery = 100.56%			
K 766.490†	26485.8	25.185 mg/L	0.3910	25.185 mg/L	0.3910	1.55%
QC value within limits for K		766.490	Recovery = 100.74%			

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Autosampler Location: 4

Date Collected: 8/30/2012 8:24:22 AM

Data Type: Reprocessed on 8/30/2012 1:59:40 PM

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1851465.1	97.556	%	1.5223			1.56%
Lu 261.542	1197173.9	97.60	%	1.601			1.64%
Ag 328.068†	202.4	0.00117	mg/L	0.000614	0.00117 mg/L	0.000614	52.61%
QC value within limits for Ag		328.068	Recovery =	Not calculated			
Al 308.215†	140.1	0.00688	mg/L	0.001023	0.00688 mg/L	0.001023	14.87%
QC value within limits for Al		308.215	Recovery =	Not calculated			
As 188.979†	-2.4	-0.00287	mg/L	0.002864	-0.00287 mg/L	0.002864	99.79%
QC value within limits for As		188.979	Recovery =	Not calculated			
Ba 233.527†	76.6	0.00089	mg/L	0.000181	0.00089 mg/L	0.000181	20.36%
QC value within limits for Ba		233.527	Recovery =	Not calculated			
Be 313.107†	31.4	0.00001	mg/L	0.000025	0.00001 mg/L	0.000025	197.30%
QC value within limits for Be		313.107	Recovery =	Not calculated			
Co 228.616†	3.4	0.00010	mg/L	0.000162	0.00010 mg/L	0.000162	170.32%
QC value within limits for Co		228.616	Recovery =	Not calculated			
Cr 267.716†	31.5	0.00045	mg/L	0.000246	0.00045 mg/L	0.000246	55.22%
QC value within limits for Cr		267.716	Recovery =	Not calculated			
Cu 324.752†	321.3	0.00145	mg/L	0.000319	0.00145 mg/L	0.000319	22.01%
QC value within limits for Cu		324.752	Recovery =	Not calculated			
Fe 273.955†	105.3	0.00435	mg/L	0.000593	0.00435 mg/L	0.000593	13.63%
QC value within limits for Fe		273.955	Recovery =	Not calculated			
Mg 279.077†	125.2	0.00715	mg/L	0.001842	0.00715 mg/L	0.001842	25.78%
QC value within limits for Mg		279.077	Recovery =	Not calculated			
Mn 257.610†	160.9	0.00028	mg/L	0.000082	0.00028 mg/L	0.000082	29.97%
QC value within limits for Mn		257.610	Recovery =	Not calculated			
Ni 231.604†	5.9	0.00020	mg/L	0.000049	0.00020 mg/L	0.000049	24.70%
QC value within limits for Ni		231.604	Recovery =	Not calculated			
Pb 220.353†	1.7	0.00033	mg/L	0.001207	0.00033 mg/L	0.001207	361.80%
QC value within limits for Pb		220.353	Recovery =	Not calculated			
Sb 206.836†	3.3	0.00287	mg/L	0.002483	0.00287 mg/L	0.002483	86.60%
QC value within limits for Sb		206.836	Recovery =	Not calculated			
Se 196.026†	-2.9	-0.00572	mg/L	0.016039	-0.00572 mg/L	0.016039	280.55%
QC value within limits for Se		196.026	Recovery =	Not calculated			
Tl 190.801	-1.1	-0.00136	mg/L	0.003256	-0.00136 mg/L	0.003256	238.85%
QC value within limits for Tl		190.801	Recovery =	Not calculated			
V 292.402†	81.5	0.00067	mg/L	0.000269	0.00067 mg/L	0.000269	40.40%
QC value within limits for V		292.402	Recovery =	Not calculated			
Zn 206.200†	12.2	0.00057	mg/L	0.000396	0.00057 mg/L	0.000396	69.29%
QC value within limits for Zn		206.200	Recovery =	Not calculated			
Cd 226.502†	6.9	0.00012	mg/L	0.000034	0.00012 mg/L	0.000034	27.29%
QC value within limits for Cd		226.502	Recovery =	Not calculated			
Ti 334.940†	106.1	0.00019	mg/L	0.000055	0.00019 mg/L	0.000055	28.90%
QC value within limits for Ti		334.940	Recovery =	Not calculated			
Ca 227.546†	12.4	0.06374	mg/L	0.060676	0.06374 mg/L	0.060676	95.19%
QC value within limits for Ca		227.546	Recovery =	Not calculated			
Na 589.592†	-52.0	-0.01070	mg/L	0.021074	-0.01070 mg/L	0.021074	196.94%
QC value within limits for Na		589.592	Recovery =	Not calculated			
K 766.490†	36.9	0.03513	mg/L	0.017474	0.03513 mg/L	0.017474	49.75%
QC value within limits for K		766.490	Recovery =	Not calculated			

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: MB-67887-PBW

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 38

Date Collected: 8/30/2012 8:28:04 AM

Data Type: Reprocessed on 8/30/2012 1:59:41 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: MB-67887-PBW

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1824656.9	96.143	%	1.4058			1.46%
Lu 261.542	1181755.0	96.34	%	1.439			1.49%
Ag 328.068†	588.6	0.00339	mg/L	0.001232	0.00339 mg/L	0.001232	36.35%

Al 308.215†	214.5	0.01054 mg/L	0.002995	0.01054 mg/L	0.002995	28.43%
As 188.979†	1.4	0.00170 mg/L	0.000722	0.00170 mg/L	0.000722	42.47%
Ba 233.527†	10.3	0.00012 mg/L	0.000060	0.00012 mg/L	0.000060	50.15%
Be 313.107†	-25.8	-0.00001 mg/L	0.000006	-0.00001 mg/L	0.000006	58.84%
Co 228.616†	-3.3	-0.00009 mg/L	0.000172	-0.00009 mg/L	0.000172	188.08%
Cr 267.716†	-24.8	-0.00035 mg/L	0.000520	-0.00035 mg/L	0.000520	148.93%
Cu 324.752†	470.4	0.00212 mg/L	0.000743	0.00212 mg/L	0.000743	35.00%
Fe 273.955†	151.8	0.00627 mg/L	0.000331	0.00627 mg/L	0.000331	5.28%
Mg 279.077†	6.6	0.00038 mg/L	0.002205	0.00038 mg/L	0.002205	585.16%
Mn 257.610†	202.9	0.00035 mg/L	0.000013	0.00035 mg/L	0.000013	3.72%
Ni 231.604†	-0.0	0.00000 mg/L	0.000230	0.00000 mg/L	0.000230	>999.9%
Pb 220.353†	2.9	0.00056 mg/L	0.001904	0.00056 mg/L	0.001904	338.83%
Sb 206.836†	11.0	0.00950 mg/L	0.002279	0.00950 mg/L	0.002279	23.98%
Se 196.026†	3.0	0.00592 mg/L	0.001751	0.00592 mg/L	0.001751	29.58%
Tl 190.801	-2.2	-0.00261 mg/L	0.002653	-0.00261 mg/L	0.002653	101.53%
V 292.402†	3.2	0.00002 mg/L	0.000404	0.00002 mg/L	0.000404	>999.9%
Zn 206.200†	47.3	0.00222 mg/L	0.000161	0.00222 mg/L	0.000161	7.29%
Cd 226.502†	4.7	0.00008 mg/L	0.000070	0.00008 mg/L	0.000070	84.35%
Ti 334.940†	139.0	0.00025 mg/L	0.000062	0.00025 mg/L	0.000062	24.84%
Ca 227.546†	18.6	0.09539 mg/L	0.046593	0.09539 mg/L	0.046593	48.85%
Na 589.592†	-92.4	-0.01900 mg/L	0.009256	-0.01900 mg/L	0.009256	48.72%
K 766.490†	-24.4	-0.02317 mg/L	0.084781	-0.02317 mg/L	0.084781	365.96%

Sequence No.: 13

Sample ID: LCS-67887-LCS

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 39

Date Collected: 8/30/2012 8:31:44 AM

Data Type: Reprocessed on 8/30/2012 1:59:42 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCS-67887-LCS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1772776.0	93.410	%	0.4760				0.51%
Lu 261.542	1153623.9	94.05	%	0.516				0.55%
Ag 328.068†	201466.6	1.1636	mg/L	0.01732	1.1636	mg/L	0.01732	1.49%
Al 308.215†	190638.3	9.3728	mg/L	0.13624	9.3728	mg/L	0.13624	1.45%
As 188.979†	397.8	0.48248	mg/L	0.005723	0.48248	mg/L	0.005723	1.19%
Ba 233.527†	824876.8	9.5663	mg/L	0.02053	9.5663	mg/L	0.02053	0.21%
Be 313.107†	597836.6	0.23726	mg/L	0.000476	0.23726	mg/L	0.000476	0.20%
Co 228.616†	85213.1	2.3707	mg/L	0.03332	2.3707	mg/L	0.03332	1.41%
Cr 267.716†	66540.0	0.94093	mg/L	0.015057	0.94093	mg/L	0.015057	1.60%
Cu 324.752†	256029.5	1.1564	mg/L	0.01683	1.1564	mg/L	0.01683	1.45%
Fe 273.955†	115070.8	4.7599	mg/L	0.06849	4.7599	mg/L	0.06849	1.44%
Mg 279.077†	413901.9	23.616	mg/L	0.0451	23.616	mg/L	0.0451	0.19%
Mn 257.610†	1377937.5	2.3577	mg/L	0.00485	2.3577	mg/L	0.00485	0.21%
Ni 231.604†	70877.3	2.3787	mg/L	0.03587	2.3787	mg/L	0.03587	1.51%
Pb 220.353†	2453.8	0.48093	mg/L	0.004466	0.48093	mg/L	0.004466	0.93%
Sb 206.836†	586.8	0.48990	mg/L	0.008158	0.48990	mg/L	0.008158	1.67%
Se 196.026†	234.1	0.47071	mg/L	0.005790	0.47071	mg/L	0.005790	1.23%
Tl 190.801	385.1	0.44097	mg/L	0.007436	0.44097	mg/L	0.007436	1.69%
V 292.402†	284700.3	2.3270	mg/L	0.03541	2.3270	mg/L	0.03541	1.52%
Zn 206.200†	50084.9	2.3507	mg/L	0.03512	2.3507	mg/L	0.03512	1.49%
Cd 226.502†	13199.9	0.23694	mg/L	0.003189	0.23694	mg/L	0.003189	1.35%
Ti 334.940†	328.7	0.00035	mg/L	0.000051	0.00035	mg/L	0.000051	14.64%
Ca 227.546†	4588.2	22.740	mg/L	0.1905	22.740	mg/L	0.1905	0.84%
Na 589.592†	114359.4	23.515	mg/L	0.1223	23.515	mg/L	0.1223	0.52%
K 766.490†	24956.6	23.731	mg/L	0.0557	23.731	mg/L	0.0557	0.23%

Sequence No.: 14

Sample ID: L1786-01B-SL-MW-23D

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 40

Date Collected: 8/30/2012 8:35:26 AM

Data Type: Reprocessed on 8/30/2012 1:59:42 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-01B-SL-MW-23D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1783050.5	93.951	%	0.2998				0.32%
Lu 261.542	1149583.6	93.72	%	0.438				0.47%
Ag 328.068†	85.1	0.00045	mg/L	0.000263	0.00045	mg/L	0.000263	58.48%
Al 308.215†	32285.0	1.5854	mg/L	0.01543	1.5854	mg/L	0.01543	0.97%
As 188.979†	0.7	0.00149	mg/L	0.004980	0.00149	mg/L	0.004980	333.68%
Ba 233.527†	1971.2	0.02286	mg/L	0.000099	0.02286	mg/L	0.000099	0.43%
Be 313.107†	26.0	0.00011	mg/L	0.000003	0.00011	mg/L	0.000003	2.64%
Co 228.616†	12.5	0.00019	mg/L	0.000062	0.00019	mg/L	0.000062	32.04%
Cr 267.716†	268.0	0.00394	mg/L	0.000248	0.00394	mg/L	0.000248	6.28%
Cu 324.752†	1701.3	0.00780	mg/L	0.000263	0.00780	mg/L	0.000263	3.38%
Fe 273.955†	32332.1	1.3364	mg/L	0.00557	1.3364	mg/L	0.00557	0.42%
Mg 279.077†	60294.1	3.4406	mg/L	0.01788	3.4406	mg/L	0.01788	0.52%
Mn 257.610†	49685.3	0.08499	mg/L	0.000410	0.08499	mg/L	0.000410	0.48%
Ni 231.604†	29.2	0.00093	mg/L	0.000449	0.00093	mg/L	0.000449	48.16%
Pb 220.353†	4.3	0.00103	mg/L	0.000490	0.00103	mg/L	0.000490	47.51%
Sb 206.836†	0.9	0.00074	mg/L	0.003319	0.00074	mg/L	0.003319	446.20%
Se 196.026†	0.9	0.00230	mg/L	0.010540	0.00230	mg/L	0.010540	459.04%
Tl 190.801	2.9	0.00395	mg/L	0.001676	0.00395	mg/L	0.001676	42.48%
V 292.402†	776.3	0.00631	mg/L	0.000596	0.00631	mg/L	0.000596	9.44%
Zn 206.200†	125.1	0.00602	mg/L	0.000211	0.00602	mg/L	0.000211	3.51%
Cd 226.502†	5.4	-0.00004	mg/L	0.000080	-0.00004	mg/L	0.000080	186.11%
Ti 334.940†	29555.6	0.05322	mg/L	0.005326	0.05322	mg/L	0.005326	10.01%
Ca 227.546†	3019.2	15.471	mg/L	0.1431	15.471	mg/L	0.1431	0.92%
Na 589.592†	61173.3	12.579	mg/L	0.0361	12.579	mg/L	0.0361	0.29%
K 766.490†	2723.7	2.5899	mg/L	0.03611	2.5899	mg/L	0.03611	1.39%

Sequence No.: 15

Sample ID: L1786-01C-SL-MW-23D

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 41

Date Collected: 8/30/2012 8:39:06 AM

Data Type: Reprocessed on 8/30/2012 1:59:43 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-01C-SL-MW-23D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1853486.6	97.662	%	1.8553				1.90%
Lu 261.542	1205586.2	98.29	%	1.839				1.87%
Ag 328.068†	193.3	0.00108	mg/L	0.000753	0.00108	mg/L	0.000753	69.61%
Al 308.215†	136.1	0.00364	mg/L	0.005538	0.00364	mg/L	0.005538	151.92%
As 188.979†	2.1	0.00306	mg/L	0.001584	0.00306	mg/L	0.001584	51.71%
Ba 233.527†	1366.6	0.01584	mg/L	0.000307	0.01584	mg/L	0.000307	1.94%
Be 313.107†	-8.3	0.00000	mg/L	0.000020	0.00000	mg/L	0.000020	863.84%
Co 228.616†	3.8	0.00010	mg/L	0.000313	0.00010	mg/L	0.000313	301.82%
Cr 267.716†	4.7	0.00021	mg/L	0.000176	0.00021	mg/L	0.000176	83.99%
Cu 324.752†	440.4	0.00199	mg/L	0.000448	0.00199	mg/L	0.000448	22.54%
Fe 273.955†	372.9	0.01541	mg/L	0.000642	0.01541	mg/L	0.000642	4.17%
Mg 279.077†	55074.5	3.1427	mg/L	0.05415	3.1427	mg/L	0.05415	1.72%
Mn 257.610†	2192.5	0.00372	mg/L	0.000070	0.00372	mg/L	0.000070	1.89%
Ni 231.604†	8.8	0.00028	mg/L	0.000178	0.00028	mg/L	0.000178	62.69%
Pb 220.353†	-9.4	-0.00184	mg/L	0.000501	-0.00184	mg/L	0.000501	27.23%
Sb 206.836†	0.9	0.00077	mg/L	0.002690	0.00077	mg/L	0.002690	350.66%
Se 196.026†	0.3	0.00062	mg/L	0.006676	0.00062	mg/L	0.006676	>999.9%
Tl 190.801	-2.1	-0.00230	mg/L	0.002792	-0.00230	mg/L	0.002792	121.62%
V 292.402†	58.3	0.00048	mg/L	0.000180	0.00048	mg/L	0.000180	37.78%
Zn 206.200†	53.7	0.00252	mg/L	0.000178	0.00252	mg/L	0.000178	7.08%
Cd 226.502†	5.8	0.00007	mg/L	0.000125	0.00007	mg/L	0.000125	188.80%
Ti 334.940†	308.4	0.00074	mg/L	0.000078	0.00074	mg/L	0.000078	10.61%
Ca 227.546†	2826.2	14.493	mg/L	0.2896	14.493	mg/L	0.2896	2.00%
Na 589.592†	58735.8	12.078	mg/L	0.3028	12.078	mg/L	0.3028	2.51%
K 766.490†	2438.6	2.3188	mg/L	0.03384	2.3188	mg/L	0.03384	1.46%

Sequence No.: 16

Sample ID: L1786-02B-SL-MW-73D

Analyst:

Logged In Analyst (Original) : mitOptima3

Autosampler Location: 42

Date Collected: 8/30/2012 8:42:46 AM

Data Type: Reprocessed on 8/30/2012 1:59:44 PM

Initial Sample Wt:
Dilution:

Initial Sample Vol:
Sample Prep Vol:

Mean Data: L1786-02B-SL-MW-73D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1800163.5	94.853	%	0.8869				0.94%
Lu 261.542	1162912.6	94.81	%	0.918				0.97%
Ag 328.068†	141.6	0.00078	mg/L	0.000239	0.00078	mg/L	0.000239	30.82%
Al 308.215†	30182.1	1.4818	mg/L	0.00905	1.4818	mg/L	0.00905	0.61%
As 188.979†	0.4	0.00117	mg/L	0.005158	0.00117	mg/L	0.005158	442.56%
Ba 233.527†	1963.0	0.02277	mg/L	0.000164	0.02277	mg/L	0.000164	0.72%
Be 313.107†	73.1	0.00012	mg/L	0.000042	0.00012	mg/L	0.000042	35.76%
Co 228.616†	15.1	0.00028	mg/L	0.000171	0.00028	mg/L	0.000171	61.71%
Cr 267.716†	249.3	0.00368	mg/L	0.000101	0.00368	mg/L	0.000101	2.74%
Cu 324.752†	1582.4	0.00726	mg/L	0.000286	0.00726	mg/L	0.000286	3.94%
Fe 273.955†	31661.3	1.3086	mg/L	0.00643	1.3086	mg/L	0.00643	0.49%
Mg 279.077†	61280.9	3.4969	mg/L	0.01709	3.4969	mg/L	0.01709	0.49%
Mn 257.610†	47197.4	0.08073	mg/L	0.000385	0.08073	mg/L	0.000385	0.48%
Ni 231.604†	22.8	0.00072	mg/L	0.000221	0.00072	mg/L	0.000221	30.50%
Pb 220.353†	0.6	0.00029	mg/L	0.001353	0.00029	mg/L	0.001353	468.76%
Sb 206.836†	2.0	0.00171	mg/L	0.001510	0.00171	mg/L	0.001510	88.24%
Se 196.026†	1.1	0.00274	mg/L	0.009245	0.00274	mg/L	0.009245	337.80%
Tl 190.801	-7.3	-0.00831	mg/L	0.004166	-0.00831	mg/L	0.004166	50.14%
V 292.402†	761.4	0.00620	mg/L	0.000435	0.00620	mg/L	0.000435	7.03%
Zn 206.200†	125.1	0.00600	mg/L	0.000116	0.00600	mg/L	0.000116	1.92%
Cd 226.502†	5.0	-0.00005	mg/L	0.000137	-0.00005	mg/L	0.000137	271.13%
Ti 334.940†	27018.9	0.04867	mg/L	0.002968	0.04867	mg/L	0.002968	6.10%
Ca 227.546†	3112.1	15.948	mg/L	0.1801	15.948	mg/L	0.1801	1.13%
Na 589.592†	62864.9	12.927	mg/L	0.0816	12.927	mg/L	0.0816	0.63%
K 766.490†	2833.1	2.6939	mg/L	0.04451	2.6939	mg/L	0.04451	1.65%

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Sequence No.: 17

Sample ID: L1786-02C-SL-MW-73D

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 43

Date Collected: 8/30/2012 8:46:26 AM

Data Type: Reprocessed on 8/30/2012 1:59:44 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-02C-SL-MW-73D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1802446.7	94.973	%	0.1445				0.15%
Lu 261.542	1172302.7	95.57	%	0.052				0.05%
Ag 328.068†	100.9	0.00055	mg/L	0.000223	0.00055	mg/L	0.000223	40.74%
Al 308.215†	241.7	0.00869	mg/L	0.001662	0.00869	mg/L	0.001662	19.13%
As 188.979†	2.8	0.00383	mg/L	0.005690	0.00383	mg/L	0.005690	148.43%
Ba 233.527†	1387.4	0.01609	mg/L	0.000175	0.01609	mg/L	0.000175	1.09%
Be 313.107†	-37.3	-0.00001	mg/L	0.000024	-0.00001	mg/L	0.000024	175.97%
Co 228.616†	0.4	0.00001	mg/L	0.000105	0.00001	mg/L	0.000105	>999.9%
Cr 267.716†	33.8	0.00063	mg/L	0.000310	0.00063	mg/L	0.000310	49.34%
Cu 324.752†	444.7	0.00201	mg/L	0.000276	0.00201	mg/L	0.000276	13.76%
Fe 273.955†	580.0	0.02397	mg/L	0.000027	0.02397	mg/L	0.000027	0.11%
Mg 279.077†	57979.4	3.3085	mg/L	0.03966	3.3085	mg/L	0.03966	1.20%
Mn 257.610†	1986.9	0.00337	mg/L	0.000045	0.00337	mg/L	0.000045	1.34%
Ni 231.604†	9.5	0.00031	mg/L	0.000286	0.00031	mg/L	0.000286	92.93%
Pb 220.353†	-1.2	-0.00024	mg/L	0.001450	-0.00024	mg/L	0.001450	609.82%
Sb 206.836†	-1.1	-0.00096	mg/L	0.000785	-0.00096	mg/L	0.000785	81.64%
Se 196.026†	0.7	0.00147	mg/L	0.008504	0.00147	mg/L	0.008504	580.06%
Tl 190.801	-3.7	-0.00416	mg/L	0.002366	-0.00416	mg/L	0.002366	56.87%
V 292.402†	21.9	0.00018	mg/L	0.000384	0.00018	mg/L	0.000384	213.78%
Zn 206.200†	69.7	0.00327	mg/L	0.000147	0.00327	mg/L	0.000147	4.51%
Cd 226.502†	-4.2	-0.00012	mg/L	0.000149	-0.00012	mg/L	0.000149	127.23%
Ti 334.940†	263.1	0.00067	mg/L	0.000155	0.00067	mg/L	0.000155	23.26%
Ca 227.546†	2969.8	15.229	mg/L	0.1000	15.229	mg/L	0.1000	0.66%
Na 589.592†	61784.9	12.705	mg/L	0.0184	12.705	mg/L	0.0184	0.14%
K 766.490†	2622.0	2.4932	mg/L	0.00911	2.4932	mg/L	0.00911	0.37%

Sequence No.: 18

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 8/30/2012 8:50:06 AM

Data Type: Reprocessed on 8/30/2012 1:59:45 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	1772986.8	93.421 %	1.4353			1.54%
Lu 261.542	1155325.3	94.19 %	1.428			1.52%
Ag 328.068†	209674.8	1.2111 mg/L	0.04073	1.2111 mg/L	0.04073	3.36%
QC value within limits for Ag 328.068 Recovery = 96.89%						
Al 308.215†	200643.0	9.8636 mg/L	0.21225	9.8636 mg/L	0.21225	2.15%
QC value within limits for Al 308.215 Recovery = 98.64%						
As 188.979†	411.3	0.49904 mg/L	0.008796	0.49904 mg/L	0.008796	1.76%
QC value within limits for As 188.979 Recovery = 99.81%						
Ba 233.527†	887929.3	10.298 mg/L	0.1270	10.298 mg/L	0.1270	1.23%
QC value within limits for Ba 233.527 Recovery = 102.98%						
Be 313.107†	625385.1	0.24910 mg/L	0.003186	0.24910 mg/L	0.003186	1.28%
QC value within limits for Be 313.107 Recovery = 99.64%						
Co 228.616†	92488.8	2.5720 mg/L	0.05654	2.5720 mg/L	0.05654	2.20%
QC value within limits for Co 228.616 Recovery = 102.88%						
Cr 267.716†	69369.4	0.98094 mg/L	0.020382	0.98094 mg/L	0.020382	2.08%
QC value within limits for Cr 267.716 Recovery = 98.09%						
Cu 324.752†	268154.0	1.2112 mg/L	0.02793	1.2112 mg/L	0.02793	2.31%
QC value within limits for Cu 324.752 Recovery = 96.90%						
Fe 273.955†	122221.5	5.0557 mg/L	0.10964	5.0557 mg/L	0.10964	2.17%
QC value within limits for Fe 273.955 Recovery = 101.11%						
Mg 279.077†	444769.5	25.377 mg/L	0.2936	25.377 mg/L	0.2936	1.16%
QC value within limits for Mg 279.077 Recovery = 101.51%						
Mn 257.610†	1486407.1	2.5432 mg/L	0.03124	2.5432 mg/L	0.03124	1.23%
QC value within limits for Mn 257.610 Recovery = 101.73%						
Ni 231.604†	75646.3	2.5385 mg/L	0.05218	2.5385 mg/L	0.05218	2.06%
QC value within limits for Ni 231.604 Recovery = 101.54%						
Pb 220.353†	2587.0	0.50755 mg/L	0.008687	0.50755 mg/L	0.008687	1.71%
QC value within limits for Pb 220.353 Recovery = 101.51%						
Sb 206.836†	620.0	0.51898 mg/L	0.006581	0.51898 mg/L	0.006581	1.27%
QC value within limits for Sb 206.836 Recovery = 103.80%						
Se 196.026†	245.3	0.49358 mg/L	0.005583	0.49358 mg/L	0.005583	1.13%
QC value within limits for Se 196.026 Recovery = 98.72%						
Tl 190.801	429.8	0.49312 mg/L	0.010614	0.49312 mg/L	0.010614	2.15%
QC value within limits for Tl 190.801 Recovery = 98.62%						
V 292.402†	302789.9	2.4741 mg/L	0.05334	2.4741 mg/L	0.05334	2.16%
QC value within limits for V 292.402 Recovery = 98.97%						
Zn 206.200†	53842.1	2.5274 mg/L	0.05653	2.5274 mg/L	0.05653	2.24%
QC value within limits for Zn 206.200 Recovery = 101.10%						
Cd 226.502†	13595.4	0.24405 mg/L	0.005247	0.24405 mg/L	0.005247	2.15%
QC value within limits for Cd 226.502 Recovery = 97.62%						
Ti 334.940†	274398.8	0.49198 mg/L	0.005906	0.49198 mg/L	0.005906	1.20%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	4951.5	24.536 mg/L	0.2946	24.536 mg/L	0.2946	1.20%
QC value within limits for Ca 227.546 Recovery = 98.15%						
Na 589.592†	125045.4	25.712 mg/L	0.5110	25.712 mg/L	0.5110	1.99%
QC value within limits for Na 589.592 Recovery = 102.85%						
K 766.490†	27233.9	25.896 mg/L	0.5473	25.896 mg/L	0.5473	2.11%
QC value within limits for K 766.490 Recovery = 103.58%						
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: 8/30/2012 8:53:49 AM

Data Type: Reprocessed on 8/30/2012 1:59:46 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	1822564.6	96.033	%	1.7935				1.87%
Lu 261.542	1179780.1	96.18	%	1.830				1.90%
Ag 328.068†	141.8	0.00082	mg/L	0.001114	0.00082	mg/L	0.001114	136.30%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215†	87.8	0.00431	mg/L	0.004790	0.00431	mg/L	0.004790	111.16%
QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979†	1.0	0.00122	mg/L	0.002585	0.00122	mg/L	0.002585	212.36%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	73.8	0.00086	mg/L	0.000103	0.00086	mg/L	0.000103	12.07%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-46.6	-0.00002	mg/L	0.000011	-0.00002	mg/L	0.000011	61.33%
QC value within limits for Be 313.107 Recovery = Not calculated								
Co 228.616†	11.4	0.00032	mg/L	0.000244	0.00032	mg/L	0.000244	77.05%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	34.1	0.00048	mg/L	0.000655	0.00048	mg/L	0.000655	135.90%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.752†	319.4	0.00144	mg/L	0.000401	0.00144	mg/L	0.000401	27.84%
QC value within limits for Cu 324.752 Recovery = Not calculated								
Fe 273.955†	32.6	0.00135	mg/L	0.000597	0.00135	mg/L	0.000597	44.34%
QC value within limits for Fe 273.955 Recovery = Not calculated								
Mg 279.077†	35.8	0.00204	mg/L	0.002423	0.00204	mg/L	0.002423	118.81%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	173.3	0.00030	mg/L	0.000053	0.00030	mg/L	0.000053	17.84%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Ni 231.604†	14.5	0.00049	mg/L	0.000161	0.00049	mg/L	0.000161	32.89%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-5.9	-0.00115	mg/L	0.001169	-0.00115	mg/L	0.001169	102.05%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	3.6	0.00312	mg/L	0.001766	0.00312	mg/L	0.001766	56.65%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.7	-0.00140	mg/L	0.012371	-0.00140	mg/L	0.012371	880.76%
QC value within limits for Se 196.026 Recovery = Not calculated								
Tl 190.801	-5.2	-0.00623	mg/L	0.007292	-0.00623	mg/L	0.007292	117.13%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 292.402†	70.1	0.00057	mg/L	0.000740	0.00057	mg/L	0.000740	129.26%
QC value within limits for V 292.402 Recovery = Not calculated								
Zn 206.200†	11.7	0.00055	mg/L	0.000139	0.00055	mg/L	0.000139	25.38%
QC value within limits for Zn 206.200 Recovery = Not calculated								
Cd 226.502†	3.9	0.00007	mg/L	0.000122	0.00007	mg/L	0.000122	176.46%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Ti 334.940†	106.9	0.00019	mg/L	0.000056	0.00019	mg/L	0.000056	28.68%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Ca 227.546†	10.6	0.05416	mg/L	0.117708	0.05416	mg/L	0.117708	217.34%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Na 589.592†	-38.6	-0.00793	mg/L	0.008053	-0.00793	mg/L	0.008053	101.58%
QC value within limits for Na 589.592 Recovery = Not calculated								
K 766.490†	-19.2	-0.01825	mg/L	0.022710	-0.01825	mg/L	0.022710	124.42%
QC value within limits for K 766.490 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: L1786-03B-SL-MW-23S

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 44

Date Collected: 8/30/2012 8:57:31 AM

Data Type: Reprocessed on 8/30/2012 1:59:47 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-03B-SL-MW-23S

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1820698.4	95.935	%	1.0203				1.06%
Lu 261.542	1185873.1	96.68	%	0.893				0.92%
Ag 328.068†	682.7	0.00354	mg/L	0.001270	0.00354	mg/L	0.001270	35.87%
Al 308.215†	10370.2	0.50408	mg/L	0.024233	0.50408	mg/L	0.024233	4.81%
As 188.979†	1.8	0.00242	mg/L	0.004252	0.00242	mg/L	0.004252	175.53%
Ba 233.527†	1343.2	0.01557	mg/L	0.000150	0.01557	mg/L	0.000150	0.96%

Be 313.107†	-85.2	0.00001 mg/L	0.000014	0.00001 mg/L	0.000014	234.81%
Co 228.616†	10.5	0.00024 mg/L	0.000132	0.00024 mg/L	0.000132	55.31%
Cr 267.716†	95.9	0.00123 mg/L	0.000422	0.00123 mg/L	0.000422	34.26%
Cu 324.752†	511.4	0.00232 mg/L	0.000214	0.00232 mg/L	0.000214	9.19%
Fe 273.955†	4399.8	0.18185 mg/L	0.005033	0.18185 mg/L	0.005033	2.77%
Mg 279.077†	128322.1	7.3225 mg/L	0.10581	7.3225 mg/L	0.10581	1.45%
Mn 257.610†	874633.7	1.4966 mg/L	0.02497	1.4966 mg/L	0.02497	1.67%
Ni 231.604†	221.6	0.00740 mg/L	0.000057	0.00740 mg/L	0.000057	0.77%
Pb 220.353†	0.8	0.00032 mg/L	0.001287	0.00032 mg/L	0.001287	408.21%
Sb 206.836†	7.4	0.00634 mg/L	0.004569	0.00634 mg/L	0.004569	72.03%
Se 196.026†	3.0	0.00600 mg/L	0.008608	0.00600 mg/L	0.008608	143.45%
Tl 190.801	-3.9	-0.00373 mg/L	0.001898	-0.00373 mg/L	0.001898	50.82%
V 292.402†	103.9	0.00083 mg/L	0.000172	0.00083 mg/L	0.000172	20.75%
Zn 206.200†	338.7	0.01650 mg/L	0.000074	0.01650 mg/L	0.000074	0.45%
Cd 226.502†	7.2	0.00007 mg/L	0.000129	0.00007 mg/L	0.000129	181.75%
Ti 334.940†	11984.2	0.02166 mg/L	0.006596	0.02166 mg/L	0.006596	30.45%
Ca 227.546†	3420.4	17.530 mg/L	0.2249	17.530 mg/L	0.2249	1.28%
Na 589.592†	178584.6	36.722 mg/L	0.5040	36.722 mg/L	0.5040	1.37%
K 766.490†	1395.2	1.3267 mg/L	0.05828	1.3267 mg/L	0.05828	4.39%

Sequence No.: 21

Sample ID: L1786-03C-SL-MW-23S

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 45

Date Collected: 8/30/2012 9:01:11 AM

Data Type: Reprocessed on 8/30/2012 1:59:47 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-03C-SL-MW-23S

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1782004.5	93.896	%	0.2475				0.26%
Lu 261.542	1162603.9	94.78	%	0.281				0.30%
Ag 328.068†	204.0	0.00078 mg/L		0.000385	0.00078 mg/L		0.000385	49.40%
Al 308.215†	206.5	0.00385 mg/L		0.005809	0.00385 mg/L		0.005809	150.73%
As 188.979†	-0.1	0.00015 mg/L		0.002531	0.00015 mg/L		0.002531	>999.9%
Ba 233.527†	1194.3	0.01385 mg/L		0.000018	0.01385 mg/L		0.000018	0.13%
Be 313.107†	-71.7	-0.00003 mg/L		0.000011	-0.00003 mg/L		0.000011	37.39%
Co 228.616†	0.9	0.00002 mg/L		0.000226	0.00002 mg/L		0.000226	903.84%
Cr 267.716†	78.4	0.00098 mg/L		0.000181	0.00098 mg/L		0.000181	18.54%
Cu 324.752†	597.7	0.00270 mg/L		0.000328	0.00270 mg/L		0.000328	12.16%
Fe 273.955†	90.5	0.00374 mg/L		0.000133	0.00374 mg/L		0.000133	3.54%
Mg 279.077†	130804.0	7.4641 mg/L		0.08332	7.4641 mg/L		0.08332	1.12%
Mn 257.610†	883307.6	1.5115 mg/L		0.00547	1.5115 mg/L		0.00547	0.36%
Ni 231.604†	212.5	0.00710 mg/L		0.000127	0.00710 mg/L		0.000127	1.78%
Pb 220.353†	-13.2	-0.00248 mg/L		0.000752	-0.00248 mg/L		0.000752	30.34%
Sb 206.836†	5.5	0.00474 mg/L		0.002570	0.00474 mg/L		0.002570	54.17%
Se 196.026†	0.4	0.00088 mg/L		0.008346	0.00088 mg/L		0.008346	943.30%
Tl 190.801	-1.2	-0.00047 mg/L		0.001831	-0.00047 mg/L		0.001831	389.95%
V 292.402†	-5.3	-0.00004 mg/L		0.000097	-0.00004 mg/L		0.000097	236.70%
Zn 206.200†	340.4	0.01655 mg/L		0.000526	0.01655 mg/L		0.000526	3.18%
Cd 226.502†	8.5	0.00011 mg/L		0.000027	0.00011 mg/L		0.000027	24.52%
Ti 334.940†	-188.8	-0.00018 mg/L		0.000114	-0.00018 mg/L		0.000114	64.31%
Ca 227.546†	3465.2	17.762 mg/L		0.1630	17.762 mg/L		0.1630	0.92%
Na 589.592†	179257.1	36.860 mg/L		0.5620	36.860 mg/L		0.5620	1.52%
K 766.490†	1297.8	1.2340 mg/L		0.09393	1.2340 mg/L		0.09393	7.61%

Sequence No.: 22

Sample ID: L1786-04B-SL-MW-13

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 46

Date Collected: 8/30/2012 9:04:59 AM

Data Type: Reprocessed on 8/30/2012 1:59:48 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-04B-SL-MW-13

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1770730.6	93.302	%	1.9603				2.10%

Lu 261.542	1156764.5	94.31 %	1.865			1.98%
Ag 328.068†	156.0	0.00088 mg/L	0.000151	0.00088 mg/L	0.000151	17.28%
Al 308.215†	5695.7	0.27934 mg/L	0.005044	0.27934 mg/L	0.005044	1.81%
As 188.979†	0.4	0.00098 mg/L	0.002057	0.00098 mg/L	0.002057	210.23%
Ba 233.527†	1494.7	0.01733 mg/L	0.000385	0.01733 mg/L	0.000385	2.22%
Be 313.107†	-150.0	-0.00004 mg/L	0.000039	-0.00004 mg/L	0.000039	105.72%
Co 228.616†	40.9	0.00110 mg/L	0.000106	0.00110 mg/L	0.000106	9.68%
Cr 267.716†	2844.1	0.04023 mg/L	0.000596	0.04023 mg/L	0.000596	1.48%
Cu 324.752†	817.0	0.00372 mg/L	0.000378	0.00372 mg/L	0.000378	10.16%
Fe 273.955†	9108.1	0.37646 mg/L	0.005796	0.37646 mg/L	0.005796	1.54%
Mg 279.077†	33285.8	1.8993 mg/L	0.02532	1.8993 mg/L	0.02532	1.33%
Mn 257.610†	15514.1	0.02653 mg/L	0.000477	0.02653 mg/L	0.000477	1.80%
Ni 231.604†	109.1	0.00365 mg/L	0.000166	0.00365 mg/L	0.000166	4.55%
Pb 220.353†	-1.3	-0.00022 mg/L	0.001610	-0.00022 mg/L	0.001610	725.39%
Sb 206.836†	2.5	0.00146 mg/L	0.002073	0.00146 mg/L	0.002073	142.40%
Se 196.026†	-4.1	-0.00803 mg/L	0.003852	-0.00803 mg/L	0.003852	48.00%
Tl 190.801	-3.0	-0.00347 mg/L	0.003004	-0.00347 mg/L	0.003004	86.65%
V 292.402†	171.6	0.00149 mg/L	0.000147	0.00149 mg/L	0.000147	9.88%
Zn 206.200†	57.2	0.00279 mg/L	0.000203	0.00279 mg/L	0.000203	7.28%
Cd 226.502†	20.8	0.00034 mg/L	0.000121	0.00034 mg/L	0.000121	36.07%
Ti 334.940†	6927.6	0.01245 mg/L	0.000283	0.01245 mg/L	0.000283	2.27%
Ca 227.546†	771.5	3.9519 mg/L	0.13503	3.9519 mg/L	0.13503	3.42%
Na 589.592†	345004.1	70.942 mg/L	1.3415	70.942 mg/L	1.3415	1.89%
K 766.490†	974.6	0.92669 mg/L	0.058083	0.92669 mg/L	0.058083	6.27%

Sequence No.: 23

Sample ID: L1786-04C-SL-MW-13

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 47

Date Collected: 8/30/2012 9:08:47 AM

Data Type: Reprocessed on 8/30/2012 1:59:49 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-04C-SL-MW-13

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1777569.9	93.662 %	%	0.9970				1.06%
Lu 261.542	1160821.4	94.64 %	%	1.044				1.10%
Ag 328.068†	123.3	0.00069 mg/L	mg/L	0.000419	0.00069 mg/L	0.000419		60.73%
Al 308.215†	130.6	0.00555 mg/L	mg/L	0.001330	0.00555 mg/L	0.001330		23.95%
As 188.979†	1.9	0.00241 mg/L	mg/L	0.005353	0.00241 mg/L	0.005353		221.73%
Ba 233.527†	1226.3	0.01422 mg/L	mg/L	0.000160	0.01422 mg/L	0.000160		1.13%
Be 313.107†	-71.5	-0.00003 mg/L	mg/L	0.000038	-0.00003 mg/L	0.000038		135.81%
Co 228.616†	26.9	0.00075 mg/L	mg/L	0.000080	0.00075 mg/L	0.000080		10.72%
Cr 267.716†	14.3	0.00024 mg/L	mg/L	0.000348	0.00024 mg/L	0.000348		147.13%
Cu 324.752†	488.1	0.00220 mg/L	mg/L	0.000401	0.00220 mg/L	0.000401		18.20%
Fe 273.955†	162.8	0.00673 mg/L	mg/L	0.000803	0.00673 mg/L	0.000803		11.94%
Mg 279.077†	30799.8	1.7575 mg/L	mg/L	0.02641	1.7575 mg/L	0.02641		1.50%
Mn 257.610†	7855.4	0.01343 mg/L	mg/L	0.000181	0.01343 mg/L	0.000181		1.35%
Ni 231.604†	45.3	0.00151 mg/L	mg/L	0.000119	0.00151 mg/L	0.000119		7.84%
Pb 220.353†	-0.3	-0.00006 mg/L	mg/L	0.001717	-0.00006 mg/L	0.001717		>999.9%
Sb 206.836†	3.1	0.00266 mg/L	mg/L	0.004542	0.00266 mg/L	0.004542		170.75%
Se 196.026†	4.7	0.00940 mg/L	mg/L	0.003290	0.00940 mg/L	0.003290		34.98%
Tl 190.801	-5.6	-0.00663 mg/L	mg/L	0.002417	-0.00663 mg/L	0.002417		36.45%
V 292.402†	48.0	0.00039 mg/L	mg/L	0.000451	0.00039 mg/L	0.000451		114.92%
Zn 206.200†	61.6	0.00289 mg/L	mg/L	0.000018	0.00289 mg/L	0.000018		0.63%
Cd 226.502†	12.3	0.00021 mg/L	mg/L	0.000159	0.00021 mg/L	0.000159		75.40%
Ti 334.940†	90.4	0.00019 mg/L	mg/L	0.000099	0.00019 mg/L	0.000099		51.15%
Ca 227.546†	730.6	3.7455 mg/L	mg/L	0.04987	3.7455 mg/L	0.04987		1.33%
Na 589.592†	330551.3	67.970 mg/L	mg/L	0.9353	67.970 mg/L	0.9353		1.38%
K 766.490†	982.8	0.93450 mg/L	mg/L	0.102113	0.93450 mg/L	0.102113		10.93%

Sequence No.: 24

Sample ID: L1786-07B-SL-MW-12

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 48

Date Collected: 8/30/2012 9:12:35 AM

Data Type: Reprocessed on 8/30/2012 1:59:49 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-07B~SL-MW-12

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Std.Dev.	
Y 360.073	1824310.4	96.125 %		1.2807			1.33%
Lu 261.542	1184944.3	96.60 %		1.231			1.27%
Ag 328.068†	107.3	0.00052 mg/L		0.000365	0.00052 mg/L	0.000365	70.23%
Al 308.215†	7472.0	0.36387 mg/L		0.005507	0.36387 mg/L	0.005507	1.51%
As 188.979†	-2.0	0.00001 mg/L		0.001354	0.00001 mg/L	0.001354	>999.9%
Ba 233.527†	5608.2	0.06502 mg/L		0.000727	0.06502 mg/L	0.000727	1.12%
Be 313.107†	-7.2	0.00001 mg/L		0.000009	0.00001 mg/L	0.000009	93.83%
Co 228.616†	10.4	0.00025 mg/L		0.000095	0.00025 mg/L	0.000095	38.90%
Cr 267.716†	14702.6	0.20788 mg/L		0.002015	0.20788 mg/L	0.002015	0.97%
Cu 324.752†	1182.8	0.00544 mg/L		0.000295	0.00544 mg/L	0.000295	5.42%
Fe 273.955†	27997.4	1.1572 mg/L		0.00883	1.1572 mg/L	0.00883	0.76%
Mg 279.077†	54293.7	3.0976 mg/L		0.02012	3.0976 mg/L	0.02012	0.65%
Mn 257.610†	186628.8	0.31934 mg/L		0.002130	0.31934 mg/L	0.002130	0.67%
Ni 231.604†	198.2	0.00663 mg/L		0.000025	0.00663 mg/L	0.000025	0.38%
Pb 220.353†	-1.1	-0.00018 mg/L		0.001620	-0.00018 mg/L	0.001620	917.33%
Sb 206.836†	6.3	0.00161 mg/L		0.001756	0.00161 mg/L	0.001756	109.31%
Se 196.026†	0.6	0.00170 mg/L		0.001055	0.00170 mg/L	0.001055	62.14%
Tl 190.801	-0.5	-0.00015 mg/L		0.003105	-0.00015 mg/L	0.003105	>999.9%
V 292.402†	34.8	0.00078 mg/L		0.000156	0.00078 mg/L	0.000156	19.86%
Zn 206.200†	68.7	0.00379 mg/L		0.000214	0.00379 mg/L	0.000214	5.65%
Cd 226.502†	31.8	0.00044 mg/L		0.000147	0.00044 mg/L	0.000147	33.23%
Ti 334.940†	3667.7	0.00676 mg/L		0.000705	0.00676 mg/L	0.000705	10.42%
Ca 227.546†	3135.0	16.065 mg/L		0.2727	16.065 mg/L	0.2727	1.70%
Na 589.592†	182527.6	37.532 mg/L		0.3441	37.532 mg/L	0.3441	0.92%
K 766.490†	2887.5	2.7457 mg/L		0.10506	2.7457 mg/L	0.10506	3.83%

Sequence No.: 25

Sample ID: L1786-07C~SL-MW-12

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 49

Date Collected: 8/30/2012 9:16:24 AM

Data Type: Reprocessed on 8/30/2012 1:59:50 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-07C~SL-MW-12

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Std.Dev.	
Y 360.073	1803136.2	95.009 %		0.4074			0.43%
Lu 261.542	1171427.3	95.50 %		0.472			0.49%
Ag 328.068†	124.3	0.00062 mg/L		0.000124	0.00062 mg/L	0.000124	20.05%
Al 308.215†	600.7	0.02566 mg/L		0.001388	0.02566 mg/L	0.001388	5.41%
As 188.979†	-2.4	-0.00236 mg/L		0.002273	-0.00236 mg/L	0.002273	96.30%
Ba 233.527†	5083.1	0.05893 mg/L		0.000850	0.05893 mg/L	0.000850	1.44%
Be 313.107†	2.4	0.00000 mg/L		0.000023	0.00000 mg/L	0.000023	>999.9%
Co 228.616†	1.0	0.00003 mg/L		0.000102	0.00003 mg/L	0.000102	353.70%
Cr 267.716†	55.1	0.00088 mg/L		0.000416	0.00088 mg/L	0.000416	47.26%
Cu 324.752†	522.5	0.00236 mg/L		0.000798	0.00236 mg/L	0.000798	33.83%
Fe 273.955†	115.5	0.00477 mg/L		0.000420	0.00477 mg/L	0.000420	8.80%
Mg 279.077†	54415.9	3.1051 mg/L		0.05479	3.1051 mg/L	0.05479	1.76%
Mn 257.610†	183522.7	0.31402 mg/L		0.000726	0.31402 mg/L	0.000726	0.23%
Ni 231.604†	35.4	0.00117 mg/L		0.000172	0.00117 mg/L	0.000172	14.68%
Pb 220.353†	-11.3	-0.00218 mg/L		0.001743	-0.00218 mg/L	0.001743	79.93%
Sb 206.836†	0.0	-0.00001 mg/L		0.004282	-0.00001 mg/L	0.004282	>999.9%
Se 196.026†	3.1	0.00615 mg/L		0.001820	0.00615 mg/L	0.001820	29.61%
Tl 190.801	-3.4	-0.00374 mg/L		0.000822	-0.00374 mg/L	0.000822	21.96%
V 292.402†	-22.1	-0.00018 mg/L		0.000285	-0.00018 mg/L	0.000285	159.18%
Zn 206.200†	35.3	0.00178 mg/L		0.000321	0.00178 mg/L	0.000321	18.06%
Cd 226.502†	23.1	0.00037 mg/L		0.000110	0.00037 mg/L	0.000110	29.62%
Ti 334.940†	-65.6	0.00010 mg/L		0.000048	0.00010 mg/L	0.000048	47.63%
Ca 227.546†	3203.9	16.429 mg/L		0.0660	16.429 mg/L	0.0660	0.40%
Na 589.592†	184288.9	37.894 mg/L		0.3408	37.894 mg/L	0.3408	0.90%
K 766.490†	2863.3	2.7227 mg/L		0.09704	2.7227 mg/L	0.09704	3.56%

Sequence No.: 26

Sample ID: L1786-08B~SL-MW-14

Autosampler Location: 50

Date Collected: 8/30/2012 9:20:13 AM

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

Data Type: Reprocessed on 8/30/2012 1:59:51 PM

Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: L1786-08B-SL-MW-14

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Y 360.073	1836078.3	96.745	%	1.2683				1.31%
Lu 261.542	1197183.3	97.60	%	1.390				1.42%
Ag 328.068†	96.9	0.00053	mg/L	0.000490	0.00053	mg/L	0.000490	91.59%
Al 308.215†	2118.4	0.10339	mg/L	0.007282	0.10339	mg/L	0.007282	7.04%
As 188.979†	0.1	0.00364	mg/L	0.002315	0.00364	mg/L	0.002315	63.53%
Ba 233.527†	2055.7	0.02383	mg/L	0.000334	0.02383	mg/L	0.000334	1.40%
Be 313.107†	-88.2	-0.00003	mg/L	0.000013	-0.00003	mg/L	0.000013	43.86%
Co 228.616†	137.3	0.00376	mg/L	0.000179	0.00376	mg/L	0.000179	4.75%
Cr 267.716†	25701.7	0.36325	mg/L	0.011823	0.36325	mg/L	0.011823	3.25%
Cu 324.752†	961.4	0.00452	mg/L	0.000332	0.00452	mg/L	0.000332	7.33%
Fe 273.955†	48332.4	1.9977	mg/L	0.07160	1.9977	mg/L	0.07160	3.58%
Mg 279.077†	23644.2	1.3483	mg/L	0.05217	1.3483	mg/L	0.05217	3.87%
Mn 257.610†	30534.2	0.05224	mg/L	0.001834	0.05224	mg/L	0.001834	3.51%
Ni 231.604†	877.1	0.02943	mg/L	0.000593	0.02943	mg/L	0.000593	2.02%
Pb 220.353†	3.5	0.00068	mg/L	0.000820	0.00068	mg/L	0.000820	119.85%
Sb 206.836†	8.5	0.00057	mg/L	0.001043	0.00057	mg/L	0.001043	182.70%
Se 196.026†	-0.4	0.00003	mg/L	0.007017	0.00003	mg/L	0.007017	>999.9%
Tl 190.801	-5.3	-0.00607	mg/L	0.003460	-0.00607	mg/L	0.003460	57.02%
V 292.402†	99.0	0.00170	mg/L	0.000306	0.00170	mg/L	0.000306	18.05%
Zn 206.200†	59.6	0.00358	mg/L	0.000162	0.00358	mg/L	0.000162	4.52%
Cd 226.502†	15.0	0.00012	mg/L	0.000060	0.00012	mg/L	0.000060	51.20%
Ti 334.940†	1789.0	0.00319	mg/L	0.000382	0.00319	mg/L	0.000382	11.96%
Ca 227.546†	687.7	3.5064	mg/L	0.08823	3.5064	mg/L	0.08823	2.52%
Na 589.592†	444797.9	91.462	mg/L	1.0053	91.462	mg/L	1.0053	1.10%
K 766.490†	1731.0	1.6459	mg/L	0.00715	1.6459	mg/L	0.00715	0.43%

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Sequence No.: 27
 Sample ID: L1786-08C-SL-MW-14
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 51
 Date Collected: 8/30/2012 9:24:01 AM
 Data Type: Reprocessed on 8/30/2012 1:59:51 PM
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: L1786-08C-SL-MW-14

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Y 360.073	1775226.4	93.539	%	0.3453				0.37%
Lu 261.542	1161616.3	94.70	%	0.375				0.40%
Ag 328.068†	195.6	0.00111	mg/L	0.000565	0.00111	mg/L	0.000565	50.90%
Al 308.215†	128.4	0.00550	mg/L	0.003299	0.00550	mg/L	0.003299	59.95%
As 188.979†	0.7	0.00103	mg/L	0.003227	0.00103	mg/L	0.003227	313.51%
Ba 233.527†	1984.8	0.02301	mg/L	0.000087	0.02301	mg/L	0.000087	0.38%
Be 313.107†	-66.0	-0.00003	mg/L	0.000019	-0.00003	mg/L	0.000019	71.03%
Co 228.616†	83.7	0.00232	mg/L	0.000154	0.00232	mg/L	0.000154	6.62%
Cr 267.716†	198.9	0.00284	mg/L	0.000341	0.00284	mg/L	0.000341	11.99%
Cu 324.752†	550.4	0.00249	mg/L	0.000199	0.00249	mg/L	0.000199	7.99%
Fe 273.955†	649.3	0.02684	mg/L	0.000250	0.02684	mg/L	0.000250	0.93%
Mg 279.077†	23395.4	1.3350	mg/L	0.01701	1.3350	mg/L	0.01701	1.27%
Mn 257.610†	10193.2	0.01743	mg/L	0.000251	0.01743	mg/L	0.000251	1.44%
Ni 231.604†	621.2	0.02085	mg/L	0.000211	0.02085	mg/L	0.000211	1.01%
Pb 220.353†	-8.6	-0.00169	mg/L	0.000937	-0.00169	mg/L	0.000937	55.57%
Sb 206.836†	4.1	0.00348	mg/L	0.002351	0.00348	mg/L	0.002351	67.54%
Se 196.026†	1.2	0.00234	mg/L	0.005131	0.00234	mg/L	0.005131	219.42%
Tl 190.801	-3.3	-0.00388	mg/L	0.002475	-0.00388	mg/L	0.002475	63.74%
V 292.402†	14.8	0.00013	mg/L	0.000239	0.00013	mg/L	0.000239	187.60%
Zn 206.200†	43.7	0.00206	mg/L	0.000204	0.00206	mg/L	0.000204	9.88%
Cd 226.502†	4.0	0.00006	mg/L	0.000062	0.00006	mg/L	0.000062	95.23%
Ti 334.940†	41.7	0.00011	mg/L	0.000121	0.00011	mg/L	0.000121	108.94%
Ca 227.546†	699.8	3.5867	mg/L	0.01337	3.5867	mg/L	0.01337	0.37%
Na 589.592†	466700.3	95.965	mg/L	0.5286	95.965	mg/L	0.5286	0.55%

K 766.490† 1755.9 1.6696 mg/L 0.10325 1.6696 mg/L 0.10325 6.18%

Sequence No.: 28

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 8/30/2012 9:27:48 AM

Data Type: Reprocessed on 8/30/2012 1:59:52 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	1750164.8	92.218 %	0.4288			0.46%
Lu 261.542	1141021.2	93.02 %	0.391			0.42%
Ag 328.068†	210883.3	1.2181 mg/L	0.01613	1.2181 mg/L	0.01613	1.32%
QC value within limits for Ag 328.068		Recovery = 97.45%				
Al 308.215†	202097.3	9.9353 mg/L	0.10960	9.9353 mg/L	0.10960	1.10%
QC value within limits for Al 308.215		Recovery = 99.35%				
As 188.979†	410.5	0.49812 mg/L	0.005103	0.49812 mg/L	0.005103	1.02%
QC value within limits for As 188.979		Recovery = 99.62%				
Ba 233.527†	879498.2	10.200 mg/L	0.0241	10.200 mg/L	0.0241	0.24%
QC value within limits for Ba 233.527		Recovery = 102.00%				
Be 313.107†	621352.3	0.24749 mg/L	0.000371	0.24749 mg/L	0.000371	0.15%
QC value within limits for Be 313.107		Recovery = 99.00%				
Co 228.616†	93542.6	2.6014 mg/L	0.02372	2.6014 mg/L	0.02372	0.91%
QC value within limits for Co 228.616		Recovery = 104.05%				
Cr 267.716†	69867.0	0.98798 mg/L	0.007217	0.98798 mg/L	0.007217	0.73%
QC value within limits for Cr 267.716		Recovery = 98.80%				
Cu 324.752†	269992.9	1.2195 mg/L	0.01007	1.2195 mg/L	0.01007	0.83%
QC value within limits for Cu 324.752		Recovery = 97.56%				
Fe 273.955†	123349.8	5.1024 mg/L	0.04850	5.1024 mg/L	0.04850	0.95%
QC value within limits for Fe 273.955		Recovery = 102.05%				
Mg 279.077†	441349.6	25.182 mg/L	0.0607	25.182 mg/L	0.0607	0.24%
QC value within limits for Mg 279.077		Recovery = 100.73%				
Mn 257.610†	1479326.4	2.5311 mg/L	0.00415	2.5311 mg/L	0.00415	0.16%
QC value within limits for Mn 257.610		Recovery = 101.25%				
Ni 231.604†	76352.5	2.5622 mg/L	0.02217	2.5622 mg/L	0.02217	0.87%
QC value within limits for Ni 231.604		Recovery = 102.49%				
Pb 220.353†	2557.9	0.50186 mg/L	0.001498	0.50186 mg/L	0.001498	0.30%
QC value within limits for Pb 220.353		Recovery = 100.37%				
Sb 206.836†	623.2	0.52168 mg/L	0.001243	0.52168 mg/L	0.001243	0.24%
QC value within limits for Sb 206.836		Recovery = 104.34%				
Se 196.026†	242.9	0.48882 mg/L	0.016782	0.48882 mg/L	0.016782	3.43%
QC value within limits for Se 196.026		Recovery = 97.76%				
Tl 190.801	417.2	0.47770 mg/L	0.005844	0.47770 mg/L	0.005844	1.22%
QC value within limits for Tl 190.801		Recovery = 95.54%				
V 292.402†	305434.6	2.4958 mg/L	0.01746	2.4958 mg/L	0.01746	0.70%
QC value within limits for V 292.402		Recovery = 99.83%				
Zn 206.200†	54441.3	2.5555 mg/L	0.02770	2.5555 mg/L	0.02770	1.08%
QC value within limits for Zn 206.200		Recovery = 102.22%				
Cd 226.502†	13715.3	0.24620 mg/L	0.001041	0.24620 mg/L	0.001041	0.42%
QC value within limits for Cd 226.502		Recovery = 98.48%				
Ti 334.940†	270548.2	0.48508 mg/L	0.002220	0.48508 mg/L	0.002220	0.46%
QC value within limits for Ti 334.940		Recovery = Not calculated				
Ca 227.546†	4902.8	24.278 mg/L	0.0717	24.278 mg/L	0.0717	0.30%
QC value within limits for Ca 227.546		Recovery = 97.11%				
Na 589.592†	123427.7	25.380 mg/L	0.0928	25.380 mg/L	0.0928	0.37%
QC value within limits for Na 589.592		Recovery = 101.52%				
K 766.490†	27030.4	25.703 mg/L	0.1598	25.703 mg/L	0.1598	0.62%
QC value within limits for K 766.490		Recovery = 102.81%				

All analyte(s) passed QC.

Sequence No.: 29

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 8/30/2012 9:31:39 AM

Data Type: Reprocessed on 8/30/2012 1:59:53 PM

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	1824190.2	96.119 %		1.0894			1.13%
Lu 261.542	1181340.3	96.31 %		1.141			1.18%
Ag 328.068†	298.2	0.00172 mg/L		0.000492	0.00172 mg/L	0.000492	28.65%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 308.215†	-84.8	-0.00418 mg/L		0.004969	-0.00418 mg/L	0.004969	118.77%
QC value within limits for Al 308.215 Recovery = Not calculated							
As 188.979†	0.2	0.00029 mg/L		0.001891	0.00029 mg/L	0.001891	652.18%
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	57.8	0.00067 mg/L		0.000098	0.00067 mg/L	0.000098	14.62%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	51.8	0.00002 mg/L		0.000027	0.00002 mg/L	0.000027	130.81%
QC value within limits for Be 313.107 Recovery = Not calculated							
Co 228.616†	3.5	0.00010 mg/L		0.000098	0.00010 mg/L	0.000098	99.97%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	17.5	0.00025 mg/L		0.000297	0.00025 mg/L	0.000297	119.91%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	241.5	0.00109 mg/L		0.000315	0.00109 mg/L	0.000315	28.86%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 273.955†	39.5	0.00163 mg/L		0.000410	0.00163 mg/L	0.000410	25.11%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	27.8	0.00159 mg/L		0.001834	0.00159 mg/L	0.001834	115.55%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	118.8	0.00020 mg/L		0.000021	0.00020 mg/L	0.000021	10.39%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Ni 231.604†	5.4	0.00018 mg/L		0.000200	0.00018 mg/L	0.000200	109.58%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	-1.1	-0.00022 mg/L		0.000388	-0.00022 mg/L	0.000388	174.53%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	1.6	0.00137 mg/L		0.001965	0.00137 mg/L	0.001965	143.11%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.0	0.00199 mg/L		0.014738	0.00199 mg/L	0.014738	740.38%
QC value within limits for Se 196.026 Recovery = Not calculated							
Tl 190.801	-2.5	-0.00305 mg/L		0.003013	-0.00305 mg/L	0.003013	98.86%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402†	39.1	0.00032 mg/L		0.000310	0.00032 mg/L	0.000310	97.13%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200†	13.4	0.00063 mg/L		0.000316	0.00063 mg/L	0.000316	50.40%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Cd 226.502†	6.6	0.00012 mg/L		0.000068	0.00012 mg/L	0.000068	58.14%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Ti 334.940†	81.8	0.00015 mg/L		0.000091	0.00015 mg/L	0.000091	61.82%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546†	7.7	0.03929 mg/L		0.076270	0.03929 mg/L	0.076270	194.13%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Na 589.592†	80.1	0.01648 mg/L		0.027562	0.01648 mg/L	0.027562	167.26%
QC value within limits for Na 589.592 Recovery = Not calculated							
K 766.490†	-2.7	-0.00258 mg/L		0.060438	-0.00258 mg/L	0.060438	>999.9%
QC value within limits for K 766.490 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 30

Sample ID: L1786-09B-SL-MW-16

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 52

Date Collected: 8/30/2012 9:35:20 AM

Data Type: Reprocessed on 8/30/2012 1:59:54 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09B-SL-MW-16

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1797669.0	94.721 %		0.6524			0.69%
Lu 261.542	1173640.5	95.68 %		0.708			0.74%
Ag 328.068†	655.4	0.00372 mg/L		0.001234	0.00372 mg/L	0.001234	33.14%
Al 308.215†	6146.9	0.30010 mg/L		0.003896	0.30010 mg/L	0.003896	1.30%

As 188.979†	-0.2	0.00062 mg/L	0.003881	0.00062 mg/L	0.003881	622.59%
Ba 233.527†	833.4	0.00966 mg/L	0.000092	0.00966 mg/L	0.000092	0.95%
Be 313.107†	-163.0	-0.00005 mg/L	0.000033	-0.00005 mg/L	0.000033	64.89%
Co 228.616†	50.2	0.00136 mg/L	0.000287	0.00136 mg/L	0.000287	21.06%
Cr 267.716†	4242.5	0.06006 mg/L	0.000554	0.06006 mg/L	0.000554	0.92%
Cu 324.752†	2916.4	0.01319 mg/L	0.000261	0.01319 mg/L	0.000261	1.97%
Fe 273.955†	8487.3	0.35080 mg/L	0.001284	0.35080 mg/L	0.001284	0.37%
Mg 279.077†	86228.1	4.9203 mg/L	0.04518	4.9203 mg/L	0.04518	0.92%
Mn 257.610†	14045.2	0.02398 mg/L	0.000246	0.02398 mg/L	0.000246	1.03%
Ni 231.604†	1314.7	0.04410 mg/L	0.000270	0.04410 mg/L	0.000270	0.61%
Pb 220.353†	0.8	0.00020 mg/L	0.000696	0.00020 mg/L	0.000696	351.42%
Sb 206.836†	5.9	0.00398 mg/L	0.004873	0.00398 mg/L	0.004873	122.59%
Se 196.026†	2.3	0.00478 mg/L	0.005526	0.00478 mg/L	0.005526	115.67%
Tl 190.801	0.1	0.00046 mg/L	0.003202	0.00046 mg/L	0.003202	693.53%
V 292.402†	255.2	0.00222 mg/L	0.000237	0.00222 mg/L	0.000237	10.67%
Zn 206.200†	188.7	0.00899 mg/L	0.000170	0.00899 mg/L	0.000170	1.89%
Cd 226.502†	2.7	0.00001 mg/L	0.000122	0.00001 mg/L	0.000122	>999.9%
Ti 334.940†	4229.7	0.00766 mg/L	0.000190	0.00766 mg/L	0.000190	2.48%
Ca 227.546†	2016.1	10.332 mg/L	0.0765	10.332 mg/L	0.0765	0.74%
Na 589.592†	127746.1	26.268 mg/L	0.1522	26.268 mg/L	0.1522	0.58%
K 766.490†	1548.8	1.4727 mg/L	0.02586	1.4727 mg/L	0.02586	1.76%

Sequence No.: 31

Sample ID: L1786-09BDUP~SL-MW-16D

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 53

Date Collected: 8/30/2012 9:39:00 AM

Data Type: Reprocessed on 8/30/2012 1:59:54 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09BDUP~SL-MW-16D

Analyte	Mean Corrected	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1794190.7	94.538	%	0.6399				0.68%
Lu 261.542	1170661.2	95.44	%	0.620				0.65%
Ag 328.068†	218.4	0.00121 mg/L		0.000055	0.00121 mg/L		0.000055	4.58%
Al 308.215†	5549.3	0.27074 mg/L		0.006506	0.27074 mg/L		0.006506	2.40%
As 188.979†	-0.3	0.00043 mg/L		0.002385	0.00043 mg/L		0.002385	554.80%
Ba 233.527†	799.0	0.00927 mg/L		0.000062	0.00927 mg/L		0.000062	0.67%
Be 313.107†	-102.5	-0.00003 mg/L		0.000023	-0.00003 mg/L		0.000023	81.82%
Co 228.616†	50.5	0.00138 mg/L		0.000127	0.00138 mg/L		0.000127	9.20%
Cr 267.716†	3647.6	0.05165 mg/L		0.000638	0.05165 mg/L		0.000638	1.24%
Cu 324.752†	2757.0	0.01247 mg/L		0.000781	0.01247 mg/L		0.000781	6.26%
Fe 273.955†	8015.8	0.33131 mg/L		0.003130	0.33131 mg/L		0.003130	0.94%
Mg 279.077†	82575.1	4.7119 mg/L		0.04433	4.7119 mg/L		0.04433	0.94%
Mn 257.610†	15090.1	0.02577 mg/L		0.000209	0.02577 mg/L		0.000209	0.81%
Ni 231.604†	1281.4	0.04299 mg/L		0.000284	0.04299 mg/L		0.000284	0.66%
Pb 220.353†	-0.3	-0.00003 mg/L		0.002117	-0.00003 mg/L		0.002117	>999.9%
Sb 206.836†	2.1	0.00087 mg/L		0.003545	0.00087 mg/L		0.003545	409.75%
Se 196.026†	-0.6	-0.00103 mg/L		0.004289	-0.00103 mg/L		0.004289	416.15%
Tl 190.801	-0.3	-0.00002 mg/L		0.003129	-0.00002 mg/L		0.003129	>999.9%
V 292.402†	239.2	0.00207 mg/L		0.000339	0.00207 mg/L		0.000339	16.39%
Zn 206.200†	189.1	0.00899 mg/L		0.000111	0.00899 mg/L		0.000111	1.24%
Cd 226.502†	10.8	0.00015 mg/L		0.000028	0.00015 mg/L		0.000028	18.38%
Ti 334.940†	3714.9	0.00674 mg/L		0.000429	0.00674 mg/L		0.000429	6.37%
Ca 227.546†	1981.5	10.155 mg/L		0.0328	10.155 mg/L		0.0328	0.32%
Na 589.592†	121974.3	25.081 mg/L		0.0867	25.081 mg/L		0.0867	0.35%
K 766.490†	1600.7	1.5220 mg/L		0.10135	1.5220 mg/L		0.10135	6.66%

Sequence No.: 32

Sample ID: L1786-09BMS~SL-MW-16S

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 54

Date Collected: 8/30/2012 9:42:42 AM

Data Type: Reprocessed on 8/30/2012 1:59:55 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09BMS~SL-MW-16S

Mean Corrected

Calib.

Sample

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1792320.6	94.439 %	1.1343			1.20%
Lu 261.542	1169356.1	95.33 %	1.207			1.27%
Ag 328.068†	193802.6	1.1193 mg/L	0.00471	1.1193 mg/L	0.00471	0.42%
Al 308.215†	189159.0	9.2977 mg/L	0.06509	9.2977 mg/L	0.06509	0.70%
As 188.979†	392.3	0.47642 mg/L	0.008851	0.47642 mg/L	0.008851	1.86%
Ba 233.527†	812423.9	9.4218 mg/L	0.08610	9.4218 mg/L	0.08610	0.91%
Be 313.107†	588098.7	0.23341 mg/L	0.002304	0.23341 mg/L	0.002304	0.99%
Co 228.616†	82541.7	2.2964 mg/L	0.01170	2.2964 mg/L	0.01170	0.51%
Cr 267.716†	67294.9	0.95166 mg/L	0.007893	0.95166 mg/L	0.007893	0.83%
Cu 324.752†	247764.2	1.1191 mg/L	0.00519	1.1191 mg/L	0.00519	0.46%
Fe 273.955†	124025.3	5.1299 mg/L	0.02919	5.1299 mg/L	0.02919	0.57%
Mg 279.077†	490416.3	27.982 mg/L	0.2987	27.982 mg/L	0.2987	1.07%
Mn 257.610†	1379396.6	2.3601 mg/L	0.02638	2.3601 mg/L	0.02638	1.12%
Ni 231.604†	69336.8	2.3270 mg/L	0.01392	2.3270 mg/L	0.01392	0.60%
Pb 220.353†	2342.3	0.45913 mg/L	0.004308	0.45913 mg/L	0.004308	0.94%
Sb 206.836†	568.9	0.47421 mg/L	0.012573	0.47421 mg/L	0.012573	2.65%
Se 196.026†	223.7	0.45007 mg/L	0.015951	0.45007 mg/L	0.015951	3.54%
Tl 190.801	376.4	0.43169 mg/L	0.002571	0.43169 mg/L	0.002571	0.60%
V 292.402†	274288.8	2.2420 mg/L	0.01395	2.2420 mg/L	0.01395	0.62%
Zn 206.200†	48777.7	2.2895 mg/L	0.00998	2.2895 mg/L	0.00998	0.44%
Cd 226.502†	12554.2	0.22529 mg/L	0.001178	0.22529 mg/L	0.001178	0.52%
Ti 334.940†	3728.3	0.00653 mg/L	0.000256	0.00653 mg/L	0.000256	3.92%
Ca 227.546†	6462.1	32.368 mg/L	0.3714	32.368 mg/L	0.3714	1.15%
Na 589.592†	237136.0	48.761 mg/L	0.1957	48.761 mg/L	0.1957	0.40%
K 766.490†	26569.7	25.265 mg/L	0.1126	25.265 mg/L	0.1126	0.45%

Sequence No.: 33

Sample ID: L1786-09BSD~SL-MW-16L

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 55

Date Collected: 8/30/2012 9:46:25 AM

Data Type: Reprocessed on 8/30/2012 1:59:56 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09BSD~SL-MW-16L

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	1875023.4	98.797 %		1.4108			1.43%
Lu 261.542	1220419.6	99.49 %		1.459			1.47%
Ag 328.068†	156.5	0.00089 mg/L		0.000289	0.00089 mg/L	0.000289	32.39%
Al 308.215†	1041.5	0.05078 mg/L		0.003218	0.05078 mg/L	0.003218	6.34%
As 188.979†	3.3	0.00409 mg/L		0.006206	0.00409 mg/L	0.006206	151.68%
Ba 233.527†	206.2	0.00239 mg/L		0.000137	0.00239 mg/L	0.000137	5.73%
Be 313.107†	22.3	0.00001 mg/L		0.000015	0.00001 mg/L	0.000015	129.95%
Co 228.616†	13.8	0.00038 mg/L		0.000253	0.00038 mg/L	0.000253	67.06%
Cr 267.716†	810.7	0.01148 mg/L		0.000314	0.01148 mg/L	0.000314	2.74%
Cu 324.752†	656.9	0.00297 mg/L		0.000151	0.00297 mg/L	0.000151	5.10%
Fe 273.955†	1692.1	0.06994 mg/L		0.003715	0.06994 mg/L	0.003715	5.31%
Mg 279.077†	17353.2	0.99020 mg/L		0.006649	0.99020 mg/L	0.006649	0.67%
Mn 257.610†	2880.2	0.00492 mg/L		0.000100	0.00492 mg/L	0.000100	2.04%
Ni 231.604†	269.6	0.00904 mg/L		0.000275	0.00904 mg/L	0.000275	3.04%
Pb 220.353†	-9.7	-0.00190 mg/L		0.002415	-0.00190 mg/L	0.002415	127.37%
Sb 206.836†	-0.4	-0.00056 mg/L		0.004571	-0.00056 mg/L	0.004571	822.61%
Se 196.026†	2.9	0.00577 mg/L		0.004690	0.00577 mg/L	0.004690	81.27%
Tl 190.801	0.6	0.00076 mg/L		0.002176	0.00076 mg/L	0.002176	285.97%
V 292.402†	98.4	0.00083 mg/L		0.000236	0.00083 mg/L	0.000236	28.43%
Zn 206.200†	42.0	0.00200 mg/L		0.000128	0.00200 mg/L	0.000128	6.39%
Cd 226.502†	6.3	0.00010 mg/L		0.000114	0.00010 mg/L	0.000114	109.37%
Ti 334.940†	811.3	0.00147 mg/L		0.000050	0.00147 mg/L	0.000050	3.40%
Ca 227.546†	399.2	2.0457 mg/L		0.05842	2.0457 mg/L	0.05842	2.86%
Na 589.592†	25033.5	5.1475 mg/L		0.06391	5.1475 mg/L	0.06391	1.24%
K 766.490†	292.4	0.27808 mg/L		0.174050	0.27808 mg/L	0.174050	62.59%

Sequence No.: 34

Sample ID: L1786-09BPDS~SL-MW-16A

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Autosampler Location: 56

Date Collected: 8/30/2012 9:50:05 AM

Data Type: Reprocessed on 8/30/2012 1:59:56 PM

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: L1786-09BPDS~SL-MW-16A

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1774204.2	93.485	%	0.5825				0.62%
Lu 261.542	1157846.6	94.39	%	0.644				0.68%
Ag 328.068†	194348.5	1.1225	mg/L	0.01453	1.1225	mg/L	0.01453	1.29%
Al 308.215†	191603.8	9.4181	mg/L	0.11922	9.4181	mg/L	0.11922	1.27%
As 188.979†	377.8	0.45926	mg/L	0.003802	0.45926	mg/L	0.003802	0.83%
Ba 233.527†	807181.2	9.3611	mg/L	0.05531	9.3611	mg/L	0.05531	0.59%
Be 313.107†	584832.2	0.23212	mg/L	0.001325	0.23212	mg/L	0.001325	0.57%
Co 228.616†	83857.9	2.3330	mg/L	0.03309	2.3330	mg/L	0.03309	1.42%
Cr 267.716†	68548.5	0.96939	mg/L	0.012697	0.96939	mg/L	0.012697	1.31%
Cu 324.752†	250836.7	1.1330	mg/L	0.01495	1.1330	mg/L	0.01495	1.32%
Fe 273.955†	121173.9	5.0121	mg/L	0.06601	5.0121	mg/L	0.06601	1.32%
Mg 279.077†	487585.9	27.821	mg/L	0.1842	27.821	mg/L	0.1842	0.66%
Mn 257.610†	1371523.2	2.3466	mg/L	0.01654	2.3466	mg/L	0.01654	0.70%
Ni 231.604†	70404.9	2.3629	mg/L	0.03510	2.3629	mg/L	0.03510	1.49%
Pb 220.353†	2305.6	0.45198	mg/L	0.003273	0.45198	mg/L	0.003273	0.72%
Sb 206.836†	528.3	0.43891	mg/L	0.006851	0.43891	mg/L	0.006851	1.56%
Se 196.026†	221.3	0.44523	mg/L	0.003052	0.44523	mg/L	0.003052	0.69%
Tl 190.801	384.2	0.44066	mg/L	0.003246	0.44066	mg/L	0.003246	0.74%
V 292.402†	278101.9	2.2732	mg/L	0.03000	2.2732	mg/L	0.03000	1.32%
Zn 206.200†	49380.3	2.3178	mg/L	0.03436	2.3178	mg/L	0.03436	1.48%
Cd 226.502†	12393.7	0.22243	mg/L	0.003876	0.22243	mg/L	0.003876	1.74%
Ti 334.940†	4467.0	0.00785	mg/L	0.000208	0.00785	mg/L	0.000208	2.65%
Ca 227.546†	6493.6	32.519	mg/L	0.2684	32.519	mg/L	0.2684	0.83%
Na 589.592†	234325.9	48.183	mg/L	0.6574	48.183	mg/L	0.6574	1.36%
K 766.490†	26105.2	24.823	mg/L	0.3995	24.823	mg/L	0.3995	1.61%

Sequence No.: 35

Sample ID: L1786-09C~SL-MW-16

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 57

Date Collected: 8/30/2012 9:53:48 AM

Data Type: Reprocessed on 8/30/2012 1:59:57 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09C~SL-MW-16

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1801596.2	94.928	%	0.3709				0.39%
Lu 261.542	1175920.7	95.87	%	0.525				0.55%
Ag 328.068†	197.2	0.00109	mg/L	0.000589	0.00109	mg/L	0.000589	54.22%
Al 308.215†	445.4	0.01962	mg/L	0.005718	0.01962	mg/L	0.005718	29.15%
As 188.979†	2.3	0.00316	mg/L	0.001806	0.00316	mg/L	0.001806	57.13%
Ba 233.527†	797.2	0.00924	mg/L	0.000106	0.00924	mg/L	0.000106	1.15%
Be 313.107†	-79.0	-0.00003	mg/L	0.000019	-0.00003	mg/L	0.000019	60.72%
Co 228.616†	58.0	0.00160	mg/L	0.000168	0.00160	mg/L	0.000168	10.51%
Cr 267.716†	281.7	0.00408	mg/L	0.000450	0.00408	mg/L	0.000450	11.05%
Cu 324.752†	478.0	0.00217	mg/L	0.000301	0.00217	mg/L	0.000301	13.88%
Fe 273.955†	3807.7	0.15738	mg/L	0.002312	0.15738	mg/L	0.002312	1.47%
Mg 279.077†	81102.1	4.6279	mg/L	0.03150	4.6279	mg/L	0.03150	0.68%
Mn 257.610†	13431.6	0.02294	mg/L	0.000042	0.02294	mg/L	0.000042	0.18%
Ni 231.604†	1285.4	0.04312	mg/L	0.000412	0.04312	mg/L	0.000412	0.96%
Pb 220.353†	-6.9	-0.00135	mg/L	0.002002	-0.00135	mg/L	0.002002	148.74%
Sb 206.836†	6.8	0.00577	mg/L	0.003698	0.00577	mg/L	0.003698	64.11%
Se 196.026†	6.3	0.01251	mg/L	0.008938	0.01251	mg/L	0.008938	71.46%
Tl 190.801	-0.2	0.00010	mg/L	0.005076	0.00010	mg/L	0.005076	>999.9%
V 292.402†	146.2	0.00121	mg/L	0.000174	0.00121	mg/L	0.000174	14.42%
Zn 206.200†	116.5	0.00549	mg/L	0.000135	0.00549	mg/L	0.000135	2.46%
Cd 226.502†	-0.7	-0.00004	mg/L	0.000120	-0.00004	mg/L	0.000120	291.26%
Ti 334.940†	131.1	0.00032	mg/L	0.000048	0.00032	mg/L	0.000048	14.96%
Ca 227.546†	1945.5	9.9723	mg/L	0.01655	9.9723	mg/L	0.01655	0.17%
Na 589.592†	123615.7	25.419	mg/L	0.2993	25.419	mg/L	0.2993	1.18%
K 766.490†	1554.0	1.4777	mg/L	0.07343	1.4777	mg/L	0.07343	4.97%

Sequence No.: 36

Sample ID: L1786-09CDUP~SL-MW-16D

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 58

Date Collected: 8/30/2012 9:57:30 AM

Data Type: Reprocessed on 8/30/2012 1:59:58 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09CDUP~SL-MW-16D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1822668.5	96.038	%	0.4465				0.46%
Lu 261.542	1189295.1	96.96	%	0.418				0.43%
Ag 328.068†	171.0	0.00094	mg/L	0.000233	0.00094	mg/L	0.000233	24.96%
Al 308.215†	380.0	0.01644	mg/L	0.003885	0.01644	mg/L	0.003885	23.62%
As 188.979†	3.5	0.00452	mg/L	0.002821	0.00452	mg/L	0.002821	62.42%
Ba 233.527†	709.0	0.00822	mg/L	0.000041	0.00822	mg/L	0.000041	0.50%
Be 313.107†	-69.9	-0.00003	mg/L	0.000008	-0.00003	mg/L	0.000008	30.46%
Co 228.616†	57.5	0.00159	mg/L	0.000184	0.00159	mg/L	0.000184	11.60%
Cr 267.716†	296.6	0.00429	mg/L	0.000648	0.00429	mg/L	0.000648	15.12%
Cu 324.752†	378.8	0.00172	mg/L	0.000184	0.00172	mg/L	0.000184	10.65%
Fe 273.955†	3700.1	0.15293	mg/L	0.004899	0.15293	mg/L	0.004899	3.20%
Mg 279.077†	80292.5	4.5817	mg/L	0.14304	4.5817	mg/L	0.14304	3.12%
Mn 257.610†	13149.7	0.02245	mg/L	0.000600	0.02245	mg/L	0.000600	2.67%
Ni 231.604†	1257.3	0.04218	mg/L	0.000188	0.04218	mg/L	0.000188	0.45%
Pb 220.353†	-0.8	-0.00015	mg/L	0.000979	-0.00015	mg/L	0.000979	637.55%
Sb 206.836†	2.7	0.00221	mg/L	0.002761	0.00221	mg/L	0.002761	124.79%
Se 196.026†	4.8	0.00963	mg/L	0.005889	0.00963	mg/L	0.005889	61.15%
Tl 190.801	-6.9	-0.00798	mg/L	0.001159	-0.00798	mg/L	0.001159	14.53%
V 292.402†	85.0	0.00071	mg/L	0.000249	0.00071	mg/L	0.000249	35.14%
Zn 206.200†	98.8	0.00466	mg/L	0.000069	0.00466	mg/L	0.000069	1.47%
Cd 226.502†	5.2	0.00006	mg/L	0.000050	0.00006	mg/L	0.000050	76.98%
Ti 334.940†	53.7	0.00018	mg/L	0.000143	0.00018	mg/L	0.000143	80.52%
Ca 227.546†	1904.5	9.7621	mg/L	0.07689	9.7621	mg/L	0.07689	0.79%
Na 589.592†	124115.7	25.521	mg/L	0.1272	25.521	mg/L	0.1272	0.50%
K 766.490†	1535.1	1.4597	mg/L	0.17225	1.4597	mg/L	0.17225	11.80%

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Sequence No.: 37

Sample ID: L1786-09CMS~SL-MW-16S

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 59

Date Collected: 8/30/2012 10:01:11 AM

Data Type: Reprocessed on 8/30/2012 1:59:59 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09CMS~SL-MW-16S

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1764900.7	92.995	%	0.9444				1.02%
Lu 261.542	1151299.7	93.86	%	0.929				0.99%
Ag 328.068†	196447.7	1.1346	mg/L	0.01383	1.1346	mg/L	0.01383	1.22%
Al 308.215†	187889.6	9.2353	mg/L	0.12704	9.2353	mg/L	0.12704	1.38%
As 188.979†	401.9	0.48748	mg/L	0.007998	0.48748	mg/L	0.007998	1.64%
Ba 233.527†	812452.4	9.4222	mg/L	0.01559	9.4222	mg/L	0.01559	0.17%
Be 313.107†	588543.0	0.23357	mg/L	0.000228	0.23357	mg/L	0.000228	0.10%
Co 228.616†	84547.2	2.3522	mg/L	0.03337	2.3522	mg/L	0.03337	1.42%
Cr 267.716†	65403.2	0.92494	mg/L	0.013273	0.92494	mg/L	0.013273	1.44%
Cu 324.752†	250961.2	1.1336	mg/L	0.01332	1.1336	mg/L	0.01332	1.18%
Fe 273.955†	117424.2	4.8571	mg/L	0.06868	4.8571	mg/L	0.06868	1.41%
Mg 279.077†	487754.6	27.830	mg/L	0.0696	27.830	mg/L	0.0696	0.25%
Mn 257.610†	1378590.2	2.3587	mg/L	0.00447	2.3587	mg/L	0.00447	0.19%
Ni 231.604†	70854.9	2.3780	mg/L	0.03357	2.3780	mg/L	0.03357	1.41%
Pb 220.353†	2394.2	0.46927	mg/L	0.006976	0.46927	mg/L	0.006976	1.49%
Sb 206.836†	576.1	0.48091	mg/L	0.007536	0.48091	mg/L	0.007536	1.57%
Se 196.026†	231.7	0.46599	mg/L	0.006784	0.46599	mg/L	0.006784	1.46%
Tl 190.801	372.2	0.42605	mg/L	0.003780	0.42605	mg/L	0.003780	0.89%
V 292.402†	279650.1	2.2857	mg/L	0.02943	2.2857	mg/L	0.02943	1.29%
Zn 206.200†	49666.9	2.3311	mg/L	0.03093	2.3311	mg/L	0.03093	1.33%
Cd 226.502†	13003.1	0.23337	mg/L	0.003428	0.23337	mg/L	0.003428	1.47%
Ti 334.940†	309.3	0.00040	mg/L	0.000045	0.00040	mg/L	0.000045	11.20%

Ca 227.546†	6470.0	32.394 mg/L	0.4112	32.394 mg/L	0.4112	1.27%
Na 589.592†	237231.4	48.781 mg/L	0.3471	48.781 mg/L	0.3471	0.71%
K 766.490†	26848.0	25.529 mg/L	0.2351	25.529 mg/L	0.2351	0.92%

Sequence No.: 38

Sample ID: L1786-09CSD~SL-MW-16L

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 60

Date Collected: 8/30/2012 10:04:55 AM

Data Type: Reprocessed on 8/30/2012 1:59:59 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09CSD~SL-MW-16L

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1831347.8	96.496 %	1.6363			1.70%
Lu 261.542	1192535.5	97.22 %	1.711			1.76%
Ag 328.068†	187.0	0.00107 mg/L	0.000492	0.00107 mg/L	0.000492	46.16%
Al 308.215†	138.0	0.00631 mg/L	0.002517	0.00631 mg/L	0.002517	39.91%
As 188.979†	0.7	0.00095 mg/L	0.002656	0.00095 mg/L	0.002656	278.35%
Ba 233.527†	212.1	0.00246 mg/L	0.000107	0.00246 mg/L	0.000107	4.36%
Be 313.107†	-55.9	-0.00002 mg/L	0.000017	-0.00002 mg/L	0.000017	76.51%
Co 228.616†	17.0	0.00047 mg/L	0.000291	0.00047 mg/L	0.000291	61.92%
Cr 267.716†	74.7	0.00108 mg/L	0.000231	0.00108 mg/L	0.000231	21.43%
Cu 324.752†	319.4	0.00144 mg/L	0.000282	0.00144 mg/L	0.000282	19.53%
Fe 273.955†	804.8	0.03327 mg/L	0.001057	0.03327 mg/L	0.001057	3.18%
Mg 279.077†	17320.0	0.98833 mg/L	0.015982	0.98833 mg/L	0.015982	1.62%
Mn 257.610†	2947.4	0.00503 mg/L	0.000098	0.00503 mg/L	0.000098	1.94%
Ni 231.604†	270.2	0.00906 mg/L	0.000225	0.00906 mg/L	0.000225	2.48%
Pb 220.353†	-4.2	-0.00082 mg/L	0.000685	-0.00082 mg/L	0.000685	83.81%
Sb 206.836†	-1.3	-0.00118 mg/L	0.001319	-0.00118 mg/L	0.001319	112.21%
Se 196.026†	-0.7	-0.00147 mg/L	0.004351	-0.00147 mg/L	0.004351	295.01%
Tl 190.801	0.9	0.00114 mg/L	0.003982	0.00114 mg/L	0.003982	348.47%
V 292.402†	61.8	0.00051 mg/L	0.000200	0.00051 mg/L	0.000200	39.42%
Zn 206.200†	37.1	0.00175 mg/L	0.000139	0.00175 mg/L	0.000139	7.95%
Cd 226.502†	10.4	0.00018 mg/L	0.000154	0.00018 mg/L	0.000154	85.18%
Ti 334.940†	63.9	0.00013 mg/L	0.000069	0.00013 mg/L	0.000069	52.36%
Ca 227.546†	410.4	2.1034 mg/L	0.07366	2.1034 mg/L	0.07366	3.50%
Na 589.592†	25106.8	5.1626 mg/L	0.13832	5.1626 mg/L	0.13832	2.68%
K 766.490†	329.2	0.31302 mg/L	0.121777	0.31302 mg/L	0.121777	38.90%

Sequence No.: 39

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 8/30/2012 10:08:36 AM

Data Type: Reprocessed on 8/30/2012 2:00:00 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	1780620.2	93.823 %	1.0540			1.12%
Lu 261.542	1163395.0	94.85 %	1.036			1.09%
Ag 328.068†	204547.2	1.1816 mg/L	0.02328	1.1816 mg/L	0.02328	1.97%
QC value within limits for Ag 328.068		Recovery = 94.53%				
Al 308.215†	200016.1	9.8328 mg/L	0.10562	9.8328 mg/L	0.10562	1.07%
QC value within limits for Al 308.215		Recovery = 98.33%				
As 188.979†	412.1	0.49996 mg/L	0.006284	0.49996 mg/L	0.006284	1.26%
QC value within limits for As 188.979		Recovery = 99.99%				
Ba 233.527†	889384.9	10.314 mg/L	0.0275	10.314 mg/L	0.0275	0.27%
QC value within limits for Ba 233.527		Recovery = 103.14%				
Be 313.107†	631200.1	0.25140 mg/L	0.000412	0.25140 mg/L	0.000412	0.16%
QC value within limits for Be 313.107		Recovery = 100.56%				
Co 228.616†	92870.8	2.5827 mg/L	0.02583	2.5827 mg/L	0.02583	1.00%
QC value within limits for Co 228.616		Recovery = 103.31%				
Cr 267.716†	69287.1	0.97977 mg/L	0.009697	0.97977 mg/L	0.009697	0.99%
QC value within limits for Cr 267.716		Recovery = 97.98%				
Cu 324.752†	265656.0	1.1999 mg/L	0.01461	1.1999 mg/L	0.01461	1.22%

QC value within limits for Cu 324.752 Recovery = 96.00%
 Fe 273.955† 122440.9 5.0648 mg/L 0.05036 5.0648 mg/L 0.05036 0.99%
 QC value within limits for Fe 273.955 Recovery = 101.30%
 Mg 279.077† 449479.7 25.646 mg/L 0.0694 25.646 mg/L 0.0694 0.27%
 QC value within limits for Mg 279.077 Recovery = 102.59%
 Mn 257.610† 1500748.4 2.5678 mg/L 0.00909 2.5678 mg/L 0.00909 0.35%
 QC value within limits for Mn 257.610 Recovery = 102.71%
 Ni 231.604† 75673.4 2.5394 mg/L 0.03023 2.5394 mg/L 0.03023 1.19%
 QC value within limits for Ni 231.604 Recovery = 101.58%
 Pb 220.353† 2568.9 0.50402 mg/L 0.005407 0.50402 mg/L 0.005407 1.07%
 QC value within limits for Pb 220.353 Recovery = 100.80%
 Sb 206.836† 628.0 0.52592 mg/L 0.003580 0.52592 mg/L 0.003580 0.68%
 QC value within limits for Sb 206.836 Recovery = 105.18%
 Se 196.026† 243.1 0.48928 mg/L 0.011734 0.48928 mg/L 0.011734 2.40%
 QC value within limits for Se 196.026 Recovery = 97.86%
 Tl 190.801 429.7 0.49298 mg/L 0.005739 0.49298 mg/L 0.005739 1.16%
 QC value within limits for Tl 190.801 Recovery = 98.60%
 V 292.402† 302322.4 2.4703 mg/L 0.02242 2.4703 mg/L 0.02242 0.91%
 QC value within limits for V 292.402 Recovery = 98.81%
 Zn 206.200† 54403.3 2.5537 mg/L 0.03057 2.5537 mg/L 0.03057 1.20%
 QC value within limits for Zn 206.200 Recovery = 102.15%
 Cd 226.502† 13625.1 0.24458 mg/L 0.001697 0.24458 mg/L 0.001697 0.69%
 QC value within limits for Cd 226.502 Recovery = 97.83%
 Ti 334.940† 272635.9 0.48881 mg/L 0.001498 0.48881 mg/L 0.001498 0.31%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 4886.5 24.200 mg/L 0.2098 24.200 mg/L 0.2098 0.87%
 QC value within limits for Ca 227.546 Recovery = 96.80%
 Na 589.592† 123301.9 25.354 mg/L 0.3457 25.354 mg/L 0.3457 1.36%
 QC value within limits for Na 589.592 Recovery = 101.42%
 K 766.490† 27399.3 26.053 mg/L 0.3486 26.053 mg/L 0.3486 1.34%
 QC value within limits for K 766.490 Recovery = 104.21%
 All analyte(s) passed QC.

Sequence No.: 40

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 8/30/2012 10:12:19 AM

Data Type: Reprocessed on 8/30/2012 2:00:01 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	1850083.2	97.483 %		1.5793			1.62%
Lu 261.542	1199075.9	97.75 %		1.570			1.61%
Ag 328.068†	386.8	0.00223 mg/L		0.000295	0.00223 mg/L	0.000295	13.25%
QC value within limits for Ag 328.068			Recovery =	Not calculated			
Al 308.215†	-116.4	-0.00574 mg/L		0.003661	-0.00574 mg/L	0.003661	63.76%
QC value within limits for Al 308.215			Recovery =	Not calculated			
As 188.979†	2.2	0.00260 mg/L		0.005944	0.00260 mg/L	0.005944	229.05%
QC value within limits for As 188.979			Recovery =	Not calculated			
Ba 233.527†	72.0	0.00084 mg/L		0.000195	0.00084 mg/L	0.000195	23.39%
QC value within limits for Ba 233.527			Recovery =	Not calculated			
Be 313.107†	57.0	0.00002 mg/L		0.000060	0.00002 mg/L	0.000060	260.06%
QC value within limits for Be 313.107			Recovery =	Not calculated			
Co 228.616†	2.6	0.00007 mg/L		0.000051	0.00007 mg/L	0.000051	70.86%
QC value within limits for Co 228.616			Recovery =	Not calculated			
Cr 267.716†	23.0	0.00033 mg/L		0.000460	0.00033 mg/L	0.000460	141.43%
QC value within limits for Cr 267.716			Recovery =	Not calculated			
Cu 324.752†	164.5	0.00074 mg/L		0.000140	0.00074 mg/L	0.000140	18.83%
QC value within limits for Cu 324.752			Recovery =	Not calculated			
Fe 273.955†	36.3	0.00150 mg/L		0.000635	0.00150 mg/L	0.000635	42.30%
QC value within limits for Fe 273.955			Recovery =	Not calculated			
Mg 279.077†	-26.6	-0.00152 mg/L		0.004925	-0.00152 mg/L	0.004925	324.86%
QC value within limits for Mg 279.077			Recovery =	Not calculated			
Mn 257.610†	169.3	0.00029 mg/L		0.000062	0.00029 mg/L	0.000062	21.39%
QC value within limits for Mn 257.610			Recovery =	Not calculated			
Ni 231.604†	6.1	0.00021 mg/L		0.000099	0.00021 mg/L	0.000099	48.03%
QC value within limits for Ni 231.604			Recovery =	Not calculated			

Pb 220.353† -2.9 -0.00056 mg/L 0.001031 -0.00056 mg/L 0.001031 184.66%
 QC value within limits for Pb 220.353 Recovery = Not calculated
 Sb 206.836† -2.4 -0.00205 mg/L 0.001656 -0.00205 mg/L 0.001656 80.90%
 QC value within limits for Sb 206.836 Recovery = Not calculated
 Se 196.026† 4.7 0.00932 mg/L 0.004104 0.00932 mg/L 0.004104 44.02%
 QC value within limits for Se 196.026 Recovery = Not calculated
 Tl 190.801 -1.2 -0.00139 mg/L 0.004174 -0.00139 mg/L 0.004174 300.46%
 QC value within limits for Tl 190.801 Recovery = Not calculated
 V 292.402† 98.2 0.00080 mg/L 0.000135 0.00080 mg/L 0.000135 16.85%
 QC value within limits for V 292.402 Recovery = Not calculated
 Zn 206.200† 10.6 0.00050 mg/L 0.000188 0.00050 mg/L 0.000188 37.84%
 QC value within limits for Zn 206.200 Recovery = Not calculated
 Cd 226.502† 9.3 0.00017 mg/L 0.000088 0.00017 mg/L 0.000088 53.23%
 QC value within limits for Cd 226.502 Recovery = Not calculated
 Ti 334.940† 86.1 0.00016 mg/L 0.000105 0.00016 mg/L 0.000105 67.52%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 15.8 0.08086 mg/L 0.094243 0.08086 mg/L 0.094243 116.55%
 QC value within limits for Ca 227.546 Recovery = Not calculated
 Na 589.592† 89.8 0.01847 mg/L 0.007122 0.01847 mg/L 0.007122 38.57%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490† 120.3 0.11440 mg/L 0.128391 0.11440 mg/L 0.128391 112.23%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 41

Sample ID: L1786-09CPDS-SL-MW-16A

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 61

Date Collected: 8/30/2012 10:16:01 AM

Data Type: Reprocessed on 8/30/2012 2:00:01 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09CPDS-SL-MW-16A

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1770731.2	93.302 %		0.6690			0.72%
Lu 261.542	1156369.9	94.27 %		0.702			0.74%
Ag 328.068†	194505.1	1.1234 mg/L		0.00761	1.1234 mg/L	0.00761	0.68%
Al 308.215†	183885.5	9.0382 mg/L		0.05199	9.0382 mg/L	0.05199	0.58%
As 188.979†	394.7	0.47883 mg/L		0.008818	0.47883 mg/L	0.008818	1.84%
Ba 233.527†	810689.9	9.4017 mg/L		0.11081	9.4017 mg/L	0.11081	1.18%
Be 313.107†	588277.4	0.23347 mg/L		0.003025	0.23347 mg/L	0.003025	1.30%
Co 228.616†	83363.0	2.3193 mg/L		0.01495	2.3193 mg/L	0.01495	0.64%
Cr 267.716†	64133.4	0.90698 mg/L		0.005683	0.90698 mg/L	0.005683	0.63%
Cu 324.752†	247133.9	1.1163 mg/L		0.00687	1.1163 mg/L	0.00687	0.62%
Fe 273.955†	115771.8	4.7888 mg/L		0.03268	4.7888 mg/L	0.03268	0.68%
Mg 279.077†	487083.1	27.792 mg/L		0.3271	27.792 mg/L	0.3271	1.18%
Mn 257.610†	1379801.5	2.3608 mg/L		0.02712	2.3608 mg/L	0.02712	1.15%
Ni 231.604†	69968.8	2.3482 mg/L		0.01920	2.3482 mg/L	0.01920	0.82%
Pb 220.353†	2370.4	0.46460 mg/L		0.004350	0.46460 mg/L	0.004350	0.94%
Sb 206.836†	550.4	0.45912 mg/L		0.013735	0.45912 mg/L	0.013735	2.99%
Se 196.026†	224.3	0.45121 mg/L		0.005262	0.45121 mg/L	0.005262	1.17%
Tl 190.801	395.4	0.45421 mg/L		0.005157	0.45421 mg/L	0.005157	1.14%
V 292.402†	275471.9	2.2516 mg/L		0.01443	2.2516 mg/L	0.01443	0.64%
Zn 206.200†	48797.2	2.2903 mg/L		0.01398	2.2903 mg/L	0.01398	0.61%
Cd 226.502†	12547.0	0.22519 mg/L		0.001642	0.22519 mg/L	0.001642	0.73%
Ti 334.940†	403.7	0.00057 mg/L		0.000138	0.00057 mg/L	0.000138	24.27%
Ca 227.546†	6463.4	32.371 mg/L		0.5070	32.371 mg/L	0.5070	1.57%
Na 589.592†	237341.1	48.803 mg/L		0.8757	48.803 mg/L	0.8757	1.79%
K 766.490†	26917.3	25.595 mg/L		0.4841	25.595 mg/L	0.4841	1.89%

Sequence No.: 42

Sample ID: L1786-10B-SL-MW-1

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 62

Date Collected: 8/30/2012 10:19:45 AM

Data Type: Reprocessed on 8/30/2012 2:00:02 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-10B-SL-MW-1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1786734.2	94.145	%	1.0473				1.11%
Lu 261.542	1165182.0	94.99	%	1.173				1.23%
Ag 328.068†	146.0	0.00076	mg/L	0.000880	0.00076	mg/L	0.000880	116.09%
Al 308.215†	1050.0	0.04515	mg/L	0.007235	0.04515	mg/L	0.007235	16.03%
As 188.979†	3.1	0.00468	mg/L	0.006202	0.00468	mg/L	0.006202	132.43%
Ba 233.527†	2951.0	0.03421	mg/L	0.000478	0.03421	mg/L	0.000478	1.40%
Be 313.107†	-53.1	-0.00002	mg/L	0.000041	-0.00002	mg/L	0.000041	218.78%
Co 228.616†	4.2	0.00011	mg/L	0.000346	0.00011	mg/L	0.000346	315.82%
Cr 267.716†	76.4	0.00135	mg/L	0.000267	0.00135	mg/L	0.000267	19.78%
Cu 324.752†	752.0	0.00341	mg/L	0.000189	0.00341	mg/L	0.000189	5.55%
Fe 273.955†	3184.4	0.13162	mg/L	0.003362	0.13162	mg/L	0.003362	2.55%
Mg 279.077†	84632.3	4.8294	mg/L	0.08689	4.8294	mg/L	0.08689	1.80%
Mn 257.610†	95910.3	0.16408	mg/L	0.002951	0.16408	mg/L	0.002951	1.80%
Ni 231.604†	25.6	0.00084	mg/L	0.000231	0.00084	mg/L	0.000231	27.58%
Pb 220.353†	-0.2	-0.00002	mg/L	0.001859	-0.00002	mg/L	0.001859	>999.9%
Sb 206.836†	5.8	0.00495	mg/L	0.001601	0.00495	mg/L	0.001601	32.32%
Se 196.026†	-0.6	-0.00108	mg/L	0.005337	-0.00108	mg/L	0.005337	495.95%
Tl 190.801	-0.3	0.00011	mg/L	0.001357	0.00011	mg/L	0.001357	>999.9%
V 292.402†	34.8	0.00029	mg/L	0.000735	0.00029	mg/L	0.000735	255.37%
Zn 206.200†	152.4	0.00722	mg/L	0.000219	0.00722	mg/L	0.000219	3.03%
Cd 226.502†	18.9	0.00025	mg/L	0.000106	0.00025	mg/L	0.000106	42.13%
Ti 334.940†	771.4	0.00181	mg/L	0.000577	0.00181	mg/L	0.000577	31.95%
Ca 227.546†	5937.4	30.447	mg/L	0.5799	30.447	mg/L	0.5799	1.90%
Na 589.592†	155095.9	31.892	mg/L	0.5642	31.892	mg/L	0.5642	1.77%
K 766.490†	1434.1	1.3637	mg/L	0.03616	1.3637	mg/L	0.03616	2.65%

Sequence No.: 43

Sample ID: L1786-10C-SL-MW-1

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 63

Date Collected: 8/30/2012 10:23:26 AM

Data Type: Reprocessed on 8/30/2012 2:00:03 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-10C-SL-MW-1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1793853.2	94.520	%	0.6070				0.64%
Lu 261.542	1170591.7	95.43	%	0.609				0.64%
Ag 328.068†	216.0	0.00120	mg/L	0.000600	0.00120	mg/L	0.000600	50.19%
Al 308.215†	-30.1	-0.00767	mg/L	0.000749	-0.00767	mg/L	0.000749	9.77%
As 188.979†	0.6	0.00174	mg/L	0.004759	0.00174	mg/L	0.004759	273.44%
Ba 233.527†	2714.9	0.03148	mg/L	0.000206	0.03148	mg/L	0.000206	0.65%
Be 313.107†	-31.4	-0.00001	mg/L	0.000019	-0.00001	mg/L	0.000019	144.17%
Co 228.616†	-2.4	-0.00007	mg/L	0.000167	-0.00007	mg/L	0.000167	248.06%
Cr 267.716†	52.7	0.00104	mg/L	0.000216	0.00104	mg/L	0.000216	20.76%
Cu 324.752†	446.0	0.00201	mg/L	0.000328	0.00201	mg/L	0.000328	16.29%
Fe 273.955†	475.0	0.01963	mg/L	0.005589	0.01963	mg/L	0.005589	28.47%
Mg 279.077†	81447.3	4.6476	mg/L	0.04184	4.6476	mg/L	0.04184	0.90%
Mn 257.610†	5834.9	0.00994	mg/L	0.000067	0.00994	mg/L	0.000067	0.67%
Ni 231.604†	-5.3	-0.00020	mg/L	0.000222	-0.00020	mg/L	0.000222	112.23%
Pb 220.353†	-8.4	-0.00164	mg/L	0.000635	-0.00164	mg/L	0.000635	38.68%
Sb 206.836†	5.8	0.00501	mg/L	0.002862	0.00501	mg/L	0.002862	57.15%
Se 196.026†	1.2	0.00235	mg/L	0.004897	0.00235	mg/L	0.004897	208.00%
Tl 190.801	-3.9	-0.00427	mg/L	0.001651	-0.00427	mg/L	0.001651	38.63%
V 292.402†	41.8	0.00034	mg/L	0.000087	0.00034	mg/L	0.000087	25.33%
Zn 206.200†	52.4	0.00246	mg/L	0.000029	0.00246	mg/L	0.000029	1.16%
Cd 226.502†	7.8	0.00006	mg/L	0.000143	0.00006	mg/L	0.000143	233.25%
Ti 334.940†	-269.9	-0.00007	mg/L	0.000075	-0.00007	mg/L	0.000075	115.21%
Ca 227.546†	5849.3	29.996	mg/L	0.3792	29.996	mg/L	0.3792	1.26%
Na 589.592†	154016.3	31.670	mg/L	0.4048	31.670	mg/L	0.4048	1.28%
K 766.490†	1458.5	1.3869	mg/L	0.03987	1.3869	mg/L	0.03987	2.87%

Sequence No.: 44

Sample ID: L1786-11B-SL-MW-2

Analyst:

Autosampler Location: 64

Date Collected: 8/30/2012 10:27:07 AM

Data Type: Reprocessed on 8/30/2012 2:00:03 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-11B-SL-MW-2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1777717.2	93.670	%	0.8620				0.92%
Lu 261.542	1157908.4	94.40	%	0.874				0.93%
Ag 328.068†	287.6	0.00160	mg/L	0.000685	0.00160	mg/L	0.000685	42.79%
Al 308.215†	4974.1	0.24052	mg/L	0.005016	0.24052	mg/L	0.005016	2.09%
As 188.979†	-0.2	0.00164	mg/L	0.001856	0.00164	mg/L	0.001856	113.10%
Ba 233.527†	2095.6	0.02430	mg/L	0.000258	0.02430	mg/L	0.000258	1.06%
Be 313.107†	-61.5	-0.00002	mg/L	0.000013	-0.00002	mg/L	0.000013	71.66%
Co 228.616†	41.3	0.00112	mg/L	0.000072	0.00112	mg/L	0.000072	6.41%
Cr 267.716†	8975.2	0.12702	mg/L	0.002126	0.12702	mg/L	0.002126	1.67%
Cu 324.752†	1203.2	0.00551	mg/L	0.000225	0.00551	mg/L	0.000225	4.09%
Fe 273.955†	21500.2	0.88864	mg/L	0.014395	0.88864	mg/L	0.014395	1.62%
Mg 279.077†	70284.6	4.0103	mg/L	0.05272	4.0103	mg/L	0.05272	1.31%
Mn 257.610†	49094.8	0.08397	mg/L	0.001107	0.08397	mg/L	0.001107	1.32%
Ni 231.604†	146.3	0.00489	mg/L	0.000274	0.00489	mg/L	0.000274	5.59%
Pb 220.353†	-8.8	-0.00171	mg/L	0.000731	-0.00171	mg/L	0.000731	42.88%
Sb 206.836†	4.9	0.00190	mg/L	0.002056	0.00190	mg/L	0.002056	108.06%
Se 196.026†	6.6	0.01346	mg/L	0.003760	0.01346	mg/L	0.003760	27.93%
Tl 190.801	-2.6	-0.00275	mg/L	0.002931	-0.00275	mg/L	0.002931	106.48%
V 292.402†	120.5	0.00130	mg/L	0.000430	0.00130	mg/L	0.000430	33.16%
Zn 206.200†	136.9	0.00673	mg/L	0.000542	0.00673	mg/L	0.000542	8.06%
Cd 226.502†	90.8	0.00151	mg/L	0.000073	0.00151	mg/L	0.000073	4.82%
Ti 334.940†	1675.2	0.00325	mg/L	0.000700	0.00325	mg/L	0.000700	21.56%
Ca 227.546†	3858.6	19.779	mg/L	0.1827	19.779	mg/L	0.1827	0.92%
Na 589.592†	95470.4	19.631	mg/L	0.1324	19.631	mg/L	0.1324	0.67%
K 766.490†	1953.9	1.8579	mg/L	0.06160	1.8579	mg/L	0.06160	3.32%

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Sequence No.: 45

Sample ID: L1786-11C-SL-MW-2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 65

Date Collected: 8/30/2012 10:30:48 AM

Data Type: Reprocessed on 8/30/2012 2:00:04 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-11C-SL-MW-2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1743351.4	91.859	%	1.0728				1.17%
Lu 261.542	1135532.9	92.57	%	1.103				1.19%
Ag 328.068†	217.3	0.00121	mg/L	0.000873	0.00121	mg/L	0.000873	72.10%
Al 308.215†	163.4	0.00392	mg/L	0.004386	0.00392	mg/L	0.004386	111.82%
As 188.979†	0.5	0.00126	mg/L	0.004018	0.00126	mg/L	0.004018	319.13%
Ba 233.527†	2031.8	0.02356	mg/L	0.000261	0.02356	mg/L	0.000261	1.11%
Be 313.107†	-102.3	-0.00004	mg/L	0.000041	-0.00004	mg/L	0.000041	99.01%
Co 228.616†	-2.8	-0.00008	mg/L	0.000099	-0.00008	mg/L	0.000099	126.26%
Cr 267.716†	50.6	0.00091	mg/L	0.000450	0.00091	mg/L	0.000450	49.37%
Cu 324.752†	520.3	0.00235	mg/L	0.000553	0.00235	mg/L	0.000553	23.55%
Fe 273.955†	321.1	0.01327	mg/L	0.000959	0.01327	mg/L	0.000959	7.23%
Mg 279.077†	68810.4	3.9265	mg/L	0.04034	3.9265	mg/L	0.04034	1.03%
Mn 257.610†	2465.8	0.00418	mg/L	0.000040	0.00418	mg/L	0.000040	0.96%
Ni 231.604†	41.0	0.00136	mg/L	0.000148	0.00136	mg/L	0.000148	10.83%
Pb 220.353†	-10.0	-0.00195	mg/L	0.001320	-0.00195	mg/L	0.001320	67.69%
Sb 206.836†	-0.6	-0.00056	mg/L	0.004197	-0.00056	mg/L	0.004197	752.54%
Se 196.026†	4.2	0.00827	mg/L	0.009369	0.00827	mg/L	0.009369	113.35%
Tl 190.801	-3.9	-0.00436	mg/L	0.005863	-0.00436	mg/L	0.005863	134.40%
V 292.402†	31.9	0.00026	mg/L	0.000335	0.00026	mg/L	0.000335	127.78%
Zn 206.200†	92.3	0.00432	mg/L	0.000348	0.00432	mg/L	0.000348	8.06%
Cd 226.502†	26.7	0.00043	mg/L	0.000142	0.00043	mg/L	0.000142	33.35%
Ti 334.940†	-158.2	-0.00002	mg/L	0.000088	-0.00002	mg/L	0.000088	359.84%
Ca 227.546†	3839.0	19.687	mg/L	0.2671	19.687	mg/L	0.2671	1.36%
Na 589.592†	97145.6	19.976	mg/L	0.0759	19.976	mg/L	0.0759	0.38%
K 766.490†	2091.3	1.9886	mg/L	0.07698	1.9886	mg/L	0.07698	3.87%

Sequence No.: 46
 Sample ID: L1786-12B-RB-02
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 66
 Date Collected: 8/30/2012 10:34:29 AM
 Data Type: Reprocessed on 8/30/2012 2:00:05 PM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: L1786-12B-RB-02

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1749532.3	92.185	%	1.0174				1.10%
Lu 261.542	1135548.8	92.58	%	1.034				1.12%
Ag 328.068†	163.6	0.00094	mg/L	0.000267	0.00094	mg/L	0.000267	28.40%
Al 308.215†	62.8	0.00301	mg/L	0.004511	0.00301	mg/L	0.004511	149.68%
As 188.979†	0.3	0.00038	mg/L	0.004530	0.00038	mg/L	0.004530	>999.9%
Ba 233.527†	21.5	0.00025	mg/L	0.000093	0.00025	mg/L	0.000093	37.30%
Be 313.107†	-68.9	-0.00003	mg/L	0.000008	-0.00003	mg/L	0.000008	29.79%
Co 228.616†	-1.4	-0.00004	mg/L	0.000149	-0.00004	mg/L	0.000149	382.58%
Cr 267.716†	55.7	0.00079	mg/L	0.000242	0.00079	mg/L	0.000242	30.57%
Cu 324.752†	433.0	0.00195	mg/L	0.000660	0.00195	mg/L	0.000660	33.76%
Fe 273.955†	296.8	0.01227	mg/L	0.000172	0.01227	mg/L	0.000172	1.40%
Mg 279.077†	312.0	0.01780	mg/L	0.002735	0.01780	mg/L	0.002735	15.36%
Mn 257.610†	339.9	0.00058	mg/L	0.000022	0.00058	mg/L	0.000022	3.74%
Ni 231.604†	0.1	0.00000	mg/L	0.000320	0.00000	mg/L	0.000320	>999.9%
Pb 220.353†	-3.2	-0.00063	mg/L	0.001199	-0.00063	mg/L	0.001199	190.80%
Sb 206.836†	3.1	0.00266	mg/L	0.002530	0.00266	mg/L	0.002530	95.22%
Se 196.026†	-1.5	-0.00300	mg/L	0.005621	-0.00300	mg/L	0.005621	187.05%
Tl 190.801	-2.2	-0.00261	mg/L	0.004125	-0.00261	mg/L	0.004125	157.87%
V 292.402†	30.2	0.00025	mg/L	0.000156	0.00025	mg/L	0.000156	62.88%
Zn 206.200†	513.8	0.02407	mg/L	0.000166	0.02407	mg/L	0.000166	0.69%
Cd 226.502†	4.4	0.00008	mg/L	0.000131	0.00008	mg/L	0.000131	170.79%
Ti 334.940†	137.3	0.00025	mg/L	0.000048	0.00025	mg/L	0.000048	19.03%
Ca 227.546†	75.7	0.38820	mg/L	0.046271	0.38820	mg/L	0.046271	11.92%
Na 589.592†	3390.4	0.69715	mg/L	0.005515	0.69715	mg/L	0.005515	0.79%
K 766.490†	110.8	0.10540	mg/L	0.029972	0.10540	mg/L	0.029972	28.44%

Sequence No.: 47
 Sample ID: L1786-12C-RB-02
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 67
 Date Collected: 8/30/2012 10:38:10 AM
 Data Type: Reprocessed on 8/30/2012 2:00:05 PM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: L1786-12C-RB-02

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1802075.4	94.953	%	1.0099				1.06%
Lu 261.542	1170559.9	95.43	%	1.112				1.17%
Ag 328.068†	208.8	0.00120	mg/L	0.000879	0.00120	mg/L	0.000879	73.19%
Al 308.215†	-3.7	-0.00022	mg/L	0.004534	-0.00022	mg/L	0.004534	>999.9%
As 188.979†	-1.1	-0.00125	mg/L	0.007904	-0.00125	mg/L	0.007904	630.11%
Ba 233.527†	99.7	0.00116	mg/L	0.000075	0.00116	mg/L	0.000075	6.50%
Be 313.107†	-60.3	-0.00002	mg/L	0.000005	-0.00002	mg/L	0.000005	23.57%
Co 228.616†	-3.4	-0.00010	mg/L	0.000107	-0.00010	mg/L	0.000107	111.68%
Cr 267.716†	187.4	0.00265	mg/L	0.000212	0.00265	mg/L	0.000212	8.00%
Cu 324.752†	395.9	0.00179	mg/L	0.000457	0.00179	mg/L	0.000457	25.57%
Fe 273.955†	246.9	0.01021	mg/L	0.000609	0.01021	mg/L	0.000609	5.96%
Mg 279.077†	36.3	0.00207	mg/L	0.001953	0.00207	mg/L	0.001953	94.47%
Mn 257.610†	2248.9	0.00385	mg/L	0.000124	0.00385	mg/L	0.000124	3.21%
Ni 231.604†	10.6	0.00036	mg/L	0.000204	0.00036	mg/L	0.000204	57.29%
Pb 220.353†	-1.9	-0.00038	mg/L	0.002010	-0.00038	mg/L	0.002010	526.62%
Sb 206.836†	1.3	0.00108	mg/L	0.003734	0.00108	mg/L	0.003734	346.63%
Se 196.026†	-4.1	-0.00813	mg/L	0.004818	-0.00813	mg/L	0.004818	59.24%
Tl 190.801	-4.9	-0.00592	mg/L	0.004865	-0.00592	mg/L	0.004865	82.22%
V 292.402†	-7.4	-0.00006	mg/L	0.000460	-0.00006	mg/L	0.000460	833.72%
Zn 206.200†	32.0	0.00151	mg/L	0.000028	0.00151	mg/L	0.000028	1.84%

Cd 226.502†	3.1	0.00005 mg/L	0.000117	0.00005 mg/L	0.000117	212.39%
Ti 334.940†	216.1	0.00039 mg/L	0.000045	0.00039 mg/L	0.000045	11.55%
Ca 227.546†	28.2	0.14471 mg/L	0.092507	0.14471 mg/L	0.092507	63.93%
Na 589.592†	1160.3	0.23859 mg/L	0.005263	0.23859 mg/L	0.005263	2.21%
K 766.490†	22.4	0.02133 mg/L	0.055991	0.02133 mg/L	0.055991	262.44%

Sequence No.: 48

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 8/30/2012 10:41:51 AM

Data Type: Reprocessed on 8/30/2012 2:00:06 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	1727638.9	91.031 %	1.3292			1.46%
Lu 261.542	1128767.7	92.02 %	1.333			1.45%
Ag 328.068†	207987.6	1.2014 mg/L	0.02997	1.2014 mg/L	0.02997	2.49%
QC value within limits for Ag		328.068 Recovery = 96.12%				
Al 308.215†	202341.1	9.9472 mg/L	0.15784	9.9472 mg/L	0.15784	1.59%
QC value within limits for Al		308.215 Recovery = 99.47%				
As 188.979†	411.5	0.49920 mg/L	0.010716	0.49920 mg/L	0.010716	2.15%
QC value within limits for As		188.979 Recovery = 99.84%				
Ba 233.527†	884858.7	10.262 mg/L	0.0638	10.262 mg/L	0.0638	0.62%
QC value within limits for Ba		233.527 Recovery = 102.62%				
Be 313.107†	627259.1	0.24984 mg/L	0.001390	0.24984 mg/L	0.001390	0.56%
QC value within limits for Be		313.107 Recovery = 99.93%				
Co 228.616†	93577.8	2.6024 mg/L	0.04446	2.6024 mg/L	0.04446	1.71%
QC value within limits for Co		228.616 Recovery = 104.09%				
Cr 267.716†	69666.4	0.98514 mg/L	0.015435	0.98514 mg/L	0.015435	1.57%
QC value within limits for Cr		267.716 Recovery = 98.51%				
Cu 324.752†	268263.3	1.2117 mg/L	0.01973	1.2117 mg/L	0.01973	1.63%
QC value within limits for Cu		324.752 Recovery = 96.94%				
Fe 273.955†	123378.2	5.1035 mg/L	0.08086	5.1035 mg/L	0.08086	1.58%
QC value within limits for Fe		273.955 Recovery = 102.07%				
Mg 279.077†	445262.3	25.406 mg/L	0.1645	25.406 mg/L	0.1645	0.65%
QC value within limits for Mg		279.077 Recovery = 101.62%				
Mn 257.610†	1493362.5	2.5552 mg/L	0.01320	2.5552 mg/L	0.01320	0.52%
QC value within limits for Mn		257.610 Recovery = 102.21%				
Ni 231.604†	76195.5	2.5569 mg/L	0.04179	2.5569 mg/L	0.04179	1.63%
QC value within limits for Ni		231.604 Recovery = 102.28%				
Pb 220.353†	2571.1	0.50445 mg/L	0.006523	0.50445 mg/L	0.006523	1.29%
QC value within limits for Pb		220.353 Recovery = 100.89%				
Sb 206.836†	634.9	0.53180 mg/L	0.009252	0.53180 mg/L	0.009252	1.74%
QC value within limits for Sb		206.836 Recovery = 106.36%				
Se 196.026†	240.8	0.48470 mg/L	0.008349	0.48470 mg/L	0.008349	1.72%
QC value within limits for Se		196.026 Recovery = 96.94%				
Tl 190.801	416.2	0.47653 mg/L	0.005265	0.47653 mg/L	0.005265	1.10%
QC value within limits for Tl		190.801 Recovery = 95.31%				
V 292.402†	304531.8	2.4884 mg/L	0.03961	2.4884 mg/L	0.03961	1.59%
QC value within limits for V		292.402 Recovery = 99.54%				
Zn 206.200†	54553.2	2.5608 mg/L	0.04234	2.5608 mg/L	0.04234	1.65%
QC value within limits for Zn		206.200 Recovery = 102.43%				
Cd 226.502†	13679.8	0.24556 mg/L	0.004242	0.24556 mg/L	0.004242	1.73%
QC value within limits for Cd		226.502 Recovery = 98.22%				
Ti 334.940†	271031.8	0.48594 mg/L	0.003843	0.48594 mg/L	0.003843	0.79%
QC value within limits for Ti		334.940 Recovery = Not calculated				
Ca 227.546†	4917.9	24.355 mg/L	0.4232	24.355 mg/L	0.4232	1.74%
QC value within limits for Ca		227.546 Recovery = 97.42%				
Na 589.592†	124923.3	25.687 mg/L	0.3373	25.687 mg/L	0.3373	1.31%
QC value within limits for Na		589.592 Recovery = 102.75%				
K 766.490†	27778.3	26.414 mg/L	0.4632	26.414 mg/L	0.4632	1.75%
QC value within limits for K		766.490 Recovery = 105.66%				

All analyte(s) passed QC.

Sequence No.: 49

Sample ID: CCB

Autosampler Location: 4

Date Collected: 8/30/2012 10:45:35 AM

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

Data Type: Reprocessed on 8/30/2012 2:00:07 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	1819602.2	95.877 %		0.9641			1.01%
Lu 261.542	1179992.3	96.20 %		1.014			1.05%
Ag 328.068†	371.1	0.00214 mg/L		0.000550	0.00214 mg/L	0.000550	25.72%
QC value within limits for Ag 328.068		Recovery =	Not calculated				
Al 308.215†	-102.3	-0.00506 mg/L		0.000697	-0.00506 mg/L	0.000697	13.79%
QC value within limits for Al 308.215		Recovery =	Not calculated				
As 188.979†	-1.0	-0.00115 mg/L		0.002194	-0.00115 mg/L	0.002194	190.79%
QC value within limits for As 188.979		Recovery =	Not calculated				
Ba 233.527†	55.8	0.00065 mg/L		0.000254	0.00065 mg/L	0.000254	39.28%
QC value within limits for Ba 233.527		Recovery =	Not calculated				
Be 313.107†	-5.1	0.00000 mg/L		0.000016	0.00000 mg/L	0.000016	>999.9%
QC value within limits for Be 313.107		Recovery =	Not calculated				
Co 228.616†	9.8	0.00027 mg/L		0.000160	0.00027 mg/L	0.000160	58.37%
QC value within limits for Co 228.616		Recovery =	Not calculated				
Cr 267.716†	7.6	0.00011 mg/L		0.000301	0.00011 mg/L	0.000301	279.42%
QC value within limits for Cr 267.716		Recovery =	Not calculated				
Cu 324.752†	259.6	0.00117 mg/L		0.000422	0.00117 mg/L	0.000422	36.02%
QC value within limits for Cu 324.752		Recovery =	Not calculated				
Fe 273.955†	28.5	0.00118 mg/L		0.000402	0.00118 mg/L	0.000402	34.20%
QC value within limits for Fe 273.955		Recovery =	Not calculated				
Mg 279.077†	-35.1	-0.00200 mg/L		0.002603	-0.00200 mg/L	0.002603	129.99%
QC value within limits for Mg 279.077		Recovery =	Not calculated				
Mn 257.610†	107.6	0.00018 mg/L		0.000064	0.00018 mg/L	0.000064	34.82%
QC value within limits for Mn 257.610		Recovery =	Not calculated				
Ni 231.604†	2.3	0.00008 mg/L		0.000128	0.00008 mg/L	0.000128	168.90%
QC value within limits for Ni 231.604		Recovery =	Not calculated				
Pb 220.353†	-8.0	-0.00157 mg/L		0.001181	-0.00157 mg/L	0.001181	75.05%
QC value within limits for Pb 220.353		Recovery =	Not calculated				
Sb 206.836†	1.9	0.00165 mg/L		0.001107	0.00165 mg/L	0.001107	66.88%
QC value within limits for Sb 206.836		Recovery =	Not calculated				
Se 196.026†	-2.8	-0.00560 mg/L		0.009597	-0.00560 mg/L	0.009597	171.52%
QC value within limits for Se 196.026		Recovery =	Not calculated				
Tl 190.801	-1.1	-0.00138 mg/L		0.002251	-0.00138 mg/L	0.002251	163.52%
QC value within limits for Tl 190.801		Recovery =	Not calculated				
V 292.402†	30.9	0.00025 mg/L		0.000272	0.00025 mg/L	0.000272	108.20%
QC value within limits for V 292.402		Recovery =	Not calculated				
Zn 206.200†	7.0	0.00033 mg/L		0.000229	0.00033 mg/L	0.000229	69.70%
QC value within limits for Zn 206.200		Recovery =	Not calculated				
Cd 226.502†	4.9	0.00009 mg/L		0.000078	0.00009 mg/L	0.000078	88.10%
QC value within limits for Cd 226.502		Recovery =	Not calculated				
Ti 334.940†	133.3	0.00024 mg/L		0.000093	0.00024 mg/L	0.000093	38.67%
QC value within limits for Ti 334.940		Recovery =	Not calculated				
Ca 227.546†	21.8	0.11170 mg/L		0.026129	0.11170 mg/L	0.026129	23.39%
QC value within limits for Ca 227.546		Recovery =	Not calculated				
Na 589.592†	-58.0	-0.01193 mg/L		0.011413	-0.01193 mg/L	0.011413	95.66%
QC value within limits for Na 589.592		Recovery =	Not calculated				
K 766.490†	11.4	0.01080 mg/L		0.114813	0.01080 mg/L	0.114813	>999.9%
QC value within limits for K 766.490		Recovery =	Not calculated				

All analyte(s) passed QC.

Sequence No.: 50
 Sample ID: MB-67888-PBW
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 68
 Date Collected: 8/30/2012 10:49:17 AM
 Data Type: Reprocessed on 8/30/2012 2:00:08 PM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB-67888-PBW

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
---------	--------------------------	-------------	--------------	----------	--------------------	----------	-----

=====
Analysis BegunLogged In Analyst: mitFIMS2
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: AS-90Sample Information File: C:\data-AA\mitFIMS2\Sample Information\0827A.sif
Batch ID: Null
Results Data Set: HG12082702
Results Library: C:\data-AA\mitFIMS2\Results\Results.mdb=====
Sequence No.: 1
Sample ID: S0
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 8/27/2012 1:46:59 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:-----
Replicate Data: S0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0004	0.0026	0.0004	13:47:58	Yes
2		[0.00]	0.0003	0.0016	0.0003	13:48:38	Yes
Mean:		[0.00]	0.0004				
SD:		0.00	0.0000				
%RSD:		0.00	5.55				

Auto-zero performed.

=====
Sequence No.: 2
Sample ID: S0.20
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 2
Date Collected: 8/27/2012 1:48:40 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:-----
Replicate Data: S0.20

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0021	0.0125	0.0024	13:49:37	Yes
2		[0.2]	0.0020	0.0108	0.0023	13:50:17	Yes
Mean:		[0.2]	0.0020				
SD:		0.0	0.0001				
%RSD:		0.0	4.22				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01005 Intercept: 0.00000

=====
Sequence No.: 3
Sample ID: S1.0
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 3
Date Collected: 8/27/2012 1:50:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:-----
Replicate Data: S1.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0105	0.0543	0.0108	13:51:17	Yes
2		[1]	0.0103	0.0537	0.0107	13:51:57	Yes
Mean:		[1]	0.0104				
SD:		0	0.0001				
%RSD:		0	0.86				

Standard number 2 applied. [1]
Correlation Coef.: 0.999935 Slope: 0.01038 Intercept: 0.00000

=====
Sequence No.: 4
Sample ID: S2.0
Autosampler Location: 4
Date Collected: 8/27/2012 1:51:59 PM

Analyst:
Initial Sample Wt:
Dilution:

Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0201	0.1073	0.0204	13:52:57	Yes
2		[2]	0.0200	0.1062	0.0203	13:53:37	Yes
Mean:		[2]	0.0200				
SD:		0	0.0001				
%RSD:		0	0.31				

Standard number 3 applied. [2]
Correlation Coef.: 0.999657 Slope: 0.01009 Intercept: 0.00000

=====

Sequence No.: 5
Sample ID: S5.0
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 8/27/2012 1:53:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0500	0.2510	0.0504	13:54:37	Yes
2		[5]	0.0502	0.2530	0.0506	13:55:17	Yes
Mean:		[5]	0.0501				
SD:		0	0.0001				
%RSD:		0	0.28				

Standard number 4 applied. [5]
Correlation Coef.: 0.999950 Slope: 0.01003 Intercept: 0.00000

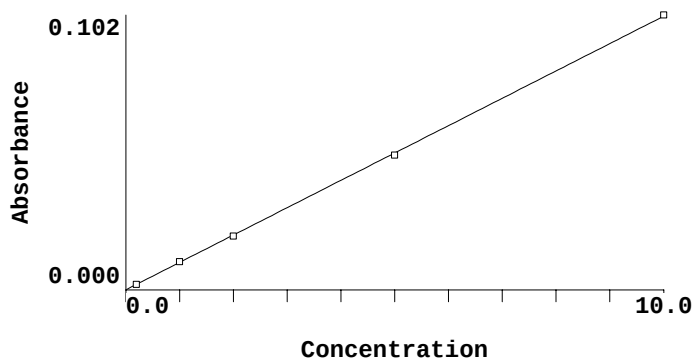
=====

Sequence No.: 6
Sample ID: S10.0
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 8/27/2012 1:55:19 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.1019	0.5198	0.1023	13:56:17	Yes
2		[10]	0.1030	0.5157	0.1034	13:56:56	Yes
Mean:		[10]	0.1025				
SD:		0	0.0007				
%RSD:		0	0.73				

Standard number 5 applied. [10]
Correlation Coef.: 0.999910 Slope: 0.01020 Intercept: 0.00000



	Mean Signal	Entered Conc.	Calculated Conc.	Standard Deviation	%RSD
ID	(Abs)	ug/L	ug/L		
S0	0.0000	0	0.000	0.00	5.6
S0.20	0.0020	0.2	0.197	0.00	4.2
S1.0	0.0104	1.0	1.019	0.00	0.9
S2.0	0.0200	2.0	1.964	0.00	0.3
S5.0	0.0501	5.0	4.913	0.00	0.3
S10.0	0.1025	10.0	10.048	0.00	0.7
Correlation Coef.: 0.999910 Slope: 0.01020 Intercept: 0.00000					

```

Sequence No.: 7
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 7
Date Collected: 8/27/2012 1:56:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

```

Replicate Data: ICV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.797	4.797	0.0489	0.2451	0.0493	13:57:56	Yes
2	4.798	4.798	0.0489	0.2465	0.0493	13:58:36	Yes
Mean:	4.798	4.798	0.0489				
SD:	0.000	0.000	0.0000				
%RSD:	0.005	0.005	0.01				

QC value within limits for Hg 253.7 Recovery = 95.95%
All analyte(s) passed QC.

```

Sequence No.: 8
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 8/27/2012 1:58:38 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

```

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0012	0.0004	13:59:38	Yes
2	0.003	0.003	0.0000	0.0013	0.0004	14:00:18	Yes
Mean:	0.002	0.002	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	60.85	60.85	60.85				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

```

Sequence No.: 9
Sample ID: MB-67823
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 17
Date Collected: 8/27/2012 2:00:20 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

```

Replicate Data: MB-67823

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	0.0015	0.0003	14:01:18	Yes
2	-0.003	-0.003	-0.0000	0.0009	0.0003	14:01:58	Yes
Mean:	-0.003	-0.003	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	2.689	2.689	2.69				

```

Sequence No.: 10
Sample ID: LCS-67823
Analyst:
Initial Sample Wt:
Autosampler Location: 18
Date Collected: 8/27/2012 2:02:00 PM
Data Type: Original
Initial Sample Vol:

```

Dilution:

Sample Prep Vol:

Replicate Data: LCS-67823

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.056	5.056	0.0516	0.2661	0.0519	14:02:58	Yes
2	5.078	5.078	0.0518	0.2613	0.0521	14:03:37	Yes
Mean:	5.067	5.067	0.0517				
SD:	0.016	0.016	0.0002				
%RSD:	0.314	0.314	0.31				

=====

Sequence No.: 11
Sample ID: L1736-03A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 19
Date Collected: 8/27/2012 2:03:39 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1736-03A

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0001	0.0018	0.0004	14:04:37	Yes
2	0.005	0.005	0.0001	0.0012	0.0004	14:05:16	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	1.590	1.590	1.59				

=====

Sequence No.: 12
Sample ID: L1736-03ADUP
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 8/27/2012 2:05:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1736-03ADUP

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0014	0.0004	14:06:15	Yes
2	0.000	0.000	-0.0000	0.0010	0.0004	14:06:56	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	319.9	319.9	319.88				

=====

Sequence No.: 13
Sample ID: L1736-03AMS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 8/27/2012 2:06:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1736-03AMS

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.815	4.815	0.0491	0.2505	0.0495	14:07:55	Yes
2	4.886	4.886	0.0498	0.2520	0.0502	14:08:35	Yes
Mean:	4.850	4.850	0.0495				
SD:	0.050	0.050	0.0005				
%RSD:	1.025	1.025	1.02				

=====

Sequence No.: 14
Sample ID: L1736-04A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 22
Date Collected: 8/27/2012 2:08:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1736-04A

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.006	-0.006	-0.0001	0.0003	0.0003	14:09:35	Yes
2	-0.002	-0.002	-0.0000	0.0011	0.0003	14:10:14	Yes
Mean:	-0.004	-0.004	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	68.67	68.67	68.67				

Sequence No.: 15

Sample ID: L1785-01D

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 23

Date Collected: 8/27/2012 2:10:16 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1785-01D

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.009	-0.009	-0.0001	0.0010	0.0003	14:11:14	Yes
2	-0.009	-0.009	-0.0001	0.0007	0.0003	14:11:54	Yes
Mean:	-0.009	-0.009	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	1.175	1.175	1.18				

Sequence No.: 16

Sample ID: L1786-01B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 24

Date Collected: 8/27/2012 2:11:56 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-01B

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.008	-0.008	-0.0001	0.0007	0.0003	14:12:53	Yes
2	-0.005	-0.005	-0.0000	0.0011	0.0003	14:13:33	Yes
Mean:	-0.006	-0.006	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	39.67	39.67	39.67				

Sequence No.: 17

Sample ID: L1786-02B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 25

Date Collected: 8/27/2012 2:13:35 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-02B

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	-0.0000	0.0014	0.0003	14:14:33	Yes
2	-0.005	-0.005	-0.0000	0.0007	0.0003	14:15:13	Yes
Mean:	-0.003	-0.003	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	79.64	79.64	79.64				

Sequence No.: 18

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 8/27/2012 2:15:15 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
--------	-----------------	--------------	----------------	-----------	-------------	------	-------------

1	4.923	4.923	0.0502	0.2530	0.0506	14:16:14	Yes
2	4.996	4.996	0.0510	0.2531	0.0513	14:16:53	Yes
Mean:	4.959	4.959	0.0506				
SD:	0.051	0.051	0.0005				
%RSD:	1.038	1.038	1.04				

QC value within limits for Hg 253.7 Recovery = 99.19%
All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 8/27/2012 2:16:55 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl	SampleConc	StdConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.004	0.004	0.0000	0.0018	0.0004	14:17:55	Yes
2	0.006	0.006	0.0001	0.0015	0.0004	14:18:35	Yes
Mean:	0.005	0.005	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	34.48	34.48	34.48				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 20

Sample ID: L1786-03B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 26

Date Collected: 8/27/2012 2:18:37 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-03B

Repl	SampleConc	StdConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.001	0.001	0.0000	0.0013	0.0004	14:19:37	Yes
2	0.001	0.001	0.0000	0.0013	0.0004	14:20:17	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	1.691	1.691	1.69				

Sequence No.: 21

Sample ID: L1786-04B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 27

Date Collected: 8/27/2012 2:20:18 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-04B

Repl	SampleConc	StdConc	Blncorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.041	0.041	0.0004	0.0037	0.0008	14:21:16	Yes
2	0.044	0.044	0.0005	0.0043	0.0008	14:21:56	Yes
Mean:	0.043	0.043	0.0004				
SD:	0.002	0.002	0.0000				
%RSD:	4.585	4.585	4.58				

Sequence No.: 22

Sample ID: L1786-07B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 28

Date Collected: 8/27/2012 2:21:58 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-07B

Repl	SampleConc	StdConc	Blncorr	Peak	Peak	Time	Peak
------	------------	---------	---------	------	------	------	------

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.106	0.106	0.0011	0.0072	0.0014	14:22:56	Yes
2	0.104	0.104	0.0011	0.0065	0.0014	14:23:35	Yes
Mean:	0.105	0.105	0.0011				
SD:	0.001	0.001	0.0000				
%RSD:	1.261	1.261	1.26				

Sequence No.: 23
Sample ID: L1786-08B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 8/27/2012 2:23:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1786-08B

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.005	0.005	0.0000	0.0016	0.0004	14:24:35	Yes
2	0.004	0.004	0.0000	0.0010	0.0004	14:25:15	Yes
Mean:	0.004	0.004	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	9.875	9.875	9.88				

Sequence No.: 24
Sample ID: L1786-09B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 8/27/2012 2:25:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1786-09B

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.006	0.006	0.0001	0.0016	0.0004	14:26:14	Yes
2	0.002	0.002	0.0000	0.0015	0.0004	14:26:54	Yes
Mean:	0.004	0.004	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	61.62	61.62	61.62				

Sequence No.: 25
Sample ID: L1786-09BDUP
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 8/27/2012 2:26:56 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1786-09BDUP

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.002	-0.002	-0.0000	0.0013	0.0003	14:27:53	Yes
2	-0.002	-0.002	-0.0000	0.0016	0.0003	14:28:33	Yes
Mean:	-0.002	-0.002	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	20.65	20.65	20.65				

Sequence No.: 26
Sample ID: L1786-09BMS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 8/27/2012 2:28:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1786-09BMS

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.037	5.037	0.0514	0.2602	0.0517	14:29:36	Yes
2	5.131	5.131	0.0523	0.2639	0.0527	14:30:16	Yes

Mean: 5.084 5.084 0.0519
SD: 0.067 0.067 0.0007
%RSD: 1.311 1.311 1.31

Sequence No.: 27

Sample ID: L1786-10B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 33

Date Collected: 8/27/2012 2:30:18 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-10B

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0001	0.0013	0.0004	14:31:16	Yes
2	0.008	0.008	0.0001	0.0016	0.0004	14:31:55	Yes
Mean:	0.007	0.007	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	34.71	34.71	34.71				

Sequence No.: 28

Sample ID: L1786-11B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 34

Date Collected: 8/27/2012 2:31:57 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-11B

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.026	0.026	0.0003	0.0033	0.0006	14:32:54	Yes
2	0.021	0.021	0.0002	0.0025	0.0006	14:33:35	Yes
Mean:	0.023	0.023	0.0002				
SD:	0.004	0.004	0.0000				
%RSD:	15.54	15.54	15.54				

Sequence No.: 29

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 8/27/2012 2:33:36 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.990	4.990	0.0509	0.2557	0.0512	14:34:37	Yes
2	4.981	4.981	0.0508	0.2559	0.0512	14:35:17	Yes
Mean:	4.986	4.986	0.0508				
SD:	0.006	0.006	0.0001				
%RSD:	0.130	0.130	0.13				

QC value within limits for Hg 253.7 Recovery = 99.71%
All analyte(s) passed QC.

Sequence No.: 30

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 8/27/2012 2:35:19 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.004	0.004	0.0000	0.0019	0.0004	14:36:19	Yes
2	0.003	0.003	0.0000	0.0019	0.0004	14:36:59	Yes
Mean:	0.004	0.004	0.0000				

SD: 0.001 0.001 0.0000

%RSD: 31.56 31.56 31.56

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 31

Sample ID: L1786-12B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 35

Date Collected: 8/27/2012 2:37:01 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-12B

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.007	-0.007	-0.0001	0.0014	0.0003	14:37:59	Yes
2	-0.006	-0.006	-0.0001	0.0012	0.0003	14:38:39	Yes
Mean:	-0.006	-0.006	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	15.12	15.12	15.12				

Sequence No.: 32

Sample ID: L1798-01B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 36

Date Collected: 8/27/2012 2:38:41 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1798-01B

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.001	-0.001	-0.0000	0.0017	0.0003	14:39:39	Yes
2	-0.003	-0.003	-0.0000	0.0008	0.0003	14:40:19	Yes
Mean:	-0.002	-0.002	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	64.87	64.87	64.87				

Sequence No.: 33

Sample ID: L1798-02B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 8/27/2012 2:40:20 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1798-02B

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0001	0.0010	0.0002	14:41:18	Yes
2	-0.012	-0.012	-0.0001	0.0009	0.0002	14:41:58	Yes
Mean:	-0.012	-0.012	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	1.729	1.729	1.73				

Sequence No.: 34

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 8/27/2012 2:42:00 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.023	5.023	0.0512	0.2586	0.0516	14:42:59	Yes
2	5.005	5.005	0.0510	0.2574	0.0514	14:43:39	Yes
Mean:	5.014	5.014	0.0511				
SD:	0.012	0.012	0.0001				

%RSD: 0.247 0.247 0.25

QC value within limits for Hg 253.7 Recovery = 100.28%

All analyte(s) passed QC.

=====

Sequence No.: 35

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 8/27/2012 2:43:41 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.009	0.009	0.0001	0.0033	0.0004	14:44:41	Yes
2	0.006	0.006	0.0001	0.0018	0.0004	14:45:21	Yes
Mean:	0.007	0.007	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	29.05	29.05	29.05				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Prep Start Date: 8/24/2012 2:00:00 P

Prep End Date: 8/24/2012 4:00:00 P

Prep Batch ID: 67823 67864

QC Matrix: N/A

QC Matrix Lot: N/A

Filter?: N/A

Filter Lot: N/A

Conc H2SO4 3110100

Conc H2SO4 (mL): 5.0

Conc HNO3 1112012

Conc HNO3 (mL): 2.5

5% KMnO4 IR12082305

5% KMnO4 (mL): 15.0

5% K2S2O8 IR12082304

5% K2S2O8 (mL): 8.0

Digestion Start Time 1: 08/24/2012 14:00

Digestion End Time 1: 08/24/2012 16:00

Block Temp (C): 97

Therm ID1: MT-47

Corr Fac-3

Prep Code: SW7470A_PR

Technician: David T Camara

Prep Type: 7470A/METHOD

Prep Factor Units:

mL / mL

Mitkem Sample ID	Client Samp ID	Final L/g	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	HOT BLOCK
S0		100	--	--	--	--			08/24/12	DTC	HgLab	2	☐	HB-A
S0.2		100	--	--	--	--			08/24/12	DTC	HgLab	2	☐	HB-A
40 uL III120823A														
S1.0		100	--	--	--	--			08/24/12	DTC	HgLab	2	☐	HB-A
200 uL III120823A														
S2.0		100	--	--	--	--			08/24/12	DTC	HgLab	2	☐	HB-A
400 uL III120823A														
S5.0		100	--	--	--	--			08/24/12	DTC	HgLab	2	☐	HB-A
1000 uL III120823A														
S10.0		100	--	--	--	--			08/24/12	DTC	HgLab	2	☐	HB-A
2000 uL III120823A														
ICV		100	--	--	--	--			08/24/12	DTC	HgLab	2	☐	HB-A
1000 uL III120731A														
ICB		100	--	--	--	--			08/24/12	DTC	HgLab	2	☐	HB-A
CCV		100	--	--	--	--			08/24/12	DTC	HgLab	2	☐	HB-A
1000 uL III120731A														
CCB		100	--	--	--	--			08/24/12	DTC	HgLab	2	☐	HB-A
MB-67823		100	--	--	--	--			08/24/12	DTC	HgLab	2	☐	HB-A
LCS-67823		100	--	--	--	--			08/24/12	DTC	HgLab	2	☐	HB-A
1000 uL III120731B														
L1736-03A	ET01 COMPOSITE	A	100	100	--	--	09/03/12	01	08/24/12	DTC	HgLab	2	☐	HB-A
L1736-03ADUP	ET01 COMPOSITE	A	100	100	--	--	09/03/12	01	08/24/12	DTC	HgLab	2	☐	HB-A
L1736-03AMS	ET01 COMPOSITE	A	100	100	--	--	09/03/12	01	08/24/12	DTC	HgLab	2	☐	HB-A
1000 uL III120731B														
L1736-04A	ET01-D	A	100	100	--	--	09/03/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
L1785-01D	WETWELL	A	100	100	--	--	09/06/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
L1786-01B	SL-MW-23D	A	100	100	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-02B	SL-MW-73D	A	100	100	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-03B	SL-MW-23S	A	100	100	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														

Logbook ID: 100.0128 -06/12

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Friday, August 24, 2012 15:47

Page 02 of 02

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

Prep Start Date: 8/24/2012 2:00:00 P

Prep End Date: 8/24/2012 4:00:00 P

Prep Batch ID: 67823-67864

Prep Type: 7470A/METHOD

Prep Factor Units:
mL / mL

Technician: David T Camara

QC Matrix: N/A
QC Matrix Lot: N/A5% KMnO4 IR12082305
5% KMnO4 (mL): 15.0Reagent 5 Lot: N/A
Reagent 5 (mL): N/AFilter?: N/A
Filter Lot: N/A5% K2S2O8 IR12082304
5% K2S2O8 (mL): 8.0Reagent 6 Lot: N/A
Reagent 6 (mL): N/ADigestion Start Time 1: 08/24/2012 14:00
Digestion End Time 1: 08/24/2012 16:00Digestion Start Time 2: N/A
Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-47
Corr Fac-3

Mitkem Sample ID	Client Samp ID	Final L/g	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11 <2	HOT BLOCK
L1786-04B	SL-MW-13	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-07B	SL-MW-12	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-08B	SL-MW-14	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-09B	SL-MW-16	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-09BDUP	SL-MW-16	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
L1786-09BMS	SL-MW-16	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
1000 uL III20731B														
L1786-10B	SL-MW-1	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-11B	SL-MW-2	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-12B	RB-02	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1798-01B	EFF-082212	A 100	--	--	--	--	09/11/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
See SEL list														
L1798-02B	INF-082212	A 100	--	--	--	--	09/11/12	01	08/24/12	DTC	HgLab	2	☐	HB-C
See SEL list														

David T Camara
Analyst ReviewedHZA
Manager Reviewed8/24/12
Date

12C 8/24/12

Prep Start Date: 8/28/2012 3:00:00 P
Prep End Date: 8/28/2012 5:00:00 P
Prep Batch ID: 67871

Prep Code: SW7470A_PR
Technician: David T Camara

Prep Type: 7470A/METHOD
Prep Factor Units: mL / mL

QC Matrix: N/A
QC Matrix Lot: N/A
Filter?: N/A
Filter Lot: N/A

Conc H2SO4 3110100
Conc H2SO4 (mL): 5.0
Conc HNO3 1112012
Conc HNO3 (mL): 2.5

5% KMnO4 IR12082808
5% KMnO4 (mL): 15.0
5% K2S2O8 IR12082809
5% K2S2O8 (mL): 8.0

Reagent 5 Lot: N/A
Reagent 5 (mL): N/A
Reagent 6 Lot: N/A
Reagent 6 (mL): N/A

Digestion Start Time 1: 08/28/2012 15:00
Digestion End Time 1: 08/28/2012 17:00

Digestion Start Time 2: N/A
Digestion End Time 2: N/A

Block Temp (C): 97
Therm ID1: MT-47
Corr Fac -3

Mitkem Sample ID	Client Samp ID	Final L/g	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH <2	HOT BLOCK
S0		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
S0.2		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
40 uL III120827C														
S1.0		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
200 uL III120827C														
S2.0		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
400 uL III120827C														
S5.0		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
1000 uL III120827C														
S10.0		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
2000 uL III120827C														
ICV		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
1000 uL III120828A														
ICB		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
CCV		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
1000 uL III120828A														
CCB		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
MB-67871		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
LCS-67871		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
1000 uL III120828B														
MB-67871		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
L1784-01B		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
TCLP METALS														
L1784-01BMS		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
1000 uL III120828B, TCLP METALS														
L1786-01C		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-2
TAL														
L1786-02C		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-2
TAL														
L1786-03C		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-2
TAL														
L1786-03C		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-2
TAL														

Logbook ID: 100.0128 -08/12

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

Prep Start Date: 8/28/2012 3:00:00 P

Prep End Date: 8/28/2012 5:00:00 P

Prep Batch ID: 67871

Prep Code: SW7470A_PR

Technician: David T Camara

Prep Type: 7470A/METHOD

Prep Factor Units:
mL / mL

QC Matrix: N/A Conc H2SO4 3110100 5% KMnO4 IR12082808 Reagent 5 Lot: N/A
 QC Matrix Lot: N/A Conc H2SO4 (mL): 5.0 5% KMnO4 (mL): N/A

Filter?: N/A Conc HNO3 1112012 5% K2S2O8 IR12082809 Reagent 6 Lot: N/A
 Filter Lot: N/A Conc HNO3 (mL): 2.5 5% K2S2O8 (mL): N/A

Digestion Start Time 1: 08/28/2012 15:00 Digestion Start Time 2: N/A
 Digestion End Time 1: 08/28/2012 17:00 Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-47
Corr Fac-3

Mitkem Sample ID	Client Samp ID	Initial (L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans Bv	Storage	pH	pH >11 <2	HOT BLOCK
L1786-04C	SL-MW-13	A 100	100	--	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															
L1786-07C	SL-MW-12	A 100	100	--	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															
L1786-08C	SL-MW-14	A 100	100	--	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															
L1786-09C	SL-MW-16	A 100	100	--	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															
L1786-09CDUP	SL-MW-16	A 100	100	--	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
L1786-09CMS	SL-MW-16	A 100	100	--	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
1000 uL III120828B															
L1786-10C	SL-MW-1	A 100	100	--	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															
L1786-11C	SL-MW-2	A 100	100	--	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															
L1786-12C	RB-02	A 100	100	--	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															

David T Camara 08/28/2012

Analyst Reviewed Manager Reviewed

Date

Date

Comments:

1008/28/12

Prep Start Date: 8/29/2012 11:10:00

Prep End Date: 8/29/2012 3:10:00 P

Prep Batch ID: 67887

Prep Code: ICP_W_PR

Technician: David T Camara

Prep Type: 3005A/SW3005A

Prep Factor Units:

mL / mL

QC Matrix: N/A

Conc HNO3 1112012

Reagent 3 Lot: N/A

Reagent 5 Lot: N/A

QC Matrix Lot: N/A

Conc HNO3 (mL): 1.0

Reagent 3 (mL): N/A

Reagent 5 (mL): N/A

Filter?: N/A

Conc HCl 4111111

Reagent 4 Lot: N/A

Reagent 6 Lot: N/A

Filter Lot: N/A

Conc HCl (mL): 2.5

Reagent 4 (mL): N/A

Reagent 6 (mL): N/A

Digestion Start Time 1: 08/29/2012 11:10

Digestion Start Time 2: N/A

Digestion End Time 1: 08/29/2012 15:10

Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-102

Corr Fac-2

Mikem Sample ID	Client Samp ID	Initial L/g	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans Bv	Storage	pH	pH >11 <2	HOT BLOCK
MB-67887		50	50	--	--	--	--			08/29/12	DTC	ICPLab	2	☐	HB-B
LCS-67887		50	50	--	--	--	--			08/29/12	DTC	ICPLab	2	☐	HB-B
455 uL III20727B, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP120321A															
L1786-01B	SL-MW-23D	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-01C	SL-MW-23D	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-02B	SL-MW-73D	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-02C	SL-MW-73D	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-03B	SL-MW-23S	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-03C	SL-MW-23S	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-04B	SL-MW-13	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-04C	SL-MW-13	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-07B	SL-MW-12	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-07C	SL-MW-12	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-08B	SL-MW-14	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-08C	SL-MW-14	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-09B	SL-MW-16	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-09BDUP	SL-MW-16	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
L1786-09BMS	SL-MW-16	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
455 uL III20727B, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP120321A															

10/28/2012

45

Logbook ID 100.0125 -06/12

Start time:

Spectrum Analytical, Inc. RI Division: Aqueous Metals Preparation Logbook

Wednesday, August 29, 2012 13:29

Page 02 of 02

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

Prep Start Date: 8/29/2012 11:10:00

Prep End Date: 8/29/2012 3:10:00 P

Prep Batch ID: 67887

Prep Code: ICP_W_PR

Technician: David T Camara

Prep Type: 3005A/SW3005A

Prep Factor Units:
mL / mL

QC Matrix: N/A

Conc HNO3 1112012

Reagent 5 Lot: N/A

QC Matrix Lot: N/A

Conc HNO3 (mL): 1.0

Reagent 5 (mL): N/A

Filter?: N/A

Conc HCl 4111111

Reagent 6 Lot: N/A

Filter Lot: N/A

Conc HCl (mL): 2.5

Reagent 6 (mL): N/A

Digestion Start Time 1: 08/29/2012 11:10

Digestion Start Time 2: N/A

Digestion End Time 1: 08/29/2012 15:10

Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-102
Corr Fac-2

Mitkem Sample ID	Client Samp ID	Initial (L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH	HOT BLOCK
L1786-09C	SL-MW-16	A	50	--	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	>11	HB-B
TAL															
L1786-09CDUP	SL-MW-16	A	50	--	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	>11	HB-B
L1786-09CMS	SL-MW-16	A	50	--	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	>11	HB-B
455 uL III20727B, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP120321A															
L1786-10B	SL-MW-1	A	50	--	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	>11	HB-B
TAL															
L1786-10C	SL-MW-1	A	50	--	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	>11	HB-B
TAL															
L1786-11B	SL-MW-2	A	50	--	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	>11	HB-B
TAL															
L1786-11C	SL-MW-2	A	50	--	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	>11	HB-B
TAL															
L1786-12B	RB-02	A	50	--	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	>11	HB-B
TAL															
L1786-12C	RB-02	A	50	--	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	>11	HB-B
TAL															

David T Camara

Date 08/29/2012

Analyst Reviewed

Manager Reviewed HZA

Date

Comments:

1 DC 8/29/12



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** Metals ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : AECOM Environment

Project: Multi Site G, ServAll

Laboratory Workorder / SDG #: L1786

SW846 6010C, SW846 7470A Dissolved

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 and SW7470A.

V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: FIMS2
Instrument Type: CVAA
Description: FIMS
Manufacturer: Perkin-Elmer
Model: FIMS100

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 sample: SL-MW-16 (L1786-09CMS).

Percent recoveries were within the QC limits.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

Duplicate analyses were performed on sample: SL-MW-16 (L1786-

09CDUP).

Relative percent differences were within the QC limits.

F. Serial Dilution (SD):

Serial Dilution analysis was performed on sample: SL-MW-16 (L1786-09CSD).

Percent differences were within the QC limits.

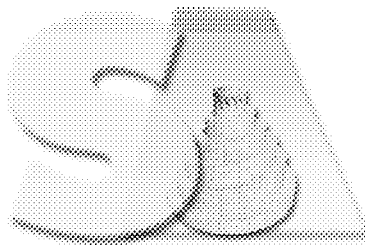
G. Samples:

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 Spectrum, 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:  _____

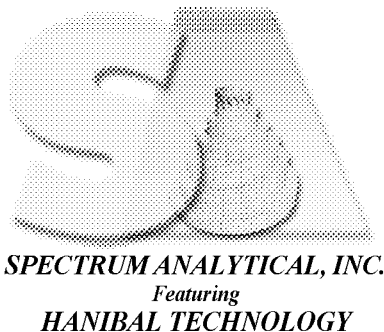
Date: 09/06/2012



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

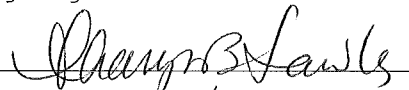
Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL1786D
SOW No.: SW846

EPA Sample No.	Lab Sample ID
<u>RB-02</u>	<u>L1786-12</u>
<u>SL-MW-1</u>	<u>L1786-10</u>
<u>SL-MW-12</u>	<u>L1786-07</u>
<u>SL-MW-13</u>	<u>L1786-04</u>
<u>SL-MW-14</u>	<u>L1786-08</u>
<u>SL-MW-16</u>	<u>L1786-09</u>
<u>SL-MW-16D</u>	<u>L1786-09DUP</u>
<u>SL-MW-16S</u>	<u>L1786-09MS</u>
<u>SL-MW-2</u>	<u>L1786-11</u>
<u>SL-MW-23D</u>	<u>L1786-01</u>
<u>SL-MW-23S</u>	<u>L1786-03</u>
<u>SL-MW-73D</u>	<u>L1786-02</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:  Name: Sharyn B Lawler
Date: 9/6/12 Title: QAD

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

RB-02

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

Case No.: _____

SAS No.: _____

SDG No.: SL1786DMatrix (soil/water): WATERLab Sample ID: L1786-12Level (low/med): MEDDate Received: 08/23/2012% 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	1.2	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	145	B		P
7440-47-3	Chromium	2.6	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		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	239	B		P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	4.9	U		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-1

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786D

Matrix (soil/water): WATER

Lab Sample ID: L1786-10

Level (low/med): MED

Date Received: 08/23/2012

% 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	31.5	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	30000			P
7440-47-3	Chromium	1.0	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		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	4650			P
7439-96-5	Manganese	10.0	U		P
7439-97-6	Mercury	0.14	B		CV
7440-02-0	Nickel	0.85	U		P
7440-09-7	Potassium	1390			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	31700			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	4.9	U		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-12

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786D

Matrix (soil/water): WATER

Lab Sample ID: L1786-07

Level (low/med): MED

Date Received: 08/23/2012

% 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	58.9	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	16400			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	31.0	U		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3110			P
7439-96-5	Manganese	314			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	1.2	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	37900			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	4.9	U		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-13

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786D

Matrix (soil/water): WATER

Lab Sample ID: L1786-04

Level (low/med): MED

Date Received: 08/22/2012

% 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	14.2	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	3750			P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	0.75	B		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	1760			P
7439-96-5	Manganese	13.4	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	1.5	B		P
7440-09-7	Potassium	935	B		P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	68000			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	4.9	U		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-14

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786D

Matrix (soil/water): WATER

Lab Sample ID: L1786-08

Level (low/med): MED

Date Received: 08/23/2012

% 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	23.0	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	3590			P
7440-47-3	Chromium	2.8	B		P
7440-48-4	Cobalt	2.3	B		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	1340			P
7439-96-5	Manganese	17.4	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	20.8	B		P
7440-09-7	Potassium	1670			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	96000			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	4.9	U		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-16

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786D

Matrix (soil/water): WATER

Lab Sample ID: L1786-09

Level (low/med): MED

Date Received: 08/23/2012

% 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	9.2	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	9970			P
7440-47-3	Chromium	4.1	B		P
7440-48-4	Cobalt	1.6	B		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	157	B		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	4630			P
7439-96-5	Manganese	22.9	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	43.1	B		P
7440-09-7	Potassium	1480			P
7782-49-2	Selenium	12.5	B		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	25400			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.2	B		P
7440-66-6	Zinc	5.5	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-2

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786D

Matrix (soil/water): WATER

Lab Sample ID: L1786-11

Level (low/med): MED

Date Received: 08/23/2012

% 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	23.6	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	19700			P
7440-47-3	Chromium	0.91	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		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3930			P
7439-96-5	Manganese	10.0	U		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	1.4	B		P
7440-09-7	Potassium	1990			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	1.1	U		P
7440-66-6	Zinc	4.9	U		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-23D

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786D

Matrix (soil/water): WATER

Lab Sample ID: L1786-01

Level (low/med): MED

Date Received: 08/22/2012

% 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	15.8	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	14500			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	3140			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	2320			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	12100			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	4.9	U		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-23S

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786D

Matrix (soil/water): WATER

Lab Sample ID: L1786-03

Level (low/med): MED

Date Received: 08/22/2012

% 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	13.8	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	17800			P
7440-47-3	Chromium	0.98	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		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	7460			P
7439-96-5	Manganese	1510			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	7.1	B		P
7440-09-7	Potassium	1230			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	36900			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

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-73D

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786D

Matrix (soil/water): WATER

Lab Sample ID: L1786-02

Level (low/med): MED

Date Received: 08/22/2012

% 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	16.1	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	15200			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	3310			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	2490			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	12700			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	4.9	U		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.:

SL1786D

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
	08/30/12 8:02				08/30/12 8:20		08/30/12 08:50		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum	10000.0	9638.94	96.4	10000.0	9841.61	98.4	9863.60	98.6	P
Antimony	500.0	499.52	99.9	500.0	508.50	101.7	518.98	103.8	P
Arsenic	500.0	486.19	97.2	500.0	497.35	99.5	499.04	99.8	P
Barium	10000.0	10129.37	101.3	10000.0	10195.46	102.0	10297.52	103.0	P
Beryllium	250.0	242.83	97.1	250.0	245.19	98.1	249.10	99.6	P
Cadmium	250.0	237.18	94.9	250.0	244.48	97.8	244.05	97.6	P
Calcium	25000.0	23571.43	94.3	25000.0	24277.68	97.1	24536.27	98.1	P
Chromium	1000.0	960.30	96.0	1000.0	976.59	97.7	980.94	98.1	P
Cobalt	2500.0	2510.18	100.4	2500.0	2558.82	102.4	2572.04	102.9	P
Copper	1250.0	1190.93	95.3	1250.0	1233.04	98.6	1211.21	96.9	P
Iron	5000.0	4927.10	98.5	5000.0	5026.57	100.5	5055.71	101.1	P
Lead	500.0	489.63	97.9	500.0	491.64	98.3	507.55	101.5	P
Magnesium	25000.0	24808.10	99.2	25000.0	25066.16	100.3	25377.49	101.5	P
Manganese	2500.0	2475.72	99.0	2500.0	2500.04	100.0	2543.25	101.7	P
Nickel	2500.0	2478.67	99.1	2500.0	2521.03	100.8	2538.51	101.5	P
Potassium	25000.0	24772.22	99.1	25000.0	25184.78	100.7	25896.18	103.6	P
Selenium	500.0	476.55	95.3	500.0	483.87	96.8	493.58	98.7	P
Silver	1250.0	1201.47	96.1	1250.0	1221.99	97.8	1211.13	96.9	P
Sodium	25000.0	24757.66	99.0	25000.0	25141.12	100.6	25712.50	102.8	P
Thallium	500.0	478.85	95.8	500.0	482.83	96.6	493.12	98.6	P
Vanadium	2500.0	2422.00	96.9	2500.0	2482.70	99.3	2474.14	99.0	P
Zinc	2500.0	2475.33	99.0	2500.0	2524.43	101.0	2527.43	101.1	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.:

SL1786D

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					08/30/12 9:27		08/30/12 10:08		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	9935.27	99.4	9832.76	98.3	P
Antimony				500.0	521.68	104.3	525.92	105.2	P
Arsenic				500.0	498.12	99.6	499.96	100	P
Barium				10000.0	10199.81	102.0	10314.39	103.1	P
Beryllium				250.0	247.49	99.0	251.40	100.6	P
Cadmium				250.0	246.20	98.5	244.58	97.8	P
Calcium				25000.0	24277.71	97.1	24200.02	96.8	P
Chromium				1000.0	987.98	98.8	979.77	98.0	P
Cobalt				2500.0	2601.37	104.1	2582.67	103.3	P
Copper				1250.0	1219.52	97.6	1199.94	96.0	P
Iron				5000.0	5102.38	102.0	5064.77	101.3	P
Lead				500.0	501.86	100.4	504.02	100.8	P
Magnesium				25000.0	25182.32	100.7	25646.27	102.6	P
Manganese				2500.0	2531.13	101.2	2567.79	102.7	P
Nickel				2500.0	2562.22	102.5	2539.41	101.6	P
Potassium				25000.0	25702.71	102.8	26053.43	104.2	P
Selenium				500.0	488.82	97.8	489.28	97.9	P
Silver				1250.0	1218.14	97.5	1181.60	94.5	P
Sodium				25000.0	25379.86	101.5	25353.99	101.4	P
Thallium				500.0	477.70	95.5	492.98	98.6	P
Vanadium				2500.0	2495.77	99.8	2470.33	98.8	P
Zinc				2500.0	2555.51	102.2	2553.72	102.1	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.:

SL1786D

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					08/30/12 10:41				
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	9947.19	99.5			P
Antimony				500.0	531.80	106.4			P
Arsenic				500.0	499.20	99.8			P
Barium				10000.0	10261.94	102.6			P
Beryllium				250.0	249.84	99.9			P
Cadmium				250.0	245.56	98.2			P
Calcium				25000.0	24354.81	97.4			P
Chromium				1000.0	985.14	98.5			P
Cobalt				2500.0	2602.35	104.1			P
Copper				1250.0	1211.71	96.9			P
Iron				5000.0	5103.54	102.1			P
Lead				500.0	504.45	100.9			P
Magnesium				25000.0	25405.61	101.6			P
Manganese				2500.0	2555.15	102.2			P
Nickel				2500.0	2556.95	102.3			P
Potassium				25000.0	26413.83	105.7			P
Selenium				500.0	484.70	96.9			P
Silver				1250.0	1201.44	96.1			P
Sodium				25000.0	25687.39	102.7			P
Thallium				500.0	476.53	95.3			P
Vanadium				2500.0	2488.39	99.5			P
Zinc				2500.0	2560.75	102.4			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: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1786D

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

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L MB-67871

FIMS2_120829A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	08/29/12 9:12	C	08/29/12 9:30	C		C		C	M
Mercury	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.: SL1786D

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-67887

OPTIMA3_120830A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	08/30/12 8:24	C	08/30/12 8:53	C	08/30/12 9:31	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	9.504	B	P
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Barium	1.1	U	1.1	U	1.1	U	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	110.0	U	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
Potassium	76.0	U	76.0	U	76.0	U	76.0	U	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	29.0	U	29.0	U	29.000	U	P
Thallium	6.2	U	6.2	U	-6.2	B	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.: SL1786D

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

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

OPTIMA3_120830A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	08/30/12 10:12	C	08/30/12 10:45	C		C		C	
Aluminum			66.0	U	66.0	U					P
Antimony			9.3	U	9.3	U					P
Arsenic			4.3	U	4.3	U					P
Barium			1.1	U	1.1	U					P
Beryllium			0.3	U	0.3	U					P
Cadmium			0.9	U	0.9	U					P
Calcium			110.0	U	111.7	B					P
Chromium			0.6	U	0.6	U					P
Cobalt			0.7	U	0.7	U					P
Copper			3.6	U	3.6	U					P
Iron			31.0	U	31.0	U					P
Lead			4.2	U	4.2	U					P
Magnesium			76.0	U	76.0	U					P
Manganese			10.0	U	10.0	U					P
Nickel			0.8	U	0.8	U					P
Potassium			114.4	B	76.0	U					P
Selenium			12.0	U	12.0	U					P
Silver			6.9	U	6.9	U					P
Sodium			29.0	U	29.0	U					P
Thallium			6.2	U	6.2	U					P
Vanadium			1.1	U	1.1	U					P
Zinc			4.9	U	4.9	U					P

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.:

SL1786D

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	527375	517131.7	103.4				
Antimony	0	600	1	633.2	105.5				
Arsenic	0	100	-3	100.4	100.4				
Barium	0	500	0	516.2	103.2				
Beryllium	0	500	0	492.2	98.4				
Cadmium	0	1000	-1	920.6	92.1				
Calcium	500000	500000	535568	524819.9	105.0				
Chromium	0	500	14	503.8	100.8				
Cobalt	0	500	0	465.3	93.1				
Copper	0	500	5	529.3	105.9				
Iron	200000	200000	183767	181511.4	90.8				
Lead	0	500	8	503.9	100.8				
Magnesium	500000	500000	498976	489185.1	97.8				
Manganese	0	500	-5	486	97.2				
Nickel	0	1000	-3	905.9	90.6				
Potassium	0	25000	148	28702.4	114.8				
Selenium	0	500	4	492.5	98.5				
Silver	0	200	-4	211.9	106.0				
Sodium	0	25000	53	28172.9	112.7				
Thallium	0	100	7	93.4	93.4				
Vanadium	0	500	-9	490.8	98.2				
Zinc	0	1000	13	938.1	93.8				

U.S. EPA - CLP

5A

EPA SAMPLE NO.

SPIKE SAMPLE RECOVERY

SL-MW-16S

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786D

Matrix (soil/water): WATER

Level (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	9240	66.0 U	9100	102		P
Antimony	75-125	481	9.3 U	456	106		P
Arsenic	75-125	487	4.3 U	456	107		P
Barium	75-125	9420	9.2 B	9100	103		P
Beryllium	75-125	234	0.26 U	227	103		P
Cadmium	75-125	233	0.89 U	227	103		P
Chromium	75-125	925	4.1 B	910	101		P
Cobalt	75-125	2350	1.6 B	2270	104		P
Copper	75-125	1130	3.6 U	1130	100		P
Iron	75-125	4860	157 B	4550	103		P
Lead	75-125	469	4.2 U	455	103		P
Manganese	75-125	2360	22.9 B	2270	103		P
Nickel	75-125	2380	43.1 B	2270	103		P
Selenium	75-125	466	12.5 B	455	100		P
Silver	75-125	1130	6.9 U	1130	100		P
Thallium	75-125	426	6.2 U	455	94		P
Vanadium	75-125	2290	1.2 B	2270	101		P
Zinc	75-125	2330	5.5 B	2270	102		P
Mercury	75-125	5.7	0.028 U	4.6	125		CV

Comments:

U.S. EPA - CLP

6

EPA SAMPLE NO.

DUPLICATES

SL-MW-16D

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786D

Matrix (soil/water): WATER

Level (low/med): MED

% Solids for Sample: 0.0

% Solids for Duplicate: 0.0

Concentration 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	4.5197	B	200		P
Barium		9.2442	B	8.2207	B	11.7		P
Beryllium		0.2600	U	0.2600	U			P
Cadmium		0.8900	U	0.8900	U			P
Calcium		9972.3222		9762.1344		2.1		P
Chromium		4.0762	B	4.2852	B	5		P
Cobalt		1.6029	B	1.5898	B	0.8		P
Copper		3.6000	U	3.6000	U			P
Iron		157.3823	B	152.9344	B	2.9		P
Lead		4.2000	U	4.2000	U			P
Magnesium		4627.9272		4581.7269		1		P
Manganese		22.9366	B	22.4547	B	2.1		P
Nickel		43.1233	B	42.1832	B	2.2		P
Potassium	1000.0	1477.6614		1459.7420		1.2		P
Selenium		12.5068	B	12.0000	U	200		P
Silver		6.9000	U	6.9000	U			P
Sodium		25418.5165		25521.3352		0.4		P
Thallium		6.2000	U	6.2000	U			P
Vanadium		1.2067	B	1.1000	U	200		P
Zinc		5.4897	B	4.9000	U	200		P
Mercury		0.0280	U	0.0280	U			CV

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name:	Spectrum Analytical, Inc.	Contract:	95900-04				
Lab Code:	MITKEM	Case No.:		SAS No.:		SDG No.:	SL1786D
Solid LCS Source:		LCS(D) ID:					
Aqueous LCS Source:		LCS-67871					

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte	True	Found	%R	True	Found	C	Limits	%R	
Mercury	4.6	4.95	107.6						

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name:	Spectrum Analytical, Inc.	Contract:	95900-04				
Lab Code:	MITKEM	Case No.:		SAS No.:		SDG No.:	SL1786D
Solid LCS Source:		LCS(D) ID:					
Aqueous LCS Source:		LCS-67887					

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	9372.76	103.0						
Antimony	455.0	489.90	107.7						
Arsenic	455.0	482.48	106.0						
Barium	9100.0	9566.33	105.1						
Beryllium	227.0	237.26	104.5						
Cadmium	227.0	236.94	104.4						
Calcium	22700.0	22739.96	100.2						
Chromium	910.0	940.93	103.4						
Cobalt	2270.0	2370.74	104.4						
Copper	1130.0	1156.42	102.3						
Iron	4550.0	4759.91	104.6						
Lead	455.0	480.93	105.7						
Magnesium	22700.0	23616.19	104.0						
Manganese	2270.0	2357.66	103.9						
Nickel	2270.0	2378.75	104.8						
Potassium	22700.0	23730.72	104.5						
Selenium	455.0	470.71	103.5						
Silver	1130.0	1163.65	103.0						
Sodium	22700.0	23515.20	103.6						
Thallium	455.0	440.97	96.9						
Vanadium	2270.0	2327.01	102.5						
Zinc	2270.0	2350.72	103.6						

U.S. EPA - CLP

9

EPA SAMPLE NO.

ICP SERIAL DILUTIONS

SL-MW-16

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1786D

Matrix (soil/water): WATER

Level (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	21.50	U			P
Barium	9.24	B	12.30	B	33		P
Beryllium	0.26	U	1.30	U			P
Cadmium	0.89	U	4.45	U			P
Calcium	9972.32		10516.92		6		P
Chromium	4.08	B	5.38	B	32		P
Cobalt	1.60	B	3.35	U	100		P
Copper	3.60	U	18.00	U			P
Iron	157.38	B	166.33	B	6		P
Lead	4.20	U	21.00	U			P
Magnesium	4627.93		4941.66		7		P
Manganese	22.94	B	50.00	U	100		P
Nickel	43.12	B	45.32	B	5		P
Potassium	1477.66		1565.11		6		P
Selenium	12.51	B	60.00	U	100		P
Silver	6.90	U	34.50	U			P
Sodium	25418.52		25813.00		2		P
Thallium	6.20	U	31.00	U			P
Vanadium	1.21	B	5.50	U	100		P
Zinc	5.49	B	24.50	U	100		P

U.S. EPA - CLP

10

METHOD DETECTION LIMITS (ANNUALLY)

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

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1786D

Instrument Type: CV InstrumentID: FIMS2 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.: SL1786D

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.:

SL1786D

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Co
Aluminum	308.21		0.1950780	0.0000000	0.0689271	0.0000000
Antimony	206.83	0.0581013	0.0000000	0.0549587	0.0214185	0.0000000
Arsenic	188.97	0.0098790	-0.0124040	-0.0756686	0.0157247	0.1927900
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	0.0025914	0.0749299	0.0000000	-0.0433049
Calcium	227.54	0.0000000		7.8420900	0.5637690	253.7870000
Chromium	267.71	0.0000000	0.0000000	0.0000000	0.0064696	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0241432	0.0000000	
Copper	324.75	0.0000000	0.0000000	-0.0922443	0.0000000	-0.1349370
Iron	273.95	0.0000000	0.0000000		0.0000000	0.0000000
Lead	220.35	-0.1032270	-0.0123272	0.0209682	-0.0064852	-0.0680890
Magnesium	279.07	0.0000000	0.0000000	0.0000000		0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0301633	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0042808	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0219452	0.0000000	-0.3855700	0.0000000	-0.7432810
Silver	328.06	0.0000000	0.0000000	-0.0362359	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	-0.0153767	-0.0040303	-0.1223880	-0.0549555	5.8333800
Titanium	334.94	0.0000000	-0.0167659	0.0000000	0.0182020	0.0000000
Vanadium	292.40	0.0000000	0.0000000	-0.0307673	0.0000000	0.0000000
Zinc	206.20	-0.0121647	-0.0130048	-0.0501268	-0.0144316	-0.3012520

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.:

SL1786D

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	Mn	Ni	Tl
Aluminum	308.21	0.0000000	0.0000000	1.5401500	0.0000000	0.0000000
Antimony	206.83	18.3748000	0.3246940	0.0000000	0.0000000	0.0000000
Arsenic	188.97	-8.8838000	0.0000000	0.2489140	0.0999179	0.1051500
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	0.0000000	-0.2126510	0.0000000
Calcium	227.54	5.3533500	3.5228400	3.8819800	26.7628000	0.0000000
Chromium	267.71		0.0000000	0.2043740	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.1584950	0.0000000
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	-0.0447064	0.3133570	-0.0606043	-0.1219210	-0.1744540
Magnesium	279.07	2.4873800	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000		0.0474986	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000		0.2920460
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.2759200	-0.2480870	0.0000000	-0.1215600	-0.4373880
Silver	328.06	0.0000000	0.0000000	0.2125900	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0860847	-0.1533400	-0.3345200	-0.0729483	
Titanium	334.94	0.1475450	0.0000000	0.0000000	0.0000000	0.1490420
Vanadium	292.40	-2.2898300	0.3129820	0.0000000	0.0000000	0.0000000
Zinc	206.20	-1.8283200	-0.3316020	-0.4006130	-0.1453040	-0.4071760

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.:

SL1786D

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Ti	V	_____	_____	_____
Aluminum	308.21	1.6328600	-0.3229200			
Antimony	206.83	-2.3648000	-1.1022500			
Arsenic	188.97	-0.2598760	0.0000000			
Barium	233.52	0.0000000	-1.4206100			
Beryllium	313.10	-1.8417600	-0.0298256			
Cadmium	226.50	0.0000000	0.0000000			
Calcium	227.54	7.1850200	24.4780000			
Chromium	267.71	0.0000000	-0.3095710			
Cobalt	228.61	2.3045300	0.0000000			
Copper	324.75	0.0000000	-0.1578650			
Iron	273.95	0.0000000	-1.6429000			
Lead	220.35	-0.9907230	-0.0982908			
Magnesium	279.07	0.0000000	0.0000000			
Manganese	257.61	0.0000000	0.0000000			
Nickel	231.60	0.5886010	0.0000000			
Potassium	766.49	0.0000000	0.0000000			
Selenium	196.02	-0.6097280	0.0000000			
Silver	328.06	0.0000000	-1.9059700			
Sodium	589.59	0.0000000	0.0000000			
Thallium	190.80	-0.2863380	4.5539900			
Titanium	334.94		0.0000000			
Vanadium	292.40	1.3967000				
Zinc	206.20	-0.8719450	-0.1607790			

Comments:

U.S. EPA - CLP
12
ICP LINEAR RANGES (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1786D
ICP ID Number: OPTIMA3 Date: 5/10/2012

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	100000	P
Beryllium	0.20	5000	P
Cadmium	0.20	50000	P
Calcium	0.20	500000	P
Chromium	0.20	50000	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	50000	P
Nickel	0.20	100000	P
Potassium	0.20	500000	P
Selenium	0.20	50000	P
Silver	0.20	2500	P
Sodium	0.20	500000	P
Thallium	0.20	50000	P
Vanadium	0.20	50000	P
Zinc	0.20	50000	P

Comments:

U.S. EPA - CLP
13
PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1786D
Preparation Method: 7470A Batch ID: 67871

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB	08/28/2012		100
CCV	08/28/2012		100
ICB	08/28/2012		100
ICV	08/28/2012		100
S0	08/28/2012		100
S0.2	08/28/2012		100
S1.0	08/28/2012		100
S10.0	08/28/2012		100
S2.0	08/28/2012		100
S5.0	08/28/2012		100
LCSW	08/28/2012		100
PBW	08/28/2012		100
RB-02	08/28/2012		100
SL-MW-1	08/28/2012		100
SL-MW-12	08/28/2012		100
SL-MW-13	08/28/2012		100
SL-MW-14	08/28/2012		100
SL-MW-16	08/28/2012		100
SL-MW-16D	08/28/2012		100
SL-MW-16S	08/28/2012		100
SL-MW-2	08/28/2012		100
SL-MW-23D	08/28/2012		100
SL-MW-23S	08/28/2012		100
SL-MW-73D	08/28/2012		100

Comments:

U.S. EPA - CLP
13
PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1786D
Preparation Method: 3005A Batch ID: 67887

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	08/29/2012		50
PBW	08/29/2012		50
RB-02	08/29/2012		50
SL-MW-1	08/29/2012		50
SL-MW-12	08/29/2012		50
SL-MW-13	08/29/2012		50
SL-MW-14	08/29/2012		50
SL-MW-16	08/29/2012		50
SL-MW-16D	08/29/2012		50
SL-MW-16S	08/29/2012		50
SL-MW-2	08/29/2012		50
SL-MW-23D	08/29/2012		50
SL-MW-23S	08/29/2012		50
SL-MW-73D	08/29/2012		50

Comments:

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.: SL1786D
 Instrument ID Number: FIMS2 Method: CV
 Start Date: 08/29/2012 End Date: 08/29/2012

FIMS2_120829A

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	0842															X														
S0.2	1.0	0844															X														
S1.0	1.0	0845															X														
S2.0	1.0	0847															X														
S5.0	1.0	0849															X														
S10.0	1.0	0850															X														
ICV	1.0	0852															X														
ICB	1.0	0854															X														
PBW	1.0	0855															X														
LCSW	1.0	0857															X														
ZZZZZZ	1.0	0859																													
ZZZZZZ	1.0	0900																													
ZZZZZZ	1.0	0902																													
SL-MW-23D	1.0	0904															X														
SL-MW-73D	1.0	0905															X														
SL-MW-23S	1.0	0907															X														
SL-MW-13	1.0	0909															X														
CCV	1.0	0910															X														
CCB	1.0	0912															X														
SL-MW-12	1.0	0914															X														
SL-MW-14	1.0	0915															X														
SL-MW-16	1.0	0917															X														
SL-MW-16D	1.0	0919															X														
ZZZZZZ	1.0	0920																													
SL-MW-1	1.0	0922															X														
SL-MW-2	1.0	0924															X														
RB-02	1.0	0925															X														
SL-MW-16S	1.0	0927															X														
CCV	1.0	0929															X														
CCB	1.0	0930															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.: SL1786D
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 08/30/2012 End Date: 08/30/2012

OPTIMA3_120830A

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	0747		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
S1	1.0	0750		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
S2	1.0	0754		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
S3	1.0	0758		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ICV	1.0	0802		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ICB	1.0	0805		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0809																													
ICSA	1.0	0813		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ICSAB	1.0	0816		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCV	1.0	0820		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCB	1.0	0824		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
PBW	1.0	0828		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LCSW	1.0	0831		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0835																													
SL-MW-23D	1.0	0839		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0842																													
SL-MW-73D	1.0	0846		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCV	1.0	0850		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCB	1.0	0853		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0857																													
SL-MW-23S	1.0	0901		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0904																													
SL-MW-13	1.0	0908		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0912																													
SL-MW-12	1.0	0916		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0920																													
SL-MW-14	1.0	0924		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCV	1.0	0927		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCB	1.0	0931		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	0935																													
ZZZZZZ	1.0	0939																													
ZZZZZZ	1.0	0942																													

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.: SL1786D
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 08/30/2012 End Date: 08/30/2012

OPTIMA3_120830A

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	5.0	0946																													
ZZZZZZ	1.0	0950																													
SL-MW-16	1.0	0953		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
SL-MW-16D	1.0	0957		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
SL-MW-16S	1.0	1001		X	X	X	X	X	X		X	X	X	X	X		X		X	X		X	X	X							
SL-MW-16L	5.0	1004		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
CCV	1.0	1008		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
CCB	1.0	1012		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1016																													
ZZZZZZ	1.0	1019																													
SL-MW-1	1.0	1023		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1027																													
SL-MW-2	1.0	1030		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
ZZZZZZ	1.0	1034																													
RB-02	1.0	1038		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
CCV	1.0	1041		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					
CCB	1.0	1045		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X					

Instrument Raw Data

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Reprocessing Begun

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Results Data Set (original): B12083001

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

Results Data Set (reprocessed): B12083001A

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

Sequence No.: 1

Sample ID: S0

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 8/30/2012 7:47:13 AM

Data Type: Reprocessed on 8/30/2012 1:59:32 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1897852.2	8791.95	0.46%	100.000	%
Lu 261.542	1226617.4	5991.55	0.49%	100.0	%
Ag 328.068†	-2770.2	56.83	2.05%	[0.00]	mg/L
Al 308.215†	2526.8	80.49	3.19%	[0.00]	mg/L
As 188.979†	-3.6	3.82	105.22%	[0.00]	mg/L
Ba 233.527†	-80.3	9.66	12.03%	[0.00]	mg/L
Be 313.107†	-1343.2	32.54	2.42%	[0.00]	mg/L
Co 228.616†	-15.2	8.58	56.57%	[0.00]	mg/L
Cr 267.716†	52.5	21.03	40.03%	[0.00]	mg/L
Cu 324.752†	3492.2	39.02	1.12%	[0.00]	mg/L
Fe 273.955†	-141.5	13.13	9.28%	[0.00]	mg/L
Mg 279.077†	-911.6	101.36	11.12%	[0.00]	mg/L
Mn 257.610†	-302.7	28.85	9.53%	[0.00]	mg/L
Ni 231.604†	-28.9	3.21	11.14%	[0.00]	mg/L
Pb 220.353†	26.8	6.66	24.90%	[0.00]	mg/L
Sb 206.836†	19.6	2.71	13.86%	[0.00]	mg/L
Se 196.026†	-2.1	5.58	270.57%	[0.00]	mg/L
Tl 190.801	-1.6	4.55	289.15%	[0.00]	mg/L
V 292.402†	-62.2	41.24	66.30%	[0.00]	mg/L
Zn 206.200†	35.8	3.96	11.07%	[0.00]	mg/L
Cd 226.502†	-59.1	1.29	2.19%	[0.00]	mg/L
Ti 334.940†	-125.6	53.27	42.43%	[0.00]	mg/L
Ca 227.546†	155.2	16.50	10.63%	[0.00]	mg/L
Na 589.592†	-509.4	40.41	7.93%	[0.00]	mg/L
K 766.490†	763.9	67.11	8.79%	[0.00]	mg/L

Sequence No.: 2

Sample ID: S1

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 8/30/2012 7:50:52 AM

Data Type: Reprocessed on 8/30/2012 1:59:34 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1736697.1	31850.96	1.83%	91.509	%
Lu 261.542	1130912.2	20922.82	1.85%	92.20	%
Ag 328.068†	430856.2	6524.71	1.51%	[2.5]	mg/L
Al 308.215†	403859.8	9270.55	2.30%	[20]	mg/L
As 188.979†	834.2	10.05	1.20%	[1]	mg/L
Ba 233.527†	1703472.3	25458.56	1.49%	[20]	mg/L
Be 313.107†	1249479.3	19797.46	1.58%	[0.5]	mg/L
Co 228.616†	178107.0	4032.03	2.26%	[5]	mg/L
Cr 267.716†	140539.6	3091.57	2.20%	[2]	mg/L
Cu 324.752†	550204.6	8987.04	1.63%	[2.5]	mg/L
Fe 273.955†	240132.4	5435.31	2.26%	[10]	mg/L

Mg 279.077†	868173.8	12933.81	1.49%	[50]	mg/L
Mn 257.610†	2890681.6	45809.44	1.58%	[5]	mg/L
Ni 231.604†	147659.4	3248.74	2.20%	[5]	mg/L
Pb 220.353†	5079.2	76.59	1.51%	[1]	mg/L
Sb 206.836†	1148.6	19.27	1.68%	[1]	mg/L
Se 196.026†	497.2	4.79	0.96%	[1]	mg/L
Tl 190.801	823.6	5.85	0.71%	[1]	mg/L
V 292.402†	607657.3	9498.25	1.56%	[5]	mg/L
Zn 206.200†	105768.2	2481.24	2.35%	[5]	mg/L
Cd 226.502†	27646.6	634.27	2.29%	[0.5]	mg/L
Ti 334.940†	552732.8	8750.90	1.58%	[1]	mg/L
Ca 227.546†	9670.4	180.52	1.87%	[50]	mg/L
Na 589.592†	241374.3	4113.95	1.70%	[50]	mg/L
K 766.490†	52295.6	966.79	1.85%	[50]	mg/L

Sequence No.: 3

Sample ID: S2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 8/30/2012 7:54:37 AM

Data Type: Reprocessed on 8/30/2012 1:59:34 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1731671.9	18026.94	1.04%	91.244	%
Lu 261.542	1127588.2	12198.37	1.08%	91.93	%
Ag 328.068†	223815.5	940.00	0.42%	[1.25]	mg/L
Al 308.215†	208273.7	831.25	0.40%	[10]	mg/L
As 188.979†	429.0	8.38	1.95%	[0.5]	mg/L
Ba 233.527†	905878.8	2375.81	0.26%	[10]	mg/L
Be 313.107†	651636.3	2422.71	0.37%	[0.25]	mg/L
Co 228.616†	92987.1	1070.11	1.15%	[2.5]	mg/L
Cr 267.716†	72721.8	888.13	1.22%	[1]	mg/L
Cu 324.752†	284676.1	797.82	0.28%	[1.25]	mg/L
Fe 273.955†	124593.6	1591.59	1.28%	[5]	mg/L
Mg 279.077†	454205.4	1128.42	0.25%	[25]	mg/L
Mn 257.610†	1523179.4	5264.06	0.35%	[2.5]	mg/L
Ni 231.604†	77094.1	1051.21	1.36%	[2.5]	mg/L
Pb 220.353†	2635.5	28.19	1.07%	[0.5]	mg/L
Sb 206.836†	606.2	9.62	1.59%	[0.5]	mg/L
Se 196.026†	262.0	5.61	2.14%	[0.5]	mg/L
Tl 190.801	435.2	4.87	1.12%	[0.5]	mg/L
V 292.402†	315282.0	1079.01	0.34%	[2.5]	mg/L
Zn 206.200†	55347.5	747.88	1.35%	[2.5]	mg/L
Cd 226.502†	14401.1	196.78	1.37%	[0.25]	mg/L
Ti 334.940†	288149.5	777.54	0.27%	[0.5]	mg/L
Ca 227.546†	5031.7	91.27	1.81%	[25]	mg/L
Na 589.592†	125152.9	1118.54	0.89%	[25]	mg/L
K 766.490†	26866.2	147.63	0.55%	[25]	mg/L

Sequence No.: 4

Sample ID: S3

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 8/30/2012 7:58:21 AM

Data Type: Reprocessed on 8/30/2012 1:59:35 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1818948.8	23150.78	1.27%	95.842	%
Lu 261.542	1177945.8	14236.14	1.21%	96.03	%
Ag 328.068†	4439.5	40.35	0.91%	[0.025]	mg/L
Al 308.215†	4094.7	22.84	0.56%	[0.2]	mg/L
As 188.979†	7.9	2.64	33.29%	[0.01]	mg/L
Ba 233.527†	18341.0	267.76	1.46%	[0.2]	mg/L

Be 313.107†	12476.7	196.63	1.58%	[0.005]	mg/L
Co 228.616†	1854.7	30.78	1.66%	[0.05]	mg/L
Cr 267.716†	1431.8	16.66	1.16%	[0.02]	mg/L
Cu 324.752†	5561.1	130.68	2.35%	[0.025]	mg/L
Fe 273.955†	2493.0	35.15	1.41%	[0.1]	mg/L
Mg 279.077†	8958.8	214.17	2.39%	[0.5]	mg/L
Mn 257.610†	30825.4	433.60	1.41%	[0.05]	mg/L
Ni 231.604†	1531.3	12.62	0.82%	[0.05]	mg/L
Pb 220.353†	52.1	6.91	13.26%	[0.01]	mg/L
Sb 206.836†	20.0	3.43	17.13%	[0.01]	mg/L
Se 196.026†	3.6	1.85	51.75%	[0.01]	mg/L
Tl 190.801	15.7	6.49	41.41%	[0.01]	mg/L
V 292.402†	6100.4	151.59	2.48%	[0.05]	mg/L
Zn 206.200†	1127.9	12.32	1.09%	[0.05]	mg/L
Cd 226.502†	289.9	5.26	1.82%	[0.005]	mg/L
Ti 334.940†	5663.8	122.76	2.17%	[0.01]	mg/L
Ca 227.546†	108.0	5.95	5.50%	[0.5]	mg/L
Na 589.592†	2448.4	56.38	2.30%	[0.5]	mg/L
K 766.490†	515.3	93.73	18.19%	[0.5]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	173700	0.00000	0.999881	
Al 308.215	3	Lin Thru 0	0.0	20320	0.00000	0.999922	
As 188.979	3	Lin Thru 0	0.0	839.0	0.00000	0.999935	
Ba 233.527	3	Lin Thru 0	0.0	86260	0.00000	0.999685	
Be 313.107	3	Lin Thru 0	0.0	2520000	0.00000	0.999854	
Co 228.616	3	Lin Thru 0	0.0	35940	0.00000	0.999847	
Cr 267.716	3	Lin Thru 0	0.0	70760	0.00000	0.999904	
Cu 324.752	3	Lin Thru 0	0.0	221600	0.00000	0.999904	
Fe 273.955	3	Lin Thru 0	0.0	24190	0.00000	0.999888	
Mg 279.077	3	Lin Thru 0	0.0	17520	0.00000	0.999831	
Mn 257.610	3	Lin Thru 0	0.0	584400	0.00000	0.999773	
Ni 231.604	3	Lin Thru 0	0.0	29790	0.00000	0.999846	
Pb 220.353	3	Lin Thru 0	0.0	5118	0.00000	0.999888	
Sb 206.836	3	Lin Thru 0	0.0	1161	0.00000	0.999738	
Se 196.026	3	Lin Thru 0	0.0	502.5	0.00000	0.999768	
Tl 190.801	3	Lin Thru 0	0.0	833.0	0.00000	0.999715	
V 292.402	3	Lin Thru 0	0.0	122400	0.00000	0.999888	
Zn 206.200	3	Lin Thru 0	0.0	21350	0.00000	0.999830	
Cd 226.502	3	Lin Thru 0	0.0	55760	0.00000	0.999863	
Ti 334.940	3	Lin Thru 0	0.0	557400	0.00000	0.999857	
Ca 227.546	3	Lin Thru 0	0.0	195.0	0.00000	0.999870	
Na 589.592	3	Lin Thru 0	0.0	4863	0.00000	0.999892	
K 766.490	3	Lin Thru 0	0.0	1052	0.00000	0.999940	

=====

Sequence No.: 5

Sample ID: ICV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 8/30/2012 8:02:02 AM

Data Type: Reprocessed on 8/30/2012 1:59:36 PM

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	1799565.7	94.821 %	0.7455			0.79%
Lu 261.542	1172151.9	95.56 %	0.779			0.81%
Ag 328.068†	208010.8	1.2015 mg/L	0.01941	1.2015 mg/L	0.01941	1.62%
QC value within limits for Ag 328.068 Recovery = 96.12%						
Al 308.215†	196071.3	9.6389 mg/L	0.14651	9.6389 mg/L	0.14651	1.52%
QC value within limits for Al 308.215 Recovery = 96.39%						
As 188.979†	400.7	0.48619 mg/L	0.010184	0.48619 mg/L	0.010184	2.09%
QC value within limits for As 188.979 Recovery = 97.24%						
Ba 233.527†	873431.1	10.129 mg/L	0.0995	10.129 mg/L	0.0995	0.98%
QC value within limits for Ba 233.527 Recovery = 101.29%						
Be 313.107†	609616.6	0.24283 mg/L	0.002395	0.24283 mg/L	0.002395	0.99%

Co	QC value within limits for Co	228.616	Recovery = 97.13%				
		90265.1	2.5102 mg/L	0.03741	2.5102 mg/L	0.03741	1.49%
Cr	QC value within limits for Cr	267.716	Recovery = 100.41%				
		67909.8	0.96030 mg/L	0.015338	0.96030 mg/L	0.015338	1.60%
Cu	QC value within limits for Cu	324.752	Recovery = 96.03%				
		263665.0	1.1909 mg/L	0.01657	1.1909 mg/L	0.01657	1.39%
Fe	QC value within limits for Fe	273.955	Recovery = 95.27%				
		119112.0	4.9271 mg/L	0.07933	4.9271 mg/L	0.07933	1.61%
Mg	QC value within limits for Mg	279.077	Recovery = 98.54%				
		434790.3	24.808 mg/L	0.2487	24.808 mg/L	0.2487	1.00%
Mn	QC value within limits for Mn	257.610	Recovery = 99.23%				
		1446939.4	2.4757 mg/L	0.02214	2.4757 mg/L	0.02214	0.89%
Ni	QC value within limits for Ni	231.604	Recovery = 99.03%				
		73863.4	2.4787 mg/L	0.03820	2.4787 mg/L	0.03820	1.54%
Pb	QC value within limits for Pb	220.353	Recovery = 99.15%				
		2495.5	0.48963 mg/L	0.004248	0.48963 mg/L	0.004248	0.87%
Sb	QC value within limits for Sb	206.836	Recovery = 97.93%				
		597.0	0.49952 mg/L	0.001025	0.49952 mg/L	0.001025	0.21%
Se	QC value within limits for Se	196.026	Recovery = 99.90%				
		236.8	0.47655 mg/L	0.007768	0.47655 mg/L	0.007768	1.63%
Tl	QC value within limits for Tl	190.801	Recovery = 95.31%				
		417.5	0.47885 mg/L	0.007445	0.47885 mg/L	0.007445	1.55%
V	QC value within limits for V	292.402	Recovery = 95.77%				
		296410.0	2.4220 mg/L	0.03698	2.4220 mg/L	0.03698	1.53%
Zn	QC value within limits for Zn	206.200	Recovery = 96.88%				
		52732.4	2.4753 mg/L	0.03905	2.4753 mg/L	0.03905	1.58%
Cd	QC value within limits for Cd	226.502	Recovery = 99.01%				
		13213.0	0.23718 mg/L	0.003626	0.23718 mg/L	0.003626	1.53%
Ti	QC value within limits for Ti	334.940	Recovery = 94.87%				
		271405.7	0.48661 mg/L	0.003666	0.48661 mg/L	0.003666	0.75%
Ca	QC value within limits for Ca	227.546	Recovery = Not calculated				
		4759.4	23.571 mg/L	0.2080	23.571 mg/L	0.2080	0.88%
Na	QC value within limits for Na	589.592	Recovery = 94.29%				
		120401.8	24.758 mg/L	0.2278	24.758 mg/L	0.2278	0.92%
K	QC value within limits for K	766.490	Recovery = 99.03%				
		26051.9	24.772 mg/L	0.1861	24.772 mg/L	0.1861	0.75%
	QC value within limits for K	766.490	Recovery = 99.09%				
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: 8/30/2012 8:05:46 AM

Data Type: Reprocessed on 8/30/2012 1:59:37 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1874322.8	98.760 %	0.2984			0.30%
Lu 261.542	1210564.9	98.69 %	0.310			0.31%
Ag 328.068†	57.0	0.00033 mg/L	0.000390	0.00033 mg/L	0.000390	118.49%
	QC value within limits for Ag	328.068	Recovery = Not calculated			
Al 308.215†	72.5	0.00355 mg/L	0.001115	0.00355 mg/L	0.001115	31.38%
	QC value within limits for Al	308.215	Recovery = Not calculated			
As 188.979†	2.5	0.00302 mg/L	0.002796	0.00302 mg/L	0.002796	92.63%
	QC value within limits for As	188.979	Recovery = Not calculated			
Ba 233.527†	70.3	0.00082 mg/L	0.000112	0.00082 mg/L	0.000112	13.77%
	QC value within limits for Ba	233.527	Recovery = Not calculated			
Be 313.107†	9.8	0.00000 mg/L	0.000019	0.00000 mg/L	0.000019	444.74%
	QC value within limits for Be	313.107	Recovery = Not calculated			
Co 228.616†	17.1	0.00047 mg/L	0.000189	0.00047 mg/L	0.000189	39.93%
	QC value within limits for Co	228.616	Recovery = Not calculated			
Cr 267.716†	3.7	0.00005 mg/L	0.000258	0.00005 mg/L	0.000258	492.69%
	QC value within limits for Cr	267.716	Recovery = Not calculated			
Cu 324.752†	178.9	0.00081 mg/L	0.000397	0.00081 mg/L	0.000397	49.14%
	QC value within limits for Cu	324.752	Recovery = Not calculated			
Fe 273.955†	30.6	0.00126 mg/L	0.000202	0.00126 mg/L	0.000202	15.97%
	QC value within limits for Fe	273.955	Recovery = Not calculated			

Mg 279.077†	27.1	0.00154 mg/L	0.004130	0.00154 mg/L	0.004130	267.31%
QC value within limits for Mg 279.077	Recovery = Not calculated					
Mn 257.610†	159.9	0.00027 mg/L	0.000044	0.00027 mg/L	0.000044	16.24%
QC value within limits for Mn 257.610	Recovery = Not calculated					
Ni 231.604†	8.8	0.00029 mg/L	0.000436	0.00029 mg/L	0.000436	148.44%
QC value within limits for Ni 231.604	Recovery = Not calculated					
Pb 220.353†	1.2	0.00024 mg/L	0.000736	0.00024 mg/L	0.000736	307.98%
QC value within limits for Pb 220.353	Recovery = Not calculated					
Sb 206.836†	4.2	0.00363 mg/L	0.003333	0.00363 mg/L	0.003333	91.74%
QC value within limits for Sb 206.836	Recovery = Not calculated					
Se 196.026†	1.0	0.00191 mg/L	0.008871	0.00191 mg/L	0.008871	465.48%
QC value within limits for Se 196.026	Recovery = Not calculated					
Tl 190.801	0.3	0.00032 mg/L	0.003773	0.00032 mg/L	0.003773	>999.9%
QC value within limits for Tl 190.801	Recovery = Not calculated					
V 292.402†	58.3	0.00048 mg/L	0.000057	0.00048 mg/L	0.000057	11.93%
QC value within limits for V 292.402	Recovery = Not calculated					
Zn 206.200†	28.4	0.00133 mg/L	0.000480	0.00133 mg/L	0.000480	36.05%
QC value within limits for Zn 206.200	Recovery = Not calculated					
Cd 226.502†	6.8	0.00012 mg/L	0.000065	0.00012 mg/L	0.000065	53.82%
QC value within limits for Cd 226.502	Recovery = Not calculated					
Ti 334.940†	123.0	0.00022 mg/L	0.000070	0.00022 mg/L	0.000070	31.78%
QC value within limits for Ti 334.940	Recovery = Not calculated					
Ca 227.546†	12.0	0.06120 mg/L	0.041213	0.06120 mg/L	0.041213	67.34%
QC value within limits for Ca 227.546	Recovery = Not calculated					
Na 589.592†	53.4	0.01097 mg/L	0.019869	0.01097 mg/L	0.019869	181.05%
QC value within limits for Na 589.592	Recovery = Not calculated					
K 766.490†	-3.9	-0.00369 mg/L	0.046277	-0.00369 mg/L	0.046277	>999.9%
QC value within limits for K 766.490	Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 8/30/2012 8:09:27 AM

Data Type: Reprocessed on 8/30/2012 1:59:37 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1815107.1	95.640	%	0.8964				0.94%
Lu 261.542	1175931.9	95.87	%	0.997				1.04%
Ag 328.068†	5424.2	0.03131 mg/L		0.000267	0.03131 mg/L		0.000267	0.85%
QC value within limits for Ag 328.068	Recovery = 104.37%							
Al 308.215†	4260.4	0.20937 mg/L		0.006436	0.20937 mg/L		0.006436	3.07%
QC value within limits for Al 308.215	Recovery = 104.68%							
As 188.979†	12.0	0.01452 mg/L		0.001379	0.01452 mg/L		0.001379	9.50%
QC value within limits for As 188.979	Recovery = 72.58%							
Ba 233.527†	18628.1	0.21603 mg/L		0.002085	0.21603 mg/L		0.002085	0.97%
QC value within limits for Ba 233.527	Recovery = 108.02%							
Be 313.107†	12812.1	0.00512 mg/L		0.000017	0.00512 mg/L		0.000017	0.34%
QC value within limits for Be 313.107	Recovery = 102.41%							
Co 228.616†	1899.0	0.05279 mg/L		0.000643	0.05279 mg/L		0.000643	1.22%
QC value within limits for Co 228.616	Recovery = 105.57%							
Cr 267.716†	1457.9	0.02062 mg/L		0.000400	0.02062 mg/L		0.000400	1.94%
QC value within limits for Cr 267.716	Recovery = 103.09%							
Cu 324.752†	6962.0	0.03145 mg/L		0.000555	0.03145 mg/L		0.000555	1.77%
QC value within limits for Cu 324.752	Recovery = 104.83%							
Fe 273.955†	4978.5	0.20585 mg/L		0.002227	0.20585 mg/L		0.002227	1.08%
QC value within limits for Fe 273.955	Recovery = 102.93%							
Mg 279.077†	9375.0	0.53491 mg/L		0.006998	0.53491 mg/L		0.006998	1.31%
QC value within limits for Mg 279.077	Recovery = 106.98%							
Mn 257.610†	31276.7	0.05351 mg/L		0.000441	0.05351 mg/L		0.000441	0.82%
QC value within limits for Mn 257.610	Recovery = 107.03%							
Ni 231.604†	1588.7	0.05330 mg/L		0.000404	0.05330 mg/L		0.000404	0.76%
QC value within limits for Ni 231.604	Recovery = 106.61%							
Pb 220.353†	51.0	0.01001 mg/L		0.000928	0.01001 mg/L		0.000928	9.28%
QC value within limits for Pb 220.353	Recovery = 100.06%							
Sb 206.836†	25.0	0.02127 mg/L		0.002190	0.02127 mg/L		0.002190	10.30%

QC value within limits for Sb 206.836 Recovery = 106.33%
 Se 196.026† 13.5 0.02699 mg/L 0.013286 0.02699 mg/L 0.013286 49.23%
 QC value within limits for Se 196.026 Recovery = 89.96%
 Tl 190.801 19.6 0.02307 mg/L 0.004130 0.02307 mg/L 0.004130 17.90%
 QC value within limits for Tl 190.801 Recovery = 115.34%
 V 292.402† 6268.6 0.05121 mg/L 0.000186 0.05121 mg/L 0.000186 0.36%
 QC value within limits for V 292.402 Recovery = 102.42%
 Zn 206.200† 1133.6 0.05323 mg/L 0.000418 0.05323 mg/L 0.000418 0.79%
 QC value within limits for Zn 206.200 Recovery = 106.47%
 Cd 226.502† 290.3 0.00520 mg/L 0.000005 0.00520 mg/L 0.000005 0.10%
 QC value within limits for Cd 226.502 Recovery = 104.07%
 Ti 334.940† 10787.6 0.01935 mg/L 0.000177 0.01935 mg/L 0.000177 0.91%
 QC value within limits for Ti 334.940 Recovery = 96.75%
 Ca 227.546† 164.9 0.82707 mg/L 0.081237 0.82707 mg/L 0.081237 9.82%
 QC value within limits for Ca 227.546 Recovery = 103.38%
 Na 589.592† 5002.6 1.0287 mg/L 0.01887 1.0287 mg/L 0.01887 1.83%
 QC value within limits for Na 589.592 Recovery = 102.87%
 K 766.490† 1105.8 1.0515 mg/L 0.06987 1.0515 mg/L 0.06987 6.64%
 QC value within limits for K 766.490 Recovery = 105.15%
 All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICSA

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 8/30/2012 8:13:06 AM

Data Type: Reprocessed on 8/30/2012 1:59:38 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1585059.3	83.519 %	1.0546			1.26%
Lu 261.542	1026733.6	83.70 %	1.069			1.28%
Ag 328.068†	206.0	-0.00383 mg/L	0.000209	-0.00383 mg/L	0.000209	5.46%
QC value within limits for Ag 328.068		Recovery =	Not calculated			
Al 308.215†	10719023.0	527.37 mg/L	10.975	527.37 mg/L	10.975	2.08%
QC value within limits for Al 308.215		Recovery =	105.47%			
As 188.979†	-32.6	-0.00350 mg/L	0.006589	-0.00350 mg/L	0.006589	188.28%
QC value within limits for As 188.979		Recovery =	Not calculated			
Ba 233.527†	23.8	0.00026 mg/L	0.000201	0.00026 mg/L	0.000201	78.83%
QC value within limits for Ba 233.527		Recovery =	Not calculated			
Be 313.107†	-296.3	-0.00014 mg/L	0.000018	-0.00014 mg/L	0.000018	13.21%
QC value within limits for Be 313.107		Recovery =	Not calculated			
Co 228.616†	148.6	-0.00027 mg/L	0.000176	-0.00027 mg/L	0.000176	64.20%
QC value within limits for Co 228.616		Recovery =	Not calculated			
Cr 267.716†	213.9	0.01367 mg/L	0.000153	0.01367 mg/L	0.000153	1.12%
QC value within limits for Cr 267.716		Recovery =	Not calculated			
Cu 324.752†	-2704.5	0.00475 mg/L	0.000750	0.00475 mg/L	0.000750	15.81%
QC value within limits for Cu 324.752		Recovery =	Not calculated			
Fe 273.955†	4446122.9	183.77 mg/L	2.591	183.77 mg/L	2.591	1.41%
QC value within limits for Fe 273.955		Recovery =	91.88%			
Mg 279.077†	8744276.4	498.98 mg/L	11.423	498.98 mg/L	11.423	2.29%
QC value within limits for Mg 279.077		Recovery =	99.80%			
Mn 257.610†	-119.0	-0.00519 mg/L	0.000203	-0.00519 mg/L	0.000203	3.90%
QC value within limits for Mn 257.610		Recovery =	Not calculated			
Ni 231.604†	-12.5	-0.00254 mg/L	0.000190	-0.00254 mg/L	0.000190	7.51%
QC value within limits for Ni 231.604		Recovery =	Not calculated			
Pb 220.353†	-220.2	0.00755 mg/L	0.002200	0.00755 mg/L	0.002200	29.15%
QC value within limits for Pb 220.353		Recovery =	Not calculated			
Sb 206.836†	17.7	0.00091 mg/L	0.000824	0.00091 mg/L	0.000824	90.67%
QC value within limits for Sb 206.836		Recovery =	Not calculated			
Se 196.026†	-39.4	0.00393 mg/L	0.012847	0.00393 mg/L	0.012847	326.99%
QC value within limits for Se 196.026		Recovery =	Not calculated			
Tl 190.801	-39.9	0.00681 mg/L	0.006284	0.00681 mg/L	0.006284	92.21%
QC value within limits for Tl 190.801		Recovery =	Not calculated			
V 292.402†	-1751.8	-0.00863 mg/L	0.000279	-0.00863 mg/L	0.000279	3.24%
QC value within limits for V 292.402		Recovery =	Not calculated			
Zn 206.200†	81.1	0.01298 mg/L	0.000114	0.01298 mg/L	0.000114	0.88%
QC value within limits for Zn 206.200		Recovery =	Not calculated			

Cd 226.502† 779.0 -0.00119 mg/L 0.000283 -0.00119 mg/L 0.000283 23.80%
 QC value within limits for Cd 226.502 Recovery = Not calculated
 Ti 334.940† -6568.2 -0.01185 mg/L 0.000266 -0.01185 mg/L 0.000266 2.25%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 104761.9 535.57 mg/L 7.174 535.57 mg/L 7.174 1.34%
 QC value within limits for Ca 227.546 Recovery = 107.11%
 Na 589.592† 257.4 0.05292 mg/L 0.019177 0.05292 mg/L 0.019177 36.24%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490† 155.3 0.14768 mg/L 0.071916 0.14768 mg/L 0.071916 48.70%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSAB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 8/30/2012 8:16:53 AM

Data Type: Reprocessed on 8/30/2012 1:59:39 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	1610334.9	84.850 %		0.6052			0.71%
Lu 261.542	1043810.3	85.10 %		0.539			0.63%
Ag 328.068†	37507.7	0.21188 mg/L		0.001676	0.21188 mg/L	0.001676	0.79%
QC value within limits for Ag 328.068			Recovery = 105.94%				
Al 308.215†	10510838.4	517.13 mg/L		3.449	517.13 mg/L	3.449	0.67%
QC value within limits for Al 308.215			Recovery = 103.43%				
As 188.979†	51.7	0.10044 mg/L		0.006084	0.10044 mg/L	0.006084	6.06%
QC value within limits for As 188.979			Recovery = 100.44%				
Ba 233.527†	44466.8	0.51620 mg/L		0.002091	0.51620 mg/L	0.002091	0.41%
QC value within limits for Ba 233.527			Recovery = 103.24%				
Be 313.107†	1240678.7	0.49223 mg/L		0.002356	0.49223 mg/L	0.002356	0.48%
QC value within limits for Be 313.107			Recovery = 98.45%				
Co 228.616†	16881.1	0.46525 mg/L		0.003756	0.46525 mg/L	0.003756	0.81%
QC value within limits for Co 228.616			Recovery = 93.05%				
Cr 267.716†	34904.9	0.50377 mg/L		0.002253	0.50377 mg/L	0.002253	0.45%
QC value within limits for Cr 267.716			Recovery = 100.75%				
Cu 324.752†	113555.7	0.52929 mg/L		0.002084	0.52929 mg/L	0.002084	0.39%
QC value within limits for Cu 324.752			Recovery = 105.86%				
Fe 273.955†	4391538.0	181.51 mg/L		0.699	181.51 mg/L	0.699	0.38%
QC value within limits for Fe 273.955			Recovery = 90.76%				
Mg 279.077†	8572724.6	489.19 mg/L		3.249	489.19 mg/L	3.249	0.66%
QC value within limits for Mg 279.077			Recovery = 97.84%				
Mn 257.610†	286875.9	0.48598 mg/L		0.002027	0.48598 mg/L	0.002027	0.42%
QC value within limits for Mn 257.610			Recovery = 97.20%				
Ni 231.604†	27052.6	0.90591 mg/L		0.006604	0.90591 mg/L	0.006604	0.73%
QC value within limits for Ni 231.604			Recovery = 90.59%				
Pb 220.353†	2324.5	0.50389 mg/L		0.004337	0.50389 mg/L	0.004337	0.86%
QC value within limits for Pb 220.353			Recovery = 100.78%				
Sb 206.836†	761.7	0.63317 mg/L		0.006450	0.63317 mg/L	0.006450	1.02%
QC value within limits for Sb 206.836			Recovery = 105.53%				
Se 196.026†	206.3	0.49252 mg/L		0.028495	0.49252 mg/L	0.028495	5.79%
QC value within limits for Se 196.026			Recovery = 98.50%				
Tl 190.801	36.9	0.09342 mg/L		0.002715	0.09342 mg/L	0.002715	2.91%
QC value within limits for Tl 190.801			Recovery = 93.42%				
V 292.402†	59297.3	0.49084 mg/L		0.002084	0.49084 mg/L	0.002084	0.42%
QC value within limits for V 292.402			Recovery = 98.17%				
Zn 206.200†	19799.3	0.93806 mg/L		0.007574	0.93806 mg/L	0.007574	0.81%
QC value within limits for Zn 206.200			Recovery = 93.81%				
Cd 226.502†	52152.8	0.92063 mg/L		0.004368	0.92063 mg/L	0.004368	0.47%
QC value within limits for Cd 226.502			Recovery = 92.06%				
Ti 334.940†	-6383.9	-0.01161 mg/L		0.000176	-0.01161 mg/L	0.000176	1.52%
QC value within limits for Ti 334.940			Recovery = Not calculated				
Ca 227.546†	102693.0	524.82 mg/L		2.563	524.82 mg/L	2.563	0.49%
QC value within limits for Ca 227.546			Recovery = 104.96%				
Na 589.592†	137010.6	28.173 mg/L		0.4209	28.173 mg/L	0.4209	1.49%
QC value within limits for Na 589.592			Recovery = 112.69%				
K 766.490†	30185.1	28.702 mg/L		0.4060	28.702 mg/L	0.4060	1.41%

QC value within limits for K 766.490 Recovery = 114.81%
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 8/30/2012 8:20:39 AM

Data Type: Reprocessed on 8/30/2012 1:59:40 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1768795.7	93.200 %	0.6169			0.66%
Lu 261.542	1152012.6	93.92 %	0.701			0.75%
Ag 328.068†	211556.1	1.2220 mg/L	0.00627	1.2220 mg/L	0.00627	0.51%
QC value within limits for Ag 328.068 Recovery = 97.76%						
Al 308.215†	200193.3	9.8416 mg/L	0.01819	9.8416 mg/L	0.01819	0.18%
QC value within limits for Al 308.215 Recovery = 98.42%						
As 188.979†	409.9	0.49735 mg/L	0.008572	0.49735 mg/L	0.008572	1.72%
QC value within limits for As 188.979 Recovery = 99.47%						
Ba 233.527†	879125.0	10.195 mg/L	0.0128	10.195 mg/L	0.0128	0.13%
QC value within limits for Ba 233.527 Recovery = 101.95%						
Be 313.107†	615540.3	0.24519 mg/L	0.000323	0.24519 mg/L	0.000323	0.13%
QC value within limits for Be 313.107 Recovery = 98.08%						
Co 228.616†	92013.6	2.5588 mg/L	0.02902	2.5588 mg/L	0.02902	1.13%
QC value within limits for Co 228.616 Recovery = 102.35%						
Cr 267.716†	69061.0	0.97659 mg/L	0.012548	0.97659 mg/L	0.012548	1.28%
QC value within limits for Cr 267.716 Recovery = 97.66%						
Cu 324.752†	272992.9	1.2330 mg/L	0.00204	1.2330 mg/L	0.00204	0.17%
QC value within limits for Cu 324.752 Recovery = 98.64%						
Fe 273.955†	121516.3	5.0266 mg/L	0.05292	5.0266 mg/L	0.05292	1.05%
QC value within limits for Fe 273.955 Recovery = 100.53%						
Mg 279.077†	439313.3	25.066 mg/L	0.0419	25.066 mg/L	0.0419	0.17%
QC value within limits for Mg 279.077 Recovery = 100.26%						
Mn 257.610†	1461156.7	2.5000 mg/L	0.00411	2.5000 mg/L	0.00411	0.16%
QC value within limits for Mn 257.610 Recovery = 100.00%						
Ni 231.604†	75125.4	2.5210 mg/L	0.02825	2.5210 mg/L	0.02825	1.12%
QC value within limits for Ni 231.604 Recovery = 100.84%						
Pb 220.353†	2505.7	0.49164 mg/L	0.004631	0.49164 mg/L	0.004631	0.94%
QC value within limits for Pb 220.353 Recovery = 98.33%						
Sb 206.836†	607.7	0.50850 mg/L	0.008577	0.50850 mg/L	0.008577	1.69%
QC value within limits for Sb 206.836 Recovery = 101.70%						
Se 196.026†	240.4	0.48387 mg/L	0.010266	0.48387 mg/L	0.010266	2.12%
QC value within limits for Se 196.026 Recovery = 96.77%						
Tl 190.801	421.2	0.48283 mg/L	0.005511	0.48283 mg/L	0.005511	1.14%
QC value within limits for Tl 190.801 Recovery = 96.57%						
V 292.402†	303838.7	2.4827 mg/L	0.00129	2.4827 mg/L	0.00129	0.05%
QC value within limits for V 292.402 Recovery = 99.31%						
Zn 206.200†	53778.8	2.5244 mg/L	0.02784	2.5244 mg/L	0.02784	1.10%
QC value within limits for Zn 206.200 Recovery = 100.98%						
Cd 226.502†	13619.5	0.24448 mg/L	0.002980	0.24448 mg/L	0.002980	1.22%
QC value within limits for Cd 226.502 Recovery = 97.79%						
Ti 334.940†	272929.0	0.48935 mg/L	0.001196	0.48935 mg/L	0.001196	0.24%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	4900.3	24.278 mg/L	0.3055	24.278 mg/L	0.3055	1.26%
QC value within limits for Ca 227.546 Recovery = 97.11%						
Na 589.592†	122266.6	25.141 mg/L	0.2874	25.141 mg/L	0.2874	1.14%
QC value within limits for Na 589.592 Recovery = 100.56%						
K 766.490†	26485.8	25.185 mg/L	0.3910	25.185 mg/L	0.3910	1.55%
QC value within limits for K 766.490 Recovery = 100.74%						

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Autosampler Location: 4

Date Collected: 8/30/2012 8:24:22 AM

Data Type: Reprocessed on 8/30/2012 1:59:40 PM

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1851465.1	97.556	%	1.5223			1.56%
Lu 261.542	1197173.9	97.60	%	1.601			1.64%
Ag 328.068†	202.4	0.00117	mg/L	0.000614	0.00117 mg/L	0.000614	52.61%
QC value within limits for Ag		328.068	Recovery =	Not calculated			
Al 308.215†	140.1	0.00688	mg/L	0.001023	0.00688 mg/L	0.001023	14.87%
QC value within limits for Al		308.215	Recovery =	Not calculated			
As 188.979†	-2.4	-0.00287	mg/L	0.002864	-0.00287 mg/L	0.002864	99.79%
QC value within limits for As		188.979	Recovery =	Not calculated			
Ba 233.527†	76.6	0.00089	mg/L	0.000181	0.00089 mg/L	0.000181	20.36%
QC value within limits for Ba		233.527	Recovery =	Not calculated			
Be 313.107†	31.4	0.00001	mg/L	0.000025	0.00001 mg/L	0.000025	197.30%
QC value within limits for Be		313.107	Recovery =	Not calculated			
Co 228.616†	3.4	0.00010	mg/L	0.000162	0.00010 mg/L	0.000162	170.32%
QC value within limits for Co		228.616	Recovery =	Not calculated			
Cr 267.716†	31.5	0.00045	mg/L	0.000246	0.00045 mg/L	0.000246	55.22%
QC value within limits for Cr		267.716	Recovery =	Not calculated			
Cu 324.752†	321.3	0.00145	mg/L	0.000319	0.00145 mg/L	0.000319	22.01%
QC value within limits for Cu		324.752	Recovery =	Not calculated			
Fe 273.955†	105.3	0.00435	mg/L	0.000593	0.00435 mg/L	0.000593	13.63%
QC value within limits for Fe		273.955	Recovery =	Not calculated			
Mg 279.077†	125.2	0.00715	mg/L	0.001842	0.00715 mg/L	0.001842	25.78%
QC value within limits for Mg		279.077	Recovery =	Not calculated			
Mn 257.610†	160.9	0.00028	mg/L	0.000082	0.00028 mg/L	0.000082	29.97%
QC value within limits for Mn		257.610	Recovery =	Not calculated			
Ni 231.604†	5.9	0.00020	mg/L	0.000049	0.00020 mg/L	0.000049	24.70%
QC value within limits for Ni		231.604	Recovery =	Not calculated			
Pb 220.353†	1.7	0.00033	mg/L	0.001207	0.00033 mg/L	0.001207	361.80%
QC value within limits for Pb		220.353	Recovery =	Not calculated			
Sb 206.836†	3.3	0.00287	mg/L	0.002483	0.00287 mg/L	0.002483	86.60%
QC value within limits for Sb		206.836	Recovery =	Not calculated			
Se 196.026†	-2.9	-0.00572	mg/L	0.016039	-0.00572 mg/L	0.016039	280.55%
QC value within limits for Se		196.026	Recovery =	Not calculated			
Tl 190.801	-1.1	-0.00136	mg/L	0.003256	-0.00136 mg/L	0.003256	238.85%
QC value within limits for Tl		190.801	Recovery =	Not calculated			
V 292.402†	81.5	0.00067	mg/L	0.000269	0.00067 mg/L	0.000269	40.40%
QC value within limits for V		292.402	Recovery =	Not calculated			
Zn 206.200†	12.2	0.00057	mg/L	0.000396	0.00057 mg/L	0.000396	69.29%
QC value within limits for Zn		206.200	Recovery =	Not calculated			
Cd 226.502†	6.9	0.00012	mg/L	0.000034	0.00012 mg/L	0.000034	27.29%
QC value within limits for Cd		226.502	Recovery =	Not calculated			
Ti 334.940†	106.1	0.00019	mg/L	0.000055	0.00019 mg/L	0.000055	28.90%
QC value within limits for Ti		334.940	Recovery =	Not calculated			
Ca 227.546†	12.4	0.06374	mg/L	0.060676	0.06374 mg/L	0.060676	95.19%
QC value within limits for Ca		227.546	Recovery =	Not calculated			
Na 589.592†	-52.0	-0.01070	mg/L	0.021074	-0.01070 mg/L	0.021074	196.94%
QC value within limits for Na		589.592	Recovery =	Not calculated			
K 766.490†	36.9	0.03513	mg/L	0.017474	0.03513 mg/L	0.017474	49.75%
QC value within limits for K		766.490	Recovery =	Not calculated			

All analyte(s) passed QC.

Sequence No.: 12

Sample ID: MB-67887-PBW

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 38

Date Collected: 8/30/2012 8:28:04 AM

Data Type: Reprocessed on 8/30/2012 1:59:41 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: MB-67887-PBW

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1824656.9	96.143	%	1.4058			1.46%
Lu 261.542	1181755.0	96.34	%	1.439			1.49%
Ag 328.068†	588.6	0.00339	mg/L	0.001232	0.00339 mg/L	0.001232	36.35%

Al 308.215†	214.5	0.01054 mg/L	0.002995	0.01054 mg/L	0.002995	28.43%
As 188.979†	1.4	0.00170 mg/L	0.000722	0.00170 mg/L	0.000722	42.47%
Ba 233.527†	10.3	0.00012 mg/L	0.000060	0.00012 mg/L	0.000060	50.15%
Be 313.107†	-25.8	-0.00001 mg/L	0.000006	-0.00001 mg/L	0.000006	58.84%
Co 228.616†	-3.3	-0.00009 mg/L	0.000172	-0.00009 mg/L	0.000172	188.08%
Cr 267.716†	-24.8	-0.00035 mg/L	0.000520	-0.00035 mg/L	0.000520	148.93%
Cu 324.752†	470.4	0.00212 mg/L	0.000743	0.00212 mg/L	0.000743	35.00%
Fe 273.955†	151.8	0.00627 mg/L	0.000331	0.00627 mg/L	0.000331	5.28%
Mg 279.077†	6.6	0.00038 mg/L	0.002205	0.00038 mg/L	0.002205	585.16%
Mn 257.610†	202.9	0.00035 mg/L	0.000013	0.00035 mg/L	0.000013	3.72%
Ni 231.604†	-0.0	0.00000 mg/L	0.000230	0.00000 mg/L	0.000230	>999.9%
Pb 220.353†	2.9	0.00056 mg/L	0.001904	0.00056 mg/L	0.001904	338.83%
Sb 206.836†	11.0	0.00950 mg/L	0.002279	0.00950 mg/L	0.002279	23.98%
Se 196.026†	3.0	0.00592 mg/L	0.001751	0.00592 mg/L	0.001751	29.58%
Tl 190.801	-2.2	-0.00261 mg/L	0.002653	-0.00261 mg/L	0.002653	101.53%
V 292.402†	3.2	0.00002 mg/L	0.000404	0.00002 mg/L	0.000404	>999.9%
Zn 206.200†	47.3	0.00222 mg/L	0.000161	0.00222 mg/L	0.000161	7.29%
Cd 226.502†	4.7	0.00008 mg/L	0.000070	0.00008 mg/L	0.000070	84.35%
Ti 334.940†	139.0	0.00025 mg/L	0.000062	0.00025 mg/L	0.000062	24.84%
Ca 227.546†	18.6	0.09539 mg/L	0.046593	0.09539 mg/L	0.046593	48.85%
Na 589.592†	-92.4	-0.01900 mg/L	0.009256	-0.01900 mg/L	0.009256	48.72%
K 766.490†	-24.4	-0.02317 mg/L	0.084781	-0.02317 mg/L	0.084781	365.96%

Sequence No.: 13

Sample ID: LCS-67887-LCS

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 39

Date Collected: 8/30/2012 8:31:44 AM

Data Type: Reprocessed on 8/30/2012 1:59:42 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCS-67887-LCS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1772776.0	93.410	%	0.4760				0.51%
Lu 261.542	1153623.9	94.05	%	0.516				0.55%
Ag 328.068†	201466.6	1.1636	mg/L	0.01732	1.1636	mg/L	0.01732	1.49%
Al 308.215†	190638.3	9.3728	mg/L	0.13624	9.3728	mg/L	0.13624	1.45%
As 188.979†	397.8	0.48248	mg/L	0.005723	0.48248	mg/L	0.005723	1.19%
Ba 233.527†	824876.8	9.5663	mg/L	0.02053	9.5663	mg/L	0.02053	0.21%
Be 313.107†	597836.6	0.23726	mg/L	0.000476	0.23726	mg/L	0.000476	0.20%
Co 228.616†	85213.1	2.3707	mg/L	0.03332	2.3707	mg/L	0.03332	1.41%
Cr 267.716†	66540.0	0.94093	mg/L	0.015057	0.94093	mg/L	0.015057	1.60%
Cu 324.752†	256029.5	1.1564	mg/L	0.01683	1.1564	mg/L	0.01683	1.45%
Fe 273.955†	115070.8	4.7599	mg/L	0.06849	4.7599	mg/L	0.06849	1.44%
Mg 279.077†	413901.9	23.616	mg/L	0.0451	23.616	mg/L	0.0451	0.19%
Mn 257.610†	1377937.5	2.3577	mg/L	0.00485	2.3577	mg/L	0.00485	0.21%
Ni 231.604†	70877.3	2.3787	mg/L	0.03587	2.3787	mg/L	0.03587	1.51%
Pb 220.353†	2453.8	0.48093	mg/L	0.004466	0.48093	mg/L	0.004466	0.93%
Sb 206.836†	586.8	0.48990	mg/L	0.008158	0.48990	mg/L	0.008158	1.67%
Se 196.026†	234.1	0.47071	mg/L	0.005790	0.47071	mg/L	0.005790	1.23%
Tl 190.801	385.1	0.44097	mg/L	0.007436	0.44097	mg/L	0.007436	1.69%
V 292.402†	284700.3	2.3270	mg/L	0.03541	2.3270	mg/L	0.03541	1.52%
Zn 206.200†	50084.9	2.3507	mg/L	0.03512	2.3507	mg/L	0.03512	1.49%
Cd 226.502†	13199.9	0.23694	mg/L	0.003189	0.23694	mg/L	0.003189	1.35%
Ti 334.940†	328.7	0.00035	mg/L	0.000051	0.00035	mg/L	0.000051	14.64%
Ca 227.546†	4588.2	22.740	mg/L	0.1905	22.740	mg/L	0.1905	0.84%
Na 589.592†	114359.4	23.515	mg/L	0.1223	23.515	mg/L	0.1223	0.52%
K 766.490†	24956.6	23.731	mg/L	0.0557	23.731	mg/L	0.0557	0.23%

Sequence No.: 14

Sample ID: L1786-01B-SL-MW-23D

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 40

Date Collected: 8/30/2012 8:35:26 AM

Data Type: Reprocessed on 8/30/2012 1:59:42 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-01B-SL-MW-23D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1783050.5	93.951	%	0.2998				0.32%
Lu 261.542	1149583.6	93.72	%	0.438				0.47%
Ag 328.068†	85.1	0.00045	mg/L	0.000263	0.00045	mg/L	0.000263	58.48%
Al 308.215†	32285.0	1.5854	mg/L	0.01543	1.5854	mg/L	0.01543	0.97%
As 188.979†	0.7	0.00149	mg/L	0.004980	0.00149	mg/L	0.004980	333.68%
Ba 233.527†	1971.2	0.02286	mg/L	0.000099	0.02286	mg/L	0.000099	0.43%
Be 313.107†	26.0	0.00011	mg/L	0.000003	0.00011	mg/L	0.000003	2.64%
Co 228.616†	12.5	0.00019	mg/L	0.000062	0.00019	mg/L	0.000062	32.04%
Cr 267.716†	268.0	0.00394	mg/L	0.000248	0.00394	mg/L	0.000248	6.28%
Cu 324.752†	1701.3	0.00780	mg/L	0.000263	0.00780	mg/L	0.000263	3.38%
Fe 273.955†	32332.1	1.3364	mg/L	0.00557	1.3364	mg/L	0.00557	0.42%
Mg 279.077†	60294.1	3.4406	mg/L	0.01788	3.4406	mg/L	0.01788	0.52%
Mn 257.610†	49685.3	0.08499	mg/L	0.000410	0.08499	mg/L	0.000410	0.48%
Ni 231.604†	29.2	0.00093	mg/L	0.000449	0.00093	mg/L	0.000449	48.16%
Pb 220.353†	4.3	0.00103	mg/L	0.000490	0.00103	mg/L	0.000490	47.51%
Sb 206.836†	0.9	0.00074	mg/L	0.003319	0.00074	mg/L	0.003319	446.20%
Se 196.026†	0.9	0.00230	mg/L	0.010540	0.00230	mg/L	0.010540	459.04%
Tl 190.801	2.9	0.00395	mg/L	0.001676	0.00395	mg/L	0.001676	42.48%
V 292.402†	776.3	0.00631	mg/L	0.000596	0.00631	mg/L	0.000596	9.44%
Zn 206.200†	125.1	0.00602	mg/L	0.000211	0.00602	mg/L	0.000211	3.51%
Cd 226.502†	5.4	-0.00004	mg/L	0.000080	-0.00004	mg/L	0.000080	186.11%
Ti 334.940†	29555.6	0.05322	mg/L	0.005326	0.05322	mg/L	0.005326	10.01%
Ca 227.546†	3019.2	15.471	mg/L	0.1431	15.471	mg/L	0.1431	0.92%
Na 589.592†	61173.3	12.579	mg/L	0.0361	12.579	mg/L	0.0361	0.29%
K 766.490†	2723.7	2.5899	mg/L	0.03611	2.5899	mg/L	0.03611	1.39%

Sequence No.: 15

Sample ID: L1786-01C-SL-MW-23D

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 41

Date Collected: 8/30/2012 8:39:06 AM

Data Type: Reprocessed on 8/30/2012 1:59:43 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-01C-SL-MW-23D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1853486.6	97.662	%	1.8553				1.90%
Lu 261.542	1205586.2	98.29	%	1.839				1.87%
Ag 328.068†	193.3	0.00108	mg/L	0.000753	0.00108	mg/L	0.000753	69.61%
Al 308.215†	136.1	0.00364	mg/L	0.005538	0.00364	mg/L	0.005538	151.92%
As 188.979†	2.1	0.00306	mg/L	0.001584	0.00306	mg/L	0.001584	51.71%
Ba 233.527†	1366.6	0.01584	mg/L	0.000307	0.01584	mg/L	0.000307	1.94%
Be 313.107†	-8.3	0.00000	mg/L	0.000020	0.00000	mg/L	0.000020	863.84%
Co 228.616†	3.8	0.00010	mg/L	0.000313	0.00010	mg/L	0.000313	301.82%
Cr 267.716†	4.7	0.00021	mg/L	0.000176	0.00021	mg/L	0.000176	83.99%
Cu 324.752†	440.4	0.00199	mg/L	0.000448	0.00199	mg/L	0.000448	22.54%
Fe 273.955†	372.9	0.01541	mg/L	0.000642	0.01541	mg/L	0.000642	4.17%
Mg 279.077†	55074.5	3.1427	mg/L	0.05415	3.1427	mg/L	0.05415	1.72%
Mn 257.610†	2192.5	0.00372	mg/L	0.000070	0.00372	mg/L	0.000070	1.89%
Ni 231.604†	8.8	0.00028	mg/L	0.000178	0.00028	mg/L	0.000178	62.69%
Pb 220.353†	-9.4	-0.00184	mg/L	0.000501	-0.00184	mg/L	0.000501	27.23%
Sb 206.836†	0.9	0.00077	mg/L	0.002690	0.00077	mg/L	0.002690	350.66%
Se 196.026†	0.3	0.00062	mg/L	0.006676	0.00062	mg/L	0.006676	>999.9%
Tl 190.801	-2.1	-0.00230	mg/L	0.002792	-0.00230	mg/L	0.002792	121.62%
V 292.402†	58.3	0.00048	mg/L	0.000180	0.00048	mg/L	0.000180	37.78%
Zn 206.200†	53.7	0.00252	mg/L	0.000178	0.00252	mg/L	0.000178	7.08%
Cd 226.502†	5.8	0.00007	mg/L	0.000125	0.00007	mg/L	0.000125	188.80%
Ti 334.940†	308.4	0.00074	mg/L	0.000078	0.00074	mg/L	0.000078	10.61%
Ca 227.546†	2826.2	14.493	mg/L	0.2896	14.493	mg/L	0.2896	2.00%
Na 589.592†	58735.8	12.078	mg/L	0.3028	12.078	mg/L	0.3028	2.51%
K 766.490†	2438.6	2.3188	mg/L	0.03384	2.3188	mg/L	0.03384	1.46%

Sequence No.: 16

Sample ID: L1786-02B-SL-MW-73D

Analyst:

Logged In Analyst (Original) : mitOptima3

Autosampler Location: 42

Date Collected: 8/30/2012 8:42:46 AM

Data Type: Reprocessed on 8/30/2012 1:59:44 PM

Initial Sample Wt:
Dilution:

Initial Sample Vol:
Sample Prep Vol:

Mean Data: L1786-02B-SL-MW-73D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1800163.5	94.853	%	0.8869				0.94%
Lu 261.542	1162912.6	94.81	%	0.918				0.97%
Ag 328.068†	141.6	0.00078	mg/L	0.000239	0.00078	mg/L	0.000239	30.82%
Al 308.215†	30182.1	1.4818	mg/L	0.00905	1.4818	mg/L	0.00905	0.61%
As 188.979†	0.4	0.00117	mg/L	0.005158	0.00117	mg/L	0.005158	442.56%
Ba 233.527†	1963.0	0.02277	mg/L	0.000164	0.02277	mg/L	0.000164	0.72%
Be 313.107†	73.1	0.00012	mg/L	0.000042	0.00012	mg/L	0.000042	35.76%
Co 228.616†	15.1	0.00028	mg/L	0.000171	0.00028	mg/L	0.000171	61.71%
Cr 267.716†	249.3	0.00368	mg/L	0.000101	0.00368	mg/L	0.000101	2.74%
Cu 324.752†	1582.4	0.00726	mg/L	0.000286	0.00726	mg/L	0.000286	3.94%
Fe 273.955†	31661.3	1.3086	mg/L	0.00643	1.3086	mg/L	0.00643	0.49%
Mg 279.077†	61280.9	3.4969	mg/L	0.01709	3.4969	mg/L	0.01709	0.49%
Mn 257.610†	47197.4	0.08073	mg/L	0.000385	0.08073	mg/L	0.000385	0.48%
Ni 231.604†	22.8	0.00072	mg/L	0.000221	0.00072	mg/L	0.000221	30.50%
Pb 220.353†	0.6	0.00029	mg/L	0.001353	0.00029	mg/L	0.001353	468.76%
Sb 206.836†	2.0	0.00171	mg/L	0.001510	0.00171	mg/L	0.001510	88.24%
Se 196.026†	1.1	0.00274	mg/L	0.009245	0.00274	mg/L	0.009245	337.80%
Tl 190.801	-7.3	-0.00831	mg/L	0.004166	-0.00831	mg/L	0.004166	50.14%
V 292.402†	761.4	0.00620	mg/L	0.000435	0.00620	mg/L	0.000435	7.03%
Zn 206.200†	125.1	0.00600	mg/L	0.000116	0.00600	mg/L	0.000116	1.92%
Cd 226.502†	5.0	-0.00005	mg/L	0.000137	-0.00005	mg/L	0.000137	271.13%
Ti 334.940†	27018.9	0.04867	mg/L	0.002968	0.04867	mg/L	0.002968	6.10%
Ca 227.546†	3112.1	15.948	mg/L	0.1801	15.948	mg/L	0.1801	1.13%
Na 589.592†	62864.9	12.927	mg/L	0.0816	12.927	mg/L	0.0816	0.63%
K 766.490†	2833.1	2.6939	mg/L	0.04451	2.6939	mg/L	0.04451	1.65%

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Sequence No.: 17

Sample ID: L1786-02C-SL-MW-73D

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 43

Date Collected: 8/30/2012 8:46:26 AM

Data Type: Reprocessed on 8/30/2012 1:59:44 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-02C-SL-MW-73D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1802446.7	94.973	%	0.1445				0.15%
Lu 261.542	1172302.7	95.57	%	0.052				0.05%
Ag 328.068†	100.9	0.00055	mg/L	0.000223	0.00055	mg/L	0.000223	40.74%
Al 308.215†	241.7	0.00869	mg/L	0.001662	0.00869	mg/L	0.001662	19.13%
As 188.979†	2.8	0.00383	mg/L	0.005690	0.00383	mg/L	0.005690	148.43%
Ba 233.527†	1387.4	0.01609	mg/L	0.000175	0.01609	mg/L	0.000175	1.09%
Be 313.107†	-37.3	-0.00001	mg/L	0.000024	-0.00001	mg/L	0.000024	175.97%
Co 228.616†	0.4	0.00001	mg/L	0.000105	0.00001	mg/L	0.000105	>999.9%
Cr 267.716†	33.8	0.00063	mg/L	0.000310	0.00063	mg/L	0.000310	49.34%
Cu 324.752†	444.7	0.00201	mg/L	0.000276	0.00201	mg/L	0.000276	13.76%
Fe 273.955†	580.0	0.02397	mg/L	0.000027	0.02397	mg/L	0.000027	0.11%
Mg 279.077†	57979.4	3.3085	mg/L	0.03966	3.3085	mg/L	0.03966	1.20%
Mn 257.610†	1986.9	0.00337	mg/L	0.000045	0.00337	mg/L	0.000045	1.34%
Ni 231.604†	9.5	0.00031	mg/L	0.000286	0.00031	mg/L	0.000286	92.93%
Pb 220.353†	-1.2	-0.00024	mg/L	0.001450	-0.00024	mg/L	0.001450	609.82%
Sb 206.836†	-1.1	-0.00096	mg/L	0.000785	-0.00096	mg/L	0.000785	81.64%
Se 196.026†	0.7	0.00147	mg/L	0.008504	0.00147	mg/L	0.008504	580.06%
Tl 190.801	-3.7	-0.00416	mg/L	0.002366	-0.00416	mg/L	0.002366	56.87%
V 292.402†	21.9	0.00018	mg/L	0.000384	0.00018	mg/L	0.000384	213.78%
Zn 206.200†	69.7	0.00327	mg/L	0.000147	0.00327	mg/L	0.000147	4.51%
Cd 226.502†	-4.2	-0.00012	mg/L	0.000149	-0.00012	mg/L	0.000149	127.23%
Ti 334.940†	263.1	0.00067	mg/L	0.000155	0.00067	mg/L	0.000155	23.26%
Ca 227.546†	2969.8	15.229	mg/L	0.1000	15.229	mg/L	0.1000	0.66%
Na 589.592†	61784.9	12.705	mg/L	0.0184	12.705	mg/L	0.0184	0.14%
K 766.490†	2622.0	2.4932	mg/L	0.00911	2.4932	mg/L	0.00911	0.37%

Sequence No.: 18

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 8/30/2012 8:50:06 AM

Data Type: Reprocessed on 8/30/2012 1:59:45 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	1772986.8	93.421 %	1.4353			1.54%
Lu 261.542	1155325.3	94.19 %	1.428			1.52%
Ag 328.068†	209674.8	1.2111 mg/L	0.04073	1.2111 mg/L	0.04073	3.36%
QC value within limits for Ag 328.068 Recovery = 96.89%						
Al 308.215†	200643.0	9.8636 mg/L	0.21225	9.8636 mg/L	0.21225	2.15%
QC value within limits for Al 308.215 Recovery = 98.64%						
As 188.979†	411.3	0.49904 mg/L	0.008796	0.49904 mg/L	0.008796	1.76%
QC value within limits for As 188.979 Recovery = 99.81%						
Ba 233.527†	887929.3	10.298 mg/L	0.1270	10.298 mg/L	0.1270	1.23%
QC value within limits for Ba 233.527 Recovery = 102.98%						
Be 313.107†	625385.1	0.24910 mg/L	0.003186	0.24910 mg/L	0.003186	1.28%
QC value within limits for Be 313.107 Recovery = 99.64%						
Co 228.616†	92488.8	2.5720 mg/L	0.05654	2.5720 mg/L	0.05654	2.20%
QC value within limits for Co 228.616 Recovery = 102.88%						
Cr 267.716†	69369.4	0.98094 mg/L	0.020382	0.98094 mg/L	0.020382	2.08%
QC value within limits for Cr 267.716 Recovery = 98.09%						
Cu 324.752†	268154.0	1.2112 mg/L	0.02793	1.2112 mg/L	0.02793	2.31%
QC value within limits for Cu 324.752 Recovery = 96.90%						
Fe 273.955†	122221.5	5.0557 mg/L	0.10964	5.0557 mg/L	0.10964	2.17%
QC value within limits for Fe 273.955 Recovery = 101.11%						
Mg 279.077†	444769.5	25.377 mg/L	0.2936	25.377 mg/L	0.2936	1.16%
QC value within limits for Mg 279.077 Recovery = 101.51%						
Mn 257.610†	1486407.1	2.5432 mg/L	0.03124	2.5432 mg/L	0.03124	1.23%
QC value within limits for Mn 257.610 Recovery = 101.73%						
Ni 231.604†	75646.3	2.5385 mg/L	0.05218	2.5385 mg/L	0.05218	2.06%
QC value within limits for Ni 231.604 Recovery = 101.54%						
Pb 220.353†	2587.0	0.50755 mg/L	0.008687	0.50755 mg/L	0.008687	1.71%
QC value within limits for Pb 220.353 Recovery = 101.51%						
Sb 206.836†	620.0	0.51898 mg/L	0.006581	0.51898 mg/L	0.006581	1.27%
QC value within limits for Sb 206.836 Recovery = 103.80%						
Se 196.026†	245.3	0.49358 mg/L	0.005583	0.49358 mg/L	0.005583	1.13%
QC value within limits for Se 196.026 Recovery = 98.72%						
Tl 190.801	429.8	0.49312 mg/L	0.010614	0.49312 mg/L	0.010614	2.15%
QC value within limits for Tl 190.801 Recovery = 98.62%						
V 292.402†	302789.9	2.4741 mg/L	0.05334	2.4741 mg/L	0.05334	2.16%
QC value within limits for V 292.402 Recovery = 98.97%						
Zn 206.200†	53842.1	2.5274 mg/L	0.05653	2.5274 mg/L	0.05653	2.24%
QC value within limits for Zn 206.200 Recovery = 101.10%						
Cd 226.502†	13595.4	0.24405 mg/L	0.005247	0.24405 mg/L	0.005247	2.15%
QC value within limits for Cd 226.502 Recovery = 97.62%						
Ti 334.940†	274398.8	0.49198 mg/L	0.005906	0.49198 mg/L	0.005906	1.20%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546†	4951.5	24.536 mg/L	0.2946	24.536 mg/L	0.2946	1.20%
QC value within limits for Ca 227.546 Recovery = 98.15%						
Na 589.592†	125045.4	25.712 mg/L	0.5110	25.712 mg/L	0.5110	1.99%
QC value within limits for Na 589.592 Recovery = 102.85%						
K 766.490†	27233.9	25.896 mg/L	0.5473	25.896 mg/L	0.5473	2.11%
QC value within limits for K 766.490 Recovery = 103.58%						
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: 8/30/2012 8:53:49 AM

Data Type: Reprocessed on 8/30/2012 1:59:46 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	1822564.6	96.033	%	1.7935				1.87%
Lu 261.542	1179780.1	96.18	%	1.830				1.90%
Ag 328.068†	141.8	0.00082	mg/L	0.001114	0.00082	mg/L	0.001114	136.30%
QC value within limits for Ag		328.068	Recovery =	Not calculated				
Al 308.215†	87.8	0.00431	mg/L	0.004790	0.00431	mg/L	0.004790	111.16%
QC value within limits for Al		308.215	Recovery =	Not calculated				
As 188.979†	1.0	0.00122	mg/L	0.002585	0.00122	mg/L	0.002585	212.36%
QC value within limits for As		188.979	Recovery =	Not calculated				
Ba 233.527†	73.8	0.00086	mg/L	0.000103	0.00086	mg/L	0.000103	12.07%
QC value within limits for Ba		233.527	Recovery =	Not calculated				
Be 313.107†	-46.6	-0.00002	mg/L	0.000011	-0.00002	mg/L	0.000011	61.33%
QC value within limits for Be		313.107	Recovery =	Not calculated				
Co 228.616†	11.4	0.00032	mg/L	0.000244	0.00032	mg/L	0.000244	77.05%
QC value within limits for Co		228.616	Recovery =	Not calculated				
Cr 267.716†	34.1	0.00048	mg/L	0.000655	0.00048	mg/L	0.000655	135.90%
QC value within limits for Cr		267.716	Recovery =	Not calculated				
Cu 324.752†	319.4	0.00144	mg/L	0.000401	0.00144	mg/L	0.000401	27.84%
QC value within limits for Cu		324.752	Recovery =	Not calculated				
Fe 273.955†	32.6	0.00135	mg/L	0.000597	0.00135	mg/L	0.000597	44.34%
QC value within limits for Fe		273.955	Recovery =	Not calculated				
Mg 279.077†	35.8	0.00204	mg/L	0.002423	0.00204	mg/L	0.002423	118.81%
QC value within limits for Mg		279.077	Recovery =	Not calculated				
Mn 257.610†	173.3	0.00030	mg/L	0.000053	0.00030	mg/L	0.000053	17.84%
QC value within limits for Mn		257.610	Recovery =	Not calculated				
Ni 231.604†	14.5	0.00049	mg/L	0.000161	0.00049	mg/L	0.000161	32.89%
QC value within limits for Ni		231.604	Recovery =	Not calculated				
Pb 220.353†	-5.9	-0.00115	mg/L	0.001169	-0.00115	mg/L	0.001169	102.05%
QC value within limits for Pb		220.353	Recovery =	Not calculated				
Sb 206.836†	3.6	0.00312	mg/L	0.001766	0.00312	mg/L	0.001766	56.65%
QC value within limits for Sb		206.836	Recovery =	Not calculated				
Se 196.026†	-0.7	-0.00140	mg/L	0.012371	-0.00140	mg/L	0.012371	880.76%
QC value within limits for Se		196.026	Recovery =	Not calculated				
Tl 190.801	-5.2	-0.00623	mg/L	0.007292	-0.00623	mg/L	0.007292	117.13%
QC value within limits for Tl		190.801	Recovery =	Not calculated				
V 292.402†	70.1	0.00057	mg/L	0.000740	0.00057	mg/L	0.000740	129.26%
QC value within limits for V		292.402	Recovery =	Not calculated				
Zn 206.200†	11.7	0.00055	mg/L	0.000139	0.00055	mg/L	0.000139	25.38%
QC value within limits for Zn		206.200	Recovery =	Not calculated				
Cd 226.502†	3.9	0.00007	mg/L	0.000122	0.00007	mg/L	0.000122	176.46%
QC value within limits for Cd		226.502	Recovery =	Not calculated				
Ti 334.940†	106.9	0.00019	mg/L	0.000056	0.00019	mg/L	0.000056	28.68%
QC value within limits for Ti		334.940	Recovery =	Not calculated				
Ca 227.546†	10.6	0.05416	mg/L	0.117708	0.05416	mg/L	0.117708	217.34%
QC value within limits for Ca		227.546	Recovery =	Not calculated				
Na 589.592†	-38.6	-0.00793	mg/L	0.008053	-0.00793	mg/L	0.008053	101.58%
QC value within limits for Na		589.592	Recovery =	Not calculated				
K 766.490†	-19.2	-0.01825	mg/L	0.022710	-0.01825	mg/L	0.022710	124.42%
QC value within limits for K		766.490	Recovery =	Not calculated				

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: L1786-03B-SL-MW-23S

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 44

Date Collected: 8/30/2012 8:57:31 AM

Data Type: Reprocessed on 8/30/2012 1:59:47 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-03B-SL-MW-23S

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1820698.4	95.935	%	1.0203				1.06%
Lu 261.542	1185873.1	96.68	%	0.893				0.92%
Ag 328.068†	682.7	0.00354	mg/L	0.001270	0.00354	mg/L	0.001270	35.87%
Al 308.215†	10370.2	0.50408	mg/L	0.024233	0.50408	mg/L	0.024233	4.81%
As 188.979†	1.8	0.00242	mg/L	0.004252	0.00242	mg/L	0.004252	175.53%
Ba 233.527†	1343.2	0.01557	mg/L	0.000150	0.01557	mg/L	0.000150	0.96%

Be 313.107†	-85.2	0.00001 mg/L	0.000014	0.00001 mg/L	0.000014	234.81%
Co 228.616†	10.5	0.00024 mg/L	0.000132	0.00024 mg/L	0.000132	55.31%
Cr 267.716†	95.9	0.00123 mg/L	0.000422	0.00123 mg/L	0.000422	34.26%
Cu 324.752†	511.4	0.00232 mg/L	0.000214	0.00232 mg/L	0.000214	9.19%
Fe 273.955†	4399.8	0.18185 mg/L	0.005033	0.18185 mg/L	0.005033	2.77%
Mg 279.077†	128322.1	7.3225 mg/L	0.10581	7.3225 mg/L	0.10581	1.45%
Mn 257.610†	874633.7	1.4966 mg/L	0.02497	1.4966 mg/L	0.02497	1.67%
Ni 231.604†	221.6	0.00740 mg/L	0.000057	0.00740 mg/L	0.000057	0.77%
Pb 220.353†	0.8	0.00032 mg/L	0.001287	0.00032 mg/L	0.001287	408.21%
Sb 206.836†	7.4	0.00634 mg/L	0.004569	0.00634 mg/L	0.004569	72.03%
Se 196.026†	3.0	0.00600 mg/L	0.008608	0.00600 mg/L	0.008608	143.45%
Tl 190.801	-3.9	-0.00373 mg/L	0.001898	-0.00373 mg/L	0.001898	50.82%
V 292.402†	103.9	0.00083 mg/L	0.000172	0.00083 mg/L	0.000172	20.75%
Zn 206.200†	338.7	0.01650 mg/L	0.000074	0.01650 mg/L	0.000074	0.45%
Cd 226.502†	7.2	0.00007 mg/L	0.000129	0.00007 mg/L	0.000129	181.75%
Ti 334.940†	11984.2	0.02166 mg/L	0.006596	0.02166 mg/L	0.006596	30.45%
Ca 227.546†	3420.4	17.530 mg/L	0.2249	17.530 mg/L	0.2249	1.28%
Na 589.592†	178584.6	36.722 mg/L	0.5040	36.722 mg/L	0.5040	1.37%
K 766.490†	1395.2	1.3267 mg/L	0.05828	1.3267 mg/L	0.05828	4.39%

Sequence No.: 21

Sample ID: L1786-03C-SL-MW-23S

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 45

Date Collected: 8/30/2012 9:01:11 AM

Data Type: Reprocessed on 8/30/2012 1:59:47 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-03C-SL-MW-23S

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1782004.5	93.896	%	0.2475				0.26%
Lu 261.542	1162603.9	94.78	%	0.281				0.30%
Ag 328.068†	204.0	0.00078 mg/L		0.000385	0.00078 mg/L		0.000385	49.40%
Al 308.215†	206.5	0.00385 mg/L		0.005809	0.00385 mg/L		0.005809	150.73%
As 188.979†	-0.1	0.00015 mg/L		0.002531	0.00015 mg/L		0.002531	>999.9%
Ba 233.527†	1194.3	0.01385 mg/L		0.000018	0.01385 mg/L		0.000018	0.13%
Be 313.107†	-71.7	-0.00003 mg/L		0.000011	-0.00003 mg/L		0.000011	37.39%
Co 228.616†	0.9	0.00002 mg/L		0.000226	0.00002 mg/L		0.000226	903.84%
Cr 267.716†	78.4	0.00098 mg/L		0.000181	0.00098 mg/L		0.000181	18.54%
Cu 324.752†	597.7	0.00270 mg/L		0.000328	0.00270 mg/L		0.000328	12.16%
Fe 273.955†	90.5	0.00374 mg/L		0.000133	0.00374 mg/L		0.000133	3.54%
Mg 279.077†	130804.0	7.4641 mg/L		0.08332	7.4641 mg/L		0.08332	1.12%
Mn 257.610†	883307.6	1.5115 mg/L		0.00547	1.5115 mg/L		0.00547	0.36%
Ni 231.604†	212.5	0.00710 mg/L		0.000127	0.00710 mg/L		0.000127	1.78%
Pb 220.353†	-13.2	-0.00248 mg/L		0.000752	-0.00248 mg/L		0.000752	30.34%
Sb 206.836†	5.5	0.00474 mg/L		0.002570	0.00474 mg/L		0.002570	54.17%
Se 196.026†	0.4	0.00088 mg/L		0.008346	0.00088 mg/L		0.008346	943.30%
Tl 190.801	-1.2	-0.00047 mg/L		0.001831	-0.00047 mg/L		0.001831	389.95%
V 292.402†	-5.3	-0.00004 mg/L		0.000097	-0.00004 mg/L		0.000097	236.70%
Zn 206.200†	340.4	0.01655 mg/L		0.000526	0.01655 mg/L		0.000526	3.18%
Cd 226.502†	8.5	0.00011 mg/L		0.000027	0.00011 mg/L		0.000027	24.52%
Ti 334.940†	-188.8	-0.00018 mg/L		0.000114	-0.00018 mg/L		0.000114	64.31%
Ca 227.546†	3465.2	17.762 mg/L		0.1630	17.762 mg/L		0.1630	0.92%
Na 589.592†	179257.1	36.860 mg/L		0.5620	36.860 mg/L		0.5620	1.52%
K 766.490†	1297.8	1.2340 mg/L		0.09393	1.2340 mg/L		0.09393	7.61%

Sequence No.: 22

Sample ID: L1786-04B-SL-MW-13

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 46

Date Collected: 8/30/2012 9:04:59 AM

Data Type: Reprocessed on 8/30/2012 1:59:48 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-04B-SL-MW-13

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1770730.6	93.302	%	1.9603				2.10%

Lu 261.542	1156764.5	94.31 %	1.865			1.98%
Ag 328.068†	156.0	0.00088 mg/L	0.000151	0.00088 mg/L	0.000151	17.28%
Al 308.215†	5695.7	0.27934 mg/L	0.005044	0.27934 mg/L	0.005044	1.81%
As 188.979†	0.4	0.00098 mg/L	0.002057	0.00098 mg/L	0.002057	210.23%
Ba 233.527†	1494.7	0.01733 mg/L	0.000385	0.01733 mg/L	0.000385	2.22%
Be 313.107†	-150.0	-0.00004 mg/L	0.000039	-0.00004 mg/L	0.000039	105.72%
Co 228.616†	40.9	0.00110 mg/L	0.000106	0.00110 mg/L	0.000106	9.68%
Cr 267.716†	2844.1	0.04023 mg/L	0.000596	0.04023 mg/L	0.000596	1.48%
Cu 324.752†	817.0	0.00372 mg/L	0.000378	0.00372 mg/L	0.000378	10.16%
Fe 273.955†	9108.1	0.37646 mg/L	0.005796	0.37646 mg/L	0.005796	1.54%
Mg 279.077†	33285.8	1.8993 mg/L	0.02532	1.8993 mg/L	0.02532	1.33%
Mn 257.610†	15514.1	0.02653 mg/L	0.000477	0.02653 mg/L	0.000477	1.80%
Ni 231.604†	109.1	0.00365 mg/L	0.000166	0.00365 mg/L	0.000166	4.55%
Pb 220.353†	-1.3	-0.00022 mg/L	0.001610	-0.00022 mg/L	0.001610	725.39%
Sb 206.836†	2.5	0.00146 mg/L	0.002073	0.00146 mg/L	0.002073	142.40%
Se 196.026†	-4.1	-0.00803 mg/L	0.003852	-0.00803 mg/L	0.003852	48.00%
Tl 190.801	-3.0	-0.00347 mg/L	0.003004	-0.00347 mg/L	0.003004	86.65%
V 292.402†	171.6	0.00149 mg/L	0.000147	0.00149 mg/L	0.000147	9.88%
Zn 206.200†	57.2	0.00279 mg/L	0.000203	0.00279 mg/L	0.000203	7.28%
Cd 226.502†	20.8	0.00034 mg/L	0.000121	0.00034 mg/L	0.000121	36.07%
Ti 334.940†	6927.6	0.01245 mg/L	0.000283	0.01245 mg/L	0.000283	2.27%
Ca 227.546†	771.5	3.9519 mg/L	0.13503	3.9519 mg/L	0.13503	3.42%
Na 589.592†	345004.1	70.942 mg/L	1.3415	70.942 mg/L	1.3415	1.89%
K 766.490†	974.6	0.92669 mg/L	0.058083	0.92669 mg/L	0.058083	6.27%

Sequence No.: 23

Sample ID: L1786-04C-SL-MW-13

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 47

Date Collected: 8/30/2012 9:08:47 AM

Data Type: Reprocessed on 8/30/2012 1:59:49 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-04C-SL-MW-13

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1777569.9	93.662 %	%	0.9970				1.06%
Lu 261.542	1160821.4	94.64 %	%	1.044				1.10%
Ag 328.068†	123.3	0.00069 mg/L	mg/L	0.000419	0.00069 mg/L	mg/L	0.000419	60.73%
Al 308.215†	130.6	0.00555 mg/L	mg/L	0.001330	0.00555 mg/L	mg/L	0.001330	23.95%
As 188.979†	1.9	0.00241 mg/L	mg/L	0.005353	0.00241 mg/L	mg/L	0.005353	221.73%
Ba 233.527†	1226.3	0.01422 mg/L	mg/L	0.000160	0.01422 mg/L	mg/L	0.000160	1.13%
Be 313.107†	-71.5	-0.00003 mg/L	mg/L	0.000038	-0.00003 mg/L	mg/L	0.000038	135.81%
Co 228.616†	26.9	0.00075 mg/L	mg/L	0.000080	0.00075 mg/L	mg/L	0.000080	10.72%
Cr 267.716†	14.3	0.00024 mg/L	mg/L	0.000348	0.00024 mg/L	mg/L	0.000348	147.13%
Cu 324.752†	488.1	0.00220 mg/L	mg/L	0.000401	0.00220 mg/L	mg/L	0.000401	18.20%
Fe 273.955†	162.8	0.00673 mg/L	mg/L	0.000803	0.00673 mg/L	mg/L	0.000803	11.94%
Mg 279.077†	30799.8	1.7575 mg/L	mg/L	0.02641	1.7575 mg/L	mg/L	0.02641	1.50%
Mn 257.610†	7855.4	0.01343 mg/L	mg/L	0.000181	0.01343 mg/L	mg/L	0.000181	1.35%
Ni 231.604†	45.3	0.00151 mg/L	mg/L	0.000119	0.00151 mg/L	mg/L	0.000119	7.84%
Pb 220.353†	-0.3	-0.00006 mg/L	mg/L	0.001717	-0.00006 mg/L	mg/L	0.001717	>999.9%
Sb 206.836†	3.1	0.00266 mg/L	mg/L	0.004542	0.00266 mg/L	mg/L	0.004542	170.75%
Se 196.026†	4.7	0.00940 mg/L	mg/L	0.003290	0.00940 mg/L	mg/L	0.003290	34.98%
Tl 190.801	-5.6	-0.00663 mg/L	mg/L	0.002417	-0.00663 mg/L	mg/L	0.002417	36.45%
V 292.402†	48.0	0.00039 mg/L	mg/L	0.000451	0.00039 mg/L	mg/L	0.000451	114.92%
Zn 206.200†	61.6	0.00289 mg/L	mg/L	0.000018	0.00289 mg/L	mg/L	0.000018	0.63%
Cd 226.502†	12.3	0.00021 mg/L	mg/L	0.000159	0.00021 mg/L	mg/L	0.000159	75.40%
Ti 334.940†	90.4	0.00019 mg/L	mg/L	0.000099	0.00019 mg/L	mg/L	0.000099	51.15%
Ca 227.546†	730.6	3.7455 mg/L	mg/L	0.04987	3.7455 mg/L	mg/L	0.04987	1.33%
Na 589.592†	330551.3	67.970 mg/L	mg/L	0.9353	67.970 mg/L	mg/L	0.9353	1.38%
K 766.490†	982.8	0.93450 mg/L	mg/L	0.102113	0.93450 mg/L	mg/L	0.102113	10.93%

Sequence No.: 24

Sample ID: L1786-07B-SL-MW-12

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 48

Date Collected: 8/30/2012 9:12:35 AM

Data Type: Reprocessed on 8/30/2012 1:59:49 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-07B~SL-MW-12

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Std.Dev.	
Y 360.073	1824310.4	96.125 %		1.2807			1.33%
Lu 261.542	1184944.3	96.60 %		1.231			1.27%
Ag 328.068†	107.3	0.00052 mg/L		0.000365	0.00052 mg/L	0.000365	70.23%
Al 308.215†	7472.0	0.36387 mg/L		0.005507	0.36387 mg/L	0.005507	1.51%
As 188.979†	-2.0	0.00001 mg/L		0.001354	0.00001 mg/L	0.001354	>999.9%
Ba 233.527†	5608.2	0.06502 mg/L		0.000727	0.06502 mg/L	0.000727	1.12%
Be 313.107†	-7.2	0.00001 mg/L		0.000009	0.00001 mg/L	0.000009	93.83%
Co 228.616†	10.4	0.00025 mg/L		0.000095	0.00025 mg/L	0.000095	38.90%
Cr 267.716†	14702.6	0.20788 mg/L		0.002015	0.20788 mg/L	0.002015	0.97%
Cu 324.752†	1182.8	0.00544 mg/L		0.000295	0.00544 mg/L	0.000295	5.42%
Fe 273.955†	27997.4	1.1572 mg/L		0.00883	1.1572 mg/L	0.00883	0.76%
Mg 279.077†	54293.7	3.0976 mg/L		0.02012	3.0976 mg/L	0.02012	0.65%
Mn 257.610†	186628.8	0.31934 mg/L		0.002130	0.31934 mg/L	0.002130	0.67%
Ni 231.604†	198.2	0.00663 mg/L		0.000025	0.00663 mg/L	0.000025	0.38%
Pb 220.353†	-1.1	-0.00018 mg/L		0.001620	-0.00018 mg/L	0.001620	917.33%
Sb 206.836†	6.3	0.00161 mg/L		0.001756	0.00161 mg/L	0.001756	109.31%
Se 196.026†	0.6	0.00170 mg/L		0.001055	0.00170 mg/L	0.001055	62.14%
Tl 190.801	-0.5	-0.00015 mg/L		0.003105	-0.00015 mg/L	0.003105	>999.9%
V 292.402†	34.8	0.00078 mg/L		0.000156	0.00078 mg/L	0.000156	19.86%
Zn 206.200†	68.7	0.00379 mg/L		0.000214	0.00379 mg/L	0.000214	5.65%
Cd 226.502†	31.8	0.00044 mg/L		0.000147	0.00044 mg/L	0.000147	33.23%
Ti 334.940†	3667.7	0.00676 mg/L		0.000705	0.00676 mg/L	0.000705	10.42%
Ca 227.546†	3135.0	16.065 mg/L		0.2727	16.065 mg/L	0.2727	1.70%
Na 589.592†	182527.6	37.532 mg/L		0.3441	37.532 mg/L	0.3441	0.92%
K 766.490†	2887.5	2.7457 mg/L		0.10506	2.7457 mg/L	0.10506	3.83%

Sequence No.: 25

Sample ID: L1786-07C~SL-MW-12

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 49

Date Collected: 8/30/2012 9:16:24 AM

Data Type: Reprocessed on 8/30/2012 1:59:50 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-07C~SL-MW-12

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Std.Dev.	
Y 360.073	1803136.2	95.009 %		0.4074			0.43%
Lu 261.542	1171427.3	95.50 %		0.472			0.49%
Ag 328.068†	124.3	0.00062 mg/L		0.000124	0.00062 mg/L	0.000124	20.05%
Al 308.215†	600.7	0.02566 mg/L		0.001388	0.02566 mg/L	0.001388	5.41%
As 188.979†	-2.4	-0.00236 mg/L		0.002273	-0.00236 mg/L	0.002273	96.30%
Ba 233.527†	5083.1	0.05893 mg/L		0.000850	0.05893 mg/L	0.000850	1.44%
Be 313.107†	2.4	0.00000 mg/L		0.000023	0.00000 mg/L	0.000023	>999.9%
Co 228.616†	1.0	0.00003 mg/L		0.000102	0.00003 mg/L	0.000102	353.70%
Cr 267.716†	55.1	0.00088 mg/L		0.000416	0.00088 mg/L	0.000416	47.26%
Cu 324.752†	522.5	0.00236 mg/L		0.000798	0.00236 mg/L	0.000798	33.83%
Fe 273.955†	115.5	0.00477 mg/L		0.000420	0.00477 mg/L	0.000420	8.80%
Mg 279.077†	54415.9	3.1051 mg/L		0.05479	3.1051 mg/L	0.05479	1.76%
Mn 257.610†	183522.7	0.31402 mg/L		0.000726	0.31402 mg/L	0.000726	0.23%
Ni 231.604†	35.4	0.00117 mg/L		0.000172	0.00117 mg/L	0.000172	14.68%
Pb 220.353†	-11.3	-0.00218 mg/L		0.001743	-0.00218 mg/L	0.001743	79.93%
Sb 206.836†	0.0	-0.00001 mg/L		0.004282	-0.00001 mg/L	0.004282	>999.9%
Se 196.026†	3.1	0.00615 mg/L		0.001820	0.00615 mg/L	0.001820	29.61%
Tl 190.801	-3.4	-0.00374 mg/L		0.000822	-0.00374 mg/L	0.000822	21.96%
V 292.402†	-22.1	-0.00018 mg/L		0.000285	-0.00018 mg/L	0.000285	159.18%
Zn 206.200†	35.3	0.00178 mg/L		0.000321	0.00178 mg/L	0.000321	18.06%
Cd 226.502†	23.1	0.00037 mg/L		0.000110	0.00037 mg/L	0.000110	29.62%
Ti 334.940†	-65.6	0.00010 mg/L		0.000048	0.00010 mg/L	0.000048	47.63%
Ca 227.546†	3203.9	16.429 mg/L		0.0660	16.429 mg/L	0.0660	0.40%
Na 589.592†	184288.9	37.894 mg/L		0.3408	37.894 mg/L	0.3408	0.90%
K 766.490†	2863.3	2.7227 mg/L		0.09704	2.7227 mg/L	0.09704	3.56%

Sequence No.: 26

Sample ID: L1786-08B~SL-MW-14

Autosampler Location: 50

Date Collected: 8/30/2012 9:20:13 AM

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

Data Type: Reprocessed on 8/30/2012 1:59:51 PM

Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: L1786-08B-SL-MW-14

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Y 360.073	1836078.3	96.745	%	1.2683				1.31%
Lu 261.542	1197183.3	97.60	%	1.390				1.42%
Ag 328.068†	96.9	0.00053	mg/L	0.000490	0.00053	mg/L	0.000490	91.59%
Al 308.215†	2118.4	0.10339	mg/L	0.007282	0.10339	mg/L	0.007282	7.04%
As 188.979†	0.1	0.00364	mg/L	0.002315	0.00364	mg/L	0.002315	63.53%
Ba 233.527†	2055.7	0.02383	mg/L	0.000334	0.02383	mg/L	0.000334	1.40%
Be 313.107†	-88.2	-0.00003	mg/L	0.000013	-0.00003	mg/L	0.000013	43.86%
Co 228.616†	137.3	0.00376	mg/L	0.000179	0.00376	mg/L	0.000179	4.75%
Cr 267.716†	25701.7	0.36325	mg/L	0.011823	0.36325	mg/L	0.011823	3.25%
Cu 324.752†	961.4	0.00452	mg/L	0.000332	0.00452	mg/L	0.000332	7.33%
Fe 273.955†	48332.4	1.9977	mg/L	0.07160	1.9977	mg/L	0.07160	3.58%
Mg 279.077†	23644.2	1.3483	mg/L	0.05217	1.3483	mg/L	0.05217	3.87%
Mn 257.610†	30534.2	0.05224	mg/L	0.001834	0.05224	mg/L	0.001834	3.51%
Ni 231.604†	877.1	0.02943	mg/L	0.000593	0.02943	mg/L	0.000593	2.02%
Pb 220.353†	3.5	0.00068	mg/L	0.000820	0.00068	mg/L	0.000820	119.85%
Sb 206.836†	8.5	0.00057	mg/L	0.001043	0.00057	mg/L	0.001043	182.70%
Se 196.026†	-0.4	0.00003	mg/L	0.007017	0.00003	mg/L	0.007017	>999.9%
Tl 190.801	-5.3	-0.00607	mg/L	0.003460	-0.00607	mg/L	0.003460	57.02%
V 292.402†	99.0	0.00170	mg/L	0.000306	0.00170	mg/L	0.000306	18.05%
Zn 206.200†	59.6	0.00358	mg/L	0.000162	0.00358	mg/L	0.000162	4.52%
Cd 226.502†	15.0	0.00012	mg/L	0.000060	0.00012	mg/L	0.000060	51.20%
Ti 334.940†	1789.0	0.00319	mg/L	0.000382	0.00319	mg/L	0.000382	11.96%
Ca 227.546†	687.7	3.5064	mg/L	0.08823	3.5064	mg/L	0.08823	2.52%
Na 589.592†	444797.9	91.462	mg/L	1.0053	91.462	mg/L	1.0053	1.10%
K 766.490†	1731.0	1.6459	mg/L	0.00715	1.6459	mg/L	0.00715	0.43%

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Sequence No.: 27
 Sample ID: L1786-08C-SL-MW-14
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 51
 Date Collected: 8/30/2012 9:24:01 AM
 Data Type: Reprocessed on 8/30/2012 1:59:51 PM
 Initial Sample Vol:
 Sample Prep Vol:

 Mean Data: L1786-08C-SL-MW-14

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Y 360.073	1775226.4	93.539	%	0.3453				0.37%
Lu 261.542	1161616.3	94.70	%	0.375				0.40%
Ag 328.068†	195.6	0.00111	mg/L	0.000565	0.00111	mg/L	0.000565	50.90%
Al 308.215†	128.4	0.00550	mg/L	0.003299	0.00550	mg/L	0.003299	59.95%
As 188.979†	0.7	0.00103	mg/L	0.003227	0.00103	mg/L	0.003227	313.51%
Ba 233.527†	1984.8	0.02301	mg/L	0.000087	0.02301	mg/L	0.000087	0.38%
Be 313.107†	-66.0	-0.00003	mg/L	0.000019	-0.00003	mg/L	0.000019	71.03%
Co 228.616†	83.7	0.00232	mg/L	0.000154	0.00232	mg/L	0.000154	6.62%
Cr 267.716†	198.9	0.00284	mg/L	0.000341	0.00284	mg/L	0.000341	11.99%
Cu 324.752†	550.4	0.00249	mg/L	0.000199	0.00249	mg/L	0.000199	7.99%
Fe 273.955†	649.3	0.02684	mg/L	0.000250	0.02684	mg/L	0.000250	0.93%
Mg 279.077†	23395.4	1.3350	mg/L	0.01701	1.3350	mg/L	0.01701	1.27%
Mn 257.610†	10193.2	0.01743	mg/L	0.000251	0.01743	mg/L	0.000251	1.44%
Ni 231.604†	621.2	0.02085	mg/L	0.000211	0.02085	mg/L	0.000211	1.01%
Pb 220.353†	-8.6	-0.00169	mg/L	0.000937	-0.00169	mg/L	0.000937	55.57%
Sb 206.836†	4.1	0.00348	mg/L	0.002351	0.00348	mg/L	0.002351	67.54%
Se 196.026†	1.2	0.00234	mg/L	0.005131	0.00234	mg/L	0.005131	219.42%
Tl 190.801	-3.3	-0.00388	mg/L	0.002475	-0.00388	mg/L	0.002475	63.74%
V 292.402†	14.8	0.00013	mg/L	0.000239	0.00013	mg/L	0.000239	187.60%
Zn 206.200†	43.7	0.00206	mg/L	0.000204	0.00206	mg/L	0.000204	9.88%
Cd 226.502†	4.0	0.00006	mg/L	0.000062	0.00006	mg/L	0.000062	95.23%
Ti 334.940†	41.7	0.00011	mg/L	0.000121	0.00011	mg/L	0.000121	108.94%
Ca 227.546†	699.8	3.5867	mg/L	0.01337	3.5867	mg/L	0.01337	0.37%
Na 589.592†	466700.3	95.965	mg/L	0.5286	95.965	mg/L	0.5286	0.55%

K 766.490† 1755.9 1.6696 mg/L 0.10325 1.6696 mg/L 0.10325 6.18%

Sequence No.: 28

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 8/30/2012 9:27:48 AM

Data Type: Reprocessed on 8/30/2012 1:59:52 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	1750164.8	92.218 %	0.4288			0.46%
Lu 261.542	1141021.2	93.02 %	0.391			0.42%
Ag 328.068†	210883.3	1.2181 mg/L	0.01613	1.2181 mg/L	0.01613	1.32%
QC value within limits for Ag 328.068		Recovery = 97.45%				
Al 308.215†	202097.3	9.9353 mg/L	0.10960	9.9353 mg/L	0.10960	1.10%
QC value within limits for Al 308.215		Recovery = 99.35%				
As 188.979†	410.5	0.49812 mg/L	0.005103	0.49812 mg/L	0.005103	1.02%
QC value within limits for As 188.979		Recovery = 99.62%				
Ba 233.527†	879498.2	10.200 mg/L	0.0241	10.200 mg/L	0.0241	0.24%
QC value within limits for Ba 233.527		Recovery = 102.00%				
Be 313.107†	621352.3	0.24749 mg/L	0.000371	0.24749 mg/L	0.000371	0.15%
QC value within limits for Be 313.107		Recovery = 99.00%				
Co 228.616†	93542.6	2.6014 mg/L	0.02372	2.6014 mg/L	0.02372	0.91%
QC value within limits for Co 228.616		Recovery = 104.05%				
Cr 267.716†	69867.0	0.98798 mg/L	0.007217	0.98798 mg/L	0.007217	0.73%
QC value within limits for Cr 267.716		Recovery = 98.80%				
Cu 324.752†	269992.9	1.2195 mg/L	0.01007	1.2195 mg/L	0.01007	0.83%
QC value within limits for Cu 324.752		Recovery = 97.56%				
Fe 273.955†	123349.8	5.1024 mg/L	0.04850	5.1024 mg/L	0.04850	0.95%
QC value within limits for Fe 273.955		Recovery = 102.05%				
Mg 279.077†	441349.6	25.182 mg/L	0.0607	25.182 mg/L	0.0607	0.24%
QC value within limits for Mg 279.077		Recovery = 100.73%				
Mn 257.610†	1479326.4	2.5311 mg/L	0.00415	2.5311 mg/L	0.00415	0.16%
QC value within limits for Mn 257.610		Recovery = 101.25%				
Ni 231.604†	76352.5	2.5622 mg/L	0.02217	2.5622 mg/L	0.02217	0.87%
QC value within limits for Ni 231.604		Recovery = 102.49%				
Pb 220.353†	2557.9	0.50186 mg/L	0.001498	0.50186 mg/L	0.001498	0.30%
QC value within limits for Pb 220.353		Recovery = 100.37%				
Sb 206.836†	623.2	0.52168 mg/L	0.001243	0.52168 mg/L	0.001243	0.24%
QC value within limits for Sb 206.836		Recovery = 104.34%				
Se 196.026†	242.9	0.48882 mg/L	0.016782	0.48882 mg/L	0.016782	3.43%
QC value within limits for Se 196.026		Recovery = 97.76%				
Tl 190.801	417.2	0.47770 mg/L	0.005844	0.47770 mg/L	0.005844	1.22%
QC value within limits for Tl 190.801		Recovery = 95.54%				
V 292.402†	305434.6	2.4958 mg/L	0.01746	2.4958 mg/L	0.01746	0.70%
QC value within limits for V 292.402		Recovery = 99.83%				
Zn 206.200†	54441.3	2.5555 mg/L	0.02770	2.5555 mg/L	0.02770	1.08%
QC value within limits for Zn 206.200		Recovery = 102.22%				
Cd 226.502†	13715.3	0.24620 mg/L	0.001041	0.24620 mg/L	0.001041	0.42%
QC value within limits for Cd 226.502		Recovery = 98.48%				
Ti 334.940†	270548.2	0.48508 mg/L	0.002220	0.48508 mg/L	0.002220	0.46%
QC value within limits for Ti 334.940		Recovery = Not calculated				
Ca 227.546†	4902.8	24.278 mg/L	0.0717	24.278 mg/L	0.0717	0.30%
QC value within limits for Ca 227.546		Recovery = 97.11%				
Na 589.592†	123427.7	25.380 mg/L	0.0928	25.380 mg/L	0.0928	0.37%
QC value within limits for Na 589.592		Recovery = 101.52%				
K 766.490†	27030.4	25.703 mg/L	0.1598	25.703 mg/L	0.1598	0.62%
QC value within limits for K 766.490		Recovery = 102.81%				

All analyte(s) passed QC.

Sequence No.: 29

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 8/30/2012 9:31:39 AM

Data Type: Reprocessed on 8/30/2012 1:59:53 PM

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	1824190.2	96.119 %		1.0894			1.13%
Lu 261.542	1181340.3	96.31 %		1.141			1.18%
Ag 328.068†	298.2	0.00172 mg/L		0.000492	0.00172 mg/L	0.000492	28.65%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 308.215†	-84.8	-0.00418 mg/L		0.004969	-0.00418 mg/L	0.004969	118.77%
QC value within limits for Al 308.215 Recovery = Not calculated							
As 188.979†	0.2	0.00029 mg/L		0.001891	0.00029 mg/L	0.001891	652.18%
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	57.8	0.00067 mg/L		0.000098	0.00067 mg/L	0.000098	14.62%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	51.8	0.00002 mg/L		0.000027	0.00002 mg/L	0.000027	130.81%
QC value within limits for Be 313.107 Recovery = Not calculated							
Co 228.616†	3.5	0.00010 mg/L		0.000098	0.00010 mg/L	0.000098	99.97%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	17.5	0.00025 mg/L		0.000297	0.00025 mg/L	0.000297	119.91%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	241.5	0.00109 mg/L		0.000315	0.00109 mg/L	0.000315	28.86%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 273.955†	39.5	0.00163 mg/L		0.000410	0.00163 mg/L	0.000410	25.11%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	27.8	0.00159 mg/L		0.001834	0.00159 mg/L	0.001834	115.55%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	118.8	0.00020 mg/L		0.000021	0.00020 mg/L	0.000021	10.39%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Ni 231.604†	5.4	0.00018 mg/L		0.000200	0.00018 mg/L	0.000200	109.58%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	-1.1	-0.00022 mg/L		0.000388	-0.00022 mg/L	0.000388	174.53%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	1.6	0.00137 mg/L		0.001965	0.00137 mg/L	0.001965	143.11%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	1.0	0.00199 mg/L		0.014738	0.00199 mg/L	0.014738	740.38%
QC value within limits for Se 196.026 Recovery = Not calculated							
Tl 190.801	-2.5	-0.00305 mg/L		0.003013	-0.00305 mg/L	0.003013	98.86%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402†	39.1	0.00032 mg/L		0.000310	0.00032 mg/L	0.000310	97.13%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200†	13.4	0.00063 mg/L		0.000316	0.00063 mg/L	0.000316	50.40%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Cd 226.502†	6.6	0.00012 mg/L		0.000068	0.00012 mg/L	0.000068	58.14%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Ti 334.940†	81.8	0.00015 mg/L		0.000091	0.00015 mg/L	0.000091	61.82%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546†	7.7	0.03929 mg/L		0.076270	0.03929 mg/L	0.076270	194.13%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Na 589.592†	80.1	0.01648 mg/L		0.027562	0.01648 mg/L	0.027562	167.26%
QC value within limits for Na 589.592 Recovery = Not calculated							
K 766.490†	-2.7	-0.00258 mg/L		0.060438	-0.00258 mg/L	0.060438	>999.9%
QC value within limits for K 766.490 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 30

Sample ID: L1786-09B-SL-MW-16

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 52

Date Collected: 8/30/2012 9:35:20 AM

Data Type: Reprocessed on 8/30/2012 1:59:54 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09B-SL-MW-16

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1797669.0	94.721 %		0.6524			0.69%
Lu 261.542	1173640.5	95.68 %		0.708			0.74%
Ag 328.068†	655.4	0.00372 mg/L		0.001234	0.00372 mg/L	0.001234	33.14%
Al 308.215†	6146.9	0.30010 mg/L		0.003896	0.30010 mg/L	0.003896	1.30%

As 188.979†	-0.2	0.00062 mg/L	0.003881	0.00062 mg/L	0.003881	622.59%
Ba 233.527†	833.4	0.00966 mg/L	0.000092	0.00966 mg/L	0.000092	0.95%
Be 313.107†	-163.0	-0.00005 mg/L	0.000033	-0.00005 mg/L	0.000033	64.89%
Co 228.616†	50.2	0.00136 mg/L	0.000287	0.00136 mg/L	0.000287	21.06%
Cr 267.716†	4242.5	0.06006 mg/L	0.000554	0.06006 mg/L	0.000554	0.92%
Cu 324.752†	2916.4	0.01319 mg/L	0.000261	0.01319 mg/L	0.000261	1.97%
Fe 273.955†	8487.3	0.35080 mg/L	0.001284	0.35080 mg/L	0.001284	0.37%
Mg 279.077†	86228.1	4.9203 mg/L	0.04518	4.9203 mg/L	0.04518	0.92%
Mn 257.610†	14045.2	0.02398 mg/L	0.000246	0.02398 mg/L	0.000246	1.03%
Ni 231.604†	1314.7	0.04410 mg/L	0.000270	0.04410 mg/L	0.000270	0.61%
Pb 220.353†	0.8	0.00020 mg/L	0.000696	0.00020 mg/L	0.000696	351.42%
Sb 206.836†	5.9	0.00398 mg/L	0.004873	0.00398 mg/L	0.004873	122.59%
Se 196.026†	2.3	0.00478 mg/L	0.005526	0.00478 mg/L	0.005526	115.67%
Tl 190.801	0.1	0.00046 mg/L	0.003202	0.00046 mg/L	0.003202	693.53%
V 292.402†	255.2	0.00222 mg/L	0.000237	0.00222 mg/L	0.000237	10.67%
Zn 206.200†	188.7	0.00899 mg/L	0.000170	0.00899 mg/L	0.000170	1.89%
Cd 226.502†	2.7	0.00001 mg/L	0.000122	0.00001 mg/L	0.000122	>999.9%
Ti 334.940†	4229.7	0.00766 mg/L	0.000190	0.00766 mg/L	0.000190	2.48%
Ca 227.546†	2016.1	10.332 mg/L	0.0765	10.332 mg/L	0.0765	0.74%
Na 589.592†	127746.1	26.268 mg/L	0.1522	26.268 mg/L	0.1522	0.58%
K 766.490†	1548.8	1.4727 mg/L	0.02586	1.4727 mg/L	0.02586	1.76%

Sequence No.: 31

Sample ID: L1786-09BDUP~SL-MW-16D

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 53

Date Collected: 8/30/2012 9:39:00 AM

Data Type: Reprocessed on 8/30/2012 1:59:54 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09BDUP~SL-MW-16D

Analyte	Mean Corrected	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1794190.7	94.538	%	0.6399				0.68%
Lu 261.542	1170661.2	95.44	%	0.620				0.65%
Ag 328.068†	218.4	0.00121 mg/L		0.000055	0.00121 mg/L		0.000055	4.58%
Al 308.215†	5549.3	0.27074 mg/L		0.006506	0.27074 mg/L		0.006506	2.40%
As 188.979†	-0.3	0.00043 mg/L		0.002385	0.00043 mg/L		0.002385	554.80%
Ba 233.527†	799.0	0.00927 mg/L		0.000062	0.00927 mg/L		0.000062	0.67%
Be 313.107†	-102.5	-0.00003 mg/L		0.000023	-0.00003 mg/L		0.000023	81.82%
Co 228.616†	50.5	0.00138 mg/L		0.000127	0.00138 mg/L		0.000127	9.20%
Cr 267.716†	3647.6	0.05165 mg/L		0.000638	0.05165 mg/L		0.000638	1.24%
Cu 324.752†	2757.0	0.01247 mg/L		0.000781	0.01247 mg/L		0.000781	6.26%
Fe 273.955†	8015.8	0.33131 mg/L		0.003130	0.33131 mg/L		0.003130	0.94%
Mg 279.077†	82575.1	4.7119 mg/L		0.04433	4.7119 mg/L		0.04433	0.94%
Mn 257.610†	15090.1	0.02577 mg/L		0.000209	0.02577 mg/L		0.000209	0.81%
Ni 231.604†	1281.4	0.04299 mg/L		0.000284	0.04299 mg/L		0.000284	0.66%
Pb 220.353†	-0.3	-0.00003 mg/L		0.002117	-0.00003 mg/L		0.002117	>999.9%
Sb 206.836†	2.1	0.00087 mg/L		0.003545	0.00087 mg/L		0.003545	409.75%
Se 196.026†	-0.6	-0.00103 mg/L		0.004289	-0.00103 mg/L		0.004289	416.15%
Tl 190.801	-0.3	-0.00002 mg/L		0.003129	-0.00002 mg/L		0.003129	>999.9%
V 292.402†	239.2	0.00207 mg/L		0.000339	0.00207 mg/L		0.000339	16.39%
Zn 206.200†	189.1	0.00899 mg/L		0.000111	0.00899 mg/L		0.000111	1.24%
Cd 226.502†	10.8	0.00015 mg/L		0.000028	0.00015 mg/L		0.000028	18.38%
Ti 334.940†	3714.9	0.00674 mg/L		0.000429	0.00674 mg/L		0.000429	6.37%
Ca 227.546†	1981.5	10.155 mg/L		0.0328	10.155 mg/L		0.0328	0.32%
Na 589.592†	121974.3	25.081 mg/L		0.0867	25.081 mg/L		0.0867	0.35%
K 766.490†	1600.7	1.5220 mg/L		0.10135	1.5220 mg/L		0.10135	6.66%

Sequence No.: 32

Sample ID: L1786-09BMS~SL-MW-16S

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 54

Date Collected: 8/30/2012 9:42:42 AM

Data Type: Reprocessed on 8/30/2012 1:59:55 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09BMS~SL-MW-16S

Mean Corrected

Calib.

Sample

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1792320.6	94.439 %	1.1343			1.20%
Lu 261.542	1169356.1	95.33 %	1.207			1.27%
Ag 328.068†	193802.6	1.1193 mg/L	0.00471	1.1193 mg/L	0.00471	0.42%
Al 308.215†	189159.0	9.2977 mg/L	0.06509	9.2977 mg/L	0.06509	0.70%
As 188.979†	392.3	0.47642 mg/L	0.008851	0.47642 mg/L	0.008851	1.86%
Ba 233.527†	812423.9	9.4218 mg/L	0.08610	9.4218 mg/L	0.08610	0.91%
Be 313.107†	588098.7	0.23341 mg/L	0.002304	0.23341 mg/L	0.002304	0.99%
Co 228.616†	82541.7	2.2964 mg/L	0.01170	2.2964 mg/L	0.01170	0.51%
Cr 267.716†	67294.9	0.95166 mg/L	0.007893	0.95166 mg/L	0.007893	0.83%
Cu 324.752†	247764.2	1.1191 mg/L	0.00519	1.1191 mg/L	0.00519	0.46%
Fe 273.955†	124025.3	5.1299 mg/L	0.02919	5.1299 mg/L	0.02919	0.57%
Mg 279.077†	490416.3	27.982 mg/L	0.2987	27.982 mg/L	0.2987	1.07%
Mn 257.610†	1379396.6	2.3601 mg/L	0.02638	2.3601 mg/L	0.02638	1.12%
Ni 231.604†	69336.8	2.3270 mg/L	0.01392	2.3270 mg/L	0.01392	0.60%
Pb 220.353†	2342.3	0.45913 mg/L	0.004308	0.45913 mg/L	0.004308	0.94%
Sb 206.836†	568.9	0.47421 mg/L	0.012573	0.47421 mg/L	0.012573	2.65%
Se 196.026†	223.7	0.45007 mg/L	0.015951	0.45007 mg/L	0.015951	3.54%
Tl 190.801	376.4	0.43169 mg/L	0.002571	0.43169 mg/L	0.002571	0.60%
V 292.402†	274288.8	2.2420 mg/L	0.01395	2.2420 mg/L	0.01395	0.62%
Zn 206.200†	48777.7	2.2895 mg/L	0.00998	2.2895 mg/L	0.00998	0.44%
Cd 226.502†	12554.2	0.22529 mg/L	0.001178	0.22529 mg/L	0.001178	0.52%
Ti 334.940†	3728.3	0.00653 mg/L	0.000256	0.00653 mg/L	0.000256	3.92%
Ca 227.546†	6462.1	32.368 mg/L	0.3714	32.368 mg/L	0.3714	1.15%
Na 589.592†	237136.0	48.761 mg/L	0.1957	48.761 mg/L	0.1957	0.40%
K 766.490†	26569.7	25.265 mg/L	0.1126	25.265 mg/L	0.1126	0.45%

Sequence No.: 33

Sample ID: L1786-09BSD~SL-MW-16L

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 55

Date Collected: 8/30/2012 9:46:25 AM

Data Type: Reprocessed on 8/30/2012 1:59:56 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09BSD~SL-MW-16L

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Y 360.073	1875023.4	98.797 %		1.4108			1.43%
Lu 261.542	1220419.6	99.49 %		1.459			1.47%
Ag 328.068†	156.5	0.00089 mg/L		0.000289	0.00089 mg/L	0.000289	32.39%
Al 308.215†	1041.5	0.05078 mg/L		0.003218	0.05078 mg/L	0.003218	6.34%
As 188.979†	3.3	0.00409 mg/L		0.006206	0.00409 mg/L	0.006206	151.68%
Ba 233.527†	206.2	0.00239 mg/L		0.000137	0.00239 mg/L	0.000137	5.73%
Be 313.107†	22.3	0.00001 mg/L		0.000015	0.00001 mg/L	0.000015	129.95%
Co 228.616†	13.8	0.00038 mg/L		0.000253	0.00038 mg/L	0.000253	67.06%
Cr 267.716†	810.7	0.01148 mg/L		0.000314	0.01148 mg/L	0.000314	2.74%
Cu 324.752†	656.9	0.00297 mg/L		0.000151	0.00297 mg/L	0.000151	5.10%
Fe 273.955†	1692.1	0.06994 mg/L		0.003715	0.06994 mg/L	0.003715	5.31%
Mg 279.077†	17353.2	0.99020 mg/L		0.006649	0.99020 mg/L	0.006649	0.67%
Mn 257.610†	2880.2	0.00492 mg/L		0.000100	0.00492 mg/L	0.000100	2.04%
Ni 231.604†	269.6	0.00904 mg/L		0.000275	0.00904 mg/L	0.000275	3.04%
Pb 220.353†	-9.7	-0.00190 mg/L		0.002415	-0.00190 mg/L	0.002415	127.37%
Sb 206.836†	-0.4	-0.00056 mg/L		0.004571	-0.00056 mg/L	0.004571	822.61%
Se 196.026†	2.9	0.00577 mg/L		0.004690	0.00577 mg/L	0.004690	81.27%
Tl 190.801	0.6	0.00076 mg/L		0.002176	0.00076 mg/L	0.002176	285.97%
V 292.402†	98.4	0.00083 mg/L		0.000236	0.00083 mg/L	0.000236	28.43%
Zn 206.200†	42.0	0.00200 mg/L		0.000128	0.00200 mg/L	0.000128	6.39%
Cd 226.502†	6.3	0.00010 mg/L		0.000114	0.00010 mg/L	0.000114	109.37%
Ti 334.940†	811.3	0.00147 mg/L		0.000050	0.00147 mg/L	0.000050	3.40%
Ca 227.546†	399.2	2.0457 mg/L		0.05842	2.0457 mg/L	0.05842	2.86%
Na 589.592†	25033.5	5.1475 mg/L		0.06391	5.1475 mg/L	0.06391	1.24%
K 766.490†	292.4	0.27808 mg/L		0.174050	0.27808 mg/L	0.174050	62.59%

Sequence No.: 34

Sample ID: L1786-09BPDS~SL-MW-16A

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Autosampler Location: 56

Date Collected: 8/30/2012 9:50:05 AM

Data Type: Reprocessed on 8/30/2012 1:59:56 PM

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: L1786-09BPDS~SL-MW-16A

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1774204.2	93.485	%	0.5825				0.62%
Lu 261.542	1157846.6	94.39	%	0.644				0.68%
Ag 328.068†	194348.5	1.1225	mg/L	0.01453	1.1225	mg/L	0.01453	1.29%
Al 308.215†	191603.8	9.4181	mg/L	0.11922	9.4181	mg/L	0.11922	1.27%
As 188.979†	377.8	0.45926	mg/L	0.003802	0.45926	mg/L	0.003802	0.83%
Ba 233.527†	807181.2	9.3611	mg/L	0.05531	9.3611	mg/L	0.05531	0.59%
Be 313.107†	584832.2	0.23212	mg/L	0.001325	0.23212	mg/L	0.001325	0.57%
Co 228.616†	83857.9	2.3330	mg/L	0.03309	2.3330	mg/L	0.03309	1.42%
Cr 267.716†	68548.5	0.96939	mg/L	0.012697	0.96939	mg/L	0.012697	1.31%
Cu 324.752†	250836.7	1.1330	mg/L	0.01495	1.1330	mg/L	0.01495	1.32%
Fe 273.955†	121173.9	5.0121	mg/L	0.06601	5.0121	mg/L	0.06601	1.32%
Mg 279.077†	487585.9	27.821	mg/L	0.1842	27.821	mg/L	0.1842	0.66%
Mn 257.610†	1371523.2	2.3466	mg/L	0.01654	2.3466	mg/L	0.01654	0.70%
Ni 231.604†	70404.9	2.3629	mg/L	0.03510	2.3629	mg/L	0.03510	1.49%
Pb 220.353†	2305.6	0.45198	mg/L	0.003273	0.45198	mg/L	0.003273	0.72%
Sb 206.836†	528.3	0.43891	mg/L	0.006851	0.43891	mg/L	0.006851	1.56%
Se 196.026†	221.3	0.44523	mg/L	0.003052	0.44523	mg/L	0.003052	0.69%
Tl 190.801	384.2	0.44066	mg/L	0.003246	0.44066	mg/L	0.003246	0.74%
V 292.402†	278101.9	2.2732	mg/L	0.03000	2.2732	mg/L	0.03000	1.32%
Zn 206.200†	49380.3	2.3178	mg/L	0.03436	2.3178	mg/L	0.03436	1.48%
Cd 226.502†	12393.7	0.22243	mg/L	0.003876	0.22243	mg/L	0.003876	1.74%
Ti 334.940†	4467.0	0.00785	mg/L	0.000208	0.00785	mg/L	0.000208	2.65%
Ca 227.546†	6493.6	32.519	mg/L	0.2684	32.519	mg/L	0.2684	0.83%
Na 589.592†	234325.9	48.183	mg/L	0.6574	48.183	mg/L	0.6574	1.36%
K 766.490†	26105.2	24.823	mg/L	0.3995	24.823	mg/L	0.3995	1.61%

Sequence No.: 35

Sample ID: L1786-09C~SL-MW-16

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 57

Date Collected: 8/30/2012 9:53:48 AM

Data Type: Reprocessed on 8/30/2012 1:59:57 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09C~SL-MW-16

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1801596.2	94.928	%	0.3709				0.39%
Lu 261.542	1175920.7	95.87	%	0.525				0.55%
Ag 328.068†	197.2	0.00109	mg/L	0.000589	0.00109	mg/L	0.000589	54.22%
Al 308.215†	445.4	0.01962	mg/L	0.005718	0.01962	mg/L	0.005718	29.15%
As 188.979†	2.3	0.00316	mg/L	0.001806	0.00316	mg/L	0.001806	57.13%
Ba 233.527†	797.2	0.00924	mg/L	0.000106	0.00924	mg/L	0.000106	1.15%
Be 313.107†	-79.0	-0.00003	mg/L	0.000019	-0.00003	mg/L	0.000019	60.72%
Co 228.616†	58.0	0.00160	mg/L	0.000168	0.00160	mg/L	0.000168	10.51%
Cr 267.716†	281.7	0.00408	mg/L	0.000450	0.00408	mg/L	0.000450	11.05%
Cu 324.752†	478.0	0.00217	mg/L	0.000301	0.00217	mg/L	0.000301	13.88%
Fe 273.955†	3807.7	0.15738	mg/L	0.002312	0.15738	mg/L	0.002312	1.47%
Mg 279.077†	81102.1	4.6279	mg/L	0.03150	4.6279	mg/L	0.03150	0.68%
Mn 257.610†	13431.6	0.02294	mg/L	0.000042	0.02294	mg/L	0.000042	0.18%
Ni 231.604†	1285.4	0.04312	mg/L	0.000412	0.04312	mg/L	0.000412	0.96%
Pb 220.353†	-6.9	-0.00135	mg/L	0.002002	-0.00135	mg/L	0.002002	148.74%
Sb 206.836†	6.8	0.00577	mg/L	0.003698	0.00577	mg/L	0.003698	64.11%
Se 196.026†	6.3	0.01251	mg/L	0.008938	0.01251	mg/L	0.008938	71.46%
Tl 190.801	-0.2	0.00010	mg/L	0.005076	0.00010	mg/L	0.005076	>999.9%
V 292.402†	146.2	0.00121	mg/L	0.000174	0.00121	mg/L	0.000174	14.42%
Zn 206.200†	116.5	0.00549	mg/L	0.000135	0.00549	mg/L	0.000135	2.46%
Cd 226.502†	-0.7	-0.00004	mg/L	0.000120	-0.00004	mg/L	0.000120	291.26%
Ti 334.940†	131.1	0.00032	mg/L	0.000048	0.00032	mg/L	0.000048	14.96%
Ca 227.546†	1945.5	9.9723	mg/L	0.01655	9.9723	mg/L	0.01655	0.17%
Na 589.592†	123615.7	25.419	mg/L	0.2993	25.419	mg/L	0.2993	1.18%
K 766.490†	1554.0	1.4777	mg/L	0.07343	1.4777	mg/L	0.07343	4.97%

Sequence No.: 36

Sample ID: L1786-09CDUP~SL-MW-16D

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 58

Date Collected: 8/30/2012 9:57:30 AM

Data Type: Reprocessed on 8/30/2012 1:59:58 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09CDUP~SL-MW-16D

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1822668.5	96.038	%	0.4465				0.46%
Lu 261.542	1189295.1	96.96	%	0.418				0.43%
Ag 328.068†	171.0	0.00094	mg/L	0.000233	0.00094	mg/L	0.000233	24.96%
Al 308.215†	380.0	0.01644	mg/L	0.003885	0.01644	mg/L	0.003885	23.62%
As 188.979†	3.5	0.00452	mg/L	0.002821	0.00452	mg/L	0.002821	62.42%
Ba 233.527†	709.0	0.00822	mg/L	0.000041	0.00822	mg/L	0.000041	0.50%
Be 313.107†	-69.9	-0.00003	mg/L	0.000008	-0.00003	mg/L	0.000008	30.46%
Co 228.616†	57.5	0.00159	mg/L	0.000184	0.00159	mg/L	0.000184	11.60%
Cr 267.716†	296.6	0.00429	mg/L	0.000648	0.00429	mg/L	0.000648	15.12%
Cu 324.752†	378.8	0.00172	mg/L	0.000184	0.00172	mg/L	0.000184	10.65%
Fe 273.955†	3700.1	0.15293	mg/L	0.004899	0.15293	mg/L	0.004899	3.20%
Mg 279.077†	80292.5	4.5817	mg/L	0.14304	4.5817	mg/L	0.14304	3.12%
Mn 257.610†	13149.7	0.02245	mg/L	0.000600	0.02245	mg/L	0.000600	2.67%
Ni 231.604†	1257.3	0.04218	mg/L	0.000188	0.04218	mg/L	0.000188	0.45%
Pb 220.353†	-0.8	-0.00015	mg/L	0.000979	-0.00015	mg/L	0.000979	637.55%
Sb 206.836†	2.7	0.00221	mg/L	0.002761	0.00221	mg/L	0.002761	124.79%
Se 196.026†	4.8	0.00963	mg/L	0.005889	0.00963	mg/L	0.005889	61.15%
Tl 190.801	-6.9	-0.00798	mg/L	0.001159	-0.00798	mg/L	0.001159	14.53%
V 292.402†	85.0	0.00071	mg/L	0.000249	0.00071	mg/L	0.000249	35.14%
Zn 206.200†	98.8	0.00466	mg/L	0.000069	0.00466	mg/L	0.000069	1.47%
Cd 226.502†	5.2	0.00006	mg/L	0.000050	0.00006	mg/L	0.000050	76.98%
Ti 334.940†	53.7	0.00018	mg/L	0.000143	0.00018	mg/L	0.000143	80.52%
Ca 227.546†	1904.5	9.7621	mg/L	0.07689	9.7621	mg/L	0.07689	0.79%
Na 589.592†	124115.7	25.521	mg/L	0.1272	25.521	mg/L	0.1272	0.50%
K 766.490†	1535.1	1.4597	mg/L	0.17225	1.4597	mg/L	0.17225	11.80%

Sequence No.: 37

Sample ID: L1786-09CMS~SL-MW-16S

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 59

Date Collected: 8/30/2012 10:01:11 AM

Data Type: Reprocessed on 8/30/2012 1:59:59 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09CMS~SL-MW-16S

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1764900.7	92.995	%	0.9444				1.02%
Lu 261.542	1151299.7	93.86	%	0.929				0.99%
Ag 328.068†	196447.7	1.1346	mg/L	0.01383	1.1346	mg/L	0.01383	1.22%
Al 308.215†	187889.6	9.2353	mg/L	0.12704	9.2353	mg/L	0.12704	1.38%
As 188.979†	401.9	0.48748	mg/L	0.007998	0.48748	mg/L	0.007998	1.64%
Ba 233.527†	812452.4	9.4222	mg/L	0.01559	9.4222	mg/L	0.01559	0.17%
Be 313.107†	588543.0	0.23357	mg/L	0.000228	0.23357	mg/L	0.000228	0.10%
Co 228.616†	84547.2	2.3522	mg/L	0.03337	2.3522	mg/L	0.03337	1.42%
Cr 267.716†	65403.2	0.92494	mg/L	0.013273	0.92494	mg/L	0.013273	1.44%
Cu 324.752†	250961.2	1.1336	mg/L	0.01332	1.1336	mg/L	0.01332	1.18%
Fe 273.955†	117424.2	4.8571	mg/L	0.06868	4.8571	mg/L	0.06868	1.41%
Mg 279.077†	487754.6	27.830	mg/L	0.0696	27.830	mg/L	0.0696	0.25%
Mn 257.610†	1378590.2	2.3587	mg/L	0.00447	2.3587	mg/L	0.00447	0.19%
Ni 231.604†	70854.9	2.3780	mg/L	0.03357	2.3780	mg/L	0.03357	1.41%
Pb 220.353†	2394.2	0.46927	mg/L	0.006976	0.46927	mg/L	0.006976	1.49%
Sb 206.836†	576.1	0.48091	mg/L	0.007536	0.48091	mg/L	0.007536	1.57%
Se 196.026†	231.7	0.46599	mg/L	0.006784	0.46599	mg/L	0.006784	1.46%
Tl 190.801	372.2	0.42605	mg/L	0.003780	0.42605	mg/L	0.003780	0.89%
V 292.402†	279650.1	2.2857	mg/L	0.02943	2.2857	mg/L	0.02943	1.29%
Zn 206.200†	49666.9	2.3311	mg/L	0.03093	2.3311	mg/L	0.03093	1.33%
Cd 226.502†	13003.1	0.23337	mg/L	0.003428	0.23337	mg/L	0.003428	1.47%
Ti 334.940†	309.3	0.00040	mg/L	0.000045	0.00040	mg/L	0.000045	11.20%

Ca 227.546†	6470.0	32.394 mg/L	0.4112	32.394 mg/L	0.4112	1.27%
Na 589.592†	237231.4	48.781 mg/L	0.3471	48.781 mg/L	0.3471	0.71%
K 766.490†	26848.0	25.529 mg/L	0.2351	25.529 mg/L	0.2351	0.92%

Sequence No.: 38

Sample ID: L1786-09CSD~SL-MW-16L

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 60

Date Collected: 8/30/2012 10:04:55 AM

Data Type: Reprocessed on 8/30/2012 1:59:59 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09CSD~SL-MW-16L

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1831347.8	96.496 %		1.6363				1.70%
Lu 261.542	1192535.5	97.22 %		1.711				1.76%
Ag 328.068†	187.0	0.00107 mg/L		0.000492	0.00107 mg/L		0.000492	46.16%
Al 308.215†	138.0	0.00631 mg/L		0.002517	0.00631 mg/L		0.002517	39.91%
As 188.979†	0.7	0.00095 mg/L		0.002656	0.00095 mg/L		0.002656	278.35%
Ba 233.527†	212.1	0.00246 mg/L		0.000107	0.00246 mg/L		0.000107	4.36%
Be 313.107†	-55.9	-0.00002 mg/L		0.000017	-0.00002 mg/L		0.000017	76.51%
Co 228.616†	17.0	0.00047 mg/L		0.000291	0.00047 mg/L		0.000291	61.92%
Cr 267.716†	74.7	0.00108 mg/L		0.000231	0.00108 mg/L		0.000231	21.43%
Cu 324.752†	319.4	0.00144 mg/L		0.000282	0.00144 mg/L		0.000282	19.53%
Fe 273.955†	804.8	0.03327 mg/L		0.001057	0.03327 mg/L		0.001057	3.18%
Mg 279.077†	17320.0	0.98833 mg/L		0.015982	0.98833 mg/L		0.015982	1.62%
Mn 257.610†	2947.4	0.00503 mg/L		0.000098	0.00503 mg/L		0.000098	1.94%
Ni 231.604†	270.2	0.00906 mg/L		0.000225	0.00906 mg/L		0.000225	2.48%
Pb 220.353†	-4.2	-0.00082 mg/L		0.000685	-0.00082 mg/L		0.000685	83.81%
Sb 206.836†	-1.3	-0.00118 mg/L		0.001319	-0.00118 mg/L		0.001319	112.21%
Se 196.026†	-0.7	-0.00147 mg/L		0.004351	-0.00147 mg/L		0.004351	295.01%
Tl 190.801	0.9	0.00114 mg/L		0.003982	0.00114 mg/L		0.003982	348.47%
V 292.402†	61.8	0.00051 mg/L		0.000200	0.00051 mg/L		0.000200	39.42%
Zn 206.200†	37.1	0.00175 mg/L		0.000139	0.00175 mg/L		0.000139	7.95%
Cd 226.502†	10.4	0.00018 mg/L		0.000154	0.00018 mg/L		0.000154	85.18%
Ti 334.940†	63.9	0.00013 mg/L		0.000069	0.00013 mg/L		0.000069	52.36%
Ca 227.546†	410.4	2.1034 mg/L		0.07366	2.1034 mg/L		0.07366	3.50%
Na 589.592†	25106.8	5.1626 mg/L		0.13832	5.1626 mg/L		0.13832	2.68%
K 766.490†	329.2	0.31302 mg/L		0.121777	0.31302 mg/L		0.121777	38.90%

Sequence No.: 39

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 8/30/2012 10:08:36 AM

Data Type: Reprocessed on 8/30/2012 2:00:00 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1780620.2	93.823 %		1.0540				1.12%
Lu 261.542	1163395.0	94.85 %		1.036				1.09%
Ag 328.068†	204547.2	1.1816 mg/L		0.02328	1.1816 mg/L		0.02328	1.97%
QC value within limits for Ag 328.068		Recovery = 94.53%						
Al 308.215†	200016.1	9.8328 mg/L		0.10562	9.8328 mg/L		0.10562	1.07%
QC value within limits for Al 308.215		Recovery = 98.33%						
As 188.979†	412.1	0.49996 mg/L		0.006284	0.49996 mg/L		0.006284	1.26%
QC value within limits for As 188.979		Recovery = 99.99%						
Ba 233.527†	889384.9	10.314 mg/L		0.0275	10.314 mg/L		0.0275	0.27%
QC value within limits for Ba 233.527		Recovery = 103.14%						
Be 313.107†	631200.1	0.25140 mg/L		0.000412	0.25140 mg/L		0.000412	0.16%
QC value within limits for Be 313.107		Recovery = 100.56%						
Co 228.616†	92870.8	2.5827 mg/L		0.02583	2.5827 mg/L		0.02583	1.00%
QC value within limits for Co 228.616		Recovery = 103.31%						
Cr 267.716†	69287.1	0.97977 mg/L		0.009697	0.97977 mg/L		0.009697	0.99%
QC value within limits for Cr 267.716		Recovery = 97.98%						
Cu 324.752†	265656.0	1.1999 mg/L		0.01461	1.1999 mg/L		0.01461	1.22%

QC value within limits for Cu 324.752 Recovery = 96.00%
 Fe 273.955† 122440.9 5.0648 mg/L 0.05036 5.0648 mg/L 0.05036 0.99%
 QC value within limits for Fe 273.955 Recovery = 101.30%
 Mg 279.077† 449479.7 25.646 mg/L 0.0694 25.646 mg/L 0.0694 0.27%
 QC value within limits for Mg 279.077 Recovery = 102.59%
 Mn 257.610† 1500748.4 2.5678 mg/L 0.00909 2.5678 mg/L 0.00909 0.35%
 QC value within limits for Mn 257.610 Recovery = 102.71%
 Ni 231.604† 75673.4 2.5394 mg/L 0.03023 2.5394 mg/L 0.03023 1.19%
 QC value within limits for Ni 231.604 Recovery = 101.58%
 Pb 220.353† 2568.9 0.50402 mg/L 0.005407 0.50402 mg/L 0.005407 1.07%
 QC value within limits for Pb 220.353 Recovery = 100.80%
 Sb 206.836† 628.0 0.52592 mg/L 0.003580 0.52592 mg/L 0.003580 0.68%
 QC value within limits for Sb 206.836 Recovery = 105.18%
 Se 196.026† 243.1 0.48928 mg/L 0.011734 0.48928 mg/L 0.011734 2.40%
 QC value within limits for Se 196.026 Recovery = 97.86%
 Tl 190.801 429.7 0.49298 mg/L 0.005739 0.49298 mg/L 0.005739 1.16%
 QC value within limits for Tl 190.801 Recovery = 98.60%
 V 292.402† 302322.4 2.4703 mg/L 0.02242 2.4703 mg/L 0.02242 0.91%
 QC value within limits for V 292.402 Recovery = 98.81%
 Zn 206.200† 54403.3 2.5537 mg/L 0.03057 2.5537 mg/L 0.03057 1.20%
 QC value within limits for Zn 206.200 Recovery = 102.15%
 Cd 226.502† 13625.1 0.24458 mg/L 0.001697 0.24458 mg/L 0.001697 0.69%
 QC value within limits for Cd 226.502 Recovery = 97.83%
 Ti 334.940† 272635.9 0.48881 mg/L 0.001498 0.48881 mg/L 0.001498 0.31%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 4886.5 24.200 mg/L 0.2098 24.200 mg/L 0.2098 0.87%
 QC value within limits for Ca 227.546 Recovery = 96.80%
 Na 589.592† 123301.9 25.354 mg/L 0.3457 25.354 mg/L 0.3457 1.36%
 QC value within limits for Na 589.592 Recovery = 101.42%
 K 766.490† 27399.3 26.053 mg/L 0.3486 26.053 mg/L 0.3486 1.34%
 QC value within limits for K 766.490 Recovery = 104.21%
 All analyte(s) passed QC.

Sequence No.: 40

Sample ID: CCB

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 8/30/2012 10:12:19 AM

Data Type: Reprocessed on 8/30/2012 2:00:01 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	1850083.2	97.483 %		1.5793			1.62%
Lu 261.542	1199075.9	97.75 %		1.570			1.61%
Ag 328.068†	386.8	0.00223 mg/L		0.000295	0.00223 mg/L	0.000295	13.25%
QC value within limits for Ag 328.068			Recovery =	Not calculated			
Al 308.215†	-116.4	-0.00574 mg/L		0.003661	-0.00574 mg/L	0.003661	63.76%
QC value within limits for Al 308.215			Recovery =	Not calculated			
As 188.979†	2.2	0.00260 mg/L		0.005944	0.00260 mg/L	0.005944	229.05%
QC value within limits for As 188.979			Recovery =	Not calculated			
Ba 233.527†	72.0	0.00084 mg/L		0.000195	0.00084 mg/L	0.000195	23.39%
QC value within limits for Ba 233.527			Recovery =	Not calculated			
Be 313.107†	57.0	0.00002 mg/L		0.000060	0.00002 mg/L	0.000060	260.06%
QC value within limits for Be 313.107			Recovery =	Not calculated			
Co 228.616†	2.6	0.00007 mg/L		0.000051	0.00007 mg/L	0.000051	70.86%
QC value within limits for Co 228.616			Recovery =	Not calculated			
Cr 267.716†	23.0	0.00033 mg/L		0.000460	0.00033 mg/L	0.000460	141.43%
QC value within limits for Cr 267.716			Recovery =	Not calculated			
Cu 324.752†	164.5	0.00074 mg/L		0.000140	0.00074 mg/L	0.000140	18.83%
QC value within limits for Cu 324.752			Recovery =	Not calculated			
Fe 273.955†	36.3	0.00150 mg/L		0.000635	0.00150 mg/L	0.000635	42.30%
QC value within limits for Fe 273.955			Recovery =	Not calculated			
Mg 279.077†	-26.6	-0.00152 mg/L		0.004925	-0.00152 mg/L	0.004925	324.86%
QC value within limits for Mg 279.077			Recovery =	Not calculated			
Mn 257.610†	169.3	0.00029 mg/L		0.000062	0.00029 mg/L	0.000062	21.39%
QC value within limits for Mn 257.610			Recovery =	Not calculated			
Ni 231.604†	6.1	0.00021 mg/L		0.000099	0.00021 mg/L	0.000099	48.03%
QC value within limits for Ni 231.604			Recovery =	Not calculated			

Pb 220.353† -2.9 -0.00056 mg/L 0.001031 -0.00056 mg/L 0.001031 184.66%
 QC value within limits for Pb 220.353 Recovery = Not calculated
 Sb 206.836† -2.4 -0.00205 mg/L 0.001656 -0.00205 mg/L 0.001656 80.90%
 QC value within limits for Sb 206.836 Recovery = Not calculated
 Se 196.026† 4.7 0.00932 mg/L 0.004104 0.00932 mg/L 0.004104 44.02%
 QC value within limits for Se 196.026 Recovery = Not calculated
 Tl 190.801 -1.2 -0.00139 mg/L 0.004174 -0.00139 mg/L 0.004174 300.46%
 QC value within limits for Tl 190.801 Recovery = Not calculated
 V 292.402† 98.2 0.00080 mg/L 0.000135 0.00080 mg/L 0.000135 16.85%
 QC value within limits for V 292.402 Recovery = Not calculated
 Zn 206.200† 10.6 0.00050 mg/L 0.000188 0.00050 mg/L 0.000188 37.84%
 QC value within limits for Zn 206.200 Recovery = Not calculated
 Cd 226.502† 9.3 0.00017 mg/L 0.000088 0.00017 mg/L 0.000088 53.23%
 QC value within limits for Cd 226.502 Recovery = Not calculated
 Ti 334.940† 86.1 0.00016 mg/L 0.000105 0.00016 mg/L 0.000105 67.52%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546† 15.8 0.08086 mg/L 0.094243 0.08086 mg/L 0.094243 116.55%
 QC value within limits for Ca 227.546 Recovery = Not calculated
 Na 589.592† 89.8 0.01847 mg/L 0.007122 0.01847 mg/L 0.007122 38.57%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490† 120.3 0.11440 mg/L 0.128391 0.11440 mg/L 0.128391 112.23%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 41

Sample ID: L1786-09CPDS-SL-MW-16A

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 61

Date Collected: 8/30/2012 10:16:01 AM

Data Type: Reprocessed on 8/30/2012 2:00:01 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-09CPDS-SL-MW-16A

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 360.073	1770731.2	93.302 %		0.6690			0.72%
Lu 261.542	1156369.9	94.27 %		0.702			0.74%
Ag 328.068†	194505.1	1.1234 mg/L		0.00761	1.1234 mg/L	0.00761	0.68%
Al 308.215†	183885.5	9.0382 mg/L		0.05199	9.0382 mg/L	0.05199	0.58%
As 188.979†	394.7	0.47883 mg/L		0.008818	0.47883 mg/L	0.008818	1.84%
Ba 233.527†	810689.9	9.4017 mg/L		0.11081	9.4017 mg/L	0.11081	1.18%
Be 313.107†	588277.4	0.23347 mg/L		0.003025	0.23347 mg/L	0.003025	1.30%
Co 228.616†	83363.0	2.3193 mg/L		0.01495	2.3193 mg/L	0.01495	0.64%
Cr 267.716†	64133.4	0.90698 mg/L		0.005683	0.90698 mg/L	0.005683	0.63%
Cu 324.752†	247133.9	1.1163 mg/L		0.00687	1.1163 mg/L	0.00687	0.62%
Fe 273.955†	115771.8	4.7888 mg/L		0.03268	4.7888 mg/L	0.03268	0.68%
Mg 279.077†	487083.1	27.792 mg/L		0.3271	27.792 mg/L	0.3271	1.18%
Mn 257.610†	1379801.5	2.3608 mg/L		0.02712	2.3608 mg/L	0.02712	1.15%
Ni 231.604†	69968.8	2.3482 mg/L		0.01920	2.3482 mg/L	0.01920	0.82%
Pb 220.353†	2370.4	0.46460 mg/L		0.004350	0.46460 mg/L	0.004350	0.94%
Sb 206.836†	550.4	0.45912 mg/L		0.013735	0.45912 mg/L	0.013735	2.99%
Se 196.026†	224.3	0.45121 mg/L		0.005262	0.45121 mg/L	0.005262	1.17%
Tl 190.801	395.4	0.45421 mg/L		0.005157	0.45421 mg/L	0.005157	1.14%
V 292.402†	275471.9	2.2516 mg/L		0.01443	2.2516 mg/L	0.01443	0.64%
Zn 206.200†	48797.2	2.2903 mg/L		0.01398	2.2903 mg/L	0.01398	0.61%
Cd 226.502†	12547.0	0.22519 mg/L		0.001642	0.22519 mg/L	0.001642	0.73%
Ti 334.940†	403.7	0.00057 mg/L		0.000138	0.00057 mg/L	0.000138	24.27%
Ca 227.546†	6463.4	32.371 mg/L		0.5070	32.371 mg/L	0.5070	1.57%
Na 589.592†	237341.1	48.803 mg/L		0.8757	48.803 mg/L	0.8757	1.79%
K 766.490†	26917.3	25.595 mg/L		0.4841	25.595 mg/L	0.4841	1.89%

Sequence No.: 42

Sample ID: L1786-10B-SL-MW-1

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 62

Date Collected: 8/30/2012 10:19:45 AM

Data Type: Reprocessed on 8/30/2012 2:00:02 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-10B-SL-MW-1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1786734.2	94.145	%	1.0473				1.11%
Lu 261.542	1165182.0	94.99	%	1.173				1.23%
Ag 328.068†	146.0	0.00076	mg/L	0.000880	0.00076	mg/L	0.000880	116.09%
Al 308.215†	1050.0	0.04515	mg/L	0.007235	0.04515	mg/L	0.007235	16.03%
As 188.979†	3.1	0.00468	mg/L	0.006202	0.00468	mg/L	0.006202	132.43%
Ba 233.527†	2951.0	0.03421	mg/L	0.000478	0.03421	mg/L	0.000478	1.40%
Be 313.107†	-53.1	-0.00002	mg/L	0.000041	-0.00002	mg/L	0.000041	218.78%
Co 228.616†	4.2	0.00011	mg/L	0.000346	0.00011	mg/L	0.000346	315.82%
Cr 267.716†	76.4	0.00135	mg/L	0.000267	0.00135	mg/L	0.000267	19.78%
Cu 324.752†	752.0	0.00341	mg/L	0.000189	0.00341	mg/L	0.000189	5.55%
Fe 273.955†	3184.4	0.13162	mg/L	0.003362	0.13162	mg/L	0.003362	2.55%
Mg 279.077†	84632.3	4.8294	mg/L	0.08689	4.8294	mg/L	0.08689	1.80%
Mn 257.610†	95910.3	0.16408	mg/L	0.002951	0.16408	mg/L	0.002951	1.80%
Ni 231.604†	25.6	0.00084	mg/L	0.000231	0.00084	mg/L	0.000231	27.58%
Pb 220.353†	-0.2	-0.00002	mg/L	0.001859	-0.00002	mg/L	0.001859	>999.9%
Sb 206.836†	5.8	0.00495	mg/L	0.001601	0.00495	mg/L	0.001601	32.32%
Se 196.026†	-0.6	-0.00108	mg/L	0.005337	-0.00108	mg/L	0.005337	495.95%
Tl 190.801	-0.3	0.00011	mg/L	0.001357	0.00011	mg/L	0.001357	>999.9%
V 292.402†	34.8	0.00029	mg/L	0.000735	0.00029	mg/L	0.000735	255.37%
Zn 206.200†	152.4	0.00722	mg/L	0.000219	0.00722	mg/L	0.000219	3.03%
Cd 226.502†	18.9	0.00025	mg/L	0.000106	0.00025	mg/L	0.000106	42.13%
Ti 334.940†	771.4	0.00181	mg/L	0.000577	0.00181	mg/L	0.000577	31.95%
Ca 227.546†	5937.4	30.447	mg/L	0.5799	30.447	mg/L	0.5799	1.90%
Na 589.592†	155095.9	31.892	mg/L	0.5642	31.892	mg/L	0.5642	1.77%
K 766.490†	1434.1	1.3637	mg/L	0.03616	1.3637	mg/L	0.03616	2.65%

Sequence No.: 43

Sample ID: L1786-10C-SL-MW-1

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 63

Date Collected: 8/30/2012 10:23:26 AM

Data Type: Reprocessed on 8/30/2012 2:00:03 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-10C-SL-MW-1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1793853.2	94.520	%	0.6070				0.64%
Lu 261.542	1170591.7	95.43	%	0.609				0.64%
Ag 328.068†	216.0	0.00120	mg/L	0.000600	0.00120	mg/L	0.000600	50.19%
Al 308.215†	-30.1	-0.00767	mg/L	0.000749	-0.00767	mg/L	0.000749	9.77%
As 188.979†	0.6	0.00174	mg/L	0.004759	0.00174	mg/L	0.004759	273.44%
Ba 233.527†	2714.9	0.03148	mg/L	0.000206	0.03148	mg/L	0.000206	0.65%
Be 313.107†	-31.4	-0.00001	mg/L	0.000019	-0.00001	mg/L	0.000019	144.17%
Co 228.616†	-2.4	-0.00007	mg/L	0.000167	-0.00007	mg/L	0.000167	248.06%
Cr 267.716†	52.7	0.00104	mg/L	0.000216	0.00104	mg/L	0.000216	20.76%
Cu 324.752†	446.0	0.00201	mg/L	0.000328	0.00201	mg/L	0.000328	16.29%
Fe 273.955†	475.0	0.01963	mg/L	0.005589	0.01963	mg/L	0.005589	28.47%
Mg 279.077†	81447.3	4.6476	mg/L	0.04184	4.6476	mg/L	0.04184	0.90%
Mn 257.610†	5834.9	0.00994	mg/L	0.000067	0.00994	mg/L	0.000067	0.67%
Ni 231.604†	-5.3	-0.00020	mg/L	0.000222	-0.00020	mg/L	0.000222	112.23%
Pb 220.353†	-8.4	-0.00164	mg/L	0.000635	-0.00164	mg/L	0.000635	38.68%
Sb 206.836†	5.8	0.00501	mg/L	0.002862	0.00501	mg/L	0.002862	57.15%
Se 196.026†	1.2	0.00235	mg/L	0.004897	0.00235	mg/L	0.004897	208.00%
Tl 190.801	-3.9	-0.00427	mg/L	0.001651	-0.00427	mg/L	0.001651	38.63%
V 292.402†	41.8	0.00034	mg/L	0.000087	0.00034	mg/L	0.000087	25.33%
Zn 206.200†	52.4	0.00246	mg/L	0.000029	0.00246	mg/L	0.000029	1.16%
Cd 226.502†	7.8	0.00006	mg/L	0.000143	0.00006	mg/L	0.000143	233.25%
Ti 334.940†	-269.9	-0.00007	mg/L	0.000075	-0.00007	mg/L	0.000075	115.21%
Ca 227.546†	5849.3	29.996	mg/L	0.3792	29.996	mg/L	0.3792	1.26%
Na 589.592†	154016.3	31.670	mg/L	0.4048	31.670	mg/L	0.4048	1.28%
K 766.490†	1458.5	1.3869	mg/L	0.03987	1.3869	mg/L	0.03987	2.87%

Sequence No.: 44

Sample ID: L1786-11B-SL-MW-2

Analyst:

Autosampler Location: 64

Date Collected: 8/30/2012 10:27:07 AM

Data Type: Reprocessed on 8/30/2012 2:00:03 PM

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-11B-SL-MW-2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1777717.2	93.670	%	0.8620				0.92%
Lu 261.542	1157908.4	94.40	%	0.874				0.93%
Ag 328.068†	287.6	0.00160	mg/L	0.000685	0.00160	mg/L	0.000685	42.79%
Al 308.215†	4974.1	0.24052	mg/L	0.005016	0.24052	mg/L	0.005016	2.09%
As 188.979†	-0.2	0.00164	mg/L	0.001856	0.00164	mg/L	0.001856	113.10%
Ba 233.527†	2095.6	0.02430	mg/L	0.000258	0.02430	mg/L	0.000258	1.06%
Be 313.107†	-61.5	-0.00002	mg/L	0.000013	-0.00002	mg/L	0.000013	71.66%
Co 228.616†	41.3	0.00112	mg/L	0.000072	0.00112	mg/L	0.000072	6.41%
Cr 267.716†	8975.2	0.12702	mg/L	0.002126	0.12702	mg/L	0.002126	1.67%
Cu 324.752†	1203.2	0.00551	mg/L	0.000225	0.00551	mg/L	0.000225	4.09%
Fe 273.955†	21500.2	0.88864	mg/L	0.014395	0.88864	mg/L	0.014395	1.62%
Mg 279.077†	70284.6	4.0103	mg/L	0.05272	4.0103	mg/L	0.05272	1.31%
Mn 257.610†	49094.8	0.08397	mg/L	0.001107	0.08397	mg/L	0.001107	1.32%
Ni 231.604†	146.3	0.00489	mg/L	0.000274	0.00489	mg/L	0.000274	5.59%
Pb 220.353†	-8.8	-0.00171	mg/L	0.000731	-0.00171	mg/L	0.000731	42.88%
Sb 206.836†	4.9	0.00190	mg/L	0.002056	0.00190	mg/L	0.002056	108.06%
Se 196.026†	6.6	0.01346	mg/L	0.003760	0.01346	mg/L	0.003760	27.93%
Tl 190.801	-2.6	-0.00275	mg/L	0.002931	-0.00275	mg/L	0.002931	106.48%
V 292.402†	120.5	0.00130	mg/L	0.000430	0.00130	mg/L	0.000430	33.16%
Zn 206.200†	136.9	0.00673	mg/L	0.000542	0.00673	mg/L	0.000542	8.06%
Cd 226.502†	90.8	0.00151	mg/L	0.000073	0.00151	mg/L	0.000073	4.82%
Ti 334.940†	1675.2	0.00325	mg/L	0.000700	0.00325	mg/L	0.000700	21.56%
Ca 227.546†	3858.6	19.779	mg/L	0.1827	19.779	mg/L	0.1827	0.92%
Na 589.592†	95470.4	19.631	mg/L	0.1324	19.631	mg/L	0.1324	0.67%
K 766.490†	1953.9	1.8579	mg/L	0.06160	1.8579	mg/L	0.06160	3.32%

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Sequence No.: 45

Sample ID: L1786-11C-SL-MW-2

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 65

Date Collected: 8/30/2012 10:30:48 AM

Data Type: Reprocessed on 8/30/2012 2:00:04 PM

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1786-11C-SL-MW-2

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1743351.4	91.859	%	1.0728				1.17%
Lu 261.542	1135532.9	92.57	%	1.103				1.19%
Ag 328.068†	217.3	0.00121	mg/L	0.000873	0.00121	mg/L	0.000873	72.10%
Al 308.215†	163.4	0.00392	mg/L	0.004386	0.00392	mg/L	0.004386	111.82%
As 188.979†	0.5	0.00126	mg/L	0.004018	0.00126	mg/L	0.004018	319.13%
Ba 233.527†	2031.8	0.02356	mg/L	0.000261	0.02356	mg/L	0.000261	1.11%
Be 313.107†	-102.3	-0.00004	mg/L	0.000041	-0.00004	mg/L	0.000041	99.01%
Co 228.616†	-2.8	-0.00008	mg/L	0.000099	-0.00008	mg/L	0.000099	126.26%
Cr 267.716†	50.6	0.00091	mg/L	0.000450	0.00091	mg/L	0.000450	49.37%
Cu 324.752†	520.3	0.00235	mg/L	0.000553	0.00235	mg/L	0.000553	23.55%
Fe 273.955†	321.1	0.01327	mg/L	0.000959	0.01327	mg/L	0.000959	7.23%
Mg 279.077†	68810.4	3.9265	mg/L	0.04034	3.9265	mg/L	0.04034	1.03%
Mn 257.610†	2465.8	0.00418	mg/L	0.000040	0.00418	mg/L	0.000040	0.96%
Ni 231.604†	41.0	0.00136	mg/L	0.000148	0.00136	mg/L	0.000148	10.83%
Pb 220.353†	-10.0	-0.00195	mg/L	0.001320	-0.00195	mg/L	0.001320	67.69%
Sb 206.836†	-0.6	-0.00056	mg/L	0.004197	-0.00056	mg/L	0.004197	752.54%
Se 196.026†	4.2	0.00827	mg/L	0.009369	0.00827	mg/L	0.009369	113.35%
Tl 190.801	-3.9	-0.00436	mg/L	0.005863	-0.00436	mg/L	0.005863	134.40%
V 292.402†	31.9	0.00026	mg/L	0.000335	0.00026	mg/L	0.000335	127.78%
Zn 206.200†	92.3	0.00432	mg/L	0.000348	0.00432	mg/L	0.000348	8.06%
Cd 226.502†	26.7	0.00043	mg/L	0.000142	0.00043	mg/L	0.000142	33.35%
Ti 334.940†	-158.2	-0.00002	mg/L	0.000088	-0.00002	mg/L	0.000088	359.84%
Ca 227.546†	3839.0	19.687	mg/L	0.2671	19.687	mg/L	0.2671	1.36%
Na 589.592†	97145.6	19.976	mg/L	0.0759	19.976	mg/L	0.0759	0.38%
K 766.490†	2091.3	1.9886	mg/L	0.07698	1.9886	mg/L	0.07698	3.87%

Sequence No.: 46
 Sample ID: L1786-12B-RB-02
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 66
 Date Collected: 8/30/2012 10:34:29 AM
 Data Type: Reprocessed on 8/30/2012 2:00:05 PM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: L1786-12B-RB-02

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1749532.3	92.185	%	1.0174				1.10%
Lu 261.542	1135548.8	92.58	%	1.034				1.12%
Ag 328.068†	163.6	0.00094	mg/L	0.000267	0.00094	mg/L	0.000267	28.40%
Al 308.215†	62.8	0.00301	mg/L	0.004511	0.00301	mg/L	0.004511	149.68%
As 188.979†	0.3	0.00038	mg/L	0.004530	0.00038	mg/L	0.004530	>999.9%
Ba 233.527†	21.5	0.00025	mg/L	0.000093	0.00025	mg/L	0.000093	37.30%
Be 313.107†	-68.9	-0.00003	mg/L	0.000008	-0.00003	mg/L	0.000008	29.79%
Co 228.616†	-1.4	-0.00004	mg/L	0.000149	-0.00004	mg/L	0.000149	382.58%
Cr 267.716†	55.7	0.00079	mg/L	0.000242	0.00079	mg/L	0.000242	30.57%
Cu 324.752†	433.0	0.00195	mg/L	0.000660	0.00195	mg/L	0.000660	33.76%
Fe 273.955†	296.8	0.01227	mg/L	0.000172	0.01227	mg/L	0.000172	1.40%
Mg 279.077†	312.0	0.01780	mg/L	0.002735	0.01780	mg/L	0.002735	15.36%
Mn 257.610†	339.9	0.00058	mg/L	0.000022	0.00058	mg/L	0.000022	3.74%
Ni 231.604†	0.1	0.00000	mg/L	0.000320	0.00000	mg/L	0.000320	>999.9%
Pb 220.353†	-3.2	-0.00063	mg/L	0.001199	-0.00063	mg/L	0.001199	190.80%
Sb 206.836†	3.1	0.00266	mg/L	0.002530	0.00266	mg/L	0.002530	95.22%
Se 196.026†	-1.5	-0.00300	mg/L	0.005621	-0.00300	mg/L	0.005621	187.05%
Tl 190.801	-2.2	-0.00261	mg/L	0.004125	-0.00261	mg/L	0.004125	157.87%
V 292.402†	30.2	0.00025	mg/L	0.000156	0.00025	mg/L	0.000156	62.88%
Zn 206.200†	513.8	0.02407	mg/L	0.000166	0.02407	mg/L	0.000166	0.69%
Cd 226.502†	4.4	0.00008	mg/L	0.000131	0.00008	mg/L	0.000131	170.79%
Ti 334.940†	137.3	0.00025	mg/L	0.000048	0.00025	mg/L	0.000048	19.03%
Ca 227.546†	75.7	0.38820	mg/L	0.046271	0.38820	mg/L	0.046271	11.92%
Na 589.592†	3390.4	0.69715	mg/L	0.005515	0.69715	mg/L	0.005515	0.79%
K 766.490†	110.8	0.10540	mg/L	0.029972	0.10540	mg/L	0.029972	28.44%

Sequence No.: 47
 Sample ID: L1786-12C-RB-02
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 67
 Date Collected: 8/30/2012 10:38:10 AM
 Data Type: Reprocessed on 8/30/2012 2:00:05 PM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: L1786-12C-RB-02

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1802075.4	94.953	%	1.0099				1.06%
Lu 261.542	1170559.9	95.43	%	1.112				1.17%
Ag 328.068†	208.8	0.00120	mg/L	0.000879	0.00120	mg/L	0.000879	73.19%
Al 308.215†	-3.7	-0.00022	mg/L	0.004534	-0.00022	mg/L	0.004534	>999.9%
As 188.979†	-1.1	-0.00125	mg/L	0.007904	-0.00125	mg/L	0.007904	630.11%
Ba 233.527†	99.7	0.00116	mg/L	0.000075	0.00116	mg/L	0.000075	6.50%
Be 313.107†	-60.3	-0.00002	mg/L	0.000005	-0.00002	mg/L	0.000005	23.57%
Co 228.616†	-3.4	-0.00010	mg/L	0.000107	-0.00010	mg/L	0.000107	111.68%
Cr 267.716†	187.4	0.00265	mg/L	0.000212	0.00265	mg/L	0.000212	8.00%
Cu 324.752†	395.9	0.00179	mg/L	0.000457	0.00179	mg/L	0.000457	25.57%
Fe 273.955†	246.9	0.01021	mg/L	0.000609	0.01021	mg/L	0.000609	5.96%
Mg 279.077†	36.3	0.00207	mg/L	0.001953	0.00207	mg/L	0.001953	94.47%
Mn 257.610†	2248.9	0.00385	mg/L	0.000124	0.00385	mg/L	0.000124	3.21%
Ni 231.604†	10.6	0.00036	mg/L	0.000204	0.00036	mg/L	0.000204	57.29%
Pb 220.353†	-1.9	-0.00038	mg/L	0.002010	-0.00038	mg/L	0.002010	526.62%
Sb 206.836†	1.3	0.00108	mg/L	0.003734	0.00108	mg/L	0.003734	346.63%
Se 196.026†	-4.1	-0.00813	mg/L	0.004818	-0.00813	mg/L	0.004818	59.24%
Tl 190.801	-4.9	-0.00592	mg/L	0.004865	-0.00592	mg/L	0.004865	82.22%
V 292.402†	-7.4	-0.00006	mg/L	0.000460	-0.00006	mg/L	0.000460	833.72%
Zn 206.200†	32.0	0.00151	mg/L	0.000028	0.00151	mg/L	0.000028	1.84%

Cd 226.502†	3.1	0.00005 mg/L	0.000117	0.00005 mg/L	0.000117	212.39%
Ti 334.940†	216.1	0.00039 mg/L	0.000045	0.00039 mg/L	0.000045	11.55%
Ca 227.546†	28.2	0.14471 mg/L	0.092507	0.14471 mg/L	0.092507	63.93%
Na 589.592†	1160.3	0.23859 mg/L	0.005263	0.23859 mg/L	0.005263	2.21%
K 766.490†	22.4	0.02133 mg/L	0.055991	0.02133 mg/L	0.055991	262.44%

Sequence No.: 48

Sample ID: CCV

Analyst:

Logged In Analyst (Original) : mitOptima3

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 8/30/2012 10:41:51 AM

Data Type: Reprocessed on 8/30/2012 2:00:06 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	1727638.9	91.031 %	1.3292			1.46%
Lu 261.542	1128767.7	92.02 %	1.333			1.45%
Ag 328.068†	207987.6	1.2014 mg/L	0.02997	1.2014 mg/L	0.02997	2.49%
QC value within limits for Ag		328.068 Recovery = 96.12%				
Al 308.215†	202341.1	9.9472 mg/L	0.15784	9.9472 mg/L	0.15784	1.59%
QC value within limits for Al		308.215 Recovery = 99.47%				
As 188.979†	411.5	0.49920 mg/L	0.010716	0.49920 mg/L	0.010716	2.15%
QC value within limits for As		188.979 Recovery = 99.84%				
Ba 233.527†	884858.7	10.262 mg/L	0.0638	10.262 mg/L	0.0638	0.62%
QC value within limits for Ba		233.527 Recovery = 102.62%				
Be 313.107†	627259.1	0.24984 mg/L	0.001390	0.24984 mg/L	0.001390	0.56%
QC value within limits for Be		313.107 Recovery = 99.93%				
Co 228.616†	93577.8	2.6024 mg/L	0.04446	2.6024 mg/L	0.04446	1.71%
QC value within limits for Co		228.616 Recovery = 104.09%				
Cr 267.716†	69666.4	0.98514 mg/L	0.015435	0.98514 mg/L	0.015435	1.57%
QC value within limits for Cr		267.716 Recovery = 98.51%				
Cu 324.752†	268263.3	1.2117 mg/L	0.01973	1.2117 mg/L	0.01973	1.63%
QC value within limits for Cu		324.752 Recovery = 96.94%				
Fe 273.955†	123378.2	5.1035 mg/L	0.08086	5.1035 mg/L	0.08086	1.58%
QC value within limits for Fe		273.955 Recovery = 102.07%				
Mg 279.077†	445262.3	25.406 mg/L	0.1645	25.406 mg/L	0.1645	0.65%
QC value within limits for Mg		279.077 Recovery = 101.62%				
Mn 257.610†	1493362.5	2.5552 mg/L	0.01320	2.5552 mg/L	0.01320	0.52%
QC value within limits for Mn		257.610 Recovery = 102.21%				
Ni 231.604†	76195.5	2.5569 mg/L	0.04179	2.5569 mg/L	0.04179	1.63%
QC value within limits for Ni		231.604 Recovery = 102.28%				
Pb 220.353†	2571.1	0.50445 mg/L	0.006523	0.50445 mg/L	0.006523	1.29%
QC value within limits for Pb		220.353 Recovery = 100.89%				
Sb 206.836†	634.9	0.53180 mg/L	0.009252	0.53180 mg/L	0.009252	1.74%
QC value within limits for Sb		206.836 Recovery = 106.36%				
Se 196.026†	240.8	0.48470 mg/L	0.008349	0.48470 mg/L	0.008349	1.72%
QC value within limits for Se		196.026 Recovery = 96.94%				
Tl 190.801	416.2	0.47653 mg/L	0.005265	0.47653 mg/L	0.005265	1.10%
QC value within limits for Tl		190.801 Recovery = 95.31%				
V 292.402†	304531.8	2.4884 mg/L	0.03961	2.4884 mg/L	0.03961	1.59%
QC value within limits for V		292.402 Recovery = 99.54%				
Zn 206.200†	54553.2	2.5608 mg/L	0.04234	2.5608 mg/L	0.04234	1.65%
QC value within limits for Zn		206.200 Recovery = 102.43%				
Cd 226.502†	13679.8	0.24556 mg/L	0.004242	0.24556 mg/L	0.004242	1.73%
QC value within limits for Cd		226.502 Recovery = 98.22%				
Ti 334.940†	271031.8	0.48594 mg/L	0.003843	0.48594 mg/L	0.003843	0.79%
QC value within limits for Ti		334.940 Recovery = Not calculated				
Ca 227.546†	4917.9	24.355 mg/L	0.4232	24.355 mg/L	0.4232	1.74%
QC value within limits for Ca		227.546 Recovery = 97.42%				
Na 589.592†	124923.3	25.687 mg/L	0.3373	25.687 mg/L	0.3373	1.31%
QC value within limits for Na		589.592 Recovery = 102.75%				
K 766.490†	27778.3	26.414 mg/L	0.4632	26.414 mg/L	0.4632	1.75%
QC value within limits for K		766.490 Recovery = 105.66%				

All analyte(s) passed QC.

Sequence No.: 49

Sample ID: CCB

Autosampler Location: 4

Date Collected: 8/30/2012 10:45:35 AM

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

Data Type: Reprocessed on 8/30/2012 2:00:07 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	1819602.2	95.877 %		0.9641			1.01%
Lu 261.542	1179992.3	96.20 %		1.014			1.05%
Ag 328.068†	371.1	0.00214 mg/L		0.000550	0.00214 mg/L	0.000550	25.72%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 308.215†	-102.3	-0.00506 mg/L		0.000697	-0.00506 mg/L	0.000697	13.79%
QC value within limits for Al 308.215 Recovery = Not calculated							
As 188.979†	-1.0	-0.00115 mg/L		0.002194	-0.00115 mg/L	0.002194	190.79%
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	55.8	0.00065 mg/L		0.000254	0.00065 mg/L	0.000254	39.28%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-5.1	0.00000 mg/L		0.000016	0.00000 mg/L	0.000016	>999.9%
QC value within limits for Be 313.107 Recovery = Not calculated							
Co 228.616†	9.8	0.00027 mg/L		0.000160	0.00027 mg/L	0.000160	58.37%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	7.6	0.00011 mg/L		0.000301	0.00011 mg/L	0.000301	279.42%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	259.6	0.00117 mg/L		0.000422	0.00117 mg/L	0.000422	36.02%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 273.955†	28.5	0.00118 mg/L		0.000402	0.00118 mg/L	0.000402	34.20%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077†	-35.1	-0.00200 mg/L		0.002603	-0.00200 mg/L	0.002603	129.99%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	107.6	0.00018 mg/L		0.000064	0.00018 mg/L	0.000064	34.82%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Ni 231.604†	2.3	0.00008 mg/L		0.000128	0.00008 mg/L	0.000128	168.90%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	-8.0	-0.00157 mg/L		0.001181	-0.00157 mg/L	0.001181	75.05%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	1.9	0.00165 mg/L		0.001107	0.00165 mg/L	0.001107	66.88%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-2.8	-0.00560 mg/L		0.009597	-0.00560 mg/L	0.009597	171.52%
QC value within limits for Se 196.026 Recovery = Not calculated							
Tl 190.801	-1.1	-0.00138 mg/L		0.002251	-0.00138 mg/L	0.002251	163.52%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402†	30.9	0.00025 mg/L		0.000272	0.00025 mg/L	0.000272	108.20%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200†	7.0	0.00033 mg/L		0.000229	0.00033 mg/L	0.000229	69.70%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Cd 226.502†	4.9	0.00009 mg/L		0.000078	0.00009 mg/L	0.000078	88.10%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Ti 334.940†	133.3	0.00024 mg/L		0.000093	0.00024 mg/L	0.000093	38.67%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546†	21.8	0.11170 mg/L		0.026129	0.11170 mg/L	0.026129	23.39%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Na 589.592†	-58.0	-0.01193 mg/L		0.011413	-0.01193 mg/L	0.011413	95.66%
QC value within limits for Na 589.592 Recovery = Not calculated							
K 766.490†	11.4	0.01080 mg/L		0.114813	0.01080 mg/L	0.114813	>999.9%
QC value within limits for K 766.490 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 50
 Sample ID: MB-67888-PBW
 Analyst:
 Logged In Analyst (Original) : mitOptima3
 Initial Sample Wt:
 Dilution:

Autosampler Location: 68
 Date Collected: 8/30/2012 10:49:17 AM
 Data Type: Reprocessed on 8/30/2012 2:00:08 PM
 Initial Sample Vol:
 Sample Prep Vol:

Mean Data: MB-67888-PBW

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
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=====
Analysis Begun

Logged In Analyst: mitFIMS2
Spectrometer Model: FIMS-100, S/N B050-9550

Technique: AA FIMS-MHS
Autosampler Model: AS-90

Sample Information File: C:\data-AA\mitFIMS2\Sample Information\0829A.sif
Batch ID: Null
Results Data Set: HG12082901
Results Library: C:\data-AA\mitFIMS2\Results\Results.mdb

=====
Method Loaded

Method Name: Comm Hg

Method Last Saved: 7/27/2011 10:10:28 AM

Method Description: Hg Analysis by Cold Vapor AA

Analyte	Calibration Equation	Wavelength
Hg 253.7	Lin Thru 0	253.7

=====
Sequence No.: 1

Sample ID: S0

Autosampler Location: 1

Date Collected: 8/29/2012 8:42:26 AM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0002	0.0035	0.0002	08:43:24	Yes
2		[0.00]	0.0002	0.0020	0.0002	08:44:04	Yes
Mean:		[0.00]	0.0002				
SD:		0.00	0.0000				
%RSD:		0.00	6.05				

Auto-zero performed.

=====
Sequence No.: 2

Sample ID: S0.20

Autosampler Location: 2

Date Collected: 8/29/2012 8:44:06 AM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0.20

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0026	0.0151	0.0029	08:45:04	Yes
2		[0.2]	0.0025	0.0136	0.0028	08:45:44	Yes
Mean:		[0.2]	0.0026				
SD:		0.0	0.0001				
%RSD:		0.0	2.59				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01288 Intercept: 0.00000

=====
Sequence No.: 3

Sample ID: S1.0

Autosampler Location: 3

Date Collected: 8/29/2012 8:45:46 AM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S1.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0130	0.0637	0.0132	08:46:44	Yes
2		[1]	0.0130	0.0625	0.0132	08:47:24	Yes
Mean:		[1]	0.0130				

SD: 0 0.0000
%RSD: 0 0.13
Standard number 2 applied. [1]
Correlation Coef.: 0.999997 Slope: 0.01296 Intercept: 0.00000

=====

Sequence No.: 4	Autosampler Location: 4
Sample ID: S2.0	Date Collected: 8/29/2012 8:47:26 AM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0252	0.1220	0.0254	08:48:24	Yes
2		[2]	0.0251	0.1216	0.0253	08:49:04	Yes
Mean:		[2]	0.0251				
SD:		0	0.0001				
%RSD:		0	0.36				

Standard number 3 applied. [2]
Correlation Coef.: 0.999753 Slope: 0.01265 Intercept: 0.00000

=====

Sequence No.: 5	Autosampler Location: 5
Sample ID: S5.0	Date Collected: 8/29/2012 8:49:06 AM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Replicate Data: S5.0

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0623	0.3021	0.0625	08:50:03	Yes
2		[5]	0.0614	0.2977	0.0617	08:50:44	Yes
Mean:		[5]	0.0618				
SD:		0	0.0006				
%RSD:		0	0.95				

Standard number 4 applied. [5]
Correlation Coef.: 0.999886 Slope: 0.01242 Intercept: 0.00000

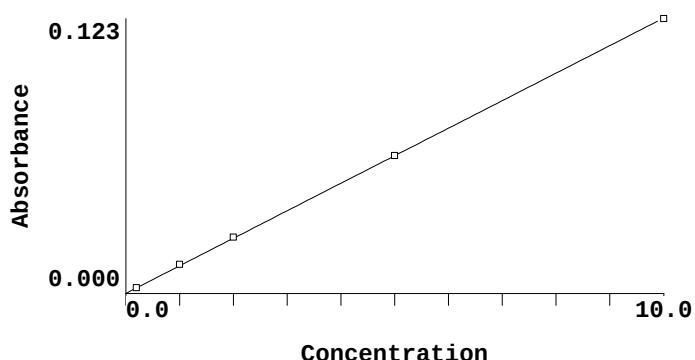
=====

Sequence No.: 6	Autosampler Location: 6
Sample ID: S10.0	Date Collected: 8/29/2012 8:50:45 AM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.1227	0.5970	0.1229	08:51:43	Yes
2		[10]	0.1240	0.5994	0.1242	08:52:23	Yes
Mean:		[10]	0.1233				
SD:		0	0.0009				
%RSD:		0	0.74				

Standard number 5 applied. [10]
Correlation Coef.: 0.999968 Slope: 0.01235 Intercept: 0.00000



Calibration data for Hg 253.7

Equation: Linear Through Zero

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
S0	0.0000	0	0.000	0.00	6.1
S0.20	0.0026	0.2	0.209	0.00	2.6
S1.0	0.0130	1.0	1.050	0.00	0.1
S2.0	0.0251	2.0	2.036	0.00	0.4
S5.0	0.0618	5.0	5.007	0.00	0.9
S10.0	0.1233	10.0	9.984	0.00	0.7

Correlation Coef.: 0.999968 Slope: 0.01235 Intercept: 0.00000

Sequence No.: 7

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 8/29/2012 8:52:25 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.470	5.470	0.0676	0.3284	0.0678	08:53:23	Yes
2	5.375	5.375	0.0664	0.3237	0.0666	08:54:03	Yes
Mean:	5.423	5.423	0.0670				
SD:	0.067	0.067	0.0008				
%RSD:	1.233	1.233	1.23				

QC value within limits for Hg 253.7 Recovery = 108.46%
All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 8/29/2012 8:54:05 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.003	-0.003	-0.0000	-0.0002	0.0002	08:55:05	Yes
2	-0.005	-0.005	-0.0001	-0.0011	0.0002	08:55:45	Yes
Mean:	-0.004	-0.004	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	34.01	34.01	34.01				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9

Sample ID: MB-67871

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 17

Date Collected: 8/29/2012 8:55:46 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: MB-67871

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0001	-0.0017	0.0002	08:56:44	Yes
2	-0.010	-0.010	-0.0001	-0.0019	0.0001	08:57:24	Yes
Mean:	-0.007	-0.007	-0.0001				
SD:	0.004	0.004	0.0000				
%RSD:	54.64	54.64	54.64				

Sequence No.: 10

Sample ID: LCS-67871

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 18

Date Collected: 8/29/2012 8:57:26 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LCS-67871

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.934	4.934	0.0609	0.2965	0.0612	08:58:24	Yes
2	4.971	4.971	0.0614	0.2973	0.0616	08:59:04	Yes
Mean:	4.953	4.953	0.0612				
SD:	0.027	0.027	0.0003				
%RSD:	0.535	0.535	0.54				

Sequence No.: 11

Sample ID: MB-67849

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 19

Date Collected: 8/29/2012 8:59:06 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: MB-67849

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0002	-0.0023	0.0001	09:00:03	Yes
2	-0.012	-0.012	-0.0002	-0.0019	0.0001	09:00:43	Yes
Mean:	-0.013	-0.013	-0.0002				
SD:	0.000	0.000	0.0000				
%RSD:	2.860	2.860	2.86				

Sequence No.: 12

Sample ID: L1784-01B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 20

Date Collected: 8/29/2012 9:00:45 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1784-01B

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.117	0.117	0.0014	0.0061	0.0017	09:01:42	Yes
2	0.119	0.119	0.0015	0.0064	0.0017	09:02:22	Yes
Mean:	0.118	0.118	0.0015				
SD:	0.002	0.002	0.0000				
%RSD:	1.374	1.374	1.37				

Sequence No.: 13

Sample ID: L1784-01BMS

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 21

Date Collected: 8/29/2012 9:02:24 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1784-01BMS

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.659	4.659	0.0575	0.2780	0.0578	09:03:22	Yes
2	4.712	4.712	0.0582	0.2805	0.0584	09:04:02	Yes
Mean:	4.686	4.686	0.0579				
SD:	0.038	0.038	0.0005				
%RSD:	0.805	0.805	0.80				

Sequence No.: 14

Sample ID: L1786-01C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 22

Date Collected: 8/29/2012 9:04:04 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-01C

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.006	-0.006	-0.0001	-0.0006	0.0002	09:05:02	Yes
2	-0.006	-0.006	-0.0001	-0.0012	0.0002	09:05:42	Yes
Mean:	-0.006	-0.006	-0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	3.669	3.669	3.67				

Sequence No.: 15

Sample ID: L1786-02C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 23

Date Collected: 8/29/2012 9:05:44 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-02C

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	-0.0004	0.0003	09:06:41	Yes
2	-0.001	-0.001	-0.0000	-0.0011	0.0002	09:07:21	Yes
Mean:	0.001	0.001	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	234.2	234.2	234.20				

Sequence No.: 16

Sample ID: L1786-03C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 24

Date Collected: 8/29/2012 9:07:23 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-03C

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0001	-0.0013	0.0001	09:08:20	Yes
2	-0.013	-0.013	-0.0002	-0.0013	0.0001	09:09:00	Yes
Mean:	-0.012	-0.012	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	6.573	6.573	6.57				

Sequence No.: 17

Sample ID: L1786-04C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 25

Date Collected: 8/29/2012 9:09:02 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-04C

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0001	-0.0020	0.0001	09:10:00	Yes

2	-0.002	-0.002	-0.0000	-0.0005	0.0002	09:10:40	Yes
Mean:	-0.007	-0.007	-0.0001				
SD:	0.006	0.006	0.0001				
%RSD:	90.36	90.36	90.36				

Sequence No.: 18

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 8/29/2012 9:10:42 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.401	5.401	0.0667	0.3219	0.0669	09:11:40	Yes
2	5.507	5.507	0.0680	0.3250	0.0682	09:12:20	Yes
Mean:	5.454	5.454	0.0674				
SD:	0.074	0.074	0.0009				
%RSD:	1.365	1.365	1.37				

QC value within limits for Hg 253.7 Recovery = 109.08%
All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 8/29/2012 9:12:22 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.004	-0.004	-0.0000	-0.0007	0.0002	09:13:22	Yes
2	-0.003	-0.003	-0.0000	-0.0003	0.0002	09:14:02	Yes
Mean:	-0.003	-0.003	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	20.67	20.67	20.67				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 20

Sample ID: L1786-07C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 26

Date Collected: 8/29/2012 9:14:04 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-07C

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	-0.0004	0.0003	09:15:04	Yes
2	0.004	0.004	0.0001	-0.0007	0.0003	09:15:44	Yes
Mean:	0.003	0.003	0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	53.52	53.52	53.52				

Sequence No.: 21

Sample ID: L1786-08C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 27

Date Collected: 8/29/2012 9:15:46 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1786-08C

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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1	-0.004	-0.004	-0.0001	-0.0010	0.0002	09:16:44	Yes
2	-0.008	-0.008	-0.0001	-0.0011	0.0001	09:17:24	Yes
Mean:	-0.006	-0.006	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	39.52	39.52	39.52				

Sequence No.: 22
Sample ID: L1786-09C
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 8/29/2012 9:17:26 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1786-09C

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0001	-0.0011	0.0001	09:18:24	Yes
2	-0.007	-0.007	-0.0001	-0.0007	0.0001	09:19:04	Yes
Mean:	-0.009	-0.009	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	30.57	30.57	30.57				

Sequence No.: 23
Sample ID: L1786-09CDUP
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 8/29/2012 9:19:06 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1786-09CDUP

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.006	-0.006	-0.0001	-0.0007	0.0002	09:20:04	Yes
2	-0.005	-0.005	-0.0001	-0.0007	0.0002	09:20:44	Yes
Mean:	-0.005	-0.005	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	13.99	13.99	13.99				

Sequence No.: 24
Sample ID: L1786-09CMS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 8/29/2012 9:20:45 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1786-09CMS

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.830	5.830	0.0720	0.3454	0.0722	09:21:43	Yes
2	5.828	5.828	0.0720	0.3448	0.0722	09:22:23	Yes
Mean:	5.829	5.829	0.0720				
SD:	0.002	0.002	0.0000				
%RSD:	0.026	0.026	0.03				

Sequence No.: 25
Sample ID: L1786-10C
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 8/29/2012 9:22:25 AM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1786-10C

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.138	0.138	0.0017	0.0079	0.0019	09:23:23	Yes
2	0.140	0.140	0.0017	0.0082	0.0020	09:24:03	Yes
Mean:	0.139	0.139	0.0017				

SD: 0.001 0.001 0.0000
%RSD: 1.079 1.079 1.08

Sequence No.: 26 Autosampler Location: 32
Sample ID: L1786-11C Date Collected: 8/29/2012 9:24:05 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: L1786-11C

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.023	0.023	0.0003	0.0014	0.0005	09:25:05	Yes
2	0.023	0.023	0.0003	0.0023	0.0005	09:25:46	Yes
Mean:	0.023	0.023	0.0003				
SD:	0.000	0.000	0.0000				
%RSD:	1.686	1.686	1.69				

Sequence No.: 27 Autosampler Location: 33
Sample ID: L1786-12C Date Collected: 8/29/2012 9:25:47 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: L1786-12C

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.003	0.003	0.0000	-0.0005	0.0003	09:26:45	Yes
2	0.003	0.003	0.0000	0.0000	0.0003	09:27:25	Yes
Mean:	0.003	0.003	0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	4.367	4.367	4.37				

Sequence No.: 28 Autosampler Location: 34
Sample ID: L1786-09CMS Date Collected: 8/29/2012 9:27:27 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: L1786-09CMS

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.634	5.634	0.0696	0.3331	0.0698	09:28:25	Yes
2	5.705	5.705	0.0705	0.3381	0.0707	09:29:05	Yes
Mean:	5.669	5.669	0.0700				
SD:	0.051	0.051	0.0006				
%RSD:	0.893	0.893	0.89				

Sequence No.: 29 Autosampler Location: 7
Sample ID: CCV Date Collected: 8/29/2012 9:29:07 AM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.418	5.418	0.0669	0.3211	0.0671	09:30:07	Yes
2	5.431	5.431	0.0671	0.3208	0.0673	09:30:47	Yes
Mean:	5.424	5.424	0.0670				
SD:	0.010	0.010	0.0001				
%RSD:	0.180	0.180	0.18				

QC value within limits for Hg 253.7 Recovery = 108.49%

All analyte(s) passed QC.

Sequence No.: 30

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 8/29/2012 9:30:49 AM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.001	0.001	0.0000	0.0004	0.0002	09:31:49	Yes
2	0.000	0.000	-0.0000	-0.0006	0.0002	09:32:29	Yes
Mean:	0.000	0.000	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	245.1	245.1	245.07				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Prep Start Date: 8/24/2012 2:00:00 P

Prep End Date: 8/24/2012 4:00:00 P

Prep Batch ID: 67823 67864

QC Matrix: N/A

Conc H2SO4 3110100

Conc H2SO4 (mL): 5.0

Filter?: N/A

Conc HNO3 1112012

Conc HNO3 (mL): 2.5

Filter Lot: N/A

Digestion Start Time 1: 08/24/2012 14:00

Digestion End Time 1: 08/24/2012 16:00

Digestion Start Time 2: N/A

Digestion End Time 2: N/A

5% KMnO4 IR12082305

5% KMnO4 (mL): 15.0

5% K2S2O8 IR12082304

5% K2S2O8 (mL): 8.0

Block Temp (C): 97

Therm ID1: MT-47

Corr Fac-3

Prep Code: SW7470A_PR

Prep Type: 7470A/METHOD

Prep Factor Units:

mL / mL

Technician: David T Camara

Mitkem Sample ID	Client Samp ID	Final L/g	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	HOT BLOCK
S0		100	--	--	--	--			08/24/12	DTC	HgLab	2		HB-A
S0.2		100	--	--	--	--			08/24/12	DTC	HgLab	2		HB-A
40 uL III120823A														
S1.0		100	--	--	--	--			08/24/12	DTC	HgLab	2		HB-A
200 uL III120823A														
S2.0		100	--	--	--	--			08/24/12	DTC	HgLab	2		HB-A
400 uL III120823A														
S5.0		100	--	--	--	--			08/24/12	DTC	HgLab	2		HB-A
1000 uL III120823A														
S10.0		100	--	--	--	--			08/24/12	DTC	HgLab	2		HB-A
2000 uL III120823A														
ICV		100	--	--	--	--			08/24/12	DTC	HgLab	2		HB-A
1000 uL III120731A														
ICB		100	--	--	--	--			08/24/12	DTC	HgLab	2		HB-A
CCV		100	--	--	--	--			08/24/12	DTC	HgLab	2		HB-A
1000 uL III120731A														
CCB		100	--	--	--	--			08/24/12	DTC	HgLab	2		HB-A
MB-67823		100	--	--	--	--			08/24/12	DTC	HgLab	2		HB-A
LCS-67823		100	--	--	--	--			08/24/12	DTC	HgLab	2		HB-A
1000 uL III120731B														
L1736-03A	ET01 COMPOSITE	A	100	100	--	--	09/03/12	01	08/24/12	DTC	HgLab	2		HB-A
L1736-03ADUP	ET01 COMPOSITE	A	100	100	--	--	09/03/12	01	08/24/12	DTC	HgLab	2		HB-A
L1736-03AMS	ET01 COMPOSITE	A	100	100	--	--	09/03/12	01	08/24/12	DTC	HgLab	2		HB-A
1000 uL III120731B														
L1736-04A	ET01-D	A	100	100	--	--	09/03/12	01	08/24/12	DTC	HgLab	2		HB-2
L1785-01D	WETWELL	A	100	100	--	--	09/06/12	01	08/24/12	DTC	HgLab	2		HB-2
L1786-01B	SL-MW-23D	A	100	100	--	--	09/13/12	01	08/24/12	DTC	HgLab	2		HB-2
TAL														
L1786-02B	SL-MW-73D	A	100	100	--	--	09/13/12	01	08/24/12	DTC	HgLab	2		HB-2
TAL														
L1786-03B	SL-MW-23S	A	100	100	--	--	09/13/12	01	08/24/12	DTC	HgLab	2		HB-2
TAL														

Lab Book ID: 100.0128 -06/12

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Friday, August 24, 2012 15:47

Page 02 of 02

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

Prep Start Date: 8/24/2012 2:00:00 P

Prep End Date: 8/24/2012 4:00:00 P

Prep Batch ID: 67823-67864

Prep Type: 7470A/METHOD

Prep Factor Units:
mL / mL

Technician: David T Camara

QC Matrix: N/A

Conc H2SO4 3110100

5% KMnO4 IR12082305

QC Matrix Lot: N/A

Conc H2SO4 (mL): 5.0

5% KMnO4 (mL): 15.0

Filter?: N/A

Conc HNO3 1112012

5% K2S2O8 IR12082304

Filter Lot: N/A

Conc HNO3 (mL): 2.5

5% K2S2O8 (mL): 8.0

Digestion Start Time 1: 08/24/2012 14:00

Digestion Start Time 2: N/A

Digestion End Time 1: 08/24/2012 16:00

Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-47

Corr Fac-3

Mitkem Sample ID	Client Samp ID	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
L1786-04B	SL-MW-13	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-07B	SL-MW-12	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-08B	SL-MW-14	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-09B	SL-MW-16	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-09BDUP	SL-MW-16	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
L1786-09BMS	SL-MW-16	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
1000 uL III20731B														
L1786-10B	SL-MW-1	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-11B	SL-MW-2	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1786-12B	RB-02	A 100	--	--	--	--	09/13/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
TAL														
L1798-01B	EFF-082212	A 100	--	--	--	--	09/11/12	01	08/24/12	DTC	HgLab	2	☐	HB-2
See SEL list														
L1798-02B	INF-082212	A 100	--	--	--	--	09/11/12	01	08/24/12	DTC	HgLab	2	☐	HB-C
See SEL list														

David T Camara

8/24/2012

HZA

8/24/12

Date

Analyst Reviewed

Date

Manager Reviewed

Date

12C 8/24/12

Prep Start Date: 8/28/2012 3:00:00 P
Prep End Date: 8/28/2012 5:00:00 P
Prep Batch ID: 67871

Prep Code: SW7470A_PR
Technician: David T Camara

Prep Type: 7470A/METHOD
Prep Factor Units: mL / mL

QC Matrix: N/A
QC Matrix Lot: N/A
Filter?: N/A
Filter Lot: N/A

Reagent 5 Lot: N/A
Reagent 5 (mL): N/A
Reagent 6 Lot: N/A
Reagent 6 (mL): N/A

5% KMnO4 IR12082808
5% KMnO4 (mL): 15.0
5% K2S2O8 IR12082809
5% K2S2O8 (mL): 8.0

Digestion Start Time 1: 08/28/2012 15:00
Digestion End Time 1: 08/28/2012 17:00

Digestion Start Time 2: N/A
Digestion End Time 2: N/A

Block Temp (C): 97
Therm ID1: MT-47
Corr Fac -3

Mitkem Sample ID	Client Samp ID	Final L/g	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH <2	HOT BLOCK
S0		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
S0.2		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
S1.0		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
S2.0		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
S5.0		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
S10.0		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
ICV		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
ICB		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
CCV		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
CCB		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
MB-67871		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
LCS-67871		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
MB-67871		100	--	--	--	--	08/28/12		08/28/12	DTC	HgLab	2		HB-A
L1784-01B	S	100	--	--	--	--	09/12/12	01	08/28/12	DTC	HgLab	2		HB-A
L1784-01BMS	S	100	--	--	--	--	09/12/12		08/28/12	DTC	HgLab	2		HB-A
L1786-01C	A	100	--	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2		HB-2
L1786-02C	A	100	--	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2		HB-2
L1786-03C	A	100	--	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2		HB-2

Logbook ID: 100.0128 -08/12

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

Prep Start Date: 8/28/2012 3:00:00 P

Prep End Date: 8/28/2012 5:00:00 P

Prep Batch ID: 67871

Prep Code: SW7470A_PR

Technician: David T Camara

Prep Type: 7470A/METHOD

Prep Factor Units:
mL / mL

QC Matrix: N/A Conc H2SO4 3110100

QC Matrix Lot: N/A Conc H2SO4 (mL): 5.0

Reagent 5 Lot: N/A

Reagent 5 (mL): N/A

Filter?: N/A Conc HNO3 1112012

Filter Lot: N/A Conc HNO3 (mL): 2.5

Reagent 6 Lot: N/A

Reagent 6 (mL): N/A

Digestion Start Time 1: 08/28/2012 15:00

Digestion End Time 1: 08/28/2012 17:00

Digestion Start Time 2: N/A

Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-47
Corr Fac-3

Mitkem Sample ID	Client Samp ID	Initial (L/g)	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans Bv	Storage	pH	pH >11 <2	HOT BLOCK
L1786-04C	SL-MW-13	A	100	100	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															
L1786-07C	SL-MW-12	A	100	100	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															
L1786-08C	SL-MW-14	A	100	100	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															
L1786-09C	SL-MW-16	A	100	100	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															
L1786-09CDUP	SL-MW-16	A	100	100	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
L1786-09CMS	SL-MW-16	A	100	100	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
1000 uL III20828B															
L1786-10C	SL-MW-1	A	100	100	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															
L1786-11C	SL-MW-2	A	100	100	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															
L1786-12C	RB-02	A	100	100	--	--	--	09/11/12	01	08/28/12	DTC	HgLab	2	☐	HB-2
TAL															

David T Camara 08/28/2012

Analyst Reviewed

Date

K2A
 Manager Reviewed

Date

8/29/12

Comments:

10C8/28/12

Prep Start Date: 8/29/2012 11:10:00

Prep End Date: 8/29/2012 3:10:00 P

Prep Batch ID: 67887

Prep Code: ICP_W_PR

Technician: David T Camara

Prep Type: 3005A/SW3005A

Prep Factor Units:

mL / mL

QC Matrix: N/A

Conc HNO3 1112012

Reagent 3 Lot: N/A

Reagent 5 Lot: N/A

QC Matrix Lot: N/A

Conc HNO3 (mL): 1.0

Reagent 3 (mL): N/A

Reagent 5 (mL): N/A

Filter?: N/A

Conc HCl 4111111

Reagent 4 Lot: N/A

Reagent 6 Lot: N/A

Filter Lot: N/A

Conc HCl (mL): 2.5

Reagent 4 (mL): N/A

Reagent 6 (mL): N/A

Digestion Start Time 1: 08/29/2012 11:10

Digestion Start Time 2: N/A

Digestion End Time 1: 08/29/2012 15:10

Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-102

Corr Fac-2

Mikem Sample ID	Client Samp ID	Initial L/g	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans Bv	Storage	pH	pH >11 <2	HOT BLOCK
MB-67887		50	50	--	--	--	--			08/29/12	DTC	ICPLab	2	☐	HB-B
LCS-67887		50	50	--	--	--	--			08/29/12	DTC	ICPLab	2	☐	HB-B
455 uL III20727B, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP120321A															
L1786-01B	SL-MW-23D	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-01C	SL-MW-23D	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-02B	SL-MW-73D	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-02C	SL-MW-73D	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-03B	SL-MW-23S	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-03C	SL-MW-23S	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-04B	SL-MW-13	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-04C	SL-MW-13	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-07B	SL-MW-12	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-07C	SL-MW-12	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-08B	SL-MW-14	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-08C	SL-MW-14	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-09B	SL-MW-16	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
TAL															
L1786-09BDUP	SL-MW-16	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
L1786-09BMS	SL-MW-16	A	50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	☐	HB-B
455 uL III20727B, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP120321A															

10/28/2012

54

Logbook ID 100.0125 -06/12

Start time:

Spectrum Analytical, Inc. RI Division: Aqueous Metals Preparation Logbook

Wednesday, August 29, 2012 13:29

Page 02 of 02

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

Prep Start Date: 8/29/2012 11:10:00

Prep End Date: 8/29/2012 3:10:00 P

Prep Batch ID: 67887

Prep Code: ICP_W_PR

Technician: David T Camara

Prep Type: 3005A/SW3005A

Prep Factor Units:
mL / mL

QC Matrix: N/A

Conc HNO3 1112012

Reagent 3 Lot: N/A

QC Matrix Lot: N/A

Conc HNO3 (mL): 1.0

Reagent 5 (mL): N/A

Filter?: N/A

Conc HCl 4111111

Reagent 4 Lot: N/A

Filter Lot: N/A

Conc HCl (mL): 2.5

Reagent 6 (mL): N/A

Digestion Start Time 1: 08/29/2012 11:10

Digestion Start Time 2: N/A

Digestion End Time 1: 08/29/2012 15:10

Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-102
Corr Fac-2

Mitkem Sample ID	Client Samp ID	Final L/g	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH	HOT BLOCK
L1786-09C	SL-MW-16	A 50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2	>11 <2	HB-B
TAL														
L1786-09CDUP	SL-MW-16	A 50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2		HB-B
L1786-09CMS	SL-MW-16	A 50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2		HB-B
455 uL III20727B, 45.5 uL IP110822C, 45.5 uL IP120321A														
L1786-10B	SL-MW-1	A 50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2		HB-B
TAL														
L1786-10C	SL-MW-1	A 50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2		HB-B
TAL														
L1786-11B	SL-MW-2	A 50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2		HB-B
TAL														
L1786-11C	SL-MW-2	A 50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2		HB-B
TAL														
L1786-12B	RB-02	A 50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2		HB-B
TAL														
L1786-12C	RB-02	A 50	50	--	--	--	09/11/12	01	08/29/12	DTC	ICPLab	2		HB-B
TAL														

David T Camara 08/29/2012

Analyst Reviewed Date

HZA

Manager Reviewed

8/29/12

Date

Comments:

1 DC 8/29/12

Internal Chain of Custody

Client: AECOM_CHSNTRDG

Work Order: L1786

Profile Name: MULTI_SITE

MATRIX Aqueous

Samp #	Bottle	Test	Status	Received	Date
01A	001	SW8260_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
01A	002	SW8260_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
01B	001	SW6010_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
01B	001	SW7470	In	LOGIN: jvales	8/22/2012 10:21:00 AM
01C	001	SW6010_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
01C	001	SW7470	In	LOGIN: jvales	8/22/2012 10:21:00 AM
02A	001	SW8260_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
02A	002	SW8260_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
02B	001	SW6010_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
02B	001	SW7470	In	LOGIN: jvales	8/22/2012 10:21:00 AM
02C	001	SW6010_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
02C	001	SW7470	In	LOGIN: jvales	8/22/2012 10:21:00 AM
03A	001	SW8260_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
03A	002	SW8260_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
03B	001	SW6010_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
03B	001	SW7470	In	LOGIN: jvales	8/22/2012 10:21:00 AM
03C	001	SW6010_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
03C	001	SW7470	In	LOGIN: jvales	8/22/2012 10:21:00 AM
04A	001	SW8260_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
04A	002	SW8260_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
04B	001	SW6010_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
04B	001	SW7470	In	LOGIN: jvales	8/22/2012 10:21:00 AM
04C	001	SW6010_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
04C	001	SW7470	In	LOGIN: jvales	8/22/2012 10:21:00 AM
05A	001	SW8260_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
05A	002	SW8260_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
05B	001	SW6010_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
05B	001	SW7470	In	LOGIN: jvales	8/22/2012 10:21:00 AM
05C	001	SW6010_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
05C	001	SW7470	In	LOGIN: jvales	8/22/2012 10:21:00 AM
06A	001	SW8260_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM
06A	002	SW8260_W	In	LOGIN: jvales	8/22/2012 10:21:00 AM

Internal Chain of Custody

Client: AECOM_CHSNTRDG

Work Order: L1786

Profile Name: MULTI_SITE

MATRIX Aqueous

Samp #	Bottle	Test	Status	Received	Date
07A	001	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
07A	002	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
07B	001	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
07B	001	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
07C	001	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
07C	001	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
08A	001	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
08A	002	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
08B	001	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
08B	001	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
08C	001	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
08C	001	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09A	001	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09A	002	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09A	003	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09A	004	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09A	005	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09A	006	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09B	001	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09B	001	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09B	002	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09B	002	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09B	003	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09B	003	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09C	001	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09C	001	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09C	002	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09C	002	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09C	003	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
09C	003	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
10A	001	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
10A	002	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM

Internal Chain of Custody

Client: AECOM_CHSNTRDG

Work Order: L1786

Profile Name: MULTI_SITE

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
10B	001	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
10B	001	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
10C	001	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
10C	001	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
11A	001	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
11A	002	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
11B	001	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
11B	001	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
11C	001	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
11C	001	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
12A	001	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
12A	002	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
12B	001	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
12B	001	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
12C	001	SW6010_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
12C	001	SW7470	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
13A	001	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM
13A	002	SW8260_W	In	LOGIN: jcartwright	8/23/2012 2:44:00 PM

Last Page of Data Report

Report Date:
19-Sep-12 15:44



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

Laboratory Report

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

Work Order: L1820
Project : Multi Site G - ServAll
Project #:

Attn: Paul Kareth

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
L1820-01	SL-MW-3A	Aqueous	27-Aug-12 11:10	28-Aug-12 08:48
L1820-02	SL-MW-3B	Aqueous	27-Aug-12 11:23	28-Aug-12 08:48
L1820-03	SL-MW-6A	Aqueous	27-Aug-12 14:30	28-Aug-12 08:48
L1820-04	SL-MW-6B	Aqueous	27-Aug-12 14:45	28-Aug-12 08:48
L1820-05	TB-03	Aqueous	27-Aug-12 00:00	28-Aug-12 08:48
L1820-06	SL-MW-5	Aqueous	29-Aug-12 10:35	30-Aug-12 08:40
L1820-07	SL-MW-4	Aqueous	29-Aug-12 11:00	30-Aug-12 08:40
L1820-08	TB-04	Aqueous	29-Aug-12 00:00	30-Aug-12 08:40

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 Spectrum Analytical.

All applicable NELAC or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.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
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033



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

SDG : L1820

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
SL-MW-3A	L1820-01	SW8260_W			SW6010_W	
SL-MW-3A	L1820-01				SW6010_W	
SL-MW-3A	L1820-01				SW7470	
SL-MW-3A	L1820-01				SW7470	
SL-MW-3B	L1820-02	SW8260_W			SW6010_W	
SL-MW-3B	L1820-02				SW6010_W	
SL-MW-3B	L1820-02				SW7470	
SL-MW-3B	L1820-02				SW7470	
SL-MW-6A	L1820-03	SW8260_W			SW6010_W	
SL-MW-6A	L1820-03				SW6010_W	
SL-MW-6A	L1820-03				SW7470	
SL-MW-6A	L1820-03				SW7470	
SL-MW-6B	L1820-04	SW8260_W			SW6010_W	
SL-MW-6B	L1820-04				SW6010_W	
SL-MW-6B	L1820-04				SW7470	
SL-MW-6B	L1820-04				SW7470	
TB-03	L1820-05	SW8260_W				
SL-MW-5	L1820-06	SW8260_W			SW6010_W	
SL-MW-5	L1820-06				SW6010_W	
SL-MW-5	L1820-06				SW7470	
SL-MW-5	L1820-06				SW7470	
SL-MW-4	L1820-07	SW8260_W			SW6010_W	
SL-MW-4	L1820-07				SW6010_W	
SL-MW-4	L1820-07				SW7470	
SL-MW-4	L1820-07				SW7470	
TB-04	L1820-08	SW8260_W				

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

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

Project Name : Multi Site G

SDG : L1820

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
L1820-01A	AQ	8/27/2012	8/28/2012	NA	8/30/2012
L1820-02A	AQ	8/27/2012	8/28/2012	NA	8/30/2012
L1820-03A	AQ	8/27/2012	8/28/2012	NA	8/30/2012
L1820-04A	AQ	8/27/2012	8/28/2012	NA	8/30/2012
L1820-05A	AQ	8/27/2012	8/28/2012	NA	8/30/2012
L1820-06A	AQ	8/29/2012	8/30/2012	NA	9/6/2012
L1820-07A	AQ	8/29/2012	8/30/2012	NA	9/6/2012
L1820-08A	AQ	8/29/2012	8/30/2012	NA	9/6/2012

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

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

Project Name : Multi Site G

SDG : L1820

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
L1820-01A	AQ	SW8260_W	NA	LOW	1
L1820-02A	AQ	SW8260_W	NA	LOW	1
L1820-03A	AQ	SW8260_W	NA	LOW	1
L1820-04A	AQ	SW8260_W	NA	LOW	1
L1820-05A	AQ	SW8260_W	NA	LOW	1
L1820-06A	AQ	SW8260_W	NA	LOW	1
L1820-07A	AQ	SW8260_W	NA	LOW	1
L1820-08A	AQ	SW8260_W	NA	LOW	1

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

SDG : L1820

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
L1820-01B	AQ	SW6010_W	8/28/2012	9/4/2012
L1820-01C	AQ	SW6010_W	8/28/2012	9/4/2012
L1820-02B	AQ	SW6010_W	8/28/2012	9/4/2012
L1820-02C	AQ	SW6010_W	8/28/2012	9/4/2012
L1820-03B	AQ	SW6010_W	8/28/2012	9/4/2012
L1820-03C	AQ	SW6010_W	8/28/2012	9/4/2012
L1820-04B	AQ	SW6010_W	8/28/2012	9/4/2012
L1820-04C	AQ	SW6010_W	8/28/2012	9/4/2012
L1820-06B	AQ	SW6010_W	8/30/2012	9/4/2012
L1820-06C	AQ	SW6010_W	8/30/2012	9/4/2012
L1820-07B	AQ	SW6010_W	8/30/2012	9/4/2012
L1820-07C	AQ	SW6010_W	8/30/2012	9/4/2012
SW7470				
L1820-01B	AQ	SW7470	8/28/2012	9/4/2012
L1820-01C	AQ	SW7470	8/28/2012	9/4/2012
L1820-02B	AQ	SW7470	8/28/2012	9/4/2012
L1820-02C	AQ	SW7470	8/28/2012	9/4/2012
L1820-03B	AQ	SW7470	8/28/2012	9/4/2012
L1820-03C	AQ	SW7470	8/28/2012	9/4/2012
L1820-04B	AQ	SW7470	8/28/2012	9/4/2012
L1820-04C	AQ	SW7470	8/28/2012	9/4/2012
L1820-06B	AQ	SW7470	8/30/2012	9/4/2012
L1820-06C	AQ	SW7470	8/30/2012	9/4/2012
L1820-07B	AQ	SW7470	8/30/2012	9/4/2012
L1820-07C	AQ	SW7470	8/30/2012	9/4/2012

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

WorkOrder: L1820

Client ID: AECOM_CHSNTRDG

Project: Multi Site G

WO Name: Multi Site G - ServAll

Location: MULTI_SITE,

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

Case:

SDG:

PO: 95900-04

HC Due: 09/18/12

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
L1820-01A	SL-MW-3A	08/27/2012 11:10	08/28/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1820-01B	SL-MW-3A	08/27/2012 11:10	08/28/2012	Aqueous	SW6010_W	TOTAL / TAL				Y	M5
L1820-01B	SL-MW-3A	08/27/2012 11:10	08/28/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1820-01C	SL-MW-3A	08/27/2012 11:10	08/28/2012	Aqueous	SW6010_W	DISSOLVED / TAL				Y	M5
L1820-01C	SL-MW-3A	08/27/2012 11:10	08/28/2012	Aqueous	SW7470	DISSOLVED / TAL					M5
L1820-02A	SL-MW-3B	08/27/2012 11:23	08/28/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1820-02B	SL-MW-3B	08/27/2012 11:23	08/28/2012	Aqueous	SW6010_W	TOTAL / TAL				Y	M5
L1820-02B	SL-MW-3B	08/27/2012 11:23	08/28/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1820-02C	SL-MW-3B	08/27/2012 11:23	08/28/2012	Aqueous	SW6010_W	DISSOLVED / TAL				Y	M5
L1820-02C	SL-MW-3B	08/27/2012 11:23	08/28/2012	Aqueous	SW7470	DISSOLVED / TAL					M5
L1820-03A	SL-MW-6A	08/27/2012 14:30	08/28/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1820-03B	SL-MW-6A	08/27/2012 14:30	08/28/2012	Aqueous	SW6010_W	TOTAL / TAL				Y	M5
L1820-03B	SL-MW-6A	08/27/2012 14:30	08/28/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1820-03C	SL-MW-6A	08/27/2012 14:30	08/28/2012	Aqueous	SW6010_W	DISSOLVED / TAL				Y	M5
L1820-03C	SL-MW-6A	08/27/2012 14:30	08/28/2012	Aqueous	SW7470	DISSOLVED / TAL					M5
L1820-04A	SL-MW-6B	08/27/2012 14:45	08/28/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1820-04B	SL-MW-6B	08/27/2012 14:45	08/28/2012	Aqueous	SW6010_W	TOTAL / TAL				Y	M5
L1820-04B	SL-MW-6B	08/27/2012 14:45	08/28/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1820-04C	SL-MW-6B	08/27/2012 14:45	08/28/2012	Aqueous	SW6010_W	DISSOLVED / TAL				Y	M5
L1820-04C	SL-MW-6B	08/27/2012 14:45	08/28/2012	Aqueous	SW7470	DISSOLVED / TAL					M5

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

HT = Test logged in but has been placed on hold

08/31/2012 09:10

Lab Client Rep: Agnes R Huntley

Page 01 of 02

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

WorkOrder: L1820

Client ID: AECOM_CHSNTRDG

Project: Multi Site G

WO Name: Multi Site G - ServAll

Location: MULTI_SITE,

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

Case:

SDG:

PO: 95900-04

HC Due: 09/18/12

Fax Due:

Fax Report: ☐

Report Level: ASP-B

Special Program:

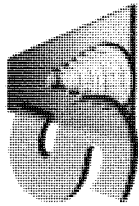
EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L1820-05A	TB-03	08/27/2012 00:00	08/28/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1820-06A	SL-MW-5	08/29/2012 10:35	08/30/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1820-06B	SL-MW-5	08/29/2012 10:35	08/30/2012	Aqueous	SW6010_W	TOTAL / TAL			Y		M5
L1820-06B	SL-MW-5	08/29/2012 10:35	08/30/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1820-06C	SL-MW-5	08/29/2012 10:35	08/30/2012	Aqueous	SW6010_W	DISSOLVED / TAL			Y		M5
L1820-06C	SL-MW-5	08/29/2012 10:35	08/30/2012	Aqueous	SW7470	DISSOLVED / TAL					M5
L1820-07A	SL-MW-4	08/29/2012 11:00	08/30/2012	Aqueous	SW8260_W	/ +TICs					VOA
L1820-07B	SL-MW-4	08/29/2012 11:00	08/30/2012	Aqueous	SW6010_W	TOTAL / TAL			Y		M5
L1820-07B	SL-MW-4	08/29/2012 11:00	08/30/2012	Aqueous	SW7470	TOTAL / TAL					M5
L1820-07C	SL-MW-4	08/29/2012 11:00	08/30/2012	Aqueous	SW6010_W	DISSOLVED / TAL			Y		M5
L1820-07C	SL-MW-4	08/29/2012 11:00	08/30/2012	Aqueous	SW7470	DISSOLVED / TAL					M5
L1820-08A	TB-04	08/29/2012 00:00	08/30/2012	Aqueous	SW8260_W	/ +TICs					VOA

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



SPECTRUM ANALYTICAL, INC.
Featuring
HAMBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- TAT- Indicate Date Needed: Standard
 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 School house Rd STE 8-1
Chestnut Ridge, NY 10977-6715
(P) 845-425-4980 x 13
(F) 845-425-4989
 Project Mgr.: _____

Invoice To: _____
AGNY
 P.O. No.: _____ RQN: _____

Project No.: Multi-G; Serv All DO0445-141
 Site Name: Mulki-G; Serv All
 Location: Bay Shore State: NY
 Sampler(s): Pete Lawler; Brian Carrieff; li

1=Na₂S₂O₃ 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=DI H₂O X2= _____ X3= _____

Containers:

of VOA Vials

of Amber Glass

of Clear Glass

of Plastic

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix
U820-06	SL-MW-5	8-29-12	1035	G	GW
U820-07	SL-MW-4	8-29-12	1100	G	GW
U820-08	TB-04	8-29-12	-	G	X1

List preservative code below:

2 4

Analyses:

TC, Metals
5
Please dispose of

QA/QC Reporting Level

- ☐ Level I ☐ Level II
☐ Level III ☐ Level IV
☐ Other _____

State specific reporting standards:

1 Filtered; 1 unfiltered
1 Filtered; 1 unfiltered

*AG is extra do not
analyze; please
dispose.

E-mail to Paul.Kerth@aecom.com

EDD Format _____

Relinquished by: _____

Received by: _____

Time: _____

Date: 8-29-12

6453 8753 8250 6490

Time: 1520

Condition upon receipt: ☒ Field ☐ Ambient ☐ X4

Paul Kerth

Date: 8/30/12

Time: 8:40

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

Received By: <i>Veronica Brunacci</i>		Page 01 of 00	
Reviewed By: <i>Jane Warner</i>		Log-in Date 08/28/2012	
Work Order: L1820		Client Name: AECOM Technical Services, Inc.	
Project Name/Event: Multi Site G			
Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.			

Lab Sample ID	Preservation (pH)					VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"
	HNO3	H2SO4	HCl	NaOH	H3PO4		
1. Custody Seal(s)	Present / Absent						
	Intact / Broken						
2. Custody Seal Nos.	N/A						
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists	Present / Absent						
	Intact / Broken						
4. Airbill	AirBill / Sticker						
	Present / Absent						
5. Airbill No.	FedEx 8753 8250 6504						
6. Sample Tags	Present / Absent						
Sample Tag Numbers	Listed /						
	Not Listed on Chain-of-Custody						
7. Sample Condition	Intact / Broken / Leaking						
8. Cooler Temperature Indicator Bottle	Present / Absent						
9. Cooler Temperature	2 °C						
10. Does information on TR/COCs and sample tags agree?	Yes / No						
11. Date Received at Laboratory	08/28/2012						
12. Time Received	08:48						
Sample Transfer							
Fraction (1) TVOA/VOA	Fraction (2) SVOA/PEST/ARO						
Area #	Area #						
By	By						
On	On						
IR Temp Gun ID: MT-1				VOA Matrix Key: US = Unpreserved Soil A = Air UA = Unpreserved Aqueous H = HCl M = MeOH E = Encore N = NaHSO4 F = Freeze			
Coolant Condition: ICE							
Preservative Name/Lot No:							
				See Sample Condition Notification/Corrective Action Form Yes / No			
				Rad OK Yes / No			

Received By: <i>Vincent Bruner</i>						Page 01 of 00					
Reviewed By: <i>[Signature]</i>						Log-in Date 08/30/2012					
Work Order: L1820				Client Name: AECOM Technical Services, Inc.							
Project Name/Event: Multi Site G											
Remarks: (1/2) Please see associated sample/extract transfer logbook pages submitted with this data package.				Preservation (pH)		VOA Matrix	Soil HeadSpace or Air Bubble > or equal to 1/4"				
				Lab Sample ID	HNO3			H2SO4	HCl	NaOH	H3PO4
				1. Custody Seal(s)	Present / Absent	L1820-06	<2				H
					Intact / Broken	L1820-07	<2				H
2. Custody Seal Nos.	N/A	L1820-08					H				
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists				Present / Absent							
4. Airbill				AirBill / Sticker							
				Present / Absent							
5. Airbill No.				FedEx 8753 8250 6490							
6. Sample Tags				Present / Absent							
Sample Tag Numbers				Listed /							
				Not Listed on Chain-of-Custody							
7. Sample Condition				Intact / Broken / Leaking							
8. Cooler Temperature Indicator Bottle				Present / Absent							
9. Cooler Temperature		4 °C									
10. Does information on TR/COCs and sample tags agree?		Yes / No									
11. Date Received at Laboratory		08/30/2012									
12. Time Received		08:40									
Sample Transfer											
Fraction (1) TVOA/VOA		Fraction (2) SVOA/PEST/ARO									
Area #		Area #									
By		By									
On		On									
IR Temp Gun ID: MT-1				VOA Matrix Key: US = Unpreserved Soil A = Air UA = Unpreserved Aqueous H = HCl M = MeOH E = Encore N = NaHSO4 F = Freeze							
Coolant Condition: ICE											
Preservative Name/Lot No:											
				See Sample Condition Notification/Corrective Action Form Yes / <u>No</u>							
				Rad OK <u>Yes</u> / No							



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** Volatiles ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : AECOM Environment

Project: Multi Site G - ServAll

Laboratory Workorder / SDG #: L1820

SW846 8260C, VOC by GC-MS

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 8260C

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V6

Instrument Type: GCMS-VOA

Description: HP6890 / HP5973

Manufacturer: Hewlett-Packard

Model: 6890 / 5973

GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

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

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

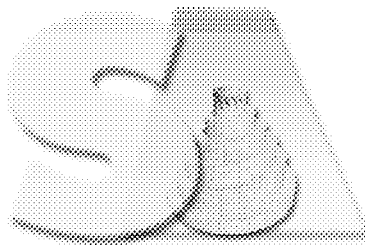
No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, 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.

A handwritten signature in black ink, reading "Yihai Ding", is centered within a light gray rectangular box.

Signed: _____

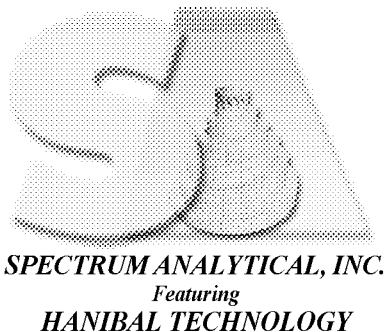
Date: _____ 9/17/2012 _____



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

2B - FORM II VOA-2
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
 Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-67915	100	103	99	97				0
02	LCSD-67915	100	104	99	97				0
03	MB-67915	103	99	99	96				0
04	TB-03	102	99	100	95				0
05	SL-MW-3A	100	96	97	94				0
06	SL-MW-3B	102	96	99	94				0
07	SL-MW-6A	99	101	97	93				0
08	SL-MW-6B	102	100	96	94				0
09	LCS-67991	103	108	96	100				0
10	LCSD-67991	102	108	95	100				0
11	MB-67991	103	101	94	95				0
12	TB-04	104	102	93	98				0
13	SL-MW-5	105	97	91	93				0
14	SL-MW-4	103	100	93	96				0

QC LIMITS
 (85-115)
 (70-120)
 (85-120)
 (75-120)

VDMC1 (DBFM) Dibromofluoromethane
 VDMC2 (DCE) = 1,2-Dichloroethane-d4
 VDMC3 (TOL) = Toluene-d8
 VDMC4 (BFB) = Bromofluorobenzene
 # Column to be used to flag recovery values
 * Values outside of contract required QC limits

som111.10.27.A

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-67915

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
Lab Sample ID: LCS-67915 LCS Lot No.: _____
Date Extracted: 08/30/2012 Date Analyzed (1): 08/30/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	53.2454	106		30 - 155
Chloromethane	50.0000	0.0000	54.9102	110		40 - 125
Vinyl chloride	50.0000	0.0000	52.0189	104		50 - 145
Bromomethane	50.0000	0.0000	50.5764	101		30 - 145
Chloroethane	50.0000	0.0000	50.0985	100		60 - 135
Trichlorofluoromethane	50.0000	0.0000	55.1510	110		60 - 145
1,1-Dichloroethene	50.0000	0.0000	58.8573	118		70 - 130
Acetone	50.0000	0.0000	55.2273	110		40 - 140
Iodomethane	50.0000	0.0000	48.6961	97		72 - 121
Carbon disulfide	50.0000	0.0000	50.7529	102		35 - 160
Methylene chloride	50.0000	0.0000	42.0640	84		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	51.3575	103		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	48.9008	98		65 - 125
1,1-Dichloroethane	50.0000	0.0000	51.2711	103		70 - 135
Vinyl acetate	50.0000	0.0000	50.3690	101		38 - 163
2-Butanone	50.0000	0.0000	49.8234	100		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	52.5945	105		70 - 125
2,2-Dichloropropane	50.0000	0.0000	51.8193	104		70 - 135
Bromochloromethane	50.0000	0.0000	52.8159	106		65 - 130
Chloroform	50.0000	0.0000	51.6261	103		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	49.4039	99		65 - 130
1,1-Dichloropropene	50.0000	0.0000	52.6551	105		75 - 130
Carbon tetrachloride	50.0000	0.0000	51.4201	103		65 - 140
1,2-Dichloroethane	50.0000	0.0000	50.9431	102		70 - 130
Benzene	50.0000	0.0000	52.1746	104		80 - 120
Trichloroethene	50.0000	0.0000	50.0497	100		70 - 125
1,2-Dichloropropane	50.0000	0.0000	52.6075	105		75 - 125
Dibromomethane	50.0000	0.0000	52.1962	104		75 - 125
Bromodichloromethane	50.0000	0.0000	52.5807	105		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	53.4874	107		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	43.2956	87		60 - 135
Toluene	50.0000	0.0000	51.8155	104		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	55.7262	111		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	51.7272	103		75 - 125
1,3-Dichloropropane	50.0000	0.0000	50.5445	101		75 - 125
Tetrachloroethene	50.0000	0.0000	47.5611	95		45 - 150
2-Hexanone	50.0000	0.0000	44.6154	89		55 - 130
Dibromochloromethane	50.0000	0.0000	51.4608	103		60 - 135
1,2-Dibromoethane	50.0000	0.0000	50.4405	101		80 - 120
Chlorobenzene	50.0000	0.0000	52.0003	104		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	50.5287	101		80 - 130
Ethylbenzene	50.0000	0.0000	50.9571	102		75 - 125
m,p-Xylene	100.0000	0.0000	101.8875	102		75 - 130
o-Xylene	50.0000	0.0000	51.7006	103		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-67915

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
Lab Sample ID: LCS-67915 LCS Lot No.: _____
Date Extracted: 08/30/2012 Date Analyzed (1): 08/30/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	153.5881	102		81 - 121
Styrene	50.0000	0.0000	51.8682	104		65 - 135
Bromoform	50.0000	0.0000	50.2368	100		70 - 130
Isopropylbenzene	50.0000	0.0000	52.8131	106		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	50.5349	101		65 - 130
Bromobenzene	50.0000	0.0000	51.2782	103		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	44.5122	89		75 - 125
n-Propylbenzene	50.0000	0.0000	50.7026	101		70 - 130
2-Chlorotoluene	50.0000	0.0000	50.8594	102		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	50.4866	101		75 - 130
4-Chlorotoluene	50.0000	0.0000	49.9222	100		75 - 130
tert-Butylbenzene	50.0000	0.0000	51.6744	103		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	50.8280	102		75 - 130
sec-Butylbenzene	50.0000	0.0000	50.6996	101		70 - 125
4-Isopropyltoluene	50.0000	0.0000	51.6744	103		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	50.4134	101		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	48.3664	97		75 - 125
n-Butylbenzene	50.0000	0.0000	52.9364	106		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	49.6598	99		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	41.5043	83		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	50.3962	101		65 - 135
Hexachlorobutadiene	50.0000	0.0000	52.5568	105		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	47.1042	94		55 - 140
Naphthalene	50.0000	0.0000	43.6942	87		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-67991

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
Lab Sample ID: LCS-67991 LCS Lot No.: _____
Date Extracted: 09/06/2012 Date Analyzed (1): 09/06/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	44.9347	90		30 - 155
Chloromethane	50.0000	0.0000	54.9927	110		40 - 125
Vinyl chloride	50.0000	0.0000	53.2743	107		50 - 145
Bromomethane	50.0000	0.0000	52.1660	104		30 - 145
Chloroethane	50.0000	0.0000	53.5620	107		60 - 135
Trichlorofluoromethane	50.0000	0.0000	56.0777	112		60 - 145
1,1-Dichloroethene	50.0000	0.0000	62.6190	125		70 - 130
Acetone	50.0000	0.0000	40.4144	81		40 - 140
Iodomethane	50.0000	0.0000	51.5030	103		72 - 121
Carbon disulfide	50.0000	0.0000	53.2086	106		35 - 160
Methylene chloride	50.0000	0.0000	44.6595	89		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	53.5730	107		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	55.0624	110		65 - 125
1,1-Dichloroethane	50.0000	0.0000	55.1500	110		70 - 135
Vinyl acetate	50.0000	0.0000	54.3079	109		38 - 163
2-Butanone	50.0000	0.0000	47.2808	95		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	56.0707	112		70 - 125
2,2-Dichloropropane	50.0000	0.0000	57.3553	115		70 - 135
Bromochloromethane	50.0000	0.0000	55.8738	112		65 - 130
Chloroform	50.0000	0.0000	55.2325	110		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	53.4168	107		65 - 130
1,1-Dichloropropene	50.0000	0.0000	55.1903	110		75 - 130
Carbon tetrachloride	50.0000	0.0000	54.1927	108		65 - 140
1,2-Dichloroethane	50.0000	0.0000	55.8550	112		70 - 130
Benzene	50.0000	0.0000	55.3263	111		80 - 120
Trichloroethene	50.0000	0.0000	53.1727	106		70 - 125
1,2-Dichloropropane	50.0000	0.0000	56.2452	112		75 - 125
Dibromomethane	50.0000	0.0000	55.6488	111		75 - 125
Bromodichloromethane	50.0000	0.0000	55.6136	111		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	55.3075	111		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	49.5251	99		60 - 135
Toluene	50.0000	0.0000	54.8732	110		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	58.5700	117		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	54.0976	108		75 - 125
1,3-Dichloropropane	50.0000	0.0000	50.6076	101		75 - 125
Tetrachloroethene	50.0000	0.0000	47.5406	95		45 - 150
2-Hexanone	50.0000	0.0000	46.2505	93		55 - 130
Dibromochloromethane	50.0000	0.0000	50.8321	102		60 - 135
1,2-Dibromoethane	50.0000	0.0000	51.3066	103		80 - 120
Chlorobenzene	50.0000	0.0000	51.9787	104		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	50.5433	101		80 - 130
Ethylbenzene	50.0000	0.0000	50.6763	101		75 - 125
m,p-Xylene	100.0000	0.0000	101.8575	102		75 - 130
o-Xylene	50.0000	0.0000	50.2088	100		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-67991

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
Lab Sample ID: LCS-67991 LCS Lot No.: _____
Date Extracted: 09/06/2012 Date Analyzed (1): 09/06/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	152.0663	101		81 - 121
Styrene	50.0000	0.0000	50.5287	101		65 - 135
Bromoform	50.0000	0.0000	49.9349	100		70 - 130
Isopropylbenzene	50.0000	0.0000	51.7742	104		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	48.8461	98		65 - 130
Bromobenzene	50.0000	0.0000	49.5073	99		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	39.3048	79		75 - 125
n-Propylbenzene	50.0000	0.0000	48.0151	96		70 - 130
2-Chlorotoluene	50.0000	0.0000	48.0722	96		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	48.5534	97		75 - 130
4-Chlorotoluene	50.0000	0.0000	47.9645	96		75 - 130
tert-Butylbenzene	50.0000	0.0000	48.7850	98		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	47.8705	96		75 - 130
sec-Butylbenzene	50.0000	0.0000	48.4425	97		70 - 125
4-Isopropyltoluene	50.0000	0.0000	48.7850	98		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	48.9442	98		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	46.8266	94		75 - 125
n-Butylbenzene	50.0000	0.0000	49.5750	99		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	48.2533	97		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	45.4124	91		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	50.6023	101		65 - 135
Hexachlorobutadiene	50.0000	0.0000	52.6275	105		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	48.7517	98		55 - 140
Naphthalene	50.0000	0.0000	46.4920	93		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS: _____

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-67915

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: L1820

Mod. Ref No.:

SDG No.: SL1820

Lab Sample ID: LCSD-67915

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC #		%RPD #		QC LIMITS	
							RPD	REC.
Dichlorodifluoromethane	50.0000	52.7092	105		1		40	30 - 155
Chloromethane	50.0000	55.3791	111		1		40	40 - 125
Vinyl chloride	50.0000	51.6278	103		1		40	50 - 145
Bromomethane	50.0000	49.9564	100		1		40	30 - 145
Chloroethane	50.0000	50.6360	101		1		40	60 - 135
Trichlorofluoromethane	50.0000	55.1924	110		0		40	60 - 145
1,1-Dichloroethene	50.0000	60.1822	120		2		40	70 - 130
Acetone	50.0000	56.0351	112		2		40	40 - 140
Iodomethane	50.0000	47.6238	95		2		40	72 - 121
Carbon disulfide	50.0000	51.1675	102		0		40	35 - 160
Methylene chloride	50.0000	43.2390	86		2		40	55 - 140
trans-1,2-Dichloroethene	50.0000	53.0887	106		3		40	60 - 140
Methyl tert-butyl ether	50.0000	51.0323	102		4		40	65 - 125
1,1-Dichloroethane	50.0000	52.5049	105		2		40	70 - 135
Vinyl acetate	50.0000	51.5500	103		2		40	38 - 163
2-Butanone	50.0000	52.3156	105		5		40	30 - 150
cis-1,2-Dichloroethene	50.0000	53.4735	107		2		40	70 - 125
2,2-Dichloropropane	50.0000	52.3054	105		1		40	70 - 135
Bromochloromethane	50.0000	53.3290	107		1		40	65 - 130
Chloroform	50.0000	52.2486	104		1		40	65 - 135
1,1,1-Trichloroethane	50.0000	49.2581	99		0		40	65 - 130
1,1-Dichloropropene	50.0000	51.9743	104		1		40	75 - 130
Carbon tetrachloride	50.0000	51.2914	103		0		40	65 - 140
1,2-Dichloroethane	50.0000	52.3099	105		3		40	70 - 130
Benzene	50.0000	53.7587	108		4		40	80 - 120
Trichloroethene	50.0000	50.9109	102		2		40	70 - 125
1,2-Dichloropropane	50.0000	53.5705	107		2		40	75 - 125
Dibromomethane	50.0000	53.2421	106		2		40	75 - 125
Bromodichloromethane	50.0000	54.2034	108		3		40	75 - 120
cis-1,3-Dichloropropene	50.0000	55.4841	111		4		40	70 - 130
4-Methyl-2-pentanone	50.0000	45.5048	91		4		40	60 - 135
Toluene	50.0000	53.4042	107		3		40	75 - 120
trans-1,3-Dichloropropene	50.0000	56.8627	114		3		40	55 - 140
1,1,2-Trichloroethane	50.0000	52.2390	104		1		40	75 - 125
1,3-Dichloropropane	50.0000	51.6150	103		2		40	75 - 125
Tetrachloroethene	50.0000	48.3944	97		2		40	45 - 150
2-Hexanone	50.0000	47.6823	95		7		40	55 - 130
Dibromochloromethane	50.0000	52.6994	105		2		40	60 - 135
1,2-Dibromoethane	50.0000	52.6116	105		4		40	80 - 120
Chlorobenzene	50.0000	53.2785	107		3		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	51.9112	104		3		40	80 - 130
Ethylbenzene	50.0000	52.5623	105		3		40	75 - 125
m,p-Xylene	100.0000	103.8677	104		2		40	75 - 130
o-Xylene	50.0000	52.3426	105		2		40	80 - 120
Xylene (Total)	150.0000	156.2104	104		2		40	81 - 121
Styrene	50.0000	52.8131	106		2		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-67915

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: L1820

Mod. Ref No.:

SDG No.: SL1820

Lab Sample ID: LCSD-67915

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
Bromoform	50.0000	52.7114	105		5		40	70 - 130
Isopropylbenzene	50.0000	52.8174	106		0		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	51.3192	103		2		40	65 - 130
Bromobenzene	50.0000	52.1139	104		1		40	75 - 125
1,2,3-Trichloropropane	50.0000	46.3951	93		4		40	75 - 125
n-Propylbenzene	50.0000	50.9144	102		1		40	70 - 130
2-Chlorotoluene	50.0000	50.9110	102		0		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	50.2470	100		1		40	75 - 130
4-Chlorotoluene	50.0000	50.8422	102		2		40	75 - 130
tert-Butylbenzene	50.0000	51.7279	103		0		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	51.2394	102		0		40	75 - 130
sec-Butylbenzene	50.0000	50.0304	100		1		40	70 - 125
4-Isopropyltoluene	50.0000	51.7279	103		0		40	75 - 130
1,3-Dichlorobenzene	50.0000	50.6162	101		0		40	75 - 125
1,4-Dichlorobenzene	50.0000	49.7660	100		3		40	75 - 125
n-Butylbenzene	50.0000	52.6781	105		1		40	70 - 135
1,2-Dichlorobenzene	50.0000	50.2661	101		2		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	44.4269	89		7		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	49.8610	100		1		40	65 - 135
Hexachlorobutadiene	50.0000	51.4470	103		2		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	47.5558	95		1		40	55 - 140
Naphthalene	50.0000	44.9070	90		3		40	55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-67991

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: L1820

Mod. Ref No.:

SDG No.: SL1820

Lab Sample ID: LCSD-67991

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC #		%RPD #		QC LIMITS	
							RPD	REC.
Dichlorodifluoromethane	50.0000	42.9425	86		5		40	30 - 155
Chloromethane	50.0000	57.1610	114		4		40	40 - 125
Vinyl chloride	50.0000	54.9870	110		3		40	50 - 145
Bromomethane	50.0000	53.4125	107		3		40	30 - 145
Chloroethane	50.0000	54.9227	110		3		40	60 - 135
Trichlorofluoromethane	50.0000	56.6566	113		1		40	60 - 145
1,1-Dichloroethene	50.0000	62.6722	125		0		40	70 - 130
Acetone	50.0000	40.4028	81		0		40	40 - 140
Iodomethane	50.0000	53.8856	108		5		40	72 - 121
Carbon disulfide	50.0000	54.5042	109		3		40	35 - 160
Methylene chloride	50.0000	46.4955	93		4		40	55 - 140
trans-1,2-Dichloroethene	50.0000	57.2122	114		6		40	60 - 140
Methyl tert-butyl ether	50.0000	57.8885	116		5		40	65 - 125
1,1-Dichloroethane	50.0000	57.5076	115		4		40	70 - 135
Vinyl acetate	50.0000	56.8376	114		4		40	38 - 163
2-Butanone	50.0000	50.3817	101		6		40	30 - 150
cis-1,2-Dichloroethene	50.0000	59.6141	119		6		40	70 - 125
2,2-Dichloropropane	50.0000	58.4762	117		2		40	70 - 135
Bromochloromethane	50.0000	58.7637	118		5		40	65 - 130
Chloroform	50.0000	57.5468	115		4		40	65 - 135
1,1,1-Trichloroethane	50.0000	55.3747	111		4		40	65 - 130
1,1-Dichloropropene	50.0000	58.7247	117		6		40	75 - 130
Carbon tetrachloride	50.0000	56.4881	113		5		40	65 - 140
1,2-Dichloroethane	50.0000	59.1234	118		5		40	70 - 130
Benzene	50.0000	58.2348	116		4		40	80 - 120
Trichloroethene	50.0000	55.6456	111		5		40	70 - 125
1,2-Dichloropropane	50.0000	57.9498	116		4		40	75 - 125
Dibromomethane	50.0000	57.7447	115		4		40	75 - 125
Bromodichloromethane	50.0000	57.5009	115		4		40	75 - 120
cis-1,3-Dichloropropene	50.0000	57.8628	116		4		40	70 - 130
4-Methyl-2-pentanone	50.0000	51.8918	104		5		40	60 - 135
Toluene	50.0000	57.2657	115		4		40	75 - 120
trans-1,3-Dichloropropene	50.0000	60.6444	121		3		40	55 - 140
1,1,2-Trichloroethane	50.0000	56.6698	113		5		40	75 - 125
1,3-Dichloropropane	50.0000	53.5832	107		6		40	75 - 125
Tetrachloroethene	50.0000	49.1568	98		3		40	45 - 150
2-Hexanone	50.0000	47.7659	96		3		40	55 - 130
Dibromochloromethane	50.0000	52.3395	105		3		40	60 - 135
1,2-Dibromoethane	50.0000	53.6186	107		4		40	80 - 120
Chlorobenzene	50.0000	54.2064	108		4		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	51.8608	104		3		40	80 - 130
Ethylbenzene	50.0000	52.9801	106		5		40	75 - 125
m,p-Xylene	100.0000	105.6743	106		4		40	75 - 130
o-Xylene	50.0000	52.9210	106		6		40	80 - 120
Xylene (Total)	150.0000	158.5953	106		5		40	81 - 121
Styrene	50.0000	52.6153	105		4		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-67991

Lab Name: SPECTRUM ANALYTICAL, INC.

Contract:

Lab Code: MITKEM Case No.: L1820

Mod. Ref No.:

SDG No.: SL1820

Lab Sample ID: LCSD-67991

LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS	
							RPD	REC.
Bromoform	50.0000	52.8036	106		6		40	70 - 130
Isopropylbenzene	50.0000	53.2824	107		3		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	52.5884	105		7		40	65 - 130
Bromobenzene	50.0000	52.0759	104		5		40	75 - 125
1,2,3-Trichloropropane	50.0000	42.7159	85		7		40	75 - 125
n-Propylbenzene	50.0000	51.2151	102		6		40	70 - 130
2-Chlorotoluene	50.0000	51.4199	103		7		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	51.1608	102		5		40	75 - 130
4-Chlorotoluene	50.0000	51.1994	102		6		40	75 - 130
tert-Butylbenzene	50.0000	51.4848	103		5		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	51.4021	103		7		40	75 - 130
sec-Butylbenzene	50.0000	50.5260	101		4		40	70 - 125
4-Isopropyltoluene	50.0000	51.4848	103		5		40	75 - 130
1,3-Dichlorobenzene	50.0000	51.3747	103		5		40	75 - 125
1,4-Dichlorobenzene	50.0000	48.8731	98		4		40	75 - 125
n-Butylbenzene	50.0000	52.2888	105		6		40	70 - 135
1,2-Dichlorobenzene	50.0000	50.6319	101		4		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	47.3589	95		4		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	53.0813	106		5		40	65 - 135
Hexachlorobutadiene	50.0000	54.1149	108		3		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	51.6123	103		5		40	55 - 140
Naphthalene	50.0000	50.0563	100		7		40	55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-67915

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
Lab File ID: V6I9397.D Lab Sample ID: MB-67915
Instrument ID: V6
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 08/30/2012
Level: (TRACE or LOW/MED) LOW Time Analyzed: 12:15
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-67915	LCS-67915	V6I9393.D	10:41
02	LCSD-67915	LCSD-67915	V6I9394.D	11:04
03	TB-03	L1820-05A	V6I9398.D	12:39
04	SL-MW-3A	L1820-01A	V6I9400.D	13:26
05	SL-MW-3B	L1820-02A	V6I9401.D	13:49
06	SL-MW-6A	L1820-03A	V6I9402.D	14:12
07	SL-MW-6B	L1820-04A	V6I9403.D	14:36

COMMENTS:

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-67991

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
Lab File ID: V6I9506.D Lab Sample ID: MB-67991
Instrument ID: V6
Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 09/06/2012
Level: (TRACE or LOW/MED) LOW Time Analyzed: 11:44
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-67991	LCS-67991	V6I9502.D	10:10
02	LCSD-67991	LCSD-67991	V6I9503.D	10:34
03	TB-04	L1820-08A	V6I9507.D	12:18
04	SL-MW-5	L1820-06A	V6I9508.D	12:41
05	SL-MW-4	L1820-07A	V6I9509.D	13:05

COMMENTS: _____

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB6Z

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
Lab File ID: V6I9320.D BFB Injection Date: 08/28/2012
Instrument ID: V6 BFB Injection Time: 8:48
GC Column: DB-624 ID: 0.25 (mm)

m/e ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
5015.0 - 40.0% of mass 95	20.3
7530.0 - 60.0% of mass 95	50.9
95Base peak, 100% relative abundance	100.0
965.0 - 9.0% of mass 95	7.2
173Less than 2.0% of mass 174	0.9 (1.0)1
174Greater than 50.0% of mass 95	85.0
1755.0 - 9.0% of mass 174	6.9 (8.1)1
17695.0 - 101.0% of mass 174	81.4 (95.8)1
1775.0 - 9.0% of mass 176	5.7 (7.0)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506Z	VSTD0506Z	V6I9322.D	08/28/2012	9:45
02	VSTD0206Z	VSTD0206Z	V6I9323.D	08/28/2012	10:31
03	VSTD0056Z	VSTD0056Z	V6I9324.D	08/28/2012	10:55
04	VSTD0016Z	VSTD0016Z	V6I9325.D	08/28/2012	11:19
05	VSTD2006Z	VSTD2006Z	V6I9327.D	08/28/2012	12:07
06	VSTD1006Z	VSTD1006Z	V6I9328.D	08/28/2012	12:31

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB6C

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
Lab File ID: V6I9390.D BFB Injection Date: 08/30/2012
Instrument ID: V6 BFB Injection Time: 9:04
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	49.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.6 (0.8)1
174	Greater than 50.0% of mass 95	85.3
175	5.0 - 9.0% of mass 174	6.6 (7.8)1
176	95.0 - 101.0% of mass 174	83.1 (97.4)1
177	5.0 - 9.0% of mass 176	5.9 (7.1)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506C	VSTD0506C	V6I9392.D	08/30/2012	10:02
02	LCS-67915	LCS-67915	V6I9393.D	08/30/2012	10:41
03	LCSD-67915	LCSD-67915	V6I9394.D	08/30/2012	11:04
04	MB-67915	MB-67915	V6I9397.D	08/30/2012	12:15
05	TB-03	L1820-05A	V6I9398.D	08/30/2012	12:39
06	SL-MW-3A	L1820-01A	V6I9400.D	08/30/2012	13:26
07	SL-MW-3B	L1820-02A	V6I9401.D	08/30/2012	13:49
08	SL-MW-6A	L1820-03A	V6I9402.D	08/30/2012	14:12
09	SL-MW-6B	L1820-04A	V6I9403.D	08/30/2012	14:36

5A - FORM V VOA
VOLATILE ORGANIC INSTRUMENT
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

EPA SAMPLE NO.

BFB6F

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
Lab File ID: V6I9500.D BFB Injection Date: 09/06/2012
Instrument ID: V6 BFB Injection Time: 9:10
GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.2
75	30.0 - 60.0% of mass 95	50.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.6 (0.7)1
174	Greater than 50.0% of mass 95	86.5
175	5.0 - 9.0% of mass 174	6.5 (7.6)1
176	95.0 - 101.0% of mass 174	85.1 (98.4)1
177	5.0 - 9.0% of mass 176	5.6 (6.6)2

1 - Value is % mass 174

2 - Value is % mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0506F	VSTD0506F	V6I9501.D	09/06/2012	9:32
02	LCS-67991	LCS-67991	V6I9502.D	09/06/2012	10:10
03	LCSD-67991	LCSD-67991	V6I9503.D	09/06/2012	10:34
04	MB-67991	MB-67991	V6I9506.D	09/06/2012	11:44
05	TB-04	L1820-08A	V6I9507.D	09/06/2012	12:18
06	SL-MW-5	L1820-06A	V6I9508.D	09/06/2012	12:41
07	SL-MW-4	L1820-07A	V6I9509.D	09/06/2012	13:05

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 08/28/2012 08/28/2012
 EPA Sample No.(VSTD#####): VSTD0506C Date Analyzed: 08/30/2012
 Lab File ID (Standard): V6I9392.D Time Analyzed: 10:02
 Instrument ID: V6 Heated Purge: (Y/N) N

	IS1 (S1)		IS2 (S2)		IS3 (S3)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	851208	5.129	712269	8.099	429494	10.62
UPPER LIMIT	1702416	5.629	1424538	8.599	858988	11.12
LOWER LIMIT	425604	4.629	356135	7.599	214747	10.12
EPA SAMPLE NO.						
01 LCS-67915	831915	5.129	693117	8.100	416991	10.620
02 LCSD-67915	823808	5.131	689274	8.101	417803	10.622
03 MB-67915	762418	5.131	648248	8.101	363007	10.621
04 TB-03	749262	5.129	616823	8.099	348419	10.619
05 SL-MW-3A	757244	5.128	639343	8.098	345897	10.618
06 SL-MW-3B	750073	5.131	626208	8.101	343810	10.621
07 SL-MW-6A	734912	5.128	625419	8.098	338844	10.619
08 SL-MW-6B	717514	5.129	620263	8.099	340348	10.619

IS1 () = Fluorobenzene

IS2 () = Chlorobenzene-d5

IS3 () = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 08/28/2012 08/28/2012
 EPA Sample No.(VSTD#####): VSTD0506F Date Analyzed: 09/06/2012
 Lab File ID (Standard): V6I9501.D Time Analyzed: 9:32
 Instrument ID: V6 Heated Purge: (Y/N) N

		IS1 (S1)		IS2 (S2)		IS3 (S3)	
		AREA	#	AREA	#	AREA	#
	12 HOUR STD	811869	5.13	734917	8.1	455412	10.62
	UPPER LIMIT	1623738	5.63	1469834	8.6	910824	11.12
	LOWER LIMIT	405935	4.63	367459	7.6	227706	10.12
	EPA SAMPLE NO.						
01	LCS-67991	796049	5.129	705531	8.099	435059	10.619
02	LCSD-67991	791365	5.128	705971	8.098	427472	10.619
03	MB-67991	740244	5.132	685667	8.102	392823	10.622
04	TB-04	743934	5.128	682346	8.098	383514	10.619
05	SL-MW-5	718547	5.129	669764	8.099	368242	10.619
06	SL-MW-4	715500	5.128	665562	8.098	365164	10.619

IS1 () = Fluorobenzene

IS2 () = Chlorobenzene-d5

IS3 () = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-3A

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1820-01A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9400.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/28/2012
% Moisture: not dec.	Date Analyzed: 08/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	0.53	J
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-3A

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1820-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9400.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/28/2012

% Moisture: not dec. Date Analyzed: 08/30/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-3A

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1820-01A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9400.D
Level: (TRACE or LOW/MED) LOW Date Received: 08/28/2012
% Moisture: not dec. Date Analyzed: 08/30/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120830.B\V6I9400.D
 Report Date: 04-Sep-2012 15:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120830.B\V6I9400.D
 Lab Smp Id: L1820-01A Client Smp ID: SL-MW-3A
 Inj Date : 30-AUG-2012 13:26
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1820-01A,,67915
 Misc Info :
 Comment :
 Method : \\Avogadro\Organics\V6.i\120830.B\v68260Gadd-6lvl.m
 Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
35 Chloroform	83	4.418	4.419	(0.862)	3772	0.52511	0.5
\$ 36 Dibromofluoromethane	113	4.548	4.549	(0.887)	223328	50.1557	50
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.845	(0.945)	46069	48.2302	48
* 46 Fluorobenzene	96	5.128	5.129	(1.000)	757244	50.0000	
\$ 58 Toluene-d8	98	6.595	6.596	(0.814)	735503	48.4658	48
* 68 Chlorobenzene-d5	117	8.098	8.099	(1.000)	639343	50.0000	
\$ 79 Bromofluorobenzene	95	9.399	9.401	(1.161)	315762	47.1231	47
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.619	(1.000)	345897	50.0000	

Data File: \\avogadro\organics\V6.i\120830.B\V6I9400.D
Report Date: 04-Sep-2012 15:14

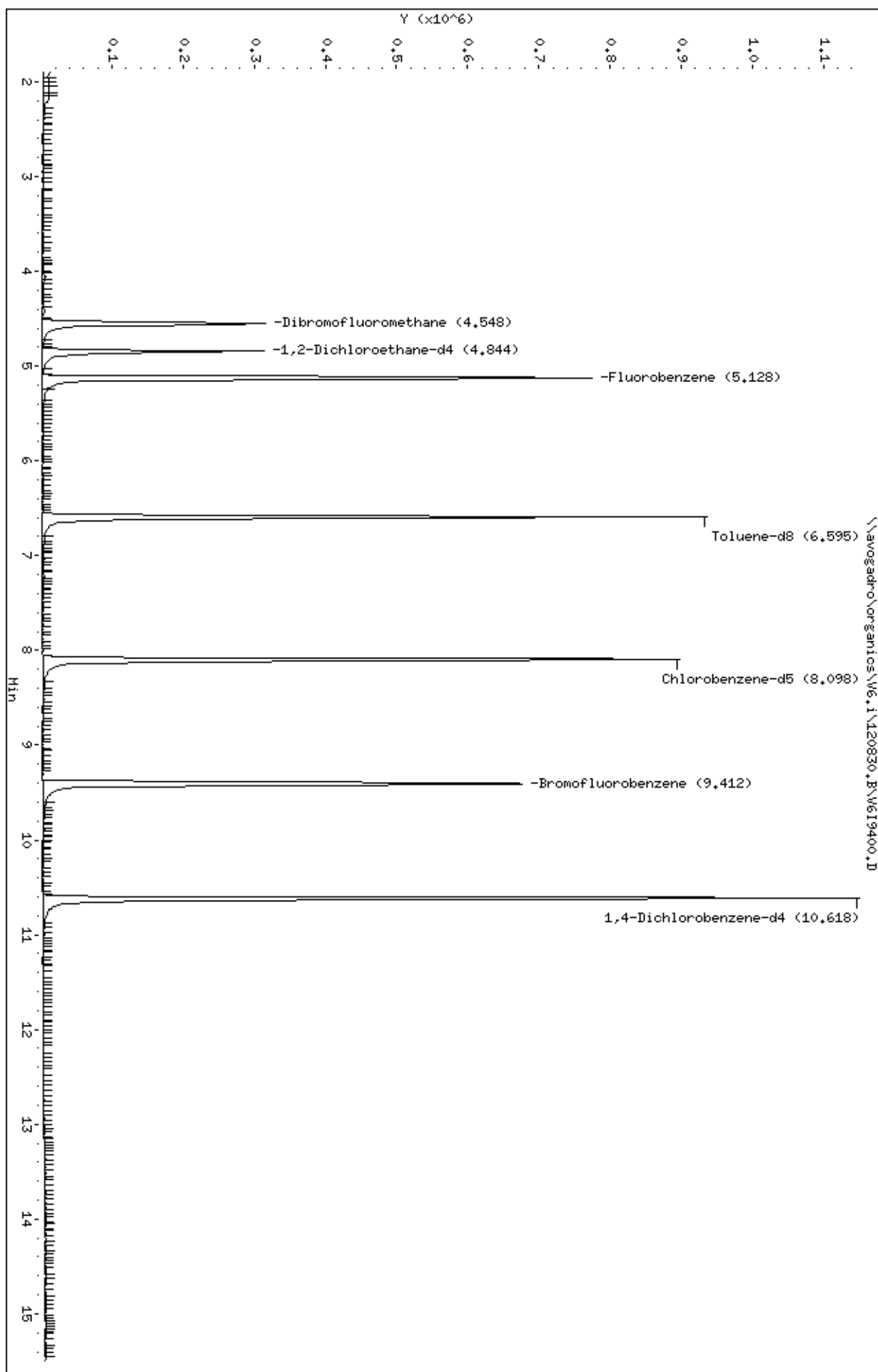
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120830.B\V6I9400.D
Lab Smp Id: L1820-01A Client Smp ID: SL-MW-3A
Inj Date : 30-AUG-2012 13:26
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1820-01A,,67915
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120830.B\v68260Gadd-6lvl.m
Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120830.B\W6I9400.D
Date : 30-AUG-2012 13:26
Client ID: SL-MH-3A
Sample Info: 5ML, L1820-01A, 67915
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120830.B\V6I9400.D

Date : 30-AUG-2012 13:26

Client ID: SL-MW-3A

Instrument: V6.i

Sample Info: 5HL, L1820-01A,, 67915

Purge Volume: 5.0

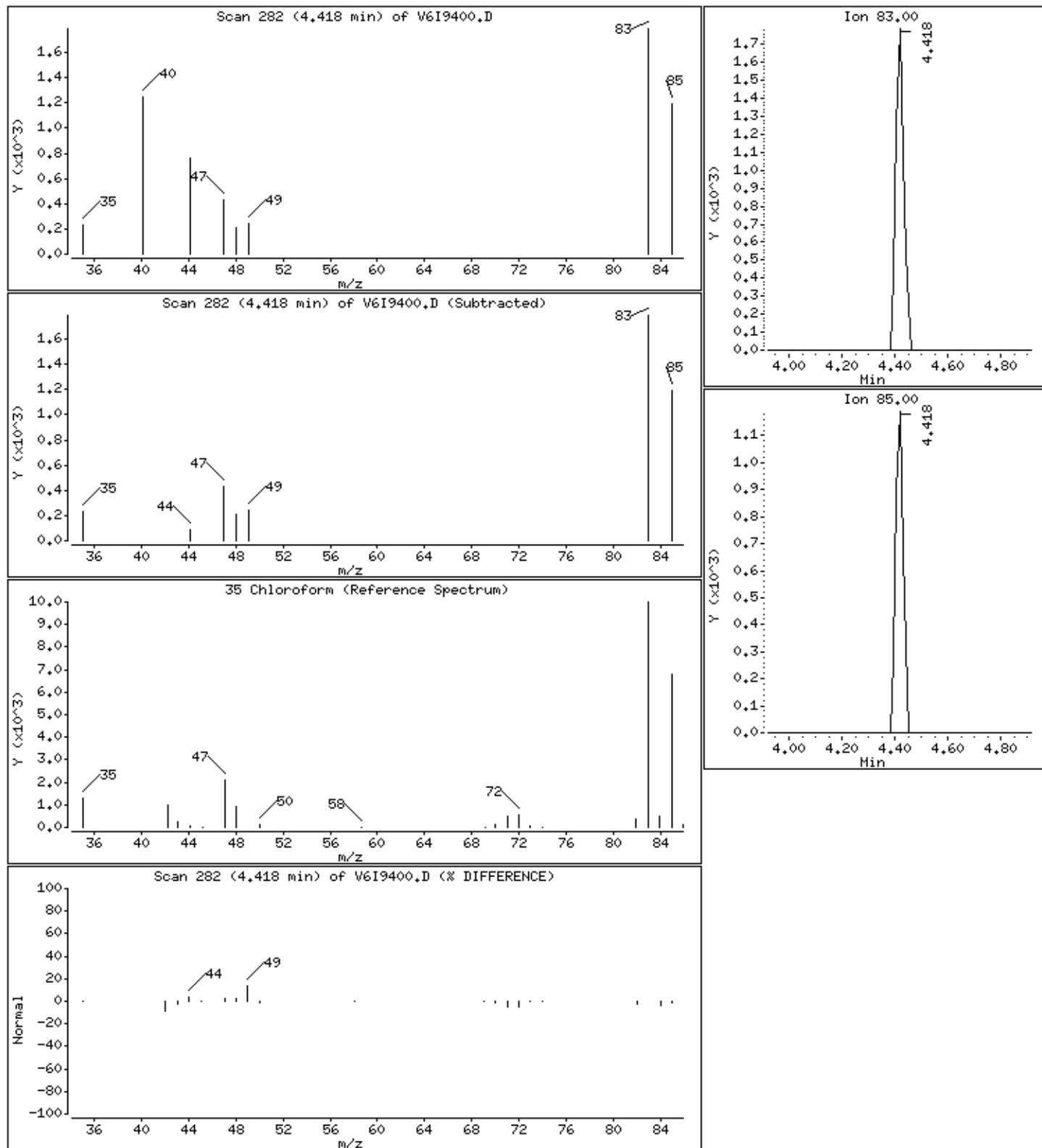
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

35 Chloroform

Concentration: 0.5 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-3B

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1820-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9401.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/28/2012

% Moisture: not dec. Date Analyzed: 08/30/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-3B

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1820-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9401.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/28/2012

% Moisture: not dec. Date Analyzed: 08/30/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-3B

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1820-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9401.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/28/2012

% Moisture: not dec. _____ Date Analyzed: 08/30/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120830.B\V6I9401.D
 Report Date: 04-Sep-2012 15:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120830.B\V6I9401.D
 Lab Smp Id: L1820-02A Client Smp ID: SL-MW-3B
 Inj Date : 30-AUG-2012 13:49
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1820-02A,,67915
 Misc Info :
 Comment :
 Method : \\Avogadro\Organics\V6.i\120830.B\v68260Gadd-6lvl.m
 Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 12
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.550	4.549	(0.887)	223901	50.7651	51
\$ 42 1,2-Dichloroethane-d4	102	4.846	4.845	(0.945)	45284	47.8616	48
* 46 Fluorobenzene	96	5.130	5.129	(1.000)	750073	50.0000	
\$ 58 Toluene-d8	98	6.586	6.596	(0.813)	738921	49.7123	50
* 68 Chlorobenzene-d5	117	8.100	8.099	(1.000)	626208	50.0000	
\$ 79 Bromofluorobenzene	95	9.402	9.401	(1.161)	308319	46.9775	47
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.619	(1.000)	343810	50.0000	

Data File: \\avogadro\organics\V6.i\120830.B\V6I9401.D
Report Date: 04-Sep-2012 15:14

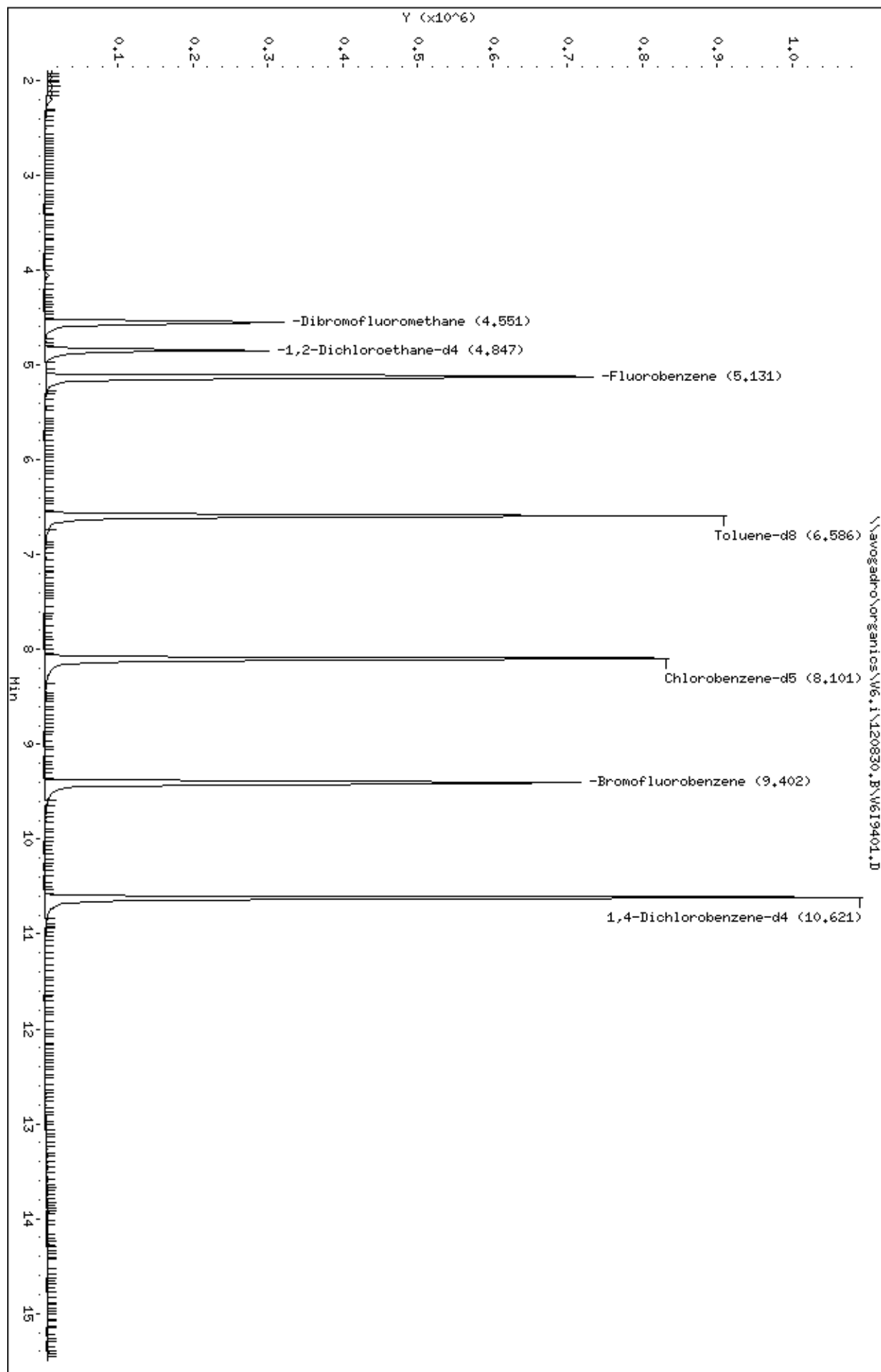
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120830.B\V6I9401.D
Lab Smp Id: L1820-02A Client Smp ID: SL-MW-3B
Inj Date : 30-AUG-2012 13:49
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1820-02A,,67915
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120830.B\v68260Gadd-6lvl.m
Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120830.B\W6I9401.D
Date : 30-AUG-2012 13:49
Client ID: SL-MH-3B
Sample Info: 5ML, L1820-02H, 67915
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-6A

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1820-03A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9402.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/28/2012
% Moisture: not dec.	Date Analyzed: 08/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-6A

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1820-03A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9402.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/28/2012
% Moisture: not dec.	Date Analyzed: 08/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-6A

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1820-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9402.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/28/2012

% Moisture: not dec. _____ Date Analyzed: 08/30/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120830.B\V6I9402.D
 Report Date: 04-Sep-2012 15:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120830.B\V6I9402.D
 Lab Smp Id: L1820-03A Client Smp ID: SL-MW-6A
 Inj Date : 30-AUG-2012 14:12
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1820-03A,,67915
 Misc Info :
 Comment :
 Method : \\Avogadro\Organics\V6.i\120830.B\v68260Gadd-6lvl.m
 Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 13
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.548	4.549	(0.887)	214591	49.6580	50
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.845	(0.945)	46932	50.6267	51
* 46 Fluorobenzene	96	5.128	5.129	(1.000)	734912	50.0000	
\$ 58 Toluene-d8	98	6.595	6.596	(0.814)	721371	48.5929	48
* 68 Chlorobenzene-d5	117	8.098	8.099	(1.000)	625419	50.0000	
\$ 79 Bromofluorobenzene	95	9.399	9.401	(1.161)	304048	46.3851	46
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.619	(1.000)	338844	50.0000	

Data File: \\avogadro\organics\V6.i\120830.B\V6I9402.D
Report Date: 04-Sep-2012 15:14

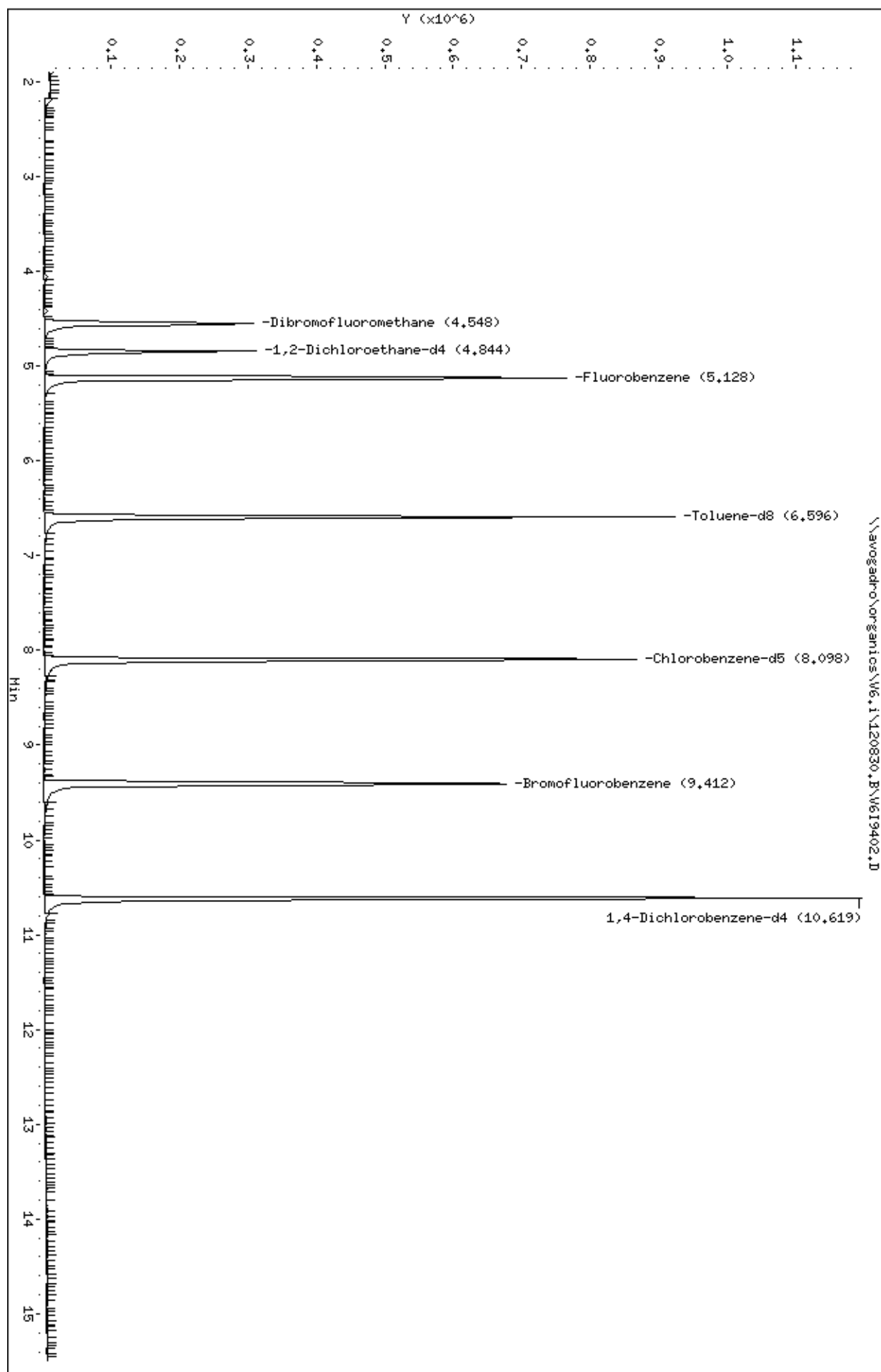
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120830.B\V6I9402.D
Lab Smp Id: L1820-03A Client Smp ID: SL-MW-6A
Inj Date : 30-AUG-2012 14:12
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1820-03A,,67915
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120830.B\v68260Gadd-6lvl.m
Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6.1\120830.B\W619402.D
Date : 30-AUG-2012 14:12
Client ID: SL-MH-6A
Sample Info: 5HL, L1820-03H, 67915
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-6B

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1820-04A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9403.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/28/2012
% Moisture: not dec.	Date Analyzed: 08/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	3.7	J
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	0.50	J
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-6B

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1820-04A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9403.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/28/2012
% Moisture: not dec.	Date Analyzed: 08/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	23	
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-6B

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1820-04A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9403.D
Level: (TRACE or LOW/MED) LOW Date Received: 08/28/2012
% Moisture: not dec. Date Analyzed: 08/30/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120830.B\V6I9403.D
 Report Date: 04-Sep-2012 15:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120830.B\V6I9403.D
 Lab Smp Id: L1820-04A Client Smp ID: SL-MW-6B
 Inj Date : 30-AUG-2012 14:36
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1820-04A,,67915
 Misc Info :
 Comment :
 Method : \\Avogadro\Organics\V6.i\120830.B\v68260Gadd-6lvl.m
 Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 14
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
12 Acetone	58	2.845	2.833	(0.555)	1934	3.71488	4(Q)
28 cis-1,2-Dichloroethene	96	4.170	4.170	(0.813)	2024	0.50258	0.5
\$ 36 Dibromofluoromethane	113	4.549	4.549	(0.887)	215767	51.1408	51
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.845	(0.945)	45051	49.7760	50
* 46 Fluorobenzene	96	5.128	5.129	(1.000)	717514	50.0000	
\$ 58 Toluene-d8	98	6.596	6.596	(0.814)	707575	48.0597	48
63 Tetrachloroethene	164	7.211	7.211	(0.890)	88502	22.7951	23
* 68 Chlorobenzene-d5	117	8.098	8.099	(1.000)	620263	50.0000	
\$ 79 Bromofluorobenzene	95	9.400	9.401	(1.161)	306189	47.1001	47
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619	(1.000)	340348	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V6.i\120830.B\V6I9403.D
Report Date: 04-Sep-2012 15:14

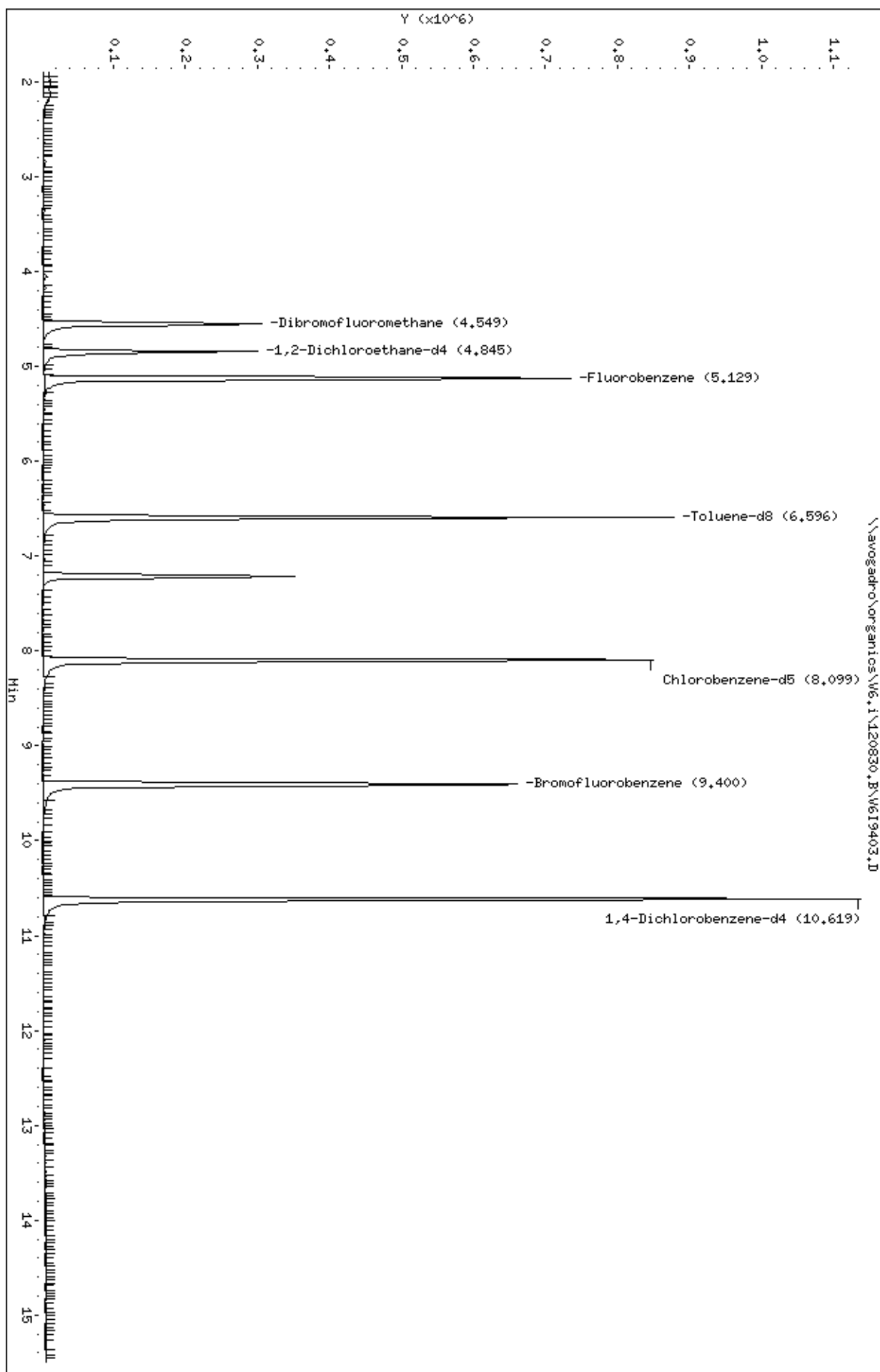
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120830.B\V6I9403.D
Lab Smp Id: L1820-04A Client Smp ID: SL-MW-6B
Inj Date : 30-AUG-2012 14:36
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1820-04A,,67915
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120830.B\v68260Gadd-6lvl.m
Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120830.B\W6I9403.D
Date : 30-AUG-2012 14:36
Client ID: SL-MW-6B
Sample Info: 5HL, L1820-044, 67915
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120830.B\V6I9403.D

Date : 30-AUG-2012 14:36

Client ID: SL-MW-6B

Instrument: V6.i

Sample Info: 5HL,L1820-04A,,67915

Purge Volume: 5.0

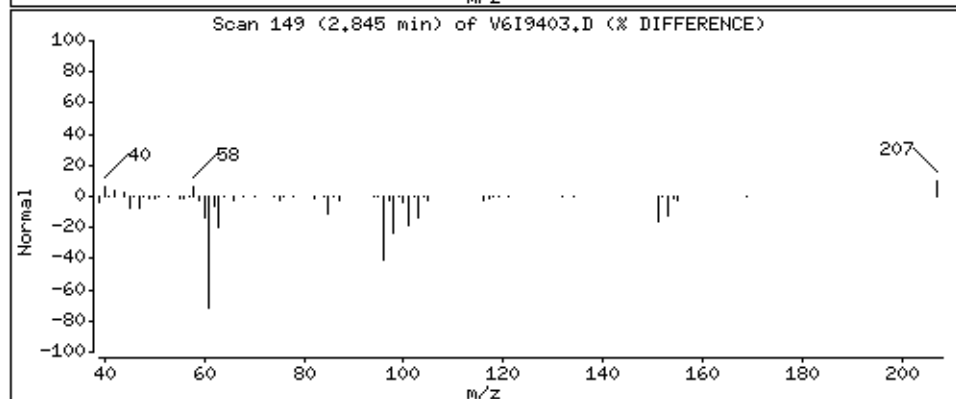
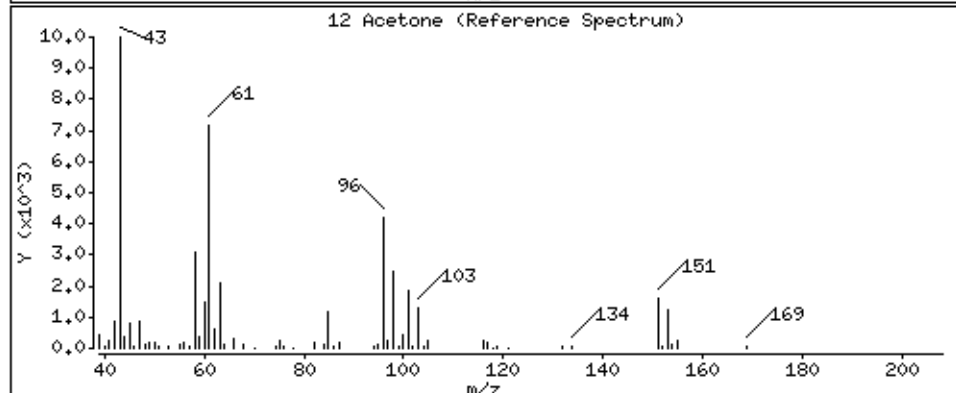
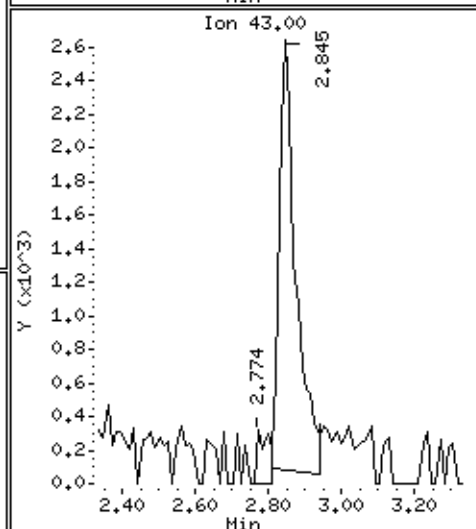
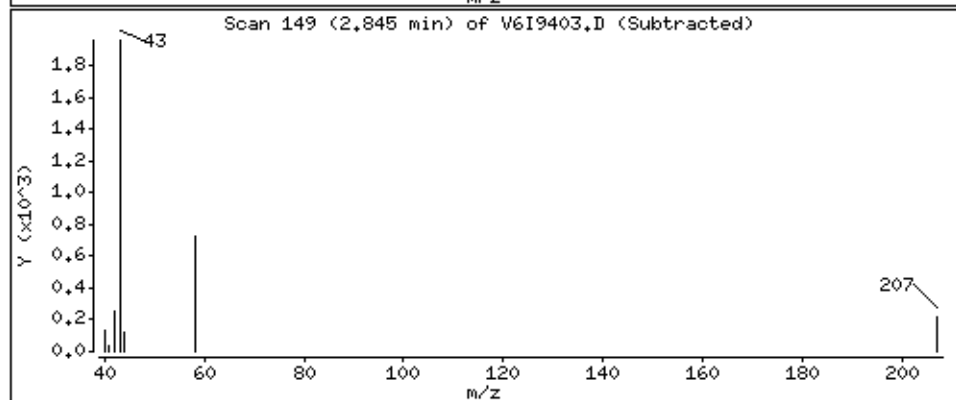
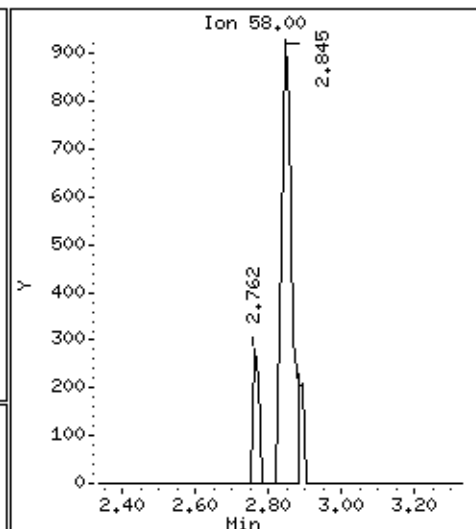
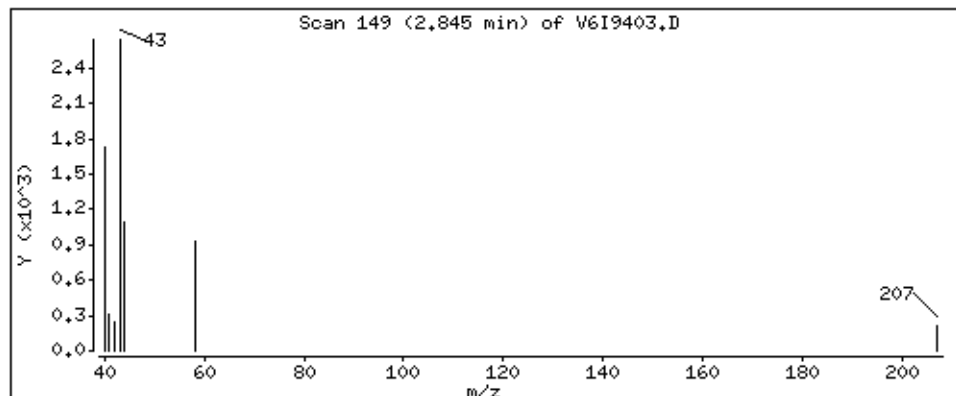
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

12 Acetone

Concentration: 4 ug/L



Data File: \\avogadro\organics\V6.i\120830.B\V6I9403.D

Date : 30-AUG-2012 14:36

Client ID: SL-MW-6B

Instrument: V6.i

Sample Info: 5HL, L1820-04A,, 67915

Purge Volume: 5.0

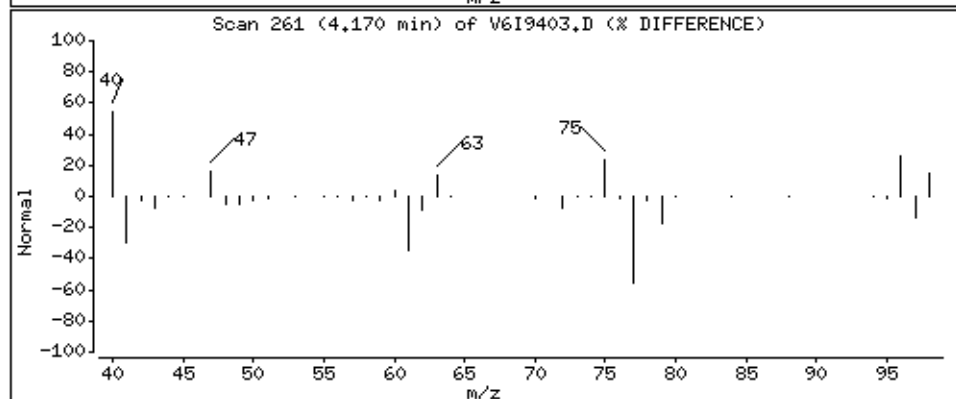
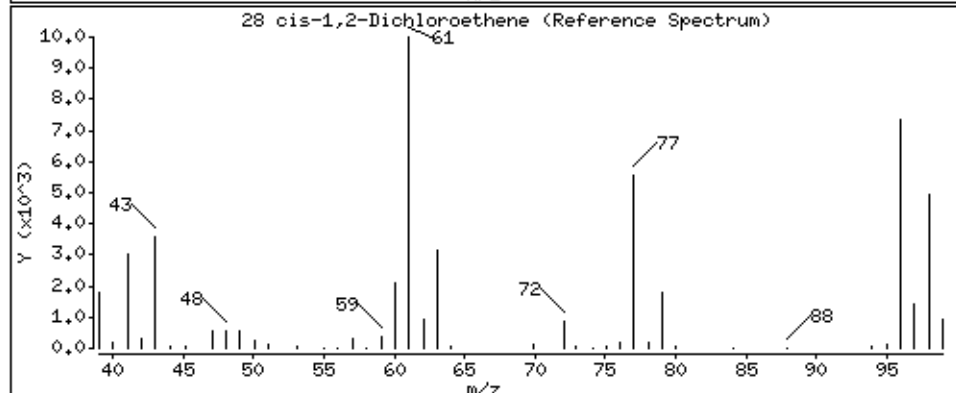
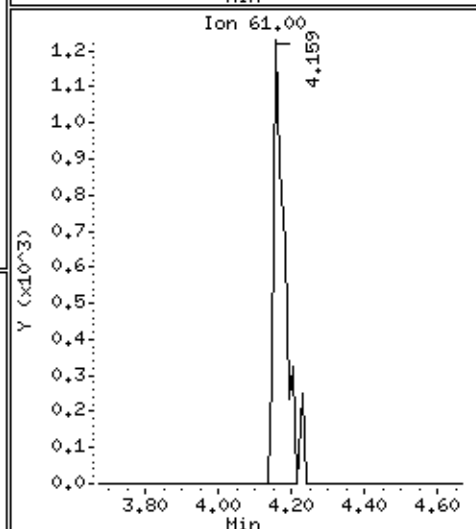
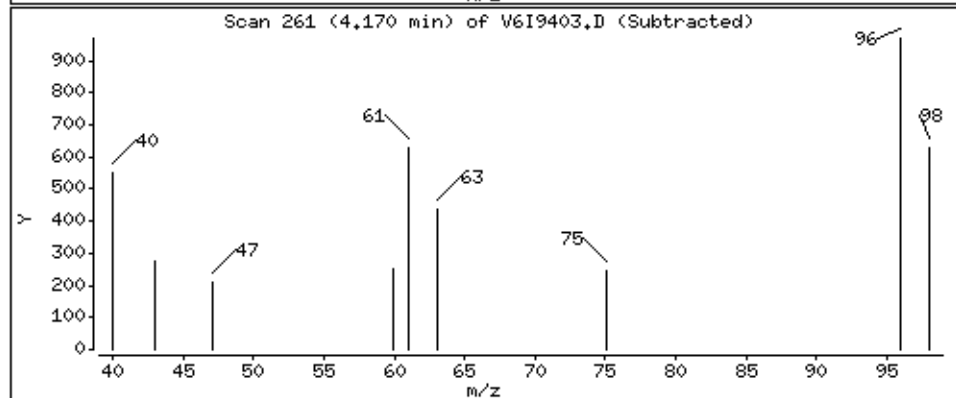
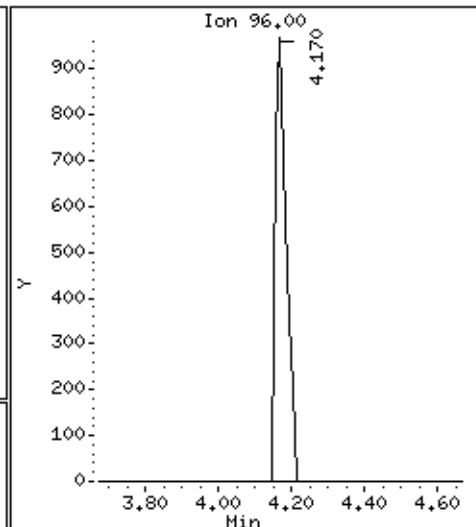
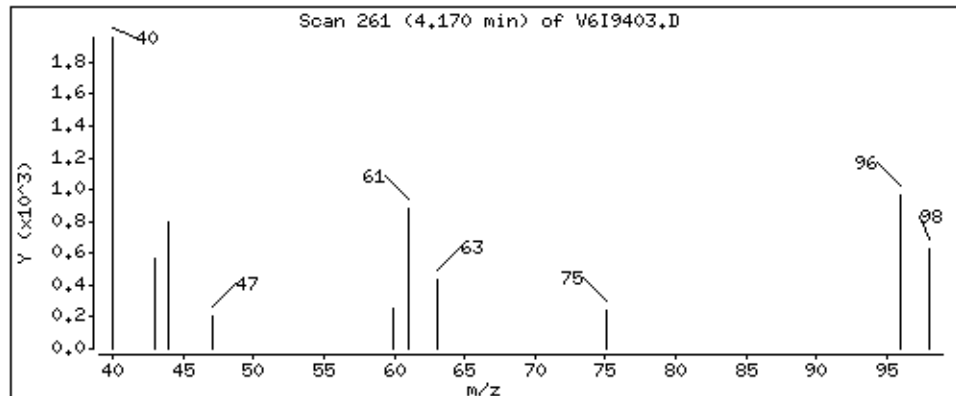
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

28 cis-1,2-Dichloroethene

Concentration: 0.5 ug/L



Data File: \\avogadro\organics\V6.i\120830.B\V6I9403.D

Date : 30-AUG-2012 14:36

Client ID: SL-MW-6B

Instrument: V6.i

Sample Info: 5HL,L1820-04A,,67915

Purge Volume: 5.0

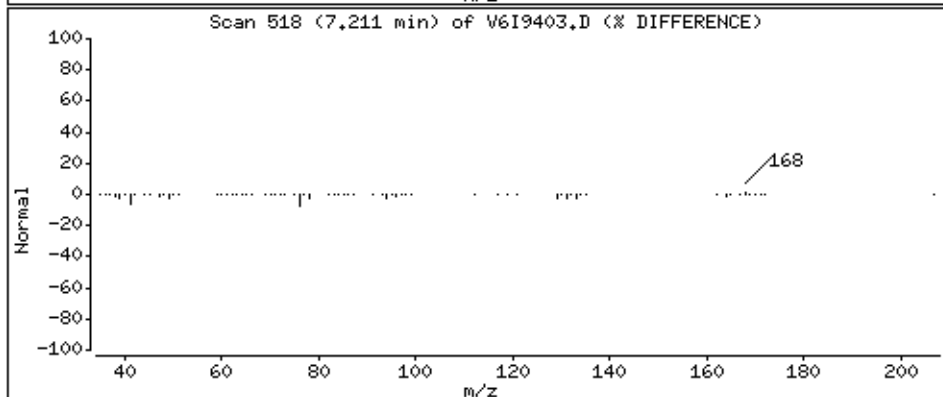
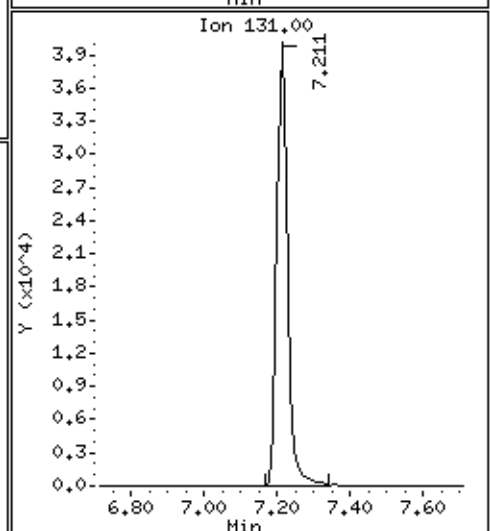
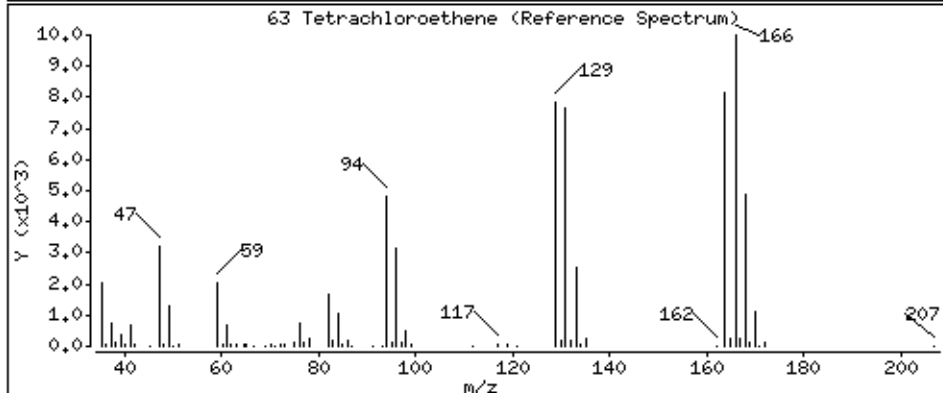
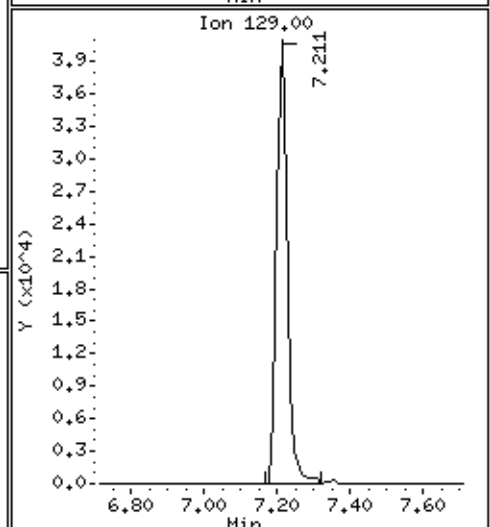
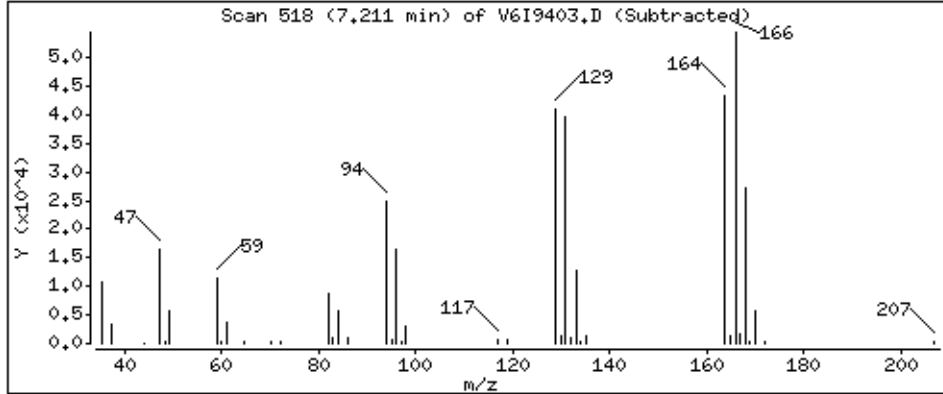
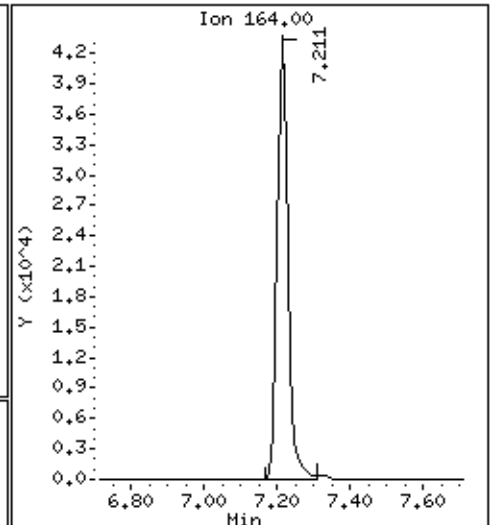
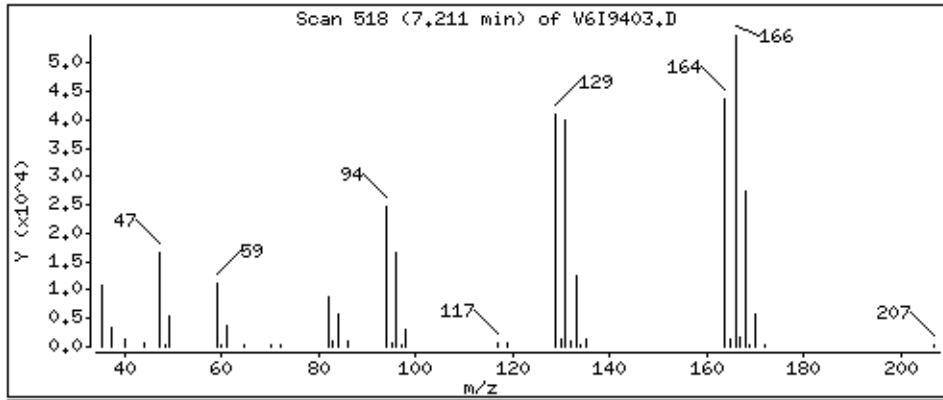
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

63 Tetrachloroethene

Concentration: 23 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-03

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1820-05A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9398.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/28/2012
% Moisture: not dec.	Date Analyzed: 08/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	0.90	J
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-03

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1820-05A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9398.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/28/2012
% Moisture: not dec.	Date Analyzed: 08/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-03

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1820-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9398.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/28/2012

% Moisture: not dec. Date Analyzed: 08/30/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120830.B\V6I9398.D
 Report Date: 04-Sep-2012 15:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120830.B\V6I9398.D
 Lab Smp Id: L1820-05A Client Smp ID: TB-03
 Inj Date : 30-AUG-2012 12:39
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1820-05A,,67915
 Misc Info :
 Comment :
 Method : \\Avogadro\Organics\V6.i\120830.B\v68260Gadd-6lvl.m
 Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
18 Methylene Chloride	84	3.164	3.165	(0.617)	5297	0.90229	0.9(Q)
\$ 36 Dibromofluoromethane	113	4.549	4.549	(0.887)	223655	50.7643	51
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.845	(0.945)	46827	49.5460	50
* 46 Fluorobenzene	96	5.128	5.129	(1.000)	749262	50.0000	
\$ 58 Toluene-d8	98	6.596	6.596	(0.814)	731370	49.9530	50
* 68 Chlorobenzene-d5	117	8.099	8.099	(1.000)	616823	50.0000	
\$ 79 Bromofluorobenzene	95	9.400	9.401	(1.161)	305652	47.2797	47
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619	(1.000)	348419	50.0000	

QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\V6.i\120830.B\V6I9398.D
Report Date: 04-Sep-2012 15:14

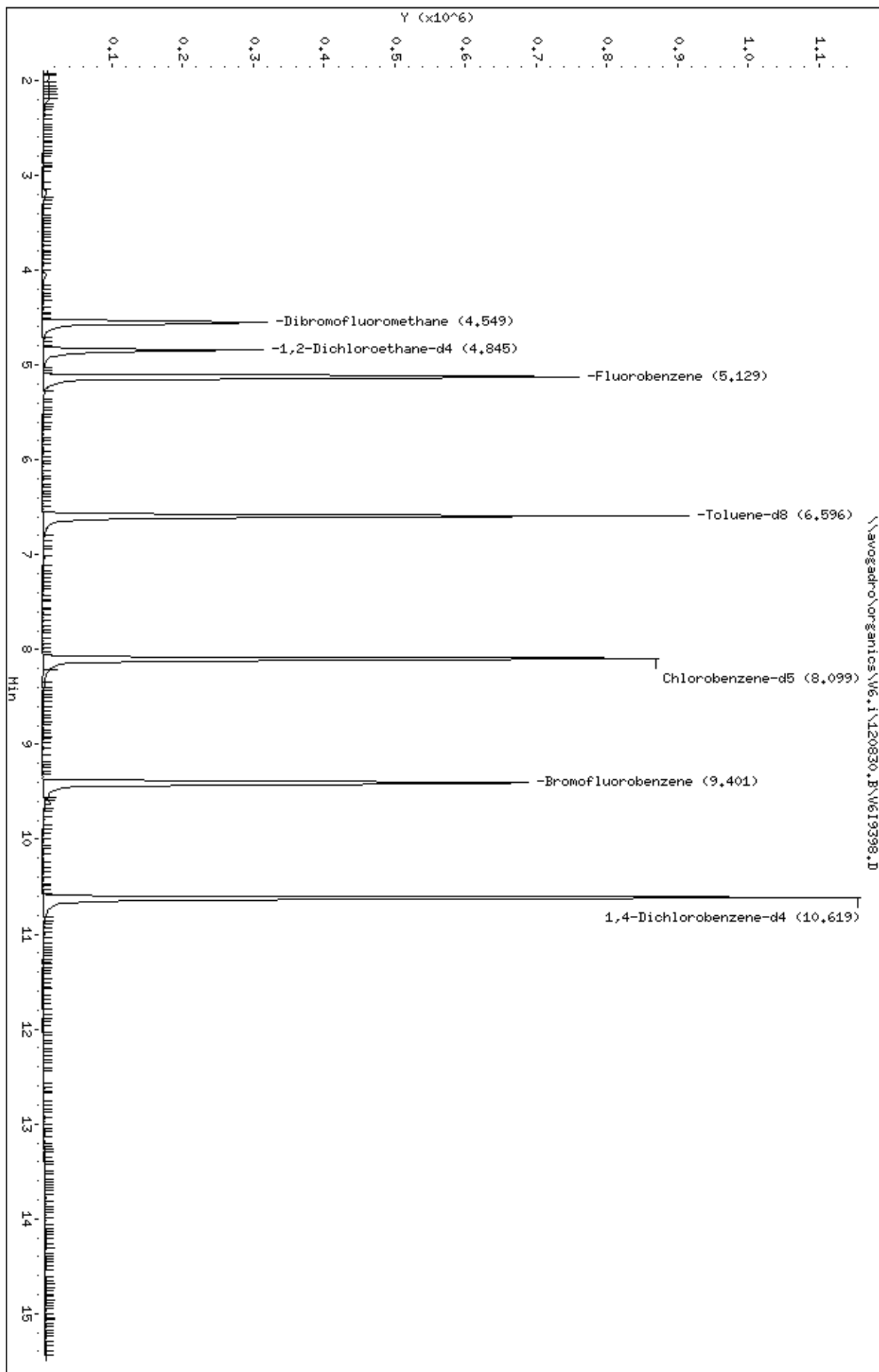
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
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Lab Smp Id: L1820-05A Client Smp ID: TB-03
Inj Date : 30-AUG-2012 12:39
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1820-05A,,67915
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120830.B\v68260Gadd-6lvl.m
Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120830.B\W6I9398.D
Date : 30-AUG-2012 12:39
Client ID: TB-03
Sample Info: 5HL, L1820-05H, 67915
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120830,B\V6I9398.D

Date : 30-AUG-2012 12:39

Client ID: TB-03

Instrument: V6.i

Sample Info: 5HL,L1820-05A,,67915

Purge Volume: 5.0

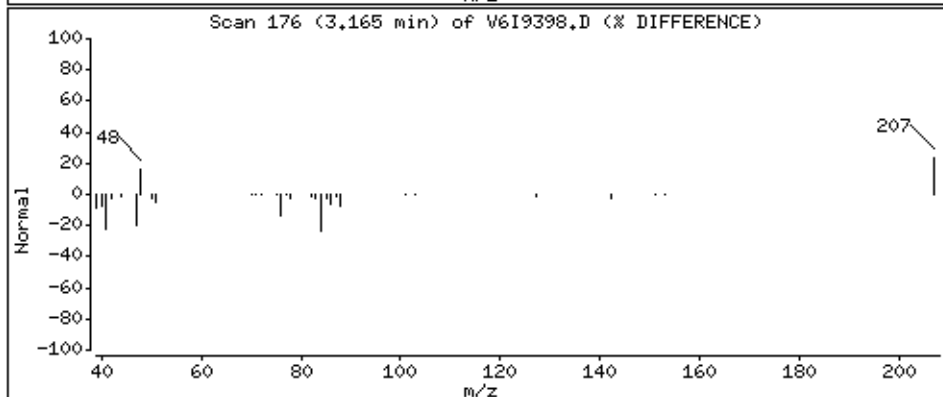
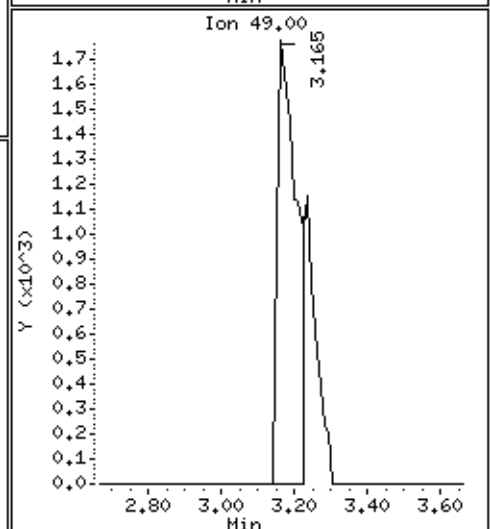
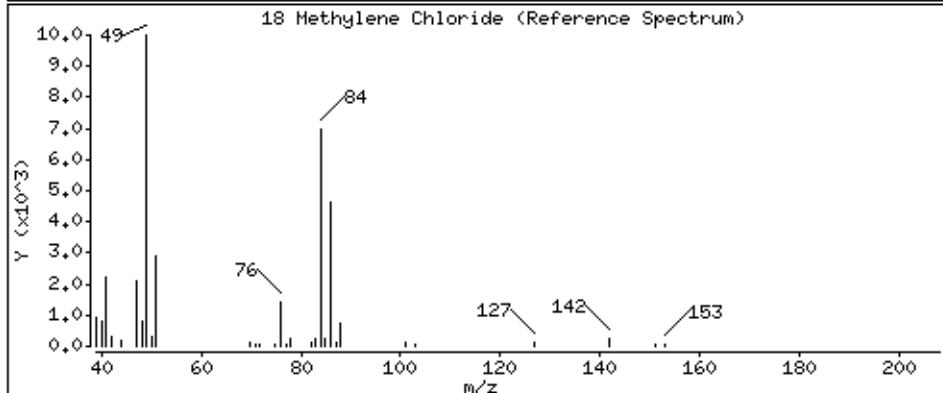
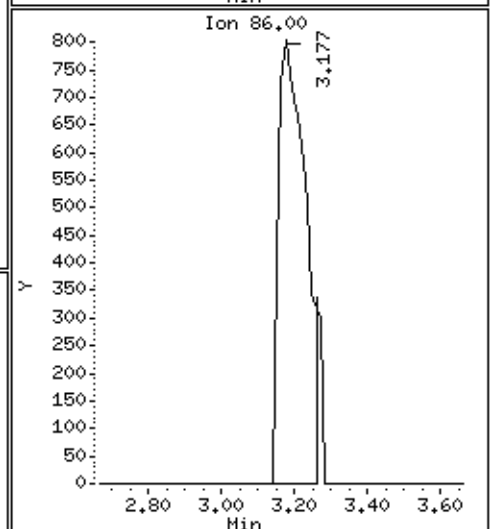
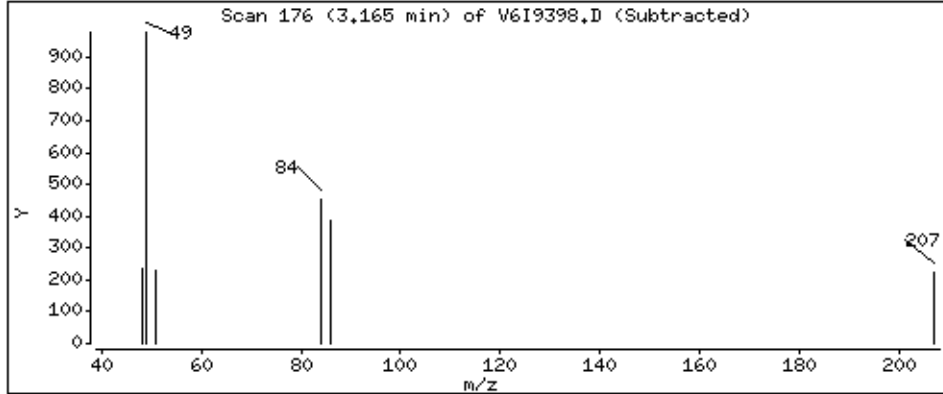
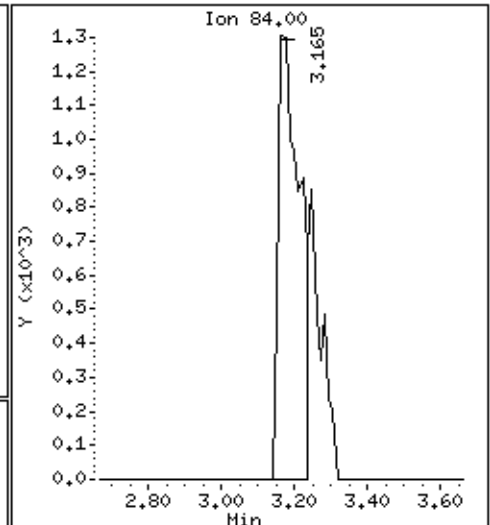
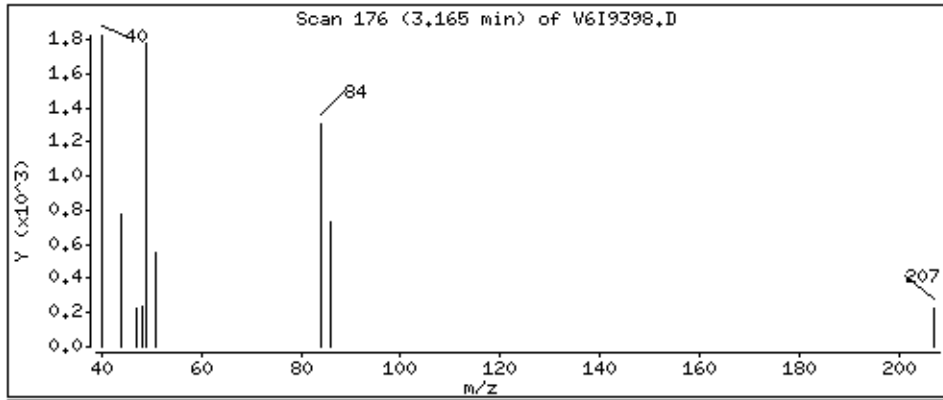
Operator: AM SRC: LIMS

Column phase: DB-624

Column diameter: 0.25

18 Methylene Chloride

Concentration: 0.9 ug/L



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-5

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1820-06A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9508.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/30/2012
% Moisture: not dec.	Date Analyzed: 09/06/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-5

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1820-06A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9508.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/30/2012
% Moisture: not dec.	Date Analyzed: 09/06/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1820-06A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9508.D
 Level: (TRACE or LOW/MED) LOW Date Received: 08/30/2012
 % Moisture: not dec. Date Analyzed: 09/06/2012
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120906.B\V6I9508.D
 Report Date: 07-Sep-2012 10:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120906.B\V6I9508.D
 Lab Smp Id: L1820-06A Client Smp ID: SL-MW-5
 Inj Date : 06-SEP-2012 12:41
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1820-06A,,67991
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120906.B\v68260Gadd-6lvl.m
 Meth Date : 07-Sep-2012 10:28 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 37
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.548	4.548	(0.887)	222364	52.6287	53
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.844	(0.945)	43955	48.4952	48
* 46 Fluorobenzene	96	5.128	5.128	(1.000)	718547	50.0000	
\$ 58 Toluene-d8	98	6.596	6.595	(0.814)	726846	45.7199	46
* 68 Chlorobenzene-d5	117	8.098	8.098	(1.000)	669764	50.0000	
\$ 79 Bromofluorobenzene	95	9.400	9.400	(1.161)	326939	46.5750	46
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.618	(1.000)	368242	50.0000	

Data File: \\avogadro\organics\V6.i\120906.B\V6I9508.D
Report Date: 07-Sep-2012 10:30

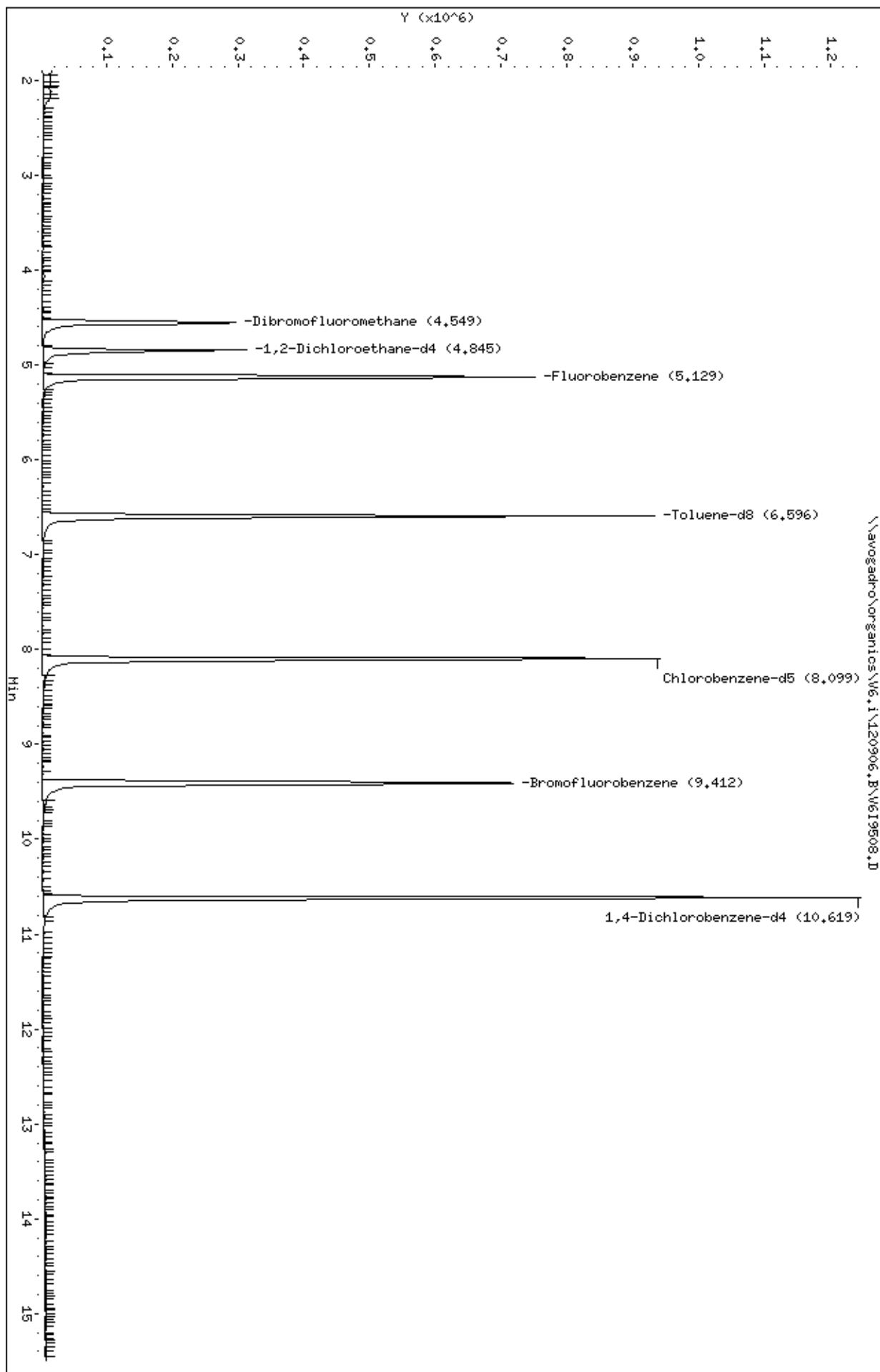
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120906.B\V6I9508.D
Lab Smp Id: L1820-06A Client Smp ID: SL-MW-5
Inj Date : 06-SEP-2012 12:41
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1820-06A,,67991
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120906.B\v68260Gadd-6lvl.m
Meth Date : 07-Sep-2012 10:28 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 37
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120906.B\W6I9508.D
Date : 06-SEP-2012 12:41
Client ID: SL-M4-5
Sample Info: 5HL, L1820-06H, 67991
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1820-07A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9509.D
 Level: (TRACE/LOW/MED) LOW Date Received: 08/30/2012
 % Moisture: not dec. Date Analyzed: 09/06/2012
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SL-MW-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1820-07A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9509.D

Level: (TRACE/LOW/MED) LOW Date Received: 08/30/2012

% Moisture: not dec. Date Analyzed: 09/06/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SL-MW-4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1820-07A
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9509.D
Level: (TRACE or LOW/MED) LOW Date Received: 08/30/2012
% Moisture: not dec. Date Analyzed: 09/06/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120906.B\V6I9509.D
 Report Date: 07-Sep-2012 10:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120906.B\V6I9509.D
 Lab Smp Id: L1820-07A Client Smp ID: SL-MW-4
 Inj Date : 06-SEP-2012 13:05
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1820-07A,,67991
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120906.B\v68260Gadd-6lvl.m
 Meth Date : 07-Sep-2012 10:28 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 38
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.560	4.548	(0.889)	217426	51.6791	52
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.844	(0.945)	44972	49.8286	50
* 46 Fluorobenzene	96	5.128	5.128	(1.000)	715500	50.0000	
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	731038	46.2739	46
* 68 Chlorobenzene-d5	117	8.098	8.098	(1.000)	665562	50.0000	
\$ 79 Bromofluorobenzene	95	9.411	9.400	(1.162)	334586	47.9653	48
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.618	(1.000)	365164	50.0000	

Data File: \\avogadro\organics\V6.i\120906.B\V6I9509.D
Report Date: 07-Sep-2012 10:30

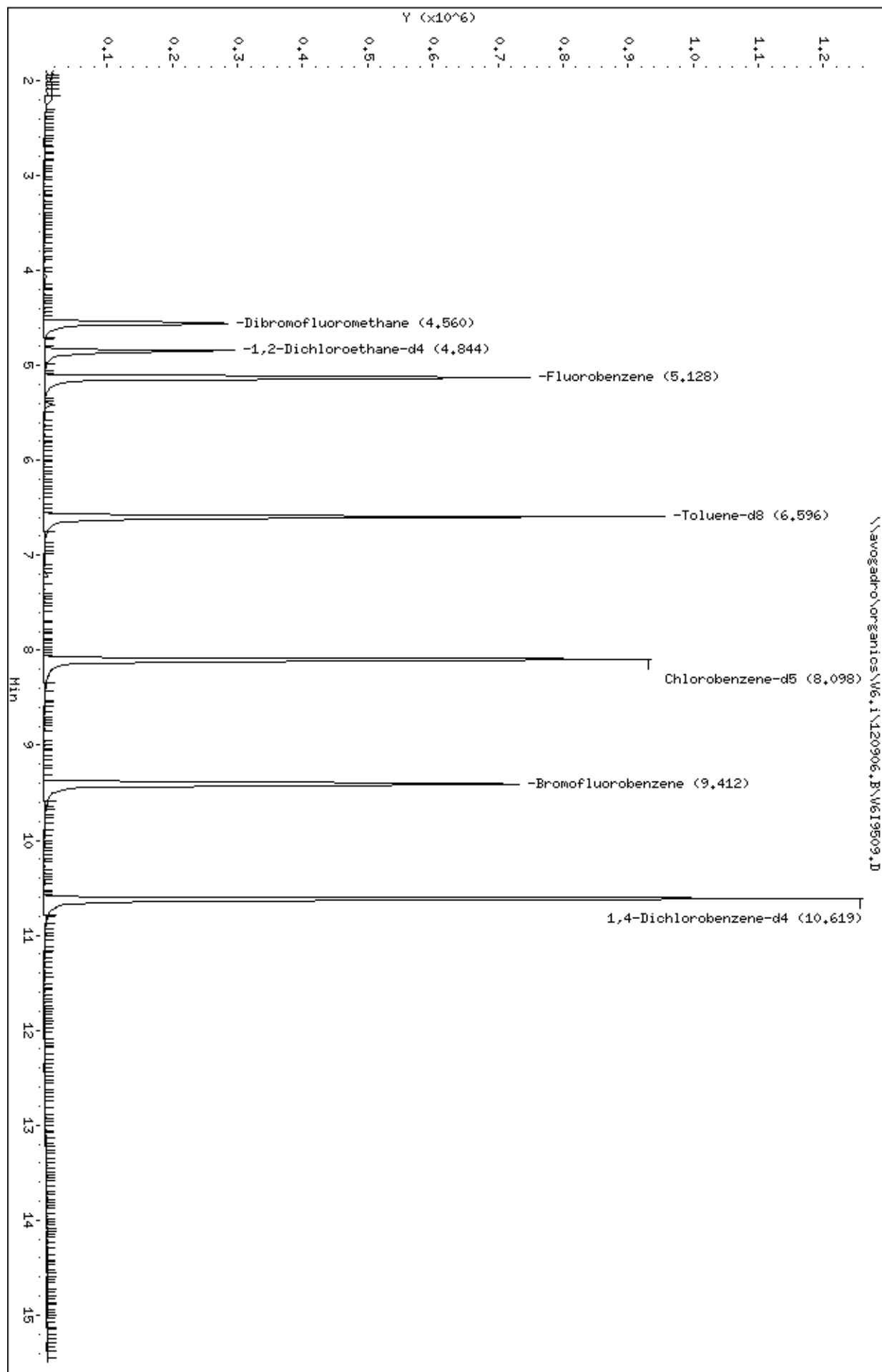
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120906.B\V6I9509.D
Lab Smp Id: L1820-07A Client Smp ID: SL-MW-4
Inj Date : 06-SEP-2012 13:05
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1820-07A,,67991
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120906.B\v68260Gadd-6lvl.m
Meth Date : 07-Sep-2012 10:28 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 38
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120906.B\W6I9509.D
Date : 06-SEP-2012 13:05
Client ID: SL-M4-4
Sample Info: 5HL, L1820-07H, 67991
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-04

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1820-08A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9507.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/30/2012
% Moisture: not dec.	Date Analyzed: 09/06/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-04

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: L1820-08A
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9507.D
Level: (TRACE/LOW/MED) LOW	Date Received: 08/30/2012
% Moisture: not dec.	Date Analyzed: 09/06/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB-04

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1820-08A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9507.D

Level: (TRACE or LOW/MED) LOW Date Received: 08/30/2012

% Moisture: not dec. _____ Date Analyzed: 09/06/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120906.B\V6I9507.D
 Report Date: 07-Sep-2012 10:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120906.B\V6I9507.D
 Lab Smp Id: L1820-08A Client Smp ID: TB-04
 Inj Date : 06-SEP-2012 12:18
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,L1820-08A,,67991
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120906.B\v68260Gadd-6lvl.m
 Meth Date : 07-Sep-2012 10:28 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 36
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 8260.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.548	4.548	(0.887)	227579	52.0249	52
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.844	(0.945)	47937	51.0837	51
* 46 Fluorobenzene	96	5.128	5.128	(1.000)	743934	50.0000	
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	752599	46.4669	46
* 68 Chlorobenzene-d5	117	8.098	8.098	(1.000)	682346	50.0000	
\$ 79 Bromofluorobenzene	95	9.399	9.400	(1.161)	350483	49.0084	49
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.618	(1.000)	383514	50.0000	

Data File: \\avogadro\organics\V6.i\120906.B\V6I9507.D
Report Date: 07-Sep-2012 10:30

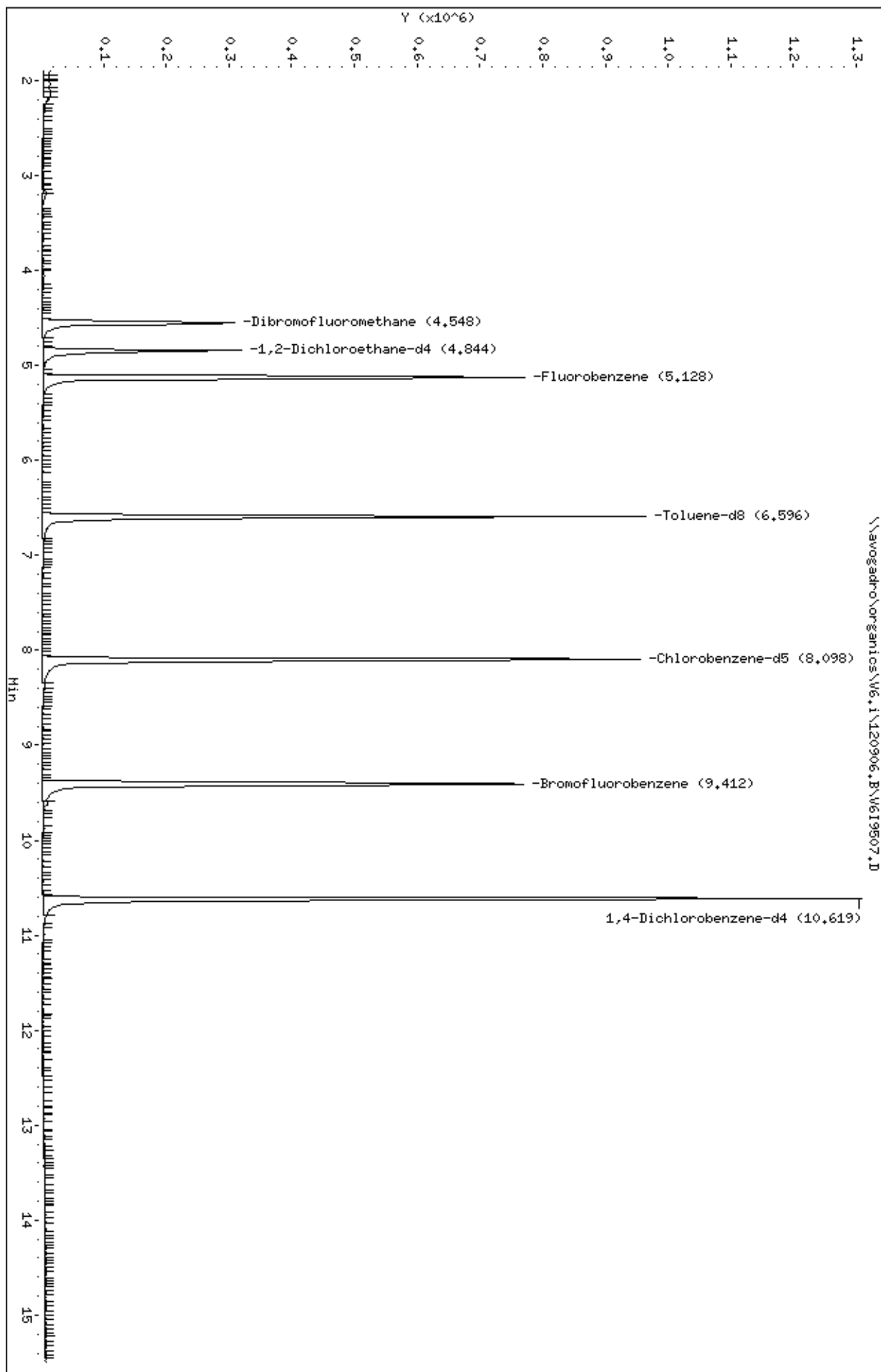
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120906.B\V6I9507.D
Lab Smp Id: L1820-08A Client Smp ID: TB-04
Inj Date : 06-SEP-2012 12:18
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,L1820-08A,,67991
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120906.B\v68260Gadd-6lvl.m
Meth Date : 07-Sep-2012 10:28 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 36
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120906.B\W6I9507.D
Date : 06-SEP-2012 12:18
Client ID: TB-04
Sample Info: 5HL, L1820-08H, 67991
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



Lab Code: MITKEM	Case No.: L1820	SAS No.:	SDG No.: SL1820
Instrument ID: V6	Calibration Date(s): 08/28/2012		08/28/2012
Heated Purge: (Y/N) N	Calibration Times: 9:45		12:31
Purge Volume: 5	(mL)		
GC Column: DB-624	ID: 0.25	(mm)	Length: 30 (mm)

LAB FILE ID: RRF005 = <u>V6I9324.D</u> RRF020 = <u>V6I9323.D</u> RRF050 = <u>V6I9322.D</u> RRF100 = <u>V6I9328.D</u> RRF200 = <u>V6I9327.D</u> RRF001 = <u>V6I9325.D</u>											
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001					
										% RSD	
Dibromomethane	0.177	0.176	0.183	0.193	0.187	0.153				0.178	7.8
Bromodichloromethane	0.374	0.375	0.384	0.384	0.369	0.350				0.373	3.4
cis-1,3-Dichloropropene	0.408	0.410	0.423	0.442	0.413	0.382				0.413	4.8
4-Methyl-2-pentanone	0.305	0.295	0.289	0.323	0.306					0.304	4.2
Toluene	1.123	1.075	1.074	1.022	0.887	1.142				1.054	8.7
trans-1,3-Dichloropropene	0.372	0.382	0.405	0.416	0.407	0.260				0.374	15.5
1,1,2-Trichloroethane	0.240	0.244	0.242	0.250	0.240	0.224				0.240	3.6
1,3-Dichloropropane	0.488	0.492	0.489	0.496	0.475	0.426				0.478	5.5
Tetrachloroethene	0.332	0.298	0.292	0.292	0.283	0.381				0.313	12.0
2-Hexanone	0.231	0.261	0.242	0.266	0.273					0.255	6.9
Dibromochloromethane	0.404	0.406	0.407	0.417	0.405	0.351				0.398	6.0
1,2-Dibromoethane	0.338	0.350	0.351	0.362	0.349	0.274				0.337	9.4
Chlorobenzene	0.999	0.923	0.898	0.874	0.794	0.829				0.886	8.2
1,1,1,2-Tetrachloroethane	0.381	0.366	0.374	0.374	0.362	0.356				0.369	2.5
Ethylbenzene	0.502	0.462	0.475	0.464	0.447	0.444				0.466	4.6
m,p-Xylene	0.632	0.591	0.578	0.544	0.501	0.577				0.570	7.8
o-Xylene	0.585	0.573	0.574	0.566	0.543	0.556				0.566	2.6
Xylene (Total)	0.616	0.585	0.577	0.551	0.515	0.570				0.569	6.0
Styrene	1.031	1.006	0.989	0.976	0.887	0.968				0.976	5.0
Bromoform	0.281	0.300	0.306	0.323	0.323	0.217				0.292	13.7
Isopropylbenzene	1.532	1.438	1.405	1.311	1.174	1.391				1.375	8.9
1,1,1,2,2-Tetrachloroethane	1.303	1.209	1.243	1.261	0.924	1.340				1.213	12.3
Bromobenzene	0.737	0.728	0.744	0.729	0.692	0.698				0.721	3.0
1,1,2,3-Trichloropropane	0.879	0.888	0.906	0.983	0.934	1.239				0.971	14.0
n-Propylbenzene	0.728	0.676	0.678	0.657	0.627	0.730				0.683	5.9
2-Chlorotoluene	0.696	0.632	0.645	0.637	0.605	0.709				0.654	6.1
1,3,5-Trimethylbenzene	2.273	2.105	2.026	1.896	1.673	2.286				2.043	11.5

6C - FORM VI VOA-3
VOLATILE ORGANICS INITIAL CALIBRATION DATA
Contract:

Lab Name:	Spectrum Analytical, Inc.	Case No.:	L1820	SAS No.:	SDG No.:	SL1820
Lab Code:	MITKEM					
Instrument ID:	V6	Calibration Date(s): 08/28/2012 08/28/2012				
Heated Purge: (Y/N)	N	Calibration Times: 9:45 12:31				
Purge Volume:	5	(mL)				
GC Column:	DB-624	ID:	0.25	(mm)	Length:	30 (mm)

LAB FILE ID: RRF005 = V6I9324.D RRF020 = V6I9323.D RRF050 = V6I9322.D RRF100 = V6I9328.D RRF200 = V6I9327.D
RRF001 = V6I9325.D

COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001	RRF		% RSD
4-Chlorotoluene	0.752	0.670	0.703	0.688	0.652	0.759		0.704	6.2
tert-Butylbenzene	2.542	2.369	2.371	2.240	2.035	2.654		2.368	9.2
1,2,4-Trimethylbenzene	2.326	2.118	2.075	1.946	1.694	2.327		2.081	11.6
sec-Butylbenzene	2.796	2.494	2.435	2.235	1.904	2.902		2.461	14.9
4-Isopropyltoluene	2.312	2.113	2.088	1.923	1.680	2.409		2.087	12.6
1,3-Dichlorobenzene	1.380	1.310	1.308	1.275	1.157	1.423		1.309	7.0
1,4-Dichlorobenzene	1.652	1.483	1.442	1.367	1.214	1.756		1.486	13.1
n-Butylbenzene	2.021	1.970	1.918	1.754	1.523	2.070		1.876	10.9
1,2-Dichlorobenzene	1.471	1.360	1.347	1.299	1.155	1.495		1.354	9.1
1,2-Dibromo-3-chloropropane	0.177	0.178	0.164	0.176	0.169	0.161		0.171	4.2
1,2,4-Trichlorobenzene	0.860	0.825	0.828	0.749	0.739	0.859		0.810	6.6
Hexachlorobutadiene	0.339	0.304	0.291	0.262	0.264	0.379		0.306	14.9
1,2,3-Trichlorobenzene	0.785	0.719	0.724	0.671	0.650	0.840		0.731	9.7
Naphthalene	2.485	2.339	2.175	2.076	1.761	2.603		2.240	13.6

Contract:

Lab Code: MITKEM

Case No.: L1820

SAS No.:

SDG No.: SL1820

Instrument ID: V6

Calibration Date(s): 08/28/2012

08/28/2012

Heated Purge: (Y/N) N

Calibration Times: 9:45

12:31

Purge Volume: 5

(mL)

GC Column: DB-624

ID: 0.25

(mm)

Length: 30

(mm)

LAB FILE ID: RRF005 = <u>V6I9324.D</u> RRF020 = <u>V6I9323.D</u> RRF050 = <u>V6I9322.D</u> RRF100 = <u>V6I9328.D</u> RRF200 = <u>V6I9327.D</u>											
RRF001 = <u>V6I9325.D</u>											
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF200	RRF001				RRF	% RSD
Dibromofluoromethane	0.291	0.295	0.292	0.296	0.296	0.295				0.294	0.7
1,2-Dichloroethane-d4	0.060	0.064	0.067	0.062	0.063	0.063				0.063	3.5
Toluene-d8	1.209	1.197	1.181	1.173	1.175	1.162				1.183	1.5
Bromofluorobenzene	0.512	0.520	0.516	0.523	0.548	0.491				0.519	3.5

Data File: \\avogadro\organics\V6.i\120828.B\V6I9322.D
Report Date: 28-Aug-2012 16:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828.B\V6I9322.D
Lab Smp Id: VSTD0506Z Client Smp ID: VSTD0506Z
Inj Date : 28-AUG-2012 09:45
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0506Z,VSTD0506Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120828.B\v68260Gadd-6lvl.m
Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 09:45 Cal File: V6I9322.D
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.589	1.590 (0.310)		171861	50.0000	48
2 Freon114	85	1.696	1.697 (0.331)		318961	50.0000	48
3 Chloromethane	50	1.779	1.768 (0.347)		388695	50.0000	52
4 Vinyl Chloride	62	1.850	1.850 (0.361)		331080	50.0000	51
5 Bromomethane	94	2.134	2.134 (0.416)		225795	50.0000	49
6 Chloroethane	64	2.216	2.217 (0.432)		187137	50.0000	50
7 Trichlorofluoromethane	101	2.406	2.407 (0.469)		447140	50.0000	52
126 Ethanol	46	2.536	2.537 (0.495)		54121	5000.00	6500(A)
8 Ether	59	2.607	2.620 (0.508)		203676	50.0000	53
9 Acrolein	56	2.725	2.726 (0.532)		256694	250.000	270(A)
10 1,1-Dichloroethene	96	2.808	2.809 (0.548)		300961	50.0000	58
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.808	2.809 (0.548)		276018	50.0000	48
12 Acetone	58	2.844	2.844 (0.555)		30126	50.0000	46
13 Iodomethane	142	2.950	2.963 (0.575)		553749	50.0000	49
14 Carbon Disulfide	76	2.986	2.998 (0.582)		1088715	50.0000	51
15 Acetonitrile	41	3.068	3.069 (0.598)		681311	500.000	480(A)
16 Allyl Chloride	39	3.068	3.069 (0.598)		369194	50.0000	55
17 Methyl Acetate	43	3.080	3.081 (0.601)		263629	50.0000	52
18 Methylene Chloride	84	3.175	3.199 (0.619)		300177	50.0000	42
19 tert-Butanol	59	3.234	3.235 (0.631)		57764	100.000	100
20 Acrylonitrile	53	3.364	3.365 (0.656)		107844	50.0000	51
21 trans-1,2-Dichloroethene	96	3.376	3.377 (0.658)		260293	50.0000	51
22 Methyl tert-butyl ether	73	3.364	3.377 (0.656)		723670	50.0000	51

						AMOUNTS	
		QUANT	SIG			CAL -AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 1,1-Dichloroethane	63	3.707	3.708	(0.723)	446392	50.0000	51
24 Vinyl acetate	43	3.731	3.732	(0.728)	865724	50.0000	52
25 Diisopropyl Ether	45	3.731	3.732	(0.728)	818276	50.0000	51
26 2-Chloro-1,3-Butadiene	53	3.778	3.779	(0.737)	391281	50.0000	52
27 Ethyl tert-butyl ether	59	4.015	4.028	(0.783)	753890	50.0000	50
29 2,2-Dichloropropane	77	4.169	4.170	(0.813)	216915	50.0000	50
28 cis-1,2-Dichloroethene	96	4.169	4.170	(0.813)	265856	50.0000	52
30 2-Butanone	72	4.169	4.170	(0.813)	34277	50.0000	50
32 Propionitrile	54	4.228	4.229	(0.825)	389416	500.000	500(A)
33 Methacrylonitrile	41	4.346	4.347	(0.848)	309713	100.000	100
34 Bromochloromethane	128	4.358	4.371	(0.850)	139355	50.0000	50
31 Tetrahydrofuran	72	4.406	4.406	(0.859)	69957	100.000	96
35 Chloroform	83	4.417	4.418	(0.862)	433912	50.0000	50
\$ 36 Dibromofluoromethane	113	4.548	4.548	(0.887)	264443	50.0000	50
37 1,1,1-Trichloroethane	97	4.583	4.584	(0.894)	355963	50.0000	48
38 Cyclohexane	56	4.630	4.631	(0.903)	392265	50.0000	48
39 1,1-Dichloropropene	110	4.713	4.714	(0.919)	122535	50.0000	50
40 Carbon Tetrachloride	117	4.713	4.726	(0.919)	377392	50.0000	49
41 Isobutyl Alcohol	43	4.772	4.785	(0.931)	239585	1000.00	1000(A)
\$ 42 1,2-Dichloroethane-d4	102	4.843	4.844	(0.945)	60421	50.0000	53
43 Benzene	78	4.891	4.903	(0.954)	894766	50.0000	51
44 1,2-Dichloroethane	62	4.903	4.915	(0.956)	370309	50.0000	52
45 tert-Amyl methyl ether	73	4.962	4.962	(0.968)	708512	50.0000	50
M 50 1,2-Dichloroethene (Total)	96				526149	100.000	(a)
* 46 Fluorobenzene	96	5.127	5.128	(1.000)	904916	50.0000	
47 Trichloroethene	130	5.447	5.448	(1.062)	260383	50.0000	48
48 Methylcyclohexane	83	5.624	5.625	(1.097)	307613	50.0000	48
49 1,2-Dichloropropane	63	5.660	5.661	(1.104)	236105	50.0000	49
51 Methyl Methacrylate	69	5.731	5.743	(1.118)	195912	50.0000	50
52 Dibromomethane	93	5.778	5.779	(1.127)	165187	50.0000	51
53 1,4-Dioxane	88	5.778	5.779	(1.127)	41689	1000.00	1200(A)
54 Bromodichloromethane	83	5.908	5.909	(1.152)	347052	50.0000	51
55 2-Chloroethyl vinyl ether	63	6.180	6.655	(1.205)	16338	50.0000	34(TQMH)M6 AED 08/28
56 cis-1,3-Dichloropropene	75	6.322	6.335	(1.233)	382618	50.0000	51
57 4-Methyl-2-pentanone	43	6.464	6.465	(1.261)	261682	50.0000	48
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	870012	50.0000	50
59 Toluene	91	6.654	6.655	(1.298)	971797	50.0000	51
60 trans-1,3-Dichloropropene	75	6.879	6.879	(1.342)	366429	50.0000	54
61 Ethyl Methacrylate	69	6.950	6.950	(1.355)	277582	50.0000	50
62 1,1,2-Trichloroethane	97	7.068	7.069	(1.378)	218790	50.0000	50
63 Tetrachloroethene	164	7.210	7.211	(0.890)	215066	50.0000	47
64 1,3-Dichloropropane	76	7.245	7.246	(0.895)	360240	50.0000	51
65 2-Hexanone	43	7.316	7.317	(0.904)	178565	50.0000	48
66 Dibromochloromethane	129	7.482	7.483	(0.924)	299646	50.0000	51
67 1,2-Dibromoethane	107	7.612	7.613	(0.940)	258286	50.0000	52
69 1-Chlorohexane	91	8.086	8.086	(0.999)	314368	50.0000	47(Q)
* 68 Chlorobenzene-d5	117	8.097	8.098	(1.000)	736906	50.0000	
70 Chlorobenzene	112	8.133	8.134	(1.004)	661550	50.0000	51
71 1,1,1,2-Tetrachloroethane	131	8.216	8.216	(1.015)	275754	50.0000	51
72 Ethylbenzene	106	8.239	8.240	(1.018)	350083	50.0000	51
73 m,p-Xylene	106	8.370	8.370	(1.034)	852074	100.000	100
74 o-Xylene	106	8.819	8.820	(1.089)	423290	50.0000	51
75 Styrene	104	8.831	8.832	(1.091)	728906	50.0000	50
76 Bromoform	173	9.056	9.057	(1.118)	225784	50.0000	52

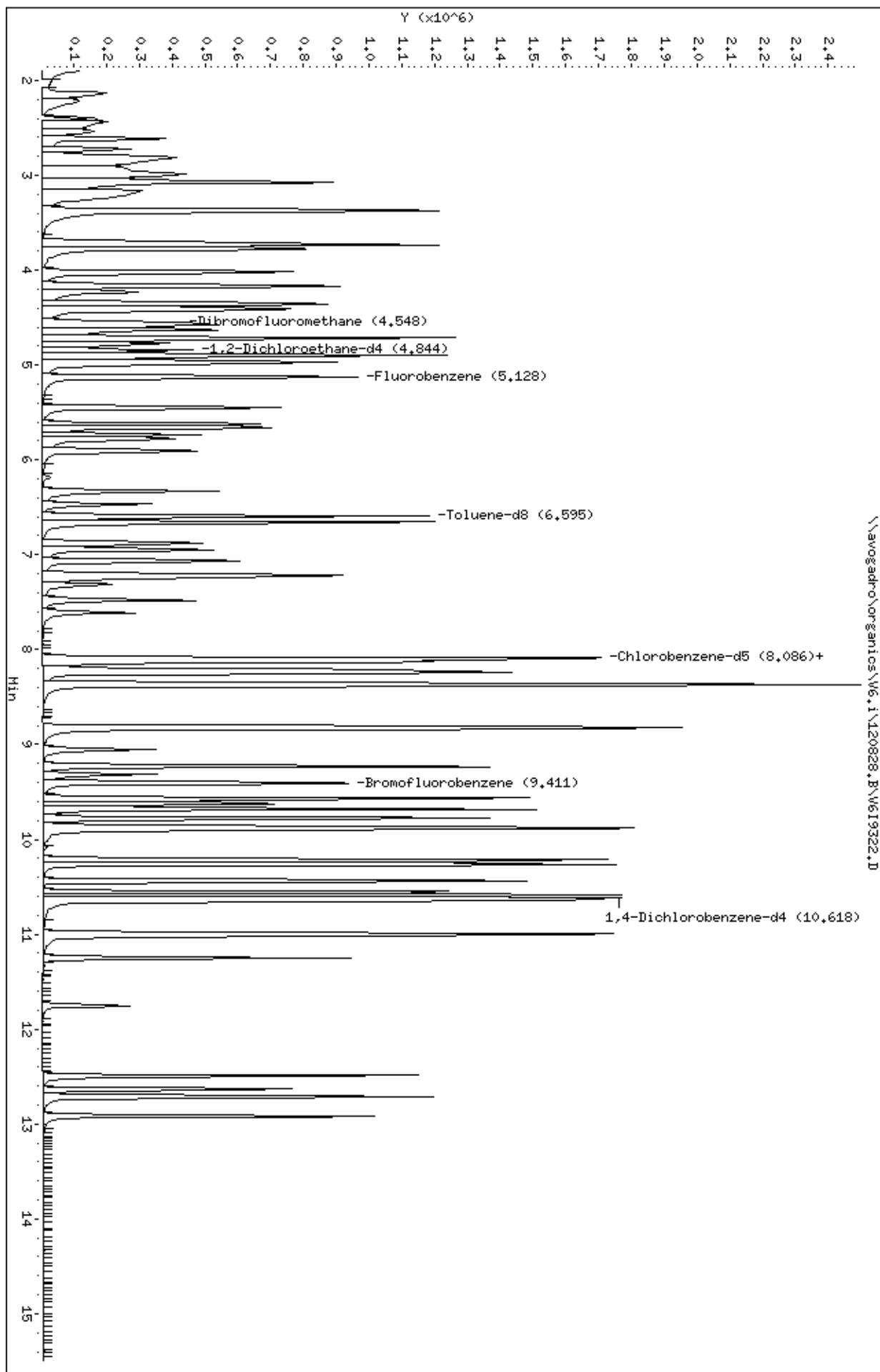
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.233	9.234 (1.140)		1035011		50.0000	51
78 trans-1,4-Dichloro-2-butene	75	9.316	9.317 (1.151)		98447		50.0000	52
\$ 79 Bromofluorobenzene	95	9.399	9.400 (1.161)		380587		50.0000	49
80 1,1,2,2-Tetrachloroethane	77	9.565	9.565 (0.901)		544856		50.0000	51
81 Bromobenzene	156	9.576	9.577 (0.902)		326033		50.0000	52
82 1,2,3-Trichloropropane	75	9.624	9.613 (0.906)		397277		50.0000	47(M)M6 AED 08/28
83 n-Propylbenzene	120	9.683	9.684 (0.912)		297463		50.0000	50
84 2-Chlorotoluene	126	9.778	9.778 (0.921)		282651		50.0000	49
85 1,3,5-Trimethylbenzene	105	9.872	9.873 (0.930)		888367		50.0000	50
86 4-Chlorotoluene	126	9.896	9.897 (0.932)		308154		50.0000	50
M 94 Xylene (Total)	106				1275364		150.000	(a)
87 tert-Butylbenzene	119	10.215	10.583 (0.962)		1039476		50.0000	50(H)
88 1,2,4-Trimethylbenzene	105	10.263	10.264 (0.967)		909735		50.0000	50
89 sec-Butylbenzene	105	10.440	10.441 (0.983)		1067580		50.0000	49
90 1,3-Dichlorobenzene	146	10.559	10.548 (0.994)		573336		50.0000	50
91 4-Isopropyltoluene	119	10.582	10.583 (0.997)		915493		50.0000	50
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.619 (1.000)		438441		50.0000	
93 1,4-Dichlorobenzene	146	10.641	10.642 (1.002)		632382		50.0000	48
95 n-Butylbenzene	91	10.985	10.985 (1.035)		840782		50.0000	51
96 1,2-Dichlorobenzene	146	11.008	11.009 (1.037)		590371		50.0000	50
97 Hexachloroethane	117	11.245	11.246 (1.059)		209227		50.0000	49
98 1,2-Dibromo-3-chloropropane	75	11.754	11.754 (1.107)		71957		50.0000	48
141 1,3,5-Trichlorobenzene	182	12.487	12.488 (2.435)		344912		50.0000	52(A)
99 1,2,4-Trichlorobenzene	180	12.487	12.488 (1.176)		362922		50.0000	51
100 Hexachlorobutadiene	225	12.641	12.630 (1.191)		127785		50.0000	50
101 Naphthalene	128	12.712	12.713 (1.197)		953459		50.0000	48
102 1,2,3-Trichlorobenzene	180	12.913	12.914 (1.216)		317566		50.0000	50

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6.1\120828.B\W619322.D
Date : 28-AUG-2012 09:45
Client ID: VSTD0506Z
Sample Info: 5HL,VSTD0506Z,VSTD0506Z
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120828.B\V6I9323.D
Report Date: 28-Aug-2012 16:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828.B\V6I9323.D
Lab Smp Id: VSTD0206Z Client Smp ID: VSTD0206Z
Inj Date : 28-AUG-2012 10:31
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0206Z,VSTD0206Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120828.B\v68260Gadd-6lvl.m
Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 10:31 Cal File: V6I9323.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.593	1.590 (0.310)		68700	20.0000	20
2 Freon114	85	1.699	1.697 (0.331)		124502	20.0000	19
3 Chloromethane	50	1.770	1.768 (0.345)		152815	20.0000	21
4 Vinyl Chloride	62	1.853	1.850 (0.361)		125721	20.0000	20
5 Bromomethane	94	2.137	2.134 (0.417)		86050	20.0000	19
6 Chloroethane	64	2.220	2.217 (0.433)		69743	20.0000	19
7 Trichlorofluoromethane	101	2.409	2.407 (0.470)		168575	20.0000	20
126 Ethanol	46	2.539	2.537 (0.495)		21937	2000.00	2700(A)
8 Ether	59	2.610	2.620 (0.509)		80320	20.0000	21
9 Acrolein	56	2.728	2.726 (0.532)		104688	100.000	110
10 1,1-Dichloroethene	96	2.811	2.809 (0.548)		67356	20.0000	13
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.811	2.809 (0.548)		107066	20.0000	19
12 Acetone	58	2.835	2.844 (0.553)		15810	20.0000	24
13 Iodomethane	142	2.953	2.963 (0.576)		199185	20.0000	18
14 Carbon Disulfide	76	2.989	2.998 (0.583)		419427	20.0000	20
15 Acetonitrile	41	3.072	3.069 (0.599)		298329	200.000	210(A)
16 Allyl Chloride	39	3.072	3.069 (0.599)		141207	20.0000	21(Q)
17 Methyl Acetate	43	3.083	3.081 (0.601)		107414	20.0000	21
18 Methylene Chloride	84	3.178	3.199 (0.619)		117895	20.0000	17
19 tert-Butanol	59	3.237	3.235 (0.631)		23675	40.0000	44
20 Acrylonitrile	53	3.367	3.365 (0.656)		42061	20.0000	20
21 trans-1,2-Dichloroethene	96	3.379	3.377 (0.659)		95435	20.0000	19
22 Methyl tert-butyl ether	73	3.367	3.377 (0.656)		293365	20.0000	21

Data File: \\avogadro\organics\V6.i\120828.B\V6I9323.D
Report Date: 28-Aug-2012 16:14

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.699	3.708 (0.721)		171944		20.0000	20
24 Vinyl acetate	43	3.734	3.732 (0.728)		339961		20.0000	21
25 Diisopropyl Ether	45	3.734	3.732 (0.728)		320287		20.0000	20
26 2-Chloro-1,3-Butadiene	53	3.770	3.779 (0.735)		146955		20.0000	20
27 Ethyl tert-butyl ether	59	4.018	4.028 (0.783)		300102		20.0000	20
29 2,2-Dichloropropane	77	4.160	4.170 (0.811)		83363		20.0000	20
28 cis-1,2-Dichloroethene	96	4.172	4.170 (0.813)		101685		20.0000	20
30 2-Butanone	72	4.172	4.170 (0.813)		15012		20.0000	22
32 Propionitrile	54	4.231	4.229 (0.825)		158091		200.000	200(A)
33 Methacrylonitrile	41	4.350	4.347 (0.848)		123297		40.0000	41
34 Bromochloromethane	128	4.361	4.371 (0.850)		55490		20.0000	20
31 Tetrahydrofuran	72	4.397	4.406 (0.857)		28676		40.0000	40
35 Chloroform	83	4.421	4.418 (0.862)		169893		20.0000	20
\$ 36 Dibromofluoromethane	113	4.551	4.548 (0.887)		263188		50.0000	50
37 1,1,1-Trichloroethane	97	4.574	4.584 (0.892)		134822		20.0000	18
38 Cyclohexane	56	4.634	4.631 (0.903)		148824		20.0000	18
39 1,1-Dichloropropene	110	4.716	4.714 (0.919)		45895		20.0000	19
40 Carbon Tetrachloride	117	4.716	4.726 (0.919)		141741		20.0000	19
41 Isobutyl Alcohol	43	4.776	4.785 (0.931)		99058		400.000	420(A)
\$ 42 1,2-Dichloroethane-d4	102	4.847	4.844 (0.945)		56662		50.0000	50
43 Benzene	78	4.894	4.903 (0.954)		351050		20.0000	20
44 1,2-Dichloroethane	62	4.906	4.915 (0.956)		136156		20.0000	19
45 tert-Amyl methyl ether	73	4.965	4.962 (0.968)		278637		20.0000	20
M 50 1,2-Dichloroethene (Total)	96				197120		40.0000	(a)
* 46 Fluorobenzene	96	5.131	5.128 (1.000)		890676		50.0000	
47 Trichloroethene	130	5.450	5.448 (1.062)		102588		20.0000	19
48 Methylcyclohexane	83	5.627	5.625 (1.097)		117681		20.0000	19
49 1,2-Dichloropropane	63	5.663	5.661 (1.104)		91878		20.0000	19
51 Methyl Methacrylate	69	5.734	5.743 (1.118)		72973		20.0000	19
52 Dibromomethane	93	5.781	5.779 (1.127)		62692		20.0000	20
53 1,4-Dioxane	88	5.781	5.779 (1.127)		17901		400.000	530(A)
54 Bromodichloromethane	83	5.900	5.909 (1.150)		133614		20.0000	20
55 2-Chloroethyl vinyl ether	63	6.184	6.655 (1.205)		5775		20.0000	19(TQM)M6 AED 08/28
56 cis-1,3-Dichloropropene	75	6.326	6.335 (1.233)		146211		20.0000	20
57 4-Methyl-2-pentanone	43	6.468	6.465 (1.261)		105191		20.0000	19
\$ 58 Toluene-d8	98	6.586	6.595 (0.813)		862150		50.0000	50
59 Toluene	91	6.657	6.655 (1.297)		382954		20.0000	20
60 trans-1,3-Dichloropropene	75	6.882	6.879 (1.341)		136147		20.0000	20
61 Ethyl Methacrylate	69	6.941	6.950 (1.353)		107867		20.0000	20
62 1,1,2-Trichloroethane	97	7.071	7.069 (1.378)		87044		20.0000	20
63 Tetrachloroethene	164	7.213	7.211 (0.890)		85770		20.0000	19
64 1,3-Dichloropropane	76	7.237	7.246 (0.893)		141680		20.0000	20
65 2-Hexanone	43	7.320	7.317 (0.904)		75101		20.0000	20
66 Dibromochloromethane	129	7.485	7.483 (0.924)		116961		20.0000	20
67 1,2-Dibromoethane	107	7.615	7.613 (0.940)		100773		20.0000	21
69 1-Chlorohexane	91	8.089	8.086 (0.999)		127400		20.0000	19(Q)
* 68 Chlorobenzene-d5	117	8.101	8.098 (1.000)		720089		50.0000	
70 Chlorobenzene	112	8.124	8.134 (1.003)		265967		20.0000	21
71 1,1,1,2-Tetrachloroethane	131	8.207	8.216 (1.013)		105339		20.0000	20
72 Ethylbenzene	106	8.243	8.240 (1.018)		133047		20.0000	20
73 m,p-Xylene	106	8.373	8.370 (1.034)		340201		40.0000	41
74 o-Xylene	106	8.811	8.820 (1.088)		164950		20.0000	20
75 Styrene	104	8.834	8.832 (1.091)		289849		20.0000	20
76 Bromoform	173	9.059	9.057 (1.118)		86360		20.0000	20

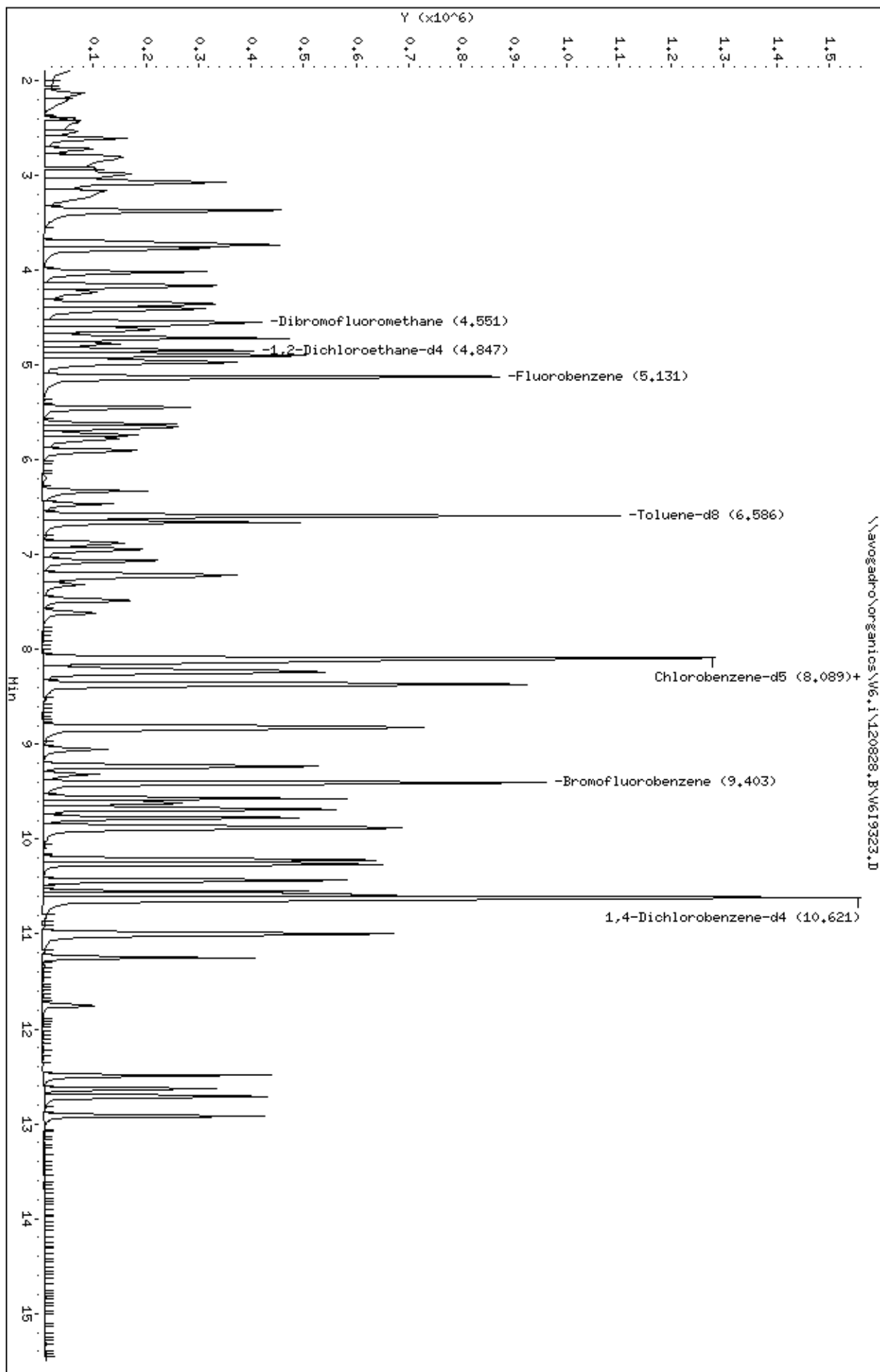
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.225	9.234	(1.139)	414320		20.0000	21
78 trans-1,4-Dichloro-2-butene	75	9.319	9.317	(1.150)	35351		20.0000	19
\$ 79 Bromofluorobenzene	95	9.402	9.400	(1.161)	374610		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.568	9.565	(0.901)	207458		20.0000	20
81 Bromobenzene	156	9.580	9.577	(0.902)	124968		20.0000	20
82 1,2,3-Trichloropropane	75	9.615	9.613	(0.905)	152416		20.0000	18
83 n-Propylbenzene	120	9.686	9.684	(0.912)	116086		20.0000	20
84 2-Chlorotoluene	126	9.781	9.778	(0.921)	108506		20.0000	19
85 1,3,5-Trimethylbenzene	105	9.875	9.873	(0.930)	361354		20.0000	21
86 4-Chlorotoluene	126	9.899	9.897	(0.932)	115041		20.0000	19
M 94 Xylene (Total)	106				505151		60.0000	(a)
87 tert-Butylbenzene	119	10.207	10.583	(0.961)	406579		20.0000	20(H)
88 1,2,4-Trimethylbenzene	105	10.266	10.264	(0.967)	363508		20.0000	20
89 sec-Butylbenzene	105	10.432	10.441	(0.982)	428108		20.0000	20
90 1,3-Dichlorobenzene	146	10.550	10.548	(0.993)	224788		20.0000	20
91 4-Isopropyltoluene	119	10.585	10.583	(0.997)	362610		20.0000	20
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.619	(1.000)	429097		50.0000	
93 1,4-Dichlorobenzene	146	10.645	10.642	(1.002)	254563		20.0000	20
95 n-Butylbenzene	91	10.988	10.985	(1.035)	338197		20.0000	21
96 1,2-Dichlorobenzene	146	11.011	11.009	(1.037)	233354		20.0000	20
97 Hexachloroethane	117	11.248	11.246	(1.059)	81684		20.0000	20
98 1,2-Dibromo-3-chloropropane	75	11.745	11.754	(1.106)	30562		20.0000	21
141 1,3,5-Trichlorobenzene	182	12.491	12.488	(2.434)	133160		20.0000	20(A)
99 1,2,4-Trichlorobenzene	180	12.491	12.488	(1.176)	141558		20.0000	20
100 Hexachlorobutadiene	225	12.633	12.630	(1.189)	52096		20.0000	21
101 Naphthalene	128	12.715	12.713	(1.197)	401496		20.0000	21
102 1,2,3-Trichlorobenzene	180	12.916	12.914	(1.216)	123405		20.0000	20

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6.1\120828.B\W619323.D
Date : 28-AUG-2012 10:31
Client ID: WSTD0206Z
Sample Info: 5HL,WSTD0206Z,WSTD0206Z
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120828.B\V6I9324.D
Report Date: 28-Aug-2012 16:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828.B\V6I9324.D
Lab Smp Id: VSTD0056Z Client Smp ID: VSTD0056Z
Inj Date : 28-AUG-2012 10:55
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0056Z,VSTD0056Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120828.B\v68260Gadd-6lvl.m
Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 10:55 Cal File: V6I9324.D
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.603	1.590 (0.313)		18751	5.00000	5
2 Freon114	85	1.697	1.697 (0.331)		35030	5.00000	5
3 Chloromethane	50	1.768	1.768 (0.345)		34905	5.00000	5
4 Vinyl Chloride	62	1.863	1.850 (0.363)		35433	5.00000	6
5 Bromomethane	94	2.135	2.134 (0.416)		22673	5.00000	5
6 Chloroethane	64	2.218	2.217 (0.433)		19576	5.00000	5
7 Trichlorofluoromethane	101	2.407	2.407 (0.469)		46322	5.00000	6
126 Ethanol	46	2.537	2.537 (0.495)		3229	500.000	400(AQ)
8 Ether	59	2.620	2.620 (0.511)		19977	5.00000	5
9 Acrolein	56	2.727	2.726 (0.532)		23475	25.0000	26
10 1,1-Dichloroethene	96	2.810	2.809 (0.548)		26755	5.00000	5(Q)
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.821	2.809 (0.550)		29121	5.00000	5
12 Acetone	58	2.845	2.844 (0.555)		3141	5.00000	5
13 Iodomethane	142	2.963	2.963 (0.578)		58354	5.00000	5
14 Carbon Disulfide	76	2.999	2.998 (0.585)		112017	5.00000	5
15 Acetonitrile	41	3.070	3.069 (0.599)		64987	50.0000	47
16 Allyl Chloride	39	3.070	3.069 (0.599)		29113	5.00000	4
17 Methyl Acetate	43	3.082	3.081 (0.601)		24647	5.00000	5
18 Methylene Chloride	84	3.176	3.199 (0.619)		36237	5.00000	5
19 tert-Butanol	59	3.236	3.235 (0.631)		4873	10.0000	9
20 Acrylonitrile	53	3.378	3.365 (0.659)		8115	5.00000	4
21 trans-1,2-Dichloroethene	96	3.378	3.377 (0.659)		26145	5.00000	5
22 Methyl tert-butyl ether	73	3.366	3.377 (0.656)		71828	5.00000	5

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.709	3.708 (0.723)		44504		5.00000	5
24 Vinyl acetate	43	3.733	3.732 (0.728)		84803		5.00000	5
25 Diisopropyl Ether	45	3.733	3.732 (0.728)		82335		5.00000	5
26 2-Chloro-1,3-Butadiene	53	3.780	3.779 (0.737)		37822		5.00000	5
27 Ethyl tert-butyl ether	59	4.017	4.028 (0.783)		77431		5.00000	5
29 2,2-Dichloropropane	77	4.170	4.170 (0.813)		23221		5.00000	6
28 cis-1,2-Dichloroethene	96	4.170	4.170 (0.813)		24874		5.00000	5
30 2-Butanone	72	4.182	4.170 (0.815)		2810		5.00000	4(Q)
32 Propionitrile	54	4.253	4.229 (0.829)		32829		50.0000	43
33 Methacrylonitrile	41	4.348	4.347 (0.848)		24860		10.0000	8
34 Bromochloromethane	128	4.372	4.371 (0.852)		13605		5.00000	5
31 Tetrahydrofuran	72	4.407	4.406 (0.859)		7148		10.0000	10
35 Chloroform	83	4.419	4.418 (0.862)		43958		5.00000	5
\$ 36 Dibromofluoromethane	113	4.549	4.548 (0.887)		255964		50.0000	49
37 1,1,1-Trichloroethane	97	4.585	4.584 (0.894)		37429		5.00000	5
38 Cyclohexane	56	4.632	4.631 (0.903)		43056		5.00000	5
39 1,1-Dichloropropene	110	4.715	4.714 (0.919)		11629		5.00000	5
40 Carbon Tetrachloride	117	4.726	4.726 (0.922)		38254		5.00000	5
41 Isobutyl Alcohol	43	4.786	4.785 (0.933)		19772		100.000	86
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.844 (0.945)		52902		50.0000	48
43 Benzene	78	4.892	4.903 (0.954)		91699		5.00000	5
44 1,2-Dichloroethane	62	4.916	4.915 (0.958)		34900		5.00000	5
45 tert-Amyl methyl ether	73	4.963	4.962 (0.968)		72350		5.00000	5
M 50 1,2-Dichloroethene (Total)	96				51019		10.0000	(a)
* 46 Fluorobenzene	96	5.129	5.128 (1.000)		879573		50.0000	
47 Trichloroethene	130	5.448	5.448 (1.062)		27758		5.00000	5
48 Methylcyclohexane	83	5.626	5.625 (1.097)		31210		5.00000	5
49 1,2-Dichloropropane	63	5.661	5.661 (1.104)		23882		5.00000	5
51 Methyl Methacrylate	69	5.744	5.743 (1.120)		17475		5.00000	4
52 Dibromomethane	93	5.780	5.779 (1.127)		15585		5.00000	5
53 1,4-Dioxane	88	5.780	5.779 (1.127)		2392		100.000	71
54 Bromodichloromethane	83	5.910	5.909 (1.152)		32921		5.00000	5
55 2-Chloroethyl vinyl ether	63	6.194	6.655 (1.208)		1117		5.00000	4(TQM)M6 AED 08/28
56 cis-1,3-Dichloropropene	75	6.336	6.335 (1.235)		35863		5.00000	5
57 4-Methyl-2-pentanone	43	6.466	6.465 (1.261)		26842		5.00000	5
\$ 58 Toluene-d8	98	6.596	6.595 (0.814)		849339		50.0000	51
59 Toluene	91	6.655	6.655 (1.298)		98783		5.00000	5
60 trans-1,3-Dichloropropene	75	6.892	6.879 (1.344)		32714		5.00000	5
61 Ethyl Methacrylate	69	6.951	6.950 (1.355)		25915		5.00000	5
62 1,1,2-Trichloroethane	97	7.069	7.069 (1.378)		21096		5.00000	5
63 Tetrachloroethene	164	7.211	7.211 (0.890)		23337		5.00000	5
64 1,3-Dichloropropane	76	7.247	7.246 (0.895)		34266		5.00000	5
65 2-Hexanone	43	7.330	7.317 (0.905)		16213		5.00000	4
66 Dibromochloromethane	129	7.484	7.483 (0.924)		28364		5.00000	5(T)
67 1,2-Dibromoethane	107	7.614	7.613 (0.940)		23729		5.00000	5
69 1-Chlorohexane	91	8.087	8.086 (0.999)		34025		5.00000	5(Q)
* 68 Chlorobenzene-d5	117	8.099	8.098 (1.000)		702771		50.0000	
70 Chlorobenzene	112	8.123	8.134 (1.003)		70214		5.00000	6
71 1,1,1,2-Tetrachloroethane	131	8.217	8.216 (1.015)		26803		5.00000	5
72 Ethylbenzene	106	8.241	8.240 (1.018)		35278		5.00000	5
73 m,p-Xylene	106	8.371	8.370 (1.034)		88818		10.0000	11
74 o-Xylene	106	8.821	8.820 (1.089)		41139		5.00000	5
75 Styrene	104	8.832	8.832 (1.091)		72477		5.00000	5
76 Bromoform	173	9.057	9.057 (1.118)		19752		5.00000	5(T)

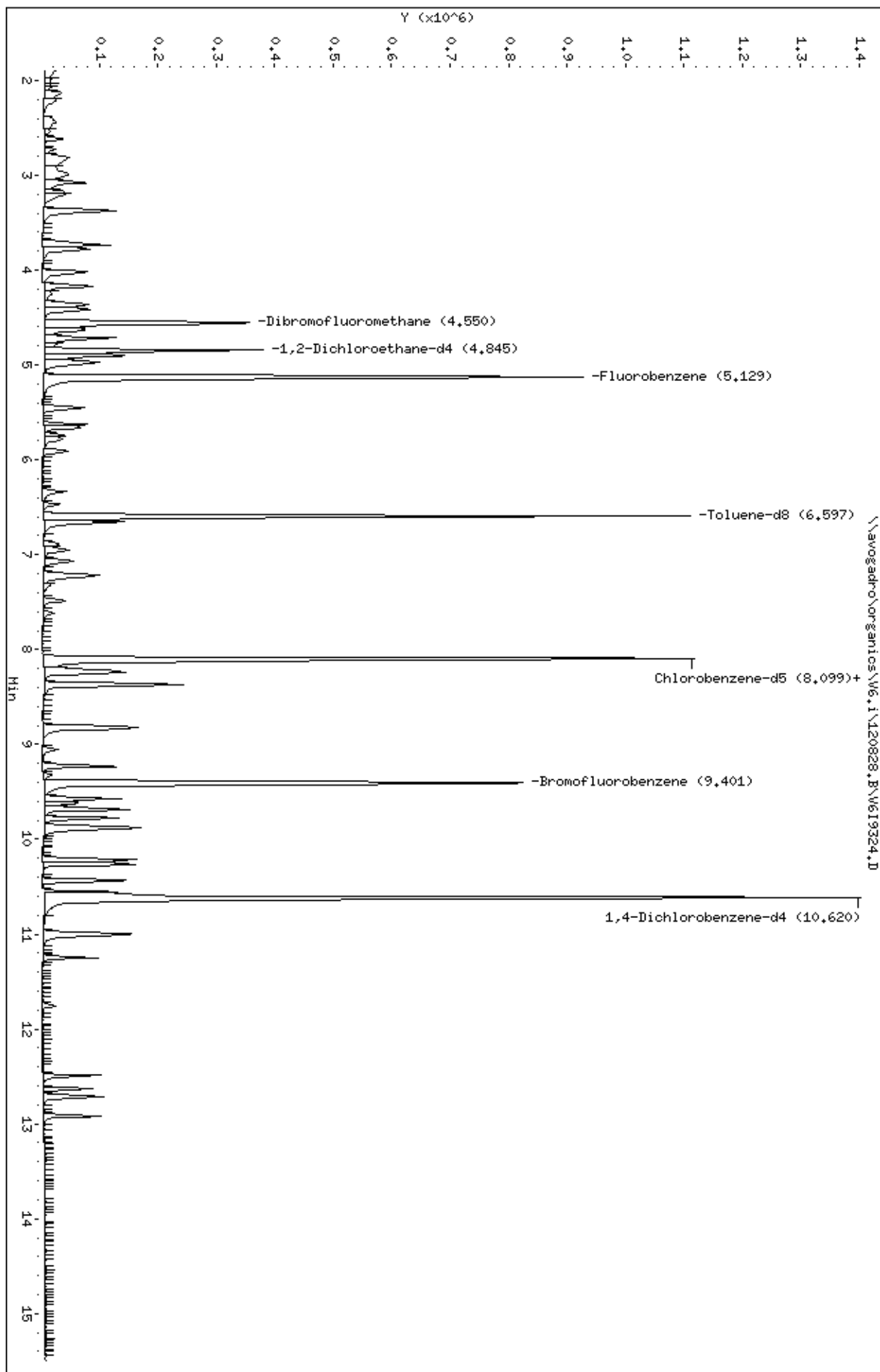
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.235	9.234 (1.140)		107658		5.00000	6
78 trans-1,4-Dichloro-2-butene	75	9.329	9.317 (1.152)		5778		5.00000	3
\$ 79 Bromofluorobenzene	95	9.400	9.400 (1.161)		360041		50.0000	49
80 1,1,2,2-Tetrachloroethane	77	9.578	9.565 (0.902)		53314		5.00000	5
81 Bromobenzene	156	9.578	9.577 (0.902)		30141		5.00000	5
82 1,2,3-Trichloropropane	75	9.613	9.613 (0.905)		35957		5.00000	4
83 n-Propylbenzene	120	9.684	9.684 (0.912)		29783		5.00000	5
84 2-Chlorotoluene	126	9.779	9.778 (0.921)		28487		5.00000	5
85 1,3,5-Trimethylbenzene	105	9.874	9.873 (0.930)		93012		5.00000	6
86 4-Chlorotoluene	126	9.897	9.897 (0.932)		30758		5.00000	5
M 94 Xylene (Total)	106				129957		15.0000	(a)
87 tert-Butylbenzene	119	10.217	10.583 (0.962)		103997		5.00000	5(H)
88 1,2,4-Trimethylbenzene	105	10.264	10.264 (0.967)		95174		5.00000	6
89 sec-Butylbenzene	105	10.430	10.441 (0.982)		114400		5.00000	6
90 1,3-Dichlorobenzene	146	10.560	10.548 (0.994)		56474		5.00000	5
91 4-Isopropyltoluene	119	10.584	10.583 (0.997)		94586		5.00000	6
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619 (1.000)		409114		50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.642 (1.002)		67606		5.00000	6
95 n-Butylbenzene	91	10.986	10.985 (1.035)		82697		5.00000	5
96 1,2-Dichlorobenzene	146	11.010	11.009 (1.037)		60176		5.00000	5
97 Hexachloroethane	117	11.246	11.246 (1.059)		20674		5.00000	5
98 1,2-Dibromo-3-chloropropane	75	11.755	11.754 (1.107)		7238		5.00000	5
141 1,3,5-Trichlorobenzene	182	12.489	12.488 (2.435)		31702		5.00000	5(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.488 (1.176)		35179		5.00000	5
100 Hexachlorobutadiene	225	12.631	12.630 (1.189)		13864		5.00000	6
101 Naphthalene	128	12.714	12.713 (1.197)		101669		5.00000	6
102 1,2,3-Trichlorobenzene	180	12.915	12.914 (1.216)		32100		5.00000	5

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6,i\120828.B\W6I9324.D
Date : 28-AUG-2012 10:55
Client ID: VSTD0056Z
Sample Info: 5HL,VSTD0056Z,VSTD0056Z
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120828.B\V6I9325.D
 Lab Smp Id: VSTD0016Z Client Smp ID: VSTD0016Z
 Inj Date : 28-AUG-2012 11:19
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML,VSTD0016Z,VSTD0016Z
 Misc Info :
 Comment :
 Method : \\Avogadro\Organics\V6.i\120828.B\v68260Gadd-6lvl.m
 Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 11:19 Cal File: V6I9325.D
 Als bottle: 6 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
1 Dichlorodifluoromethane	85	1.617	1.590	(0.315)	3197	1.00000	0.9	
2 Freon114	85	1.699	1.697	(0.331)	5894	1.00000	0.9	
3 Chloromethane	50	1.770	1.768	(0.345)	7057	1.00000	1.0	
4 Vinyl Chloride	62	1.853	1.850	(0.361)	6323	1.00000	1	
5 Bromomethane	94	2.137	2.134	(0.417)	5562	1.00000	1(Q)	
6 Chloroethane	64	2.220	2.217	(0.433)	3905	1.00000	1	
7 Trichlorofluoromethane	101	2.409	2.407	(0.470)	6218	1.00000	0.8	
126 Ethanol	46	2.551	2.537	(0.497)	815	100.000	100(Q)	
8 Ether	59	2.622	2.620	(0.511)	2751	1.00000	0.7(Q)	
9 Acrolein	56	2.729	2.726	(0.532)	4114	5.00000	4	
10 1,1-Dichloroethene	96	2.812	2.809	(0.548)	4675	1.00000	0.9	
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.847	2.809	(0.555)	5281	1.00000	1.0	
12 Acetone	58	2.847	2.844	(0.555)	599	1.00000	0.9(Q)	
13 Iodomethane	142	2.954	2.963	(0.576)	12216	1.00000	1	
14 Carbon Disulfide	76	3.001	2.998	(0.585)	21449	1.00000	1	
15 Acetonitrile	41	3.072	3.069	(0.599)	10697	1.00000	8	
16 Allyl Chloride	39	3.072	3.069	(0.599)	5765	1.00000	0.9(Q)	
17 Methyl Acetate	43	3.096	3.081	(0.603)	4220	1.00000	0.8	
18 Methylene Chloride	84	3.202	3.199	(0.624)	11162	1.00000	2	
19 tert-Butanol	59	3.238	3.235	(0.631)	1022	1.00000	2	
20 Acrylonitrile	53	3.380	3.365	(0.659)	859	1.00000	0.4(aQ)	
21 trans-1,2-Dichloroethene	96	3.380	3.377	(0.659)	5049	1.00000	1	
22 Methyl tert-butyl ether	73	3.368	3.377	(0.656)	13066	1.00000	1.0	

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.711	3.708 (0.723)		8872		1.00000	1
24 Vinyl acetate	43	3.735	3.732 (0.728)		15056		1.00000	0.9(T)
25 Diisopropyl Ether	45	3.735	3.732 (0.728)		15740		1.00000	1
26 2-Chloro-1,3-Butadiene	53	3.782	3.779 (0.737)		6299		1.00000	0.9
27 Ethyl tert-butyl ether	59	4.019	4.028 (0.783)		15094		1.00000	1
29 2,2-Dichloropropane	77	4.172	4.170 (0.813)		4406		1.00000	1
28 cis-1,2-Dichloroethene	96	4.172	4.170 (0.813)		4527		1.00000	0.9
30 2-Butanone	72	4.196	4.170 (0.818)		426		1.00000	0.6(QM)M6 AED 08/28
32 Propionitrile	54	4.255	4.229 (0.829)		2300		1.00000	3
33 Methacrylonitrile	41	4.350	4.347 (0.848)		4732		1.00000	2
34 Bromochloromethane	128	4.374	4.371 (0.852)		2523		1.00000	0.9
31 Tetrahydrofuran	72	4.421	4.406 (0.862)		882		1.00000	1(Q)
35 Chloroform	83	4.421	4.418 (0.862)		8150		1.00000	1.0
\$ 36 Dibromofluoromethane	113	4.551	4.548 (0.887)		257559		1.00000	50
37 1,1,1-Trichloroethane	97	4.587	4.584 (0.894)		7444		1.00000	1
38 Cyclohexane	56	4.634	4.631 (0.903)		7706		1.00000	1.0
39 1,1-Dichloropropene	110	4.717	4.714 (0.919)		2510		1.00000	1(Q)
40 Carbon Tetrachloride	117	4.717	4.726 (0.919)		7256		1.00000	1.0
41 Isobutyl Alcohol	43	4.965	4.785 (0.968)		6949		1.00000	30(T)
\$ 42 1,2-Dichloroethane-d4	102	4.847	4.844 (0.945)		55321		1.00000	50
43 Benzene	78	4.894	4.903 (0.954)		17594		1.00000	1
44 1,2-Dichloroethane	62	4.918	4.915 (0.958)		6573		1.00000	1.0(T)
45 tert-Amyl methyl ether	73	4.965	4.962 (0.968)		13916		1.00000	1
M 50 1,2-Dichloroethene (Total)	96				9576		2.00000	(a)
* 46 Fluorobenzene	96	5.131	5.128 (1.000)		873696		50.0000	
47 Trichloroethene	130	5.450	5.448 (1.062)		5724		1.00000	1
48 Methylcyclohexane	83	5.628	5.625 (1.097)		6480		1.00000	1
49 1,2-Dichloropropane	63	5.663	5.661 (1.104)		4161		1.00000	0.9
51 Methyl Methacrylate	69	5.746	5.743 (1.120)		3136		1.00000	0.8
52 Dibromomethane	93	5.793	5.779 (1.129)		2667		1.00000	0.8
53 1,4-Dioxane	88	5.793	5.779 (1.129)		150		1.00000	4(QM)M6 AED 08/28
54 Bromodichloromethane	83	5.912	5.909 (1.152)		6115		1.00000	0.9
55 2-Chloroethyl vinyl ether	63	6.657	6.655 (1.297)		1327		1.00000	4(TQ)
56 cis-1,3-Dichloropropene	75	6.338	6.335 (1.235)		6674		1.00000	0.9
57 4-Methyl-2-pentanone	43	6.468	6.465 (1.261)		4803		1.00000	0.9
\$ 58 Toluene-d8	98	6.598	6.595 (0.815)		843243		1.00000	49
59 Toluene	91	6.657	6.655 (1.297)		19948		1.00000	1
60 trans-1,3-Dichloropropene	75	6.894	6.879 (1.344)		4550		1.00000	0.7
61 Ethyl Methacrylate	69	6.953	6.950 (1.355)		4693		1.00000	0.9
62 1,1,2-Trichloroethane	97	7.071	7.069 (1.378)		3917		1.00000	0.9
63 Tetrachloroethene	164	7.213	7.211 (0.890)		5538		1.00000	1
64 1,3-Dichloropropane	76	7.249	7.246 (0.895)		6181		1.00000	0.9
65 2-Hexanone	43	7.332	7.317 (0.905)		2658		1.00000	0.7(T)
66 Dibromochloromethane	129	7.486	7.483 (0.924)		5093		1.00000	0.9(T)
67 1,2-Dibromoethane	107	7.628	7.613 (0.942)		3983		1.00000	0.8(T)
69 1-Chlorohexane	91	8.089	8.086 (0.999)		8105		1.00000	1(Q)
* 68 Chlorobenzene-d5	117	8.101	8.098 (1.000)		725956		50.0000	
70 Chlorobenzene	112	8.125	8.134 (1.003)		12035		1.00000	0.9(Q)
71 1,1,1,2-Tetrachloroethane	131	8.207	8.216 (1.013)		5162		1.00000	1.0(Q)
72 Ethylbenzene	106	8.243	8.240 (1.018)		6442		1.00000	1.0(Q)
73 m,p-Xylene	106	8.373	8.370 (1.034)		16754		2.00000	2
74 o-Xylene	106	8.811	8.820 (1.088)		8076		1.00000	1.0
75 Styrene	104	8.835	8.832 (1.091)		14061		1.00000	1.0
76 Bromoform	173	9.059	9.057 (1.118)		3145		1.00000	0.7(T)

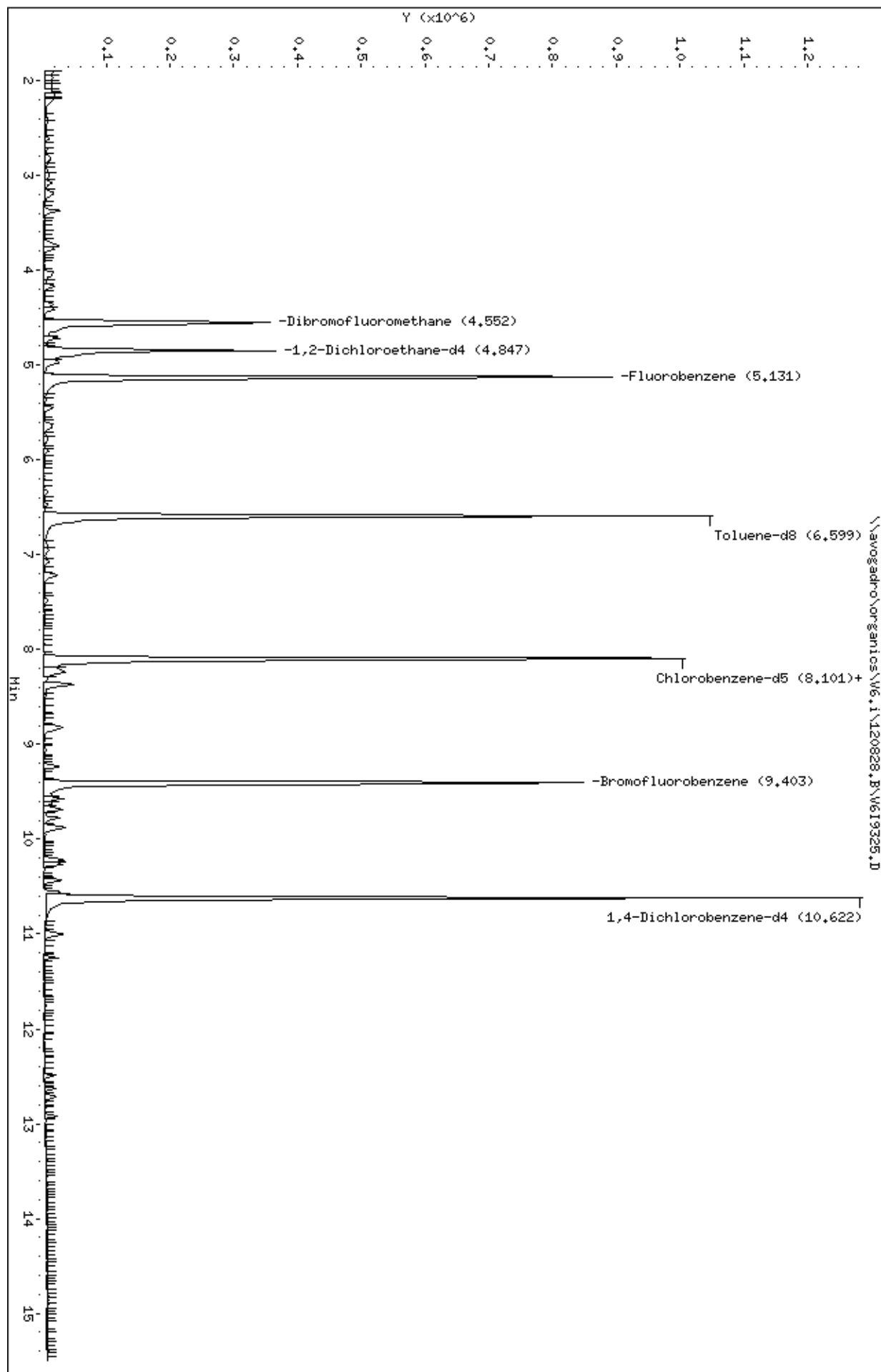
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.225	9.234 (1.139)		20195		1.00000	1
78 trans-1,4-Dichloro-2-butene	75	9.320	9.317 (1.150)		866		1.00000	0.5(Q)
\$ 79 Bromofluorobenzene	95	9.402	9.400 (1.161)		356667		1.00000	47
80 1,1,2,2-Tetrachloroethane	77	9.568	9.565 (0.901)		10745		1.00000	1
81 Bromobenzene	156	9.580	9.577 (0.902)		5595		1.00000	1.0
82 1,2,3-Trichloropropane	75	9.615	9.613 (0.905)		9937		1.00000	1
83 n-Propylbenzene	120	9.686	9.684 (0.912)		5856		1.00000	1
84 2-Chlorotoluene	126	9.781	9.778 (0.921)		5684		1.00000	1(Q)
85 1,3,5-Trimethylbenzene	105	9.876	9.873 (0.930)		18336		1.00000	1
86 4-Chlorotoluene	126	9.899	9.897 (0.932)		6091		1.00000	1
M 94 Xylene (Total)	106				24830		3.00000	(a)
87 tert-Butylbenzene	119	10.219	10.583 (0.962)		21284		1.00000	1(H)
88 1,2,4-Trimethylbenzene	105	10.266	10.264 (0.967)		18663		1.00000	1
89 sec-Butylbenzene	105	10.432	10.441 (0.982)		23273		1.00000	1
90 1,3-Dichlorobenzene	146	10.550	10.548 (0.993)		11412		1.00000	1
91 4-Isopropyltoluene	119	10.586	10.583 (0.997)		19321		1.00000	1
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.619 (1.000)		401035		50.0000	
93 1,4-Dichlorobenzene	146	10.645	10.642 (1.002)		14088		1.00000	1(Q)
95 n-Butylbenzene	91	10.988	10.985 (1.035)		16606		1.00000	1
96 1,2-Dichlorobenzene	146	11.012	11.009 (1.037)		11991		1.00000	1
97 Hexachloroethane	117	11.248	11.246 (1.059)		4126		1.00000	1
98 1,2-Dibromo-3-chloropropane	75	11.745	11.754 (1.106)		1293		1.00000	0.9
141 1,3,5-Trichlorobenzene	182	12.491	12.488 (2.434)		6562		1.00000	1(A)
99 1,2,4-Trichlorobenzene	180	12.491	12.488 (1.176)		6890		1.00000	1
100 Hexachlorobutadiene	225	12.633	12.630 (1.189)		3041		1.00000	1
101 Naphthalene	128	12.716	12.713 (1.197)		20876		1.00000	1
102 1,2,3-Trichlorobenzene	180	12.917	12.914 (1.216)		6738		1.00000	1

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6,i\120828.B\W6I9325.D
Date : 28-AUG-2012 11:19
Client ID: VSTD0016Z
Sample Info: 5M,VSTD0016Z,VSTD0016Z
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120828.B\V6I9327.D
Report Date: 28-Aug-2012 16:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828.B\V6I9327.D
Lab Smp Id: VSTD2006Z Client Smp ID: VSTD2006Z
Inj Date : 28-AUG-2012 12:07
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD2006Z,VSTD2006Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120828.B\v68260Gadd-6lvl.m
Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:07 Cal File: V6I9327.D
Als bottle: 8 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.601	1.590 (0.312)		699381	200.000	190
2 Freon114	85	1.708	1.697 (0.333)		1310311	200.000	190
3 Chloromethane	50	1.779	1.768 (0.347)		1472752	200.000	190
4 Vinyl Chloride	62	1.862	1.850 (0.363)		1232326	200.000	180
5 Bromomethane	94	2.146	2.134 (0.419)		848525	200.000	180(Q)
6 Chloroethane	64	2.217	2.217 (0.432)		728552	200.000	190
7 Trichlorofluoromethane	101	2.406	2.407 (0.469)		1801421	200.000	200(A)
126 Ethanol	46	2.548	2.537 (0.497)		140258	20000.0	16000(AQ)
8 Ether	59	2.619	2.620 (0.511)		809044	200.000	200(Q)
9 Acrolein	56	2.725	2.726 (0.532)		889273	1000.00	910(A)
10 1,1-Dichloroethene	96	2.820	2.809 (0.550)		1162290	200.000	220(AQ)
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.820	2.809 (0.550)		1218545	200.000	200(A)
12 Acetone	58	2.844	2.844 (0.555)		132923	200.000	200(Q)
13 Iodomethane	142	2.962	2.963 (0.578)		2216636	200.000	190
14 Carbon Disulfide	76	2.998	2.998 (0.585)		3994884	200.000	180
15 Acetonitrile	41	3.069	3.069 (0.598)		2926651	2000.00	2000(A)
16 Allyl Chloride	39	3.069	3.069 (0.598)		1425150	200.000	200(AQ)
17 Methyl Acetate	43	3.080	3.081 (0.601)		1057782	200.000	200
18 Methylene Chloride	84	3.199	3.199 (0.624)		1156642	200.000	160
19 tert-Butanol	59	3.246	3.235 (0.633)		216525	400.000	380(A)
20 Acrylonitrile	53	3.364	3.365 (0.656)		474800	200.000	220(AQ)
21 trans-1,2-Dichloroethene	96	3.376	3.377 (0.658)		990107	200.000	190
22 Methyl tert-butyl ether	73	3.364	3.377 (0.656)		2678804	200.000	180

						AMOUNTS	
		QUANT SIG					
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 1,1-Dichloroethane	63	3.708	3.708	(0.723)	1687210	200.000	180
24 Vinyl acetate	43	3.731	3.732	(0.728)	3143897	200.000	180
25 Diisopropyl Ether	45	3.731	3.732	(0.728)	2945446	200.000	180
26 2-Chloro-1,3-Butadiene	53	3.779	3.779	(0.737)	1481794	200.000	190
27 Ethyl tert-butyl ether	59	4.027	4.028	(0.785)	2765754	200.000	180
29 2,2-Dichloropropane	77	4.169	4.170	(0.813)	814657	200.000	180
28 cis-1,2-Dichloroethene	96	4.169	4.170	(0.813)	1018267	200.000	190
30 2-Butanone	72	4.169	4.170	(0.813)	147009	200.000	210(AQ)
32 Propionitrile	54	4.228	4.229	(0.825)	1641314	2000.00	2000(A)
33 Methacrylonitrile	41	4.346	4.347	(0.848)	1249839	400.000	400(A)
34 Bromochloromethane	128	4.370	4.371	(0.852)	576363	200.000	200
31 Tetrahydrofuran	72	4.406	4.406	(0.859)	299143	400.000	400(AQ)
35 Chloroform	83	4.417	4.418	(0.862)	1650467	200.000	190
\$ 36 Dibromofluoromethane	113	4.559	4.548	(0.889)	275371	50.0000	50
37 1,1,1-Trichloroethane	97	4.583	4.584	(0.894)	1516851	200.000	200
38 Cyclohexane	56	4.630	4.631	(0.903)	1713596	200.000	200
39 1,1-Dichloropropene	110	4.713	4.714	(0.919)	504592	200.000	200
40 Carbon Tetrachloride	117	4.725	4.726	(0.922)	1589602	200.000	200
41 Isobutyl Alcohol	43	4.784	4.785	(0.933)	998439	4000.00	4100(A)
\$ 42 1,2-Dichloroethane-d4	102	4.843	4.844	(0.945)	58719	50.0000	50
43 Benzene	78	4.903	4.903	(0.956)	3115421	200.000	170
44 1,2-Dichloroethane	62	4.914	4.915	(0.958)	1473436	200.000	200
45 tert-Amyl methyl ether	73	4.974	4.962	(0.970)	2598722	200.000	180
M 50 1,2-Dichloroethene (Total)	96				2008374	400.000	(a)
* 46 Fluorobenzene	96	5.127	5.128	(1.000)	931782	50.0000	
47 Trichloroethene	130	5.447	5.448	(1.062)	1035821	200.000	190
48 Methylcyclohexane	83	5.624	5.625	(1.097)	1301423	200.000	200
49 1,2-Dichloropropane	63	5.660	5.661	(1.104)	981783	200.000	200
51 Methyl Methacrylate	69	5.731	5.743	(1.118)	854859	200.000	210(A)
52 Dibromomethane	93	5.778	5.779	(1.127)	695328	200.000	210(A)
53 1,4-Dioxane	88	5.778	5.779	(1.127)	136844	4000.00	3800(AQ)
54 Bromodichloromethane	83	5.908	5.909	(1.152)	1376628	200.000	200
55 2-Chloroethyl vinyl ether	63	6.181	6.655	(1.205)	72887	200.000	230(TAQM)
56 cis-1,3-Dichloropropene	75	6.323	6.335	(1.233)	1537739	200.000	200
57 4-Methyl-2-pentanone	43	6.465	6.465	(1.261)	1140076	200.000	200
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	897245	50.0000	50
59 Toluene	91	6.654	6.655	(1.298)	3306271	200.000	170
60 trans-1,3-Dichloropropene	75	6.879	6.879	(1.342)	1518537	200.000	220(A)
61 Ethyl Methacrylate	69	6.950	6.950	(1.355)	1148610	200.000	200
62 1,1,2-Trichloroethane	97	7.068	7.069	(1.378)	892877	200.000	200
63 Tetrachloroethene	164	7.210	7.211	(0.890)	864719	200.000	180
64 1,3-Dichloropropane	76	7.246	7.246	(0.895)	1451462	200.000	200
65 2-Hexanone	43	7.317	7.317	(0.904)	835327	200.000	210(AQ)
66 Dibromochloromethane	129	7.482	7.483	(0.924)	1237515	200.000	200
67 1,2-Dibromoethane	107	7.612	7.613	(0.940)	1066718	200.000	210(A)
69 1-Chlorohexane	91	8.086	8.086	(0.999)	1219819	200.000	180(Q)
* 68 Chlorobenzene-d5	117	8.097	8.098	(1.000)	763611	50.0000	
70 Chlorobenzene	112	8.133	8.134	(1.004)	2426231	200.000	180(Q)
71 1,1,1,2-Tetrachloroethane	131	8.216	8.216	(1.015)	1105948	200.000	200(Q)
72 Ethylbenzene	106	8.239	8.240	(1.018)	1365927	200.000	190(Q)
73 m,p-Xylene	106	8.370	8.370	(1.034)	3058974	400.000	350(AQ)
74 o-Xylene	106	8.819	8.820	(1.089)	1659185	200.000	190(Q)
75 Styrene	104	8.831	8.832	(1.091)	2710773	200.000	180
76 Bromoform	173	9.056	9.057	(1.118)	987590	200.000	220(A)

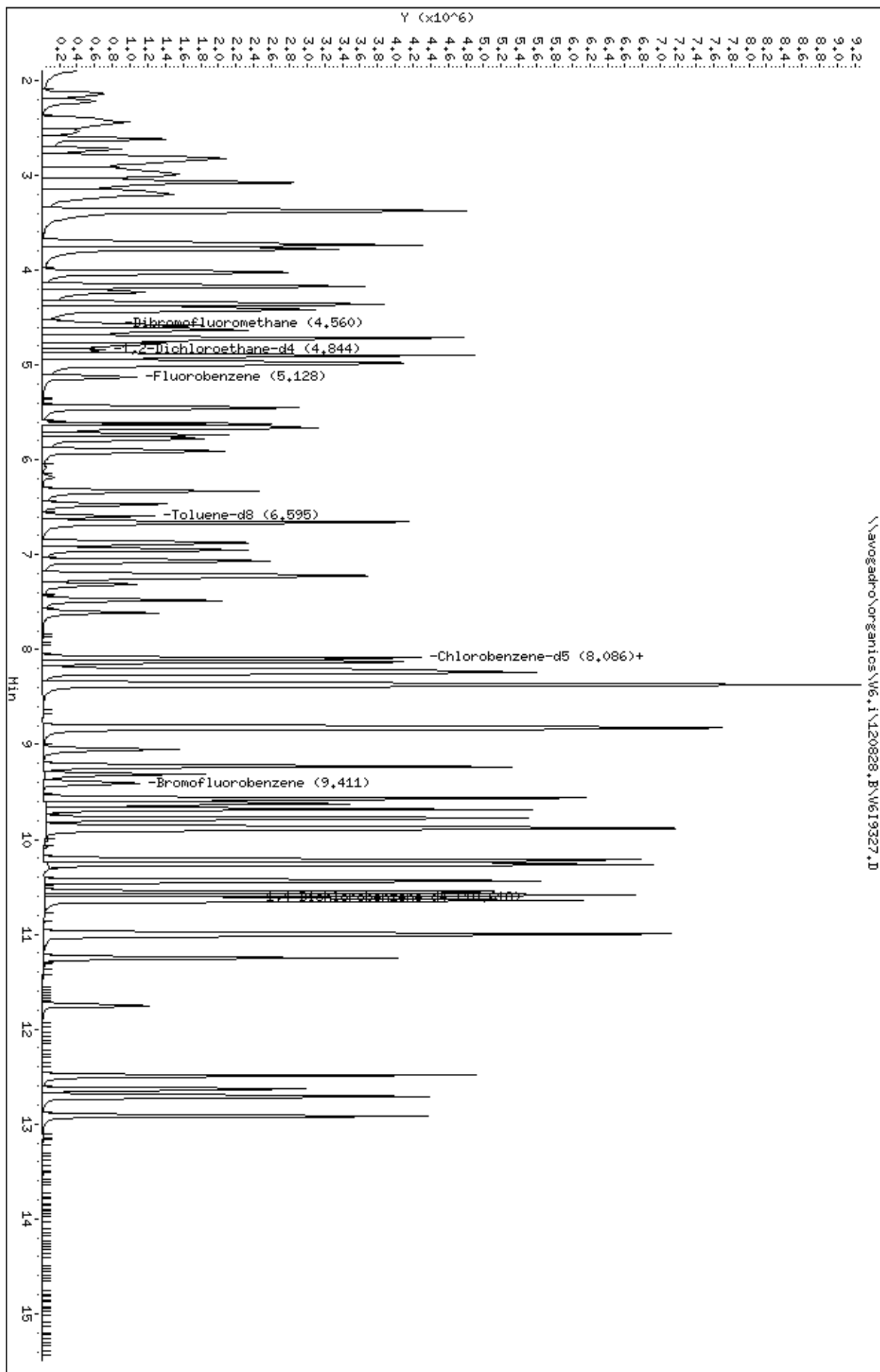
						AMOUNTS		
		QUANT	SIG					
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
77 Isopropylbenzene	105	9.233	9.234	(1.140)	3584834	200.000	170	
78 trans-1,4-Dichloro-2-butene	75	9.316	9.317	(1.151)	483922	200.000	240(AQ)	
\$ 79 Bromofluorobenzene	95	9.411	9.400	(1.162)	418476	50.0000	52	
80 1,1,2,2-Tetrachloroethane	77	9.577	9.565	(0.902)	1744495	200.000	150	
81 Bromobenzene	156	9.577	9.577	(0.902)	1305629	200.000	190(Q)	
82 1,2,3-Trichloropropane	75	9.624	9.613	(0.906)	1763415	200.000	190	
83 n-Propylbenzene	120	9.683	9.684	(0.912)	1183458	200.000	180(Q)	
84 2-Chlorotoluene	126	9.778	9.778	(0.921)	1141178	200.000	180(Q)	
85 1,3,5-Trimethylbenzene	105	9.872	9.873	(0.930)	3157935	200.000	160	
86 4-Chlorotoluene	126	9.896	9.897	(0.932)	1231198	200.000	180(Q)	
M 94 Xylene (Total)	106				4718159	600.000	(a)	
87 tert-Butylbenzene	119	10.216	10.583	(0.962)	3840043	200.000	170(H)	
88 1,2,4-Trimethylbenzene	105	10.263	10.264	(0.967)	3196373	200.000	160	
89 sec-Butylbenzene	105	10.440	10.441	(0.983)	3594265	200.000	150	
90 1,3-Dichlorobenzene	146	10.559	10.548	(0.994)	2183156	200.000	180	
91 4-Isopropyltoluene	119	10.582	10.583	(0.997)	3169885	200.000	160	
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.619	(1.000)	471819	50.0000	(Q)	
93 1,4-Dichlorobenzene	146	10.642	10.642	(1.002)	2291868	200.000	160(Q)	
95 n-Butylbenzene	91	10.985	10.985	(1.035)	2874019	200.000	160	
96 1,2-Dichlorobenzene	146	11.008	11.009	(1.037)	2180361	200.000	170	
97 Hexachloroethane	117	11.245	11.246	(1.059)	878656	200.000	190	
98 1,2-Dibromo-3-chloropropane	75	11.754	11.754	(1.107)	319006	200.000	200	
141 1,3,5-Trichlorobenzene	182	12.487	12.488	(2.435)	1334495	200.000	190(A)	
99 1,2,4-Trichlorobenzene	180	12.487	12.488	(1.176)	1394245	200.000	180	
100 Hexachlorobutadiene	225	12.641	12.630	(1.191)	498395	200.000	180	
101 Naphthalene	128	12.712	12.713	(1.197)	3323759	200.000	160	
102 1,2,3-Trichlorobenzene	180	12.913	12.914	(1.216)	1226730	200.000	180	

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6,i\120828.B\W6I9327.D
 Date : 28-AUG-2012 12:07
 Client ID: WSTD2006Z
 Sample Info: 5HL,WSTD2006Z,WSTD2006Z
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W6,i
 Operator: AH SRC: AH
 Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120828.B\V6I9328.D
Report Date: 28-Aug-2012 16:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828.B\V6I9328.D
Lab Smp Id: VSTD1006Z Client Smp ID: VSTD1006Z
Inj Date : 28-AUG-2012 12:31
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD1006Z,VSTD1006Z
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120828.B\v68260Gadd-6lvl.m
Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 9 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.593	1.590 (0.311)		370146	100.000	100
2 Freon114	85	1.700	1.697 (0.331)		679383	100.000	100
3 Chloromethane	50	1.783	1.768 (0.347)		735953	100.000	100
4 Vinyl Chloride	62	1.854	1.850 (0.361)		629152	100.000	97
5 Bromomethane	94	2.138	2.134 (0.417)		424773	100.000	93
6 Chloroethane	64	2.220	2.217 (0.433)		358483	100.000	96
7 Trichlorofluoromethane	101	2.410	2.407 (0.470)		901241	100.000	110
126 Ethanol	46	2.540	2.537 (0.495)		62428	10000.0	7500(A)
8 Ether	59	2.611	2.620 (0.509)		401185	100.000	100(Q)
9 Acrolein	56	2.729	2.726 (0.532)		444172	500.000	470(A)
10 1,1-Dichloroethene	96	2.812	2.809 (0.548)		575944	100.000	110
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.812	2.809 (0.548)		610496	100.000	110
12 Acetone	58	2.836	2.844 (0.553)		58104	100.000	89
13 Iodomethane	142	2.954	2.963 (0.576)		1110820	100.000	99
14 Carbon Disulfide	76	3.001	2.998 (0.585)		2079932	100.000	98
15 Acetonitrile	41	3.072	3.069 (0.599)		1468680	1000.00	1000(A)
16 Allyl Chloride	39	3.072	3.069 (0.599)		703085	100.000	100
17 Methyl Acetate	43	3.084	3.081 (0.601)		530039	100.000	100
18 Methylene Chloride	84	3.202	3.199 (0.624)		587012	100.000	83
19 tert-Butanol	59	3.238	3.235 (0.631)		103150	200.000	190
20 Acrylonitrile	53	3.368	3.365 (0.656)		220800	100.000	110
21 trans-1,2-Dichloroethene	96	3.380	3.377 (0.659)		508331	100.000	100
22 Methyl tert-butyl ether	73	3.368	3.377 (0.656)		1398802	100.000	100

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 1,1-Dichloroethane	63	3.699	3.708	(0.721)	862767	100.000	99
24 Vinyl acetate	43	3.735	3.732	(0.728)	1671572	100.000	100
25 Diisopropyl Ether	45	3.735	3.732	(0.728)	1569164	100.000	99
26 2-Chloro-1,3-Butadiene	53	3.770	3.779	(0.735)	752723	100.000	100
27 Ethyl tert-butyl ether	59	4.019	4.028	(0.783)	1449349	100.000	97
29 2,2-Dichloropropane	77	4.161	4.170	(0.811)	408675	100.000	95
28 cis-1,2-Dichloroethene	96	4.161	4.170	(0.811)	520062	100.000	100
30 2-Butanone	72	4.173	4.170	(0.813)	71396	100.000	100
32 Propionitrile	54	4.232	4.229	(0.825)	840303	1000.00	1100(A)
33 Methacrylonitrile	41	4.350	4.347	(0.848)	652307	200.000	220(A)
34 Bromochloromethane	128	4.362	4.371	(0.850)	285268	100.000	100
31 Tetrahydrofuran	72	4.398	4.406	(0.857)	150843	200.000	210(A)
35 Chloroform	83	4.421	4.418	(0.862)	862919	100.000	100
\$ 36 Dibromofluoromethane	113	4.551	4.548	(0.887)	265608	50.0000	50
37 1,1,1-Trichloroethane	97	4.587	4.584	(0.894)	762482	100.000	100
38 Cyclohexane	56	4.634	4.631	(0.903)	858378	100.000	100
39 1,1-Dichloropropene	110	4.717	4.714	(0.919)	249899	100.000	100
40 Carbon Tetrachloride	117	4.717	4.726	(0.919)	789915	100.000	100
41 Isobutyl Alcohol	43	4.776	4.785	(0.931)	496605	2000.00	2100(A)
\$ 42 1,2-Dichloroethane-d4	102	4.847	4.844	(0.945)	55499	50.0000	49
43 Benzene	78	4.895	4.903	(0.954)	1693914	100.000	98
44 1,2-Dichloroethane	62	4.906	4.915	(0.956)	741175	100.000	100
45 tert-Amyl methyl ether	73	4.966	4.962	(0.968)	1385089	100.000	99
M 50 1,2-Dichloroethene (Total)	96				1028393	200.000	(a)
* 46 Fluorobenzene	96	5.131	5.128	(1.000)	898023	50.0000	
47 Trichloroethene	130	5.451	5.448	(1.062)	521438	100.000	97
48 Methylcyclohexane	83	5.628	5.625	(1.097)	668097	100.000	100
49 1,2-Dichloropropane	63	5.664	5.661	(1.104)	490444	100.000	100
51 Methyl Methacrylate	69	5.735	5.743	(1.118)	418525	100.000	110
52 Dibromomethane	93	5.770	5.779	(1.125)	345784	100.000	110
53 1,4-Dioxane	88	5.782	5.779	(1.127)	55002	2000.00	1600(A)
54 Bromodichloromethane	83	5.900	5.909	(1.150)	689761	100.000	100
55 2-Chloroethyl vinyl ether	63	6.184	6.655	(1.205)	31826	100.000	100(TQM)M6 AED 08/28
56 cis-1,3-Dichloropropene	75	6.326	6.335	(1.233)	793429	100.000	110
57 4-Methyl-2-pentanone	43	6.468	6.465	(1.261)	579581	100.000	110
\$ 58 Toluene-d8	98	6.598	6.595	(0.815)	865506	50.0000	49
59 Toluene	91	6.658	6.655	(1.297)	1836180	100.000	97
60 trans-1,3-Dichloropropene	75	6.871	6.879	(1.339)	747583	100.000	110
61 Ethyl Methacrylate	69	6.942	6.950	(1.353)	583161	100.000	100
62 1,1,2-Trichloroethane	97	7.060	7.069	(1.376)	448561	100.000	100
63 Tetrachloroethene	164	7.214	7.211	(0.890)	430459	100.000	93
64 1,3-Dichloropropane	76	7.237	7.246	(0.893)	732385	100.000	100
65 2-Hexanone	43	7.308	7.317	(0.902)	392637	100.000	100
66 Dibromochloromethane	129	7.474	7.483	(0.923)	615357	100.000	100
67 1,2-Dibromoethane	107	7.604	7.613	(0.939)	534640	100.000	110
69 1-Chlorohexane	91	8.089	8.086	(0.999)	620500	100.000	92
* 68 Chlorobenzene-d5	117	8.101	8.098	(1.000)	738087	50.0000	
70 Chlorobenzene	112	8.125	8.134	(1.003)	1289764	100.000	98
71 1,1,1,2-Tetrachloroethane	131	8.208	8.216	(1.013)	551564	100.000	100
72 Ethylbenzene	106	8.243	8.240	(1.018)	684643	100.000	100(Q)
73 m,p-Xylene	106	8.373	8.370	(1.034)	1606048	200.000	190
74 o-Xylene	106	8.811	8.820	(1.088)	835748	100.000	100
75 Styrene	104	8.835	8.832	(1.091)	1440769	100.000	100
76 Bromoform	173	9.048	9.057	(1.117)	477175	100.000	110

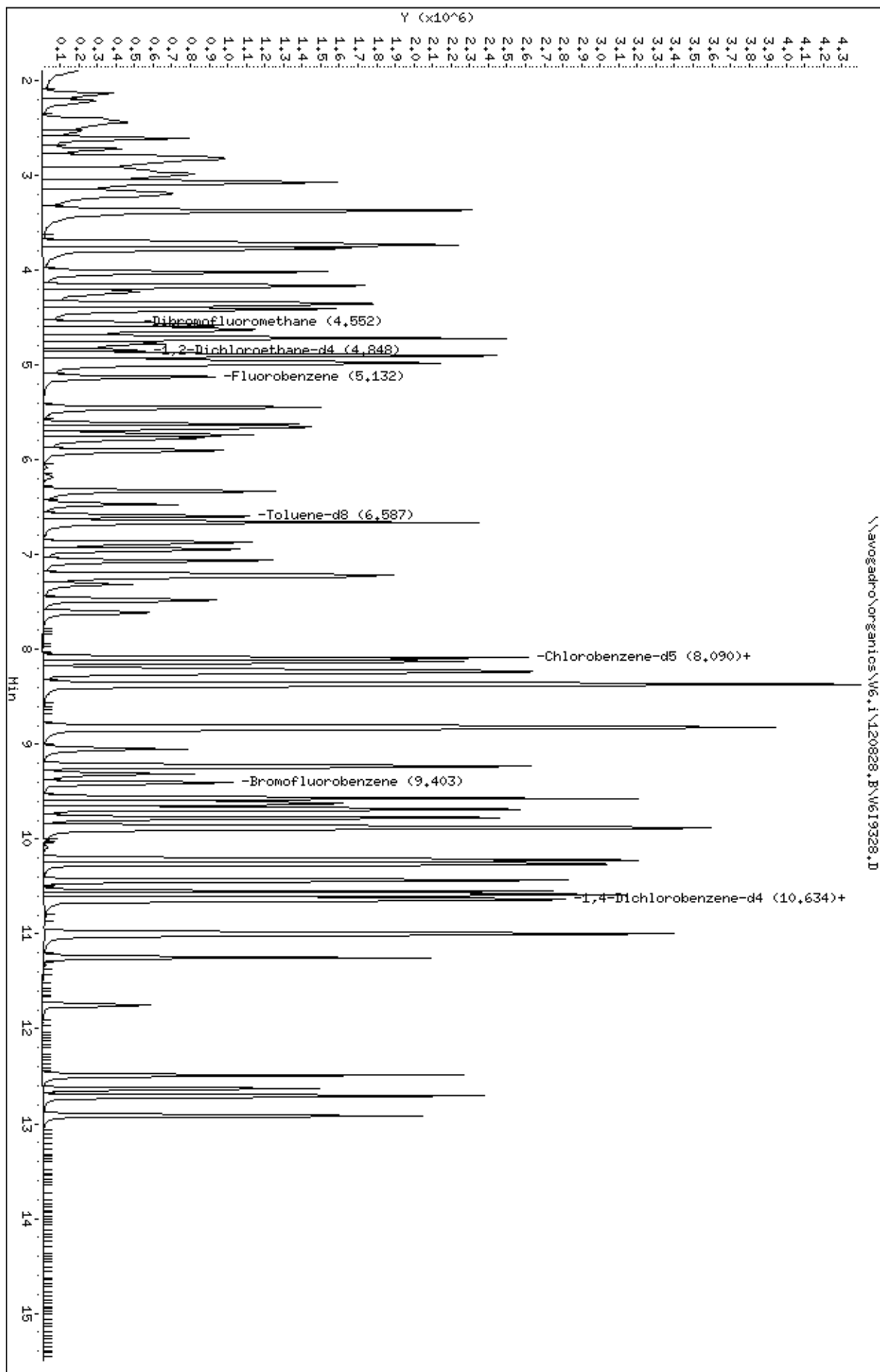
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.225	9.234 (1.139)		1935005		100.000	95
78 trans-1,4-Dichloro-2-butene	75	9.308	9.317 (1.149)		222355		100.000	120
\$ 79 Bromofluorobenzene	95	9.403	9.400 (1.161)		386133		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.569	9.565 (0.901)		1107660		100.000	100
81 Bromobenzene	156	9.569	9.577 (0.901)		640905		100.000	100(Q)
82 1,2,3-Trichloropropane	75	9.616	9.613 (0.905)		863220		100.000	100
83 n-Propylbenzene	120	9.687	9.684 (0.912)		577537		100.000	96(Q)
84 2-Chlorotoluene	126	9.782	9.778 (0.921)		559290		100.000	97
85 1,3,5-Trimethylbenzene	105	9.876	9.873 (0.930)		1665924		100.000	93
86 4-Chlorotoluene	126	9.900	9.897 (0.932)		604456		100.000	98
M 94 Xylene (Total)	106				2441796		300.000	(a)
87 tert-Butylbenzene	119	10.207	10.583 (0.961)		1967545		100.000	94(H)
88 1,2,4-Trimethylbenzene	105	10.267	10.264 (0.967)		1709334		100.000	93
89 sec-Butylbenzene	105	10.432	10.441 (0.982)		1963370		100.000	91
90 1,3-Dichlorobenzene	146	10.551	10.548 (0.993)		1120289		100.000	97
91 4-Isopropyltoluene	119	10.586	10.583 (0.997)		1689759		100.000	92
* 92 1,4-Dichlorobenzene-d4	152	10.622	10.619 (1.000)		439281		50.0000	(Q)
93 1,4-Dichlorobenzene	146	10.645	10.642 (1.002)		1201265		100.000	92
95 n-Butylbenzene	91	10.988	10.985 (1.035)		1541245		100.000	94
96 1,2-Dichlorobenzene	146	11.012	11.009 (1.037)		1141272		100.000	96
97 Hexachloroethane	117	11.249	11.246 (1.059)		420976		100.000	98
98 1,2-Dibromo-3-chloropropane	75	11.746	11.754 (1.106)		154500		100.000	100
141 1,3,5-Trichlorobenzene	182	12.491	12.488 (2.434)		639242		100.000	97(A)
99 1,2,4-Trichlorobenzene	180	12.491	12.488 (1.176)		657869		100.000	92
100 Hexachlorobutadiene	225	12.633	12.630 (1.189)		229953		100.000	90
101 Naphthalene	128	12.704	12.713 (1.196)		1824282		100.000	93
102 1,2,3-Trichlorobenzene	180	12.917	12.914 (1.216)		589433		100.000	92

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: \\avogadro\organics\W6,i\120828.B\W6I9328.D
Date : 28-AUG-2012 12:31
Client ID: WSTD1006Z
Sample Info: 5M, WSTD1006Z, WSTD1006Z
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120828.B\V6I9329.D
 Lab Smp Id: VICV0506Z Client Smp ID: VICV0506Z
 Inj Date : 28-AUG-2012 12:57
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML,VICV0506Z,VICV0506Z
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120828.B\v68260Gadd-6lvl.m
 Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 10 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.590	1.590 (0.310)		141473	50.0000	41
2 Freon114	85	1.697	1.697 (0.331)		274825	50.0000	42
3 Chloromethane	50	1.768	1.768 (0.345)		321367	50.0000	44
4 Vinyl Chloride	62	1.850	1.850 (0.361)		260956	50.0000	41
5 Bromomethane	94	2.134	2.134 (0.416)		181038	50.0000	40
6 Chloroethane	64	2.217	2.217 (0.432)		146528	50.0000	40
7 Trichlorofluoromethane	101	2.407	2.407 (0.469)		357018	50.0000	43
126 Ethanol	46	2.537	2.537 (0.495)		35107	5000.00	4300(A)
8 Ether	59	2.620	2.620 (0.511)		177279	50.0000	47
9 Acrolein	56	2.726	2.726 (0.532)		208904	250.000	230(A)
10 1,1-Dichloroethene	96	2.809	2.809 (0.548)		243964	50.0000	48
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.809	2.809 (0.548)		225506	50.0000	40
12 Acetone	58	2.844	2.844 (0.555)		32948	50.0000	51
13 Iodomethane	142	2.963	2.963 (0.578)		405339	50.0000	37
14 Carbon Disulfide	76	2.998	2.998 (0.585)		876820	50.0000	42
15 Acetonitrile	41	3.069	3.069 (0.599)		579770	500.000	420(A)
16 Allyl Chloride	39	3.069	3.069 (0.599)		285537	50.0000	43
17 Methyl Acetate	43	3.081	3.081 (0.601)		248536	50.0000	50
18 Methylene Chloride	84	3.199	3.199 (0.624)		254902	50.0000	37
19 tert-Butanol	59	3.235	3.235 (0.631)		55692	100.000	100
20 Acrylonitrile	53	3.365	3.365 (0.656)		105805	50.0000	52
21 trans-1,2-Dichloroethene	96	3.377	3.377 (0.659)		209703	50.0000	42
22 Methyl tert-butyl ether	73	3.377	3.377 (0.659)		649709	50.0000	47

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.708	3.708	(0.723)	363944		50.0000	42
24 Vinyl acetate	43	3.732	3.732	(0.728)	755441		50.0000	46
25 Diisopropyl Ether	45	3.732	3.732	(0.728)	693613		50.0000	44
26 2-Chloro-1,3-Butadiene	53	3.779	3.779	(0.737)	305176		50.0000	41
27 Ethyl tert-butyl ether	59	4.028	4.028	(0.785)	659541		50.0000	45
29 2,2-Dichloropropane	77	4.170	4.170	(0.813)	168428		50.0000	40
28 cis-1,2-Dichloroethene	96	4.170	4.170	(0.813)	222741		50.0000	45
30 2-Butanone	72	4.170	4.170	(0.813)	35680		50.0000	53
32 Propionitrile	54	4.229	4.229	(0.825)	364558		500.000	480(A)
33 Methacrylonitrile	41	4.347	4.347	(0.848)	287917		100.000	98
34 Bromochloromethane	128	4.371	4.371	(0.852)	123541		50.0000	45
31 Tetrahydrofuran	72	4.406	4.406	(0.859)	69691		100.000	98
35 Chloroform	83	4.418	4.418	(0.862)	363566		50.0000	43
\$ 36 Dibromofluoromethane	113	4.548	4.548	(0.887)	260744		50.0000	50
37 1,1,1-Trichloroethane	97	4.584	4.584	(0.894)	285325		50.0000	39
38 Cyclohexane	56	4.631	4.631	(0.903)	319991		50.0000	40
39 1,1-Dichloropropene	110	4.714	4.714	(0.919)	100330		50.0000	42
40 Carbon Tetrachloride	117	4.726	4.726	(0.922)	296290		50.0000	40
41 Isobutyl Alcohol	43	4.785	4.785	(0.933)	240421		1000.00	1000(A)
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.844	(0.945)	56315		50.0000	50
43 Benzene	78	4.903	4.903	(0.956)	730878		50.0000	43
44 1,2-Dichloroethane	62	4.915	4.915	(0.958)	318759		50.0000	46
45 tert-Amyl methyl ether	73	4.962	4.962	(0.968)	623188		50.0000	45
M 50 1,2-Dichloroethene (Total)	96				432444		100.000	87
* 46 Fluorobenzene	96	5.128	5.128	(1.000)	883468		50.0000	
47 Trichloroethene	130	5.448	5.448	(1.062)	206382		50.0000	39
48 Methylcyclohexane	83	5.625	5.625	(1.097)	270828		50.0000	43
49 1,2-Dichloropropane	63	5.661	5.661	(1.104)	206917		50.0000	44
51 Methyl Methacrylate	69	5.743	5.743	(1.120)	186910		50.0000	49
52 Dibromomethane	93	5.779	5.779	(1.127)	144763		50.0000	46
53 1,4-Dioxane	88	5.779	5.779	(1.127)	40408		1000.00	1200(A)
54 Bromodichloromethane	83	5.909	5.909	(1.152)	291100		50.0000	44
55 2-Chloroethyl vinyl ether	63	6.655	6.655	(1.298)	72532		50.0000	240(AQ)
56 cis-1,3-Dichloropropene	75	6.335	6.335	(1.235)	331136		50.0000	45
57 4-Methyl-2-pentanone	43	6.465	6.465	(1.261)	255617		50.0000	48
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	854554		50.0000	50
59 Toluene	91	6.655	6.655	(1.298)	790057		50.0000	42
60 trans-1,3-Dichloropropene	75	6.879	6.879	(1.341)	316702		50.0000	48
61 Ethyl Methacrylate	69	6.950	6.950	(1.355)	258599		50.0000	48
62 1,1,2-Trichloroethane	97	7.069	7.069	(1.378)	195955		50.0000	46
63 Tetrachloroethene	164	7.211	7.211	(0.890)	176724		50.0000	39
64 1,3-Dichloropropane	76	7.246	7.246	(0.895)	320464		50.0000	47
65 2-Hexanone	43	7.317	7.317	(0.904)	197172		50.0000	54
66 Dibromochloromethane	129	7.483	7.483	(0.924)	268078		50.0000	47
67 1,2-Dibromoethane	107	7.613	7.613	(0.940)	233252		50.0000	48
69 1-Chlorohexane	91	8.086	8.086	(0.999)	271379		50.0000	42
* 68 Chlorobenzene-d5	117	8.098	8.098	(1.000)	715870		50.0000	
70 Chlorobenzene	112	8.134	8.134	(1.004)	555568		50.0000	44
71 1,1,1,2-Tetrachloroethane	131	8.216	8.216	(1.015)	229409		50.0000	43
72 Ethylbenzene	106	8.240	8.240	(1.018)	286645		50.0000	43
73 m,p-Xylene	106	8.370	8.370	(1.034)	717876		100.000	88
74 o-Xylene	106	8.820	8.820	(1.089)	348184		50.0000	43
75 Styrene	104	8.832	8.832	(1.091)	611990		50.0000	44
76 Bromoform	173	9.057	9.057	(1.118)	208868		50.0000	50

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.234	9.234	(1.140)	882993		50.0000	45
78 trans-1,4-Dichloro-2-butene	75	9.317	9.317	(1.150)	90187		50.0000	49
\$ 79 Bromofluorobenzene	95	9.400	9.400	(1.161)	369042		50.0000	49
80 1,1,2,2-Tetrachloroethane	77	9.565	9.565	(0.901)	477021		50.0000	46
81 Bromobenzene	156	9.577	9.577	(0.902)	277332		50.0000	45
82 1,2,3-Trichloropropane	75	9.613	9.613	(0.905)	375999		50.0000	46
83 n-Propylbenzene	120	9.684	9.684	(0.912)	247081		50.0000	42
84 2-Chlorotoluene	126	9.778	9.778	(0.921)	237603		50.0000	43
85 1,3,5-Trimethylbenzene	105	9.873	9.873	(0.930)	771638		50.0000	44
86 4-Chlorotoluene	126	9.897	9.897	(0.932)	258926		50.0000	43
M 94 Xylene (Total)	106				1066060		150.000	130
87 tert-Butylbenzene	119	10.583	10.583	(0.997)	800919		50.0000	40
88 1,2,4-Trimethylbenzene	105	10.264	10.264	(0.967)	794837		50.0000	45
89 sec-Butylbenzene	105	10.441	10.441	(0.983)	928065		50.0000	44
90 1,3-Dichlorobenzene	146	10.548	10.548	(0.993)	490101		50.0000	44
91 4-Isopropyltoluene	119	10.583	10.583	(0.997)	800919		50.0000	45
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619	(1.000)	425139		50.0000	
93 1,4-Dichlorobenzene	146	10.642	10.642	(1.002)	544021		50.0000	43
95 n-Butylbenzene	91	10.985	10.985	(1.035)	741455		50.0000	46
96 1,2-Dichlorobenzene	146	11.009	11.009	(1.037)	518493		50.0000	45
97 Hexachloroethane	117	11.246	11.246	(1.059)	185966		50.0000	45
98 1,2-Dibromo-3-chloropropane	75	11.754	11.754	(1.107)	70809		50.0000	49
141 1,3,5-Trichlorobenzene	182	12.488	12.488	(2.435)	310705		50.0000	48(A)
99 1,2,4-Trichlorobenzene	180	12.488	12.488	(1.176)	324917		50.0000	47
100 Hexachlorobutadiene	225	12.630	12.630	(1.189)	115617		50.0000	46
101 Naphthalene	128	12.713	12.713	(1.197)	947183		50.0000	50
102 1,2,3-Trichlorobenzene	180	12.914	12.914	(1.216)	290384		50.0000	47

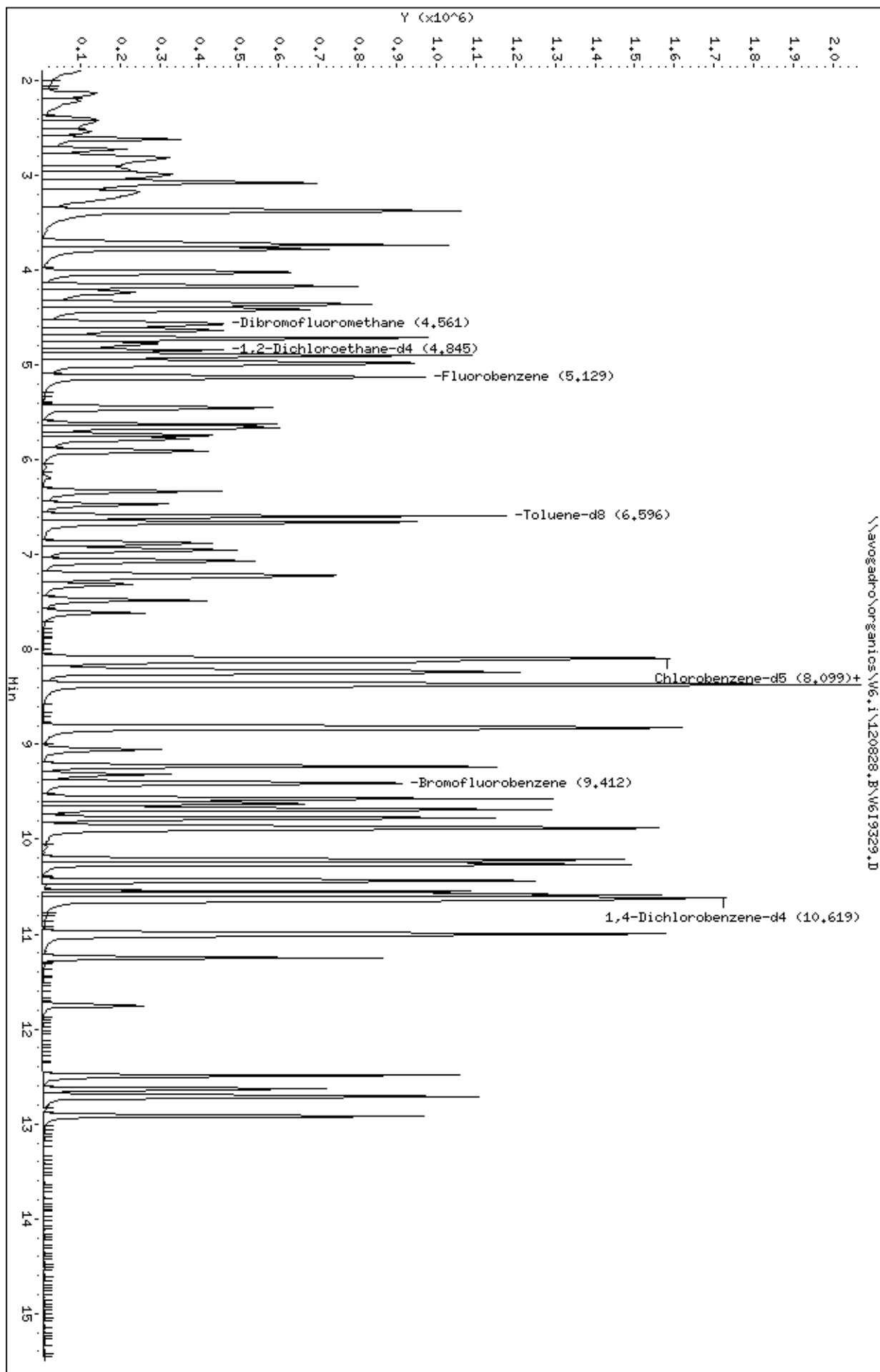
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6.1\120828.B\W619329.D
Date : 28-AUG-2012 12:57
Client ID: VICV0506Z
Sample Info: 5HL,VICV0506Z,VICV0506Z
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Instrument ID: V6 Calibration Date: 08/30/2012 Time: 10:02

Lab File ID: V6I9392.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VSTD0506C Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.195	0.194	0.100	-0.7	20.0
Chloromethane	0.411	0.441	0.010	7.4	20.0
Vinyl chloride	0.361	0.363	0.010	0.7	20.0
Bromomethane	0.255	0.250	0.010	-2.1	20.0
Chloroethane	0.207	0.201	0.010	-3.0	20.0
Trichlorofluoromethane	0.472	0.503	0.010	6.5	20.0
1,1-Dichloroethene	0.288	0.330	0.100	14.8	20.0
Acetone	0.036	0.036	0.010	-0.2	20.0
Iodomethane	0.624	0.589	0.010	-5.7	20.0
Carbon disulfide	1.185	1.178	0.010	-0.6	20.0
Methylene chloride	0.392	0.327	0.010	-16.5	20.0
trans-1,2-Dichloroethene	0.282	0.283	0.010	0.4	20.0
Methyl tert-butyl ether	0.781	0.757	0.010	-3.0	20.0
1,1-Dichloroethane	0.487	0.477	0.010	-2.0	20.0
Vinyl acetate	0.918	0.897	0.010	-2.3	20.0
2-Butanone	0.038	0.035	0.010	-8.1	20.0
cis-1,2-Dichloroethene	0.281	0.291	0.010	3.8	20.0
2,2-Dichloropropane	0.239	0.240	0.010	0.3	20.0
Bromochloromethane	0.154	0.154	0.010	0.0	20.0
Chloroform	0.474	0.476	0.010	0.4	20.0
1,1,1-Trichloroethane	0.409	0.388	0.010	-5.2	20.0
1,1-Dichloropropene	0.136	0.135	0.010	-0.3	20.0
Carbon tetrachloride	0.422	0.416	0.010	-1.5	20.0
1,2-Dichloroethane	0.395	0.401	0.010	1.5	20.0
Benzene	0.967	0.972	0.010	0.5	20.0
Trichloroethene	0.298	0.286	0.010	-3.9	20.0
1,2-Dichloropropane	0.261	0.267	0.010	2.3	20.0
Dibromomethane	0.178	0.179	0.010	0.7	20.0
Bromodichloromethane	0.373	0.380	0.010	1.9	20.0
cis-1,3-Dichloropropene	0.413	0.431	0.010	4.5	20.0
4-Methyl-2-pentanone	0.304	0.254	0.010	-16.5	20.0
Toluene	1.054	1.063	0.010	0.9	20.0
trans-1,3-Dichloropropene	0.374	0.385	0.010	2.9	20.0
1,1,2-Trichloroethane	0.240	0.238	0.010	-0.6	20.0
1,3-Dichloropropane	0.478	0.470	0.010	-1.5	20.0
Tetrachloroethene	0.313	0.286	0.010	-8.8	20.0
2-Hexanone	0.255	0.221	0.010	-13.2	20.0
Dibromochloromethane	0.398	0.394	0.010	-1.1	20.0
1,2-Dibromoethane	0.337	0.331	0.010	-2.0	20.0
Chlorobenzene	0.886	0.887	0.010	0.1	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Instrument ID: V6 Calibration Date: 08/30/2012 Time: 10:02

Lab File ID: V6I9392.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VSTD0506C Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.369	0.358	0.010	-3.1	20.0
Ethylbenzene	0.466	0.466	0.010	0.0	20.0
m,p-Xylene	0.570	0.564	0.010	-1.1	20.0
o-Xylene	0.566	0.568	0.010	0.3	20.0
Xylene (Total)	0.569	0.565	0.010	-0.6	20.0
Styrene	0.976	0.969	0.010	-0.8	20.0
Bromoform	0.292	0.282	0.010	-3.5	20.0
Isopropylbenzene	1.375	1.390	0.300	1.1	20.0
1,1,2,2-Tetrachloroethane	1.213	1.187	0.300	-2.2	20.0
Bromobenzene	0.721	0.713	0.010	-1.2	20.0
1,2,3-Trichloropropane	0.971	0.750	0.010	-22.8	20.0
n-Propylbenzene	0.683	0.652	0.010	-4.5	20.0
2-Chlorotoluene	0.654	0.643	0.010	-1.6	20.0
1,3,5-Trimethylbenzene	2.043	2.006	0.010	-1.8	20.0
4-Chlorotoluene	0.704	0.679	0.010	-3.5	20.0
tert-Butylbenzene	2.368	2.084	0.010	-12.0	20.0
1,2,4-Trimethylbenzene	2.081	2.047	0.010	-1.6	20.0
sec-Butylbenzene	2.461	2.406	0.010	-2.2	20.0
4-Isopropyltoluene	2.087	2.084	0.010	-0.2	20.0
1,3-Dichlorobenzene	1.309	1.275	0.010	-2.6	20.0
1,4-Dichlorobenzene	1.486	1.385	0.010	-6.8	20.0
n-Butylbenzene	1.876	1.917	0.100	2.2	20.0
1,2-Dichlorobenzene	1.354	1.314	0.010	-3.0	20.0
1,2-Dibromo-3-chloropropane	0.171	0.141	0.010	-17.3	20.0
1,2,4-Trichlorobenzene	0.810	0.779	0.010	-3.8	20.0
Hexachlorobutadiene	0.306	0.305	0.010	-0.6	20.0
1,2,3-Trichlorobenzene	0.731	0.668	0.010	-8.7	20.0
Naphthalene	2.240	1.874	0.010	-16.3	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Instrument ID: V6 Calibration Date: 08/30/2012 Time: 10:02

Lab File ID: V6I9392.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VSTD0506C Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.294	0.294	0.010	0.0	20.0
1,2-Dichloroethane-d4	0.063	0.064	0.010	1.2	20.0
Toluene-d8	1.183	1.163	0.010	-1.6	20.0
Bromofluorobenzene	0.519	0.512	0.010	-1.2	20.0

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Instrument ID: V6 Calibration Date: 09/06/2012 Time: 9:32

Lab File ID: V6I9501.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VSTD0506F Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.195	0.169	0.100	-13.5	20.0
Chloromethane	0.411	0.480	0.010	16.9	20.0
Vinyl chloride	0.361	0.401	0.010	11.3	20.0
Bromomethane	0.255	0.272	0.010	6.4	20.0
Chloroethane	0.207	0.228	0.010	10.0	20.0
Trichlorofluoromethane	0.472	0.512	0.010	8.4	20.0
1,1-Dichloroethene	0.288	0.368	0.100	28.0	20.0
Acetone	0.036	0.027	0.010	-26.5	20.0
Iodomethane	0.624	0.658	0.010	5.4	20.0
Carbon disulfide	1.185	1.298	0.010	9.5	20.0
Methylene chloride	0.392	0.366	0.010	-6.5	20.0
trans-1,2-Dichloroethene	0.282	0.317	0.010	12.5	20.0
Methyl tert-butyl ether	0.781	0.855	0.010	9.5	20.0
1,1-Dichloroethane	0.487	0.571	0.010	17.3	20.0
Vinyl acetate	0.918	0.988	0.010	7.6	20.0
2-Butanone	0.038	0.034	0.010	-10.8	20.0
cis-1,2-Dichloroethene	0.281	0.345	0.010	23.0	20.0
2,2-Dichloropropane	0.239	0.260	0.010	8.8	20.0
Bromochloromethane	0.154	0.174	0.010	13.1	20.0
Chloroform	0.474	0.548	0.010	15.5	20.0
1,1,1-Trichloroethane	0.409	0.443	0.010	8.3	20.0
1,1-Dichloropropene	0.136	0.157	0.010	15.9	20.0
Carbon tetrachloride	0.422	0.462	0.010	9.5	20.0
1,2-Dichloroethane	0.395	0.460	0.010	16.4	20.0
Benzene	0.967	1.128	0.010	16.6	20.0
Trichloroethene	0.298	0.335	0.010	12.3	20.0
1,2-Dichloropropane	0.261	0.312	0.010	19.6	20.0
Dibromomethane	0.178	0.202	0.010	13.6	20.0
Bromodichloromethane	0.373	0.439	0.010	17.9	20.0
cis-1,3-Dichloropropene	0.413	0.487	0.010	17.9	20.0
4-Methyl-2-pentanone	0.304	0.285	0.010	-6.1	20.0
Toluene	1.054	1.211	0.010	14.9	20.0
trans-1,3-Dichloropropene	0.374	0.462	0.010	23.5	20.0
1,1,2-Trichloroethane	0.240	0.273	0.010	13.7	20.0
1,3-Dichloropropane	0.478	0.486	0.010	1.8	20.0
Tetrachloroethene	0.313	0.308	0.010	-1.6	20.0
2-Hexanone	0.255	0.202	0.010	-20.8	20.0
Dibromochloromethane	0.398	0.412	0.010	3.5	20.0
1,2-Dibromoethane	0.337	0.345	0.010	2.4	20.0
Chlorobenzene	0.886	0.974	0.010	9.9	20.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Instrument ID: V6 Calibration Date: 09/06/2012 Time: 9:32

Lab File ID: V6I9501.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VSTD0506F Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
1,1,1,2-Tetrachloroethane	0.369	0.394	0.010	6.9	20.0
Ethylbenzene	0.466	0.494	0.010	6.1	20.0
m,p-Xylene	0.570	0.596	0.010	4.6	20.0
o-Xylene	0.566	0.609	0.010	7.5	20.0
Xylene (Total)	0.569	0.601	0.010	5.5	20.0
Styrene	0.976	1.025	0.010	4.9	20.0
Bromoform	0.292	0.285	0.010	-2.2	20.0
Isopropylbenzene	1.375	1.464	0.300	6.5	20.0
1,1,2,2-Tetrachloroethane	1.213	1.199	0.300	-1.2	20.0
Bromobenzene	0.721	0.745	0.010	3.4	20.0
1,2,3-Trichloropropane	0.971	0.809	0.010	-16.7	20.0
n-Propylbenzene	0.683	0.682	0.010	-0.1	20.0
2-Chlorotoluene	0.654	0.660	0.010	0.9	20.0
1,3,5-Trimethylbenzene	2.043	2.041	0.010	-0.1	20.0
4-Chlorotoluene	0.704	0.710	0.010	0.9	20.0
tert-Butylbenzene	2.368	2.095	0.010	-11.5	20.0
1,2,4-Trimethylbenzene	2.081	2.090	0.010	0.4	20.0
sec-Butylbenzene	2.461	2.421	0.010	-1.6	20.0
4-Isopropyltoluene	2.087	2.095	0.010	0.4	20.0
1,3-Dichlorobenzene	1.309	1.322	0.010	1.0	20.0
1,4-Dichlorobenzene	1.486	1.486	0.010	0.0	20.0
n-Butylbenzene	1.876	1.937	0.100	3.2	20.0
1,2-Dichlorobenzene	1.354	1.364	0.010	0.7	20.0
1,2-Dibromo-3-chloropropane	0.171	0.142	0.010	-17.2	20.0
1,2,4-Trichlorobenzene	0.810	0.833	0.010	2.8	20.0
Hexachlorobutadiene	0.306	0.297	0.010	-3.0	20.0
1,2,3-Trichlorobenzene	0.731	0.709	0.010	-3.1	20.0
Naphthalene	2.240	1.967	0.010	-12.2	20.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Instrument ID: V6 Calibration Date: 09/06/2012 Time: 9:32

Lab File ID: V6I9501.D Init. Calib. Date(s): 08/28/2012 08/28/2012

EPA Sample No.(VSTD####) VSTD0506F Init. Calib. Time(s): 9:45 12:31

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30 (m)

Purge Volume: 5.0 (mL)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX %D
Dibromofluoromethane	0.294	0.311	0.010	5.6	20.0
1,2-Dichloroethane-d4	0.063	0.068	0.010	7.1	20.0
Toluene-d8	1.183	1.125	0.010	-4.9	20.0
Bromofluorobenzene	0.519	0.522	0.010	0.7	20.0

Data File: \\avogadro\organics\V6.i\120828.B\V6I9329.D
Report Date: 28-Aug-2012 16:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120828.B\V6I9329.D
Lab Smp Id: VICV0506Z Client Smp ID: VICV0506Z
Inj Date : 28-AUG-2012 12:57
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VICV0506Z,VICV0506Z
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120828.B\v68260Gadd-6lvl.m
Meth Date : 28-Aug-2012 16:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.590	1.590 (0.310)		141473	50.0000	41
2 Freon114	85	1.697	1.697 (0.331)		274825	50.0000	42
3 Chloromethane	50	1.768	1.768 (0.345)		321367	50.0000	44
4 Vinyl Chloride	62	1.850	1.850 (0.361)		260956	50.0000	41
5 Bromomethane	94	2.134	2.134 (0.416)		181038	50.0000	40
6 Chloroethane	64	2.217	2.217 (0.432)		146528	50.0000	40
7 Trichlorofluoromethane	101	2.407	2.407 (0.469)		357018	50.0000	43
126 Ethanol	46	2.537	2.537 (0.495)		35107	5000.00	4300(A)
8 Ether	59	2.620	2.620 (0.511)		177279	50.0000	47
9 Acrolein	56	2.726	2.726 (0.532)		208904	250.000	230(A)
10 1,1-Dichloroethene	96	2.809	2.809 (0.548)		243964	50.0000	48
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.809	2.809 (0.548)		225506	50.0000	40
12 Acetone	58	2.844	2.844 (0.555)		32948	50.0000	51
13 Iodomethane	142	2.963	2.963 (0.578)		405339	50.0000	37
14 Carbon Disulfide	76	2.998	2.998 (0.585)		876820	50.0000	42
15 Acetonitrile	41	3.069	3.069 (0.599)		579770	500.000	420(A)
16 Allyl Chloride	39	3.069	3.069 (0.599)		285537	50.0000	43
17 Methyl Acetate	43	3.081	3.081 (0.601)		248536	50.0000	50
18 Methylene Chloride	84	3.199	3.199 (0.624)		254902	50.0000	37
19 tert-Butanol	59	3.235	3.235 (0.631)		55692	100.000	100
20 Acrylonitrile	53	3.365	3.365 (0.656)		105805	50.0000	52
21 trans-1,2-Dichloroethene	96	3.377	3.377 (0.659)		209703	50.0000	42
22 Methyl tert-butyl ether	73	3.377	3.377 (0.659)		649709	50.0000	47

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.708	3.708	(0.723)	363944		50.0000	42
24 Vinyl acetate	43	3.732	3.732	(0.728)	755441		50.0000	46
25 Diisopropyl Ether	45	3.732	3.732	(0.728)	693613		50.0000	44
26 2-Chloro-1,3-Butadiene	53	3.779	3.779	(0.737)	305176		50.0000	41
27 Ethyl tert-butyl ether	59	4.028	4.028	(0.785)	659541		50.0000	45
29 2,2-Dichloropropane	77	4.170	4.170	(0.813)	168428		50.0000	40
28 cis-1,2-Dichloroethene	96	4.170	4.170	(0.813)	222741		50.0000	45
30 2-Butanone	72	4.170	4.170	(0.813)	35680		50.0000	53
32 Propionitrile	54	4.229	4.229	(0.825)	364558		500.000	480(A)
33 Methacrylonitrile	41	4.347	4.347	(0.848)	287917		100.000	98
34 Bromochloromethane	128	4.371	4.371	(0.852)	123541		50.0000	45
31 Tetrahydrofuran	72	4.406	4.406	(0.859)	69691		100.000	98
35 Chloroform	83	4.418	4.418	(0.862)	363566		50.0000	43
\$ 36 Dibromofluoromethane	113	4.548	4.548	(0.887)	260744		50.0000	50
37 1,1,1-Trichloroethane	97	4.584	4.584	(0.894)	285325		50.0000	39
38 Cyclohexane	56	4.631	4.631	(0.903)	319991		50.0000	40
39 1,1-Dichloropropene	110	4.714	4.714	(0.919)	100330		50.0000	42
40 Carbon Tetrachloride	117	4.726	4.726	(0.922)	296290		50.0000	40
41 Isobutyl Alcohol	43	4.785	4.785	(0.933)	240421		1000.00	1000(A)
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.844	(0.945)	56315		50.0000	50
43 Benzene	78	4.903	4.903	(0.956)	730878		50.0000	43
44 1,2-Dichloroethane	62	4.915	4.915	(0.958)	318759		50.0000	46
45 tert-Amyl methyl ether	73	4.962	4.962	(0.968)	623188		50.0000	45
M 50 1,2-Dichloroethene (Total)	96				432444		100.000	87
* 46 Fluorobenzene	96	5.128	5.128	(1.000)	883468		50.0000	
47 Trichloroethene	130	5.448	5.448	(1.062)	206382		50.0000	39
48 Methylcyclohexane	83	5.625	5.625	(1.097)	270828		50.0000	43
49 1,2-Dichloropropane	63	5.661	5.661	(1.104)	206917		50.0000	44
51 Methyl Methacrylate	69	5.743	5.743	(1.120)	186910		50.0000	49
52 Dibromomethane	93	5.779	5.779	(1.127)	144763		50.0000	46
53 1,4-Dioxane	88	5.779	5.779	(1.127)	40408		1000.00	1200(A)
54 Bromodichloromethane	83	5.909	5.909	(1.152)	291100		50.0000	44
55 2-Chloroethyl vinyl ether	63	6.655	6.655	(1.298)	72532		50.0000	240(AQ)
56 cis-1,3-Dichloropropene	75	6.335	6.335	(1.235)	331136		50.0000	45
57 4-Methyl-2-pentanone	43	6.465	6.465	(1.261)	255617		50.0000	48
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	854554		50.0000	50
59 Toluene	91	6.655	6.655	(1.298)	790057		50.0000	42
60 trans-1,3-Dichloropropene	75	6.879	6.879	(1.341)	316702		50.0000	48
61 Ethyl Methacrylate	69	6.950	6.950	(1.355)	258599		50.0000	48
62 1,1,2-Trichloroethane	97	7.069	7.069	(1.378)	195955		50.0000	46
63 Tetrachloroethene	164	7.211	7.211	(0.890)	176724		50.0000	39
64 1,3-Dichloropropane	76	7.246	7.246	(0.895)	320464		50.0000	47
65 2-Hexanone	43	7.317	7.317	(0.904)	197172		50.0000	54
66 Dibromochloromethane	129	7.483	7.483	(0.924)	268078		50.0000	47
67 1,2-Dibromoethane	107	7.613	7.613	(0.940)	233252		50.0000	48
69 1-Chlorohexane	91	8.086	8.086	(0.999)	271379		50.0000	42
* 68 Chlorobenzene-d5	117	8.098	8.098	(1.000)	715870		50.0000	
70 Chlorobenzene	112	8.134	8.134	(1.004)	555568		50.0000	44
71 1,1,1,2-Tetrachloroethane	131	8.216	8.216	(1.015)	229409		50.0000	43
72 Ethylbenzene	106	8.240	8.240	(1.018)	286645		50.0000	43
73 m,p-Xylene	106	8.370	8.370	(1.034)	717876		100.000	88
74 o-Xylene	106	8.820	8.820	(1.089)	348184		50.0000	43
75 Styrene	104	8.832	8.832	(1.091)	611990		50.0000	44
76 Bromoform	173	9.057	9.057	(1.118)	208868		50.0000	50

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.234	9.234	(1.140)	882993		50.0000	45
78 trans-1,4-Dichloro-2-butene	75	9.317	9.317	(1.150)	90187		50.0000	49
\$ 79 Bromofluorobenzene	95	9.400	9.400	(1.161)	369042		50.0000	49
80 1,1,2,2-Tetrachloroethane	77	9.565	9.565	(0.901)	477021		50.0000	46
81 Bromobenzene	156	9.577	9.577	(0.902)	277332		50.0000	45
82 1,2,3-Trichloropropane	75	9.613	9.613	(0.905)	375999		50.0000	46
83 n-Propylbenzene	120	9.684	9.684	(0.912)	247081		50.0000	42
84 2-Chlorotoluene	126	9.778	9.778	(0.921)	237603		50.0000	43
85 1,3,5-Trimethylbenzene	105	9.873	9.873	(0.930)	771638		50.0000	44
86 4-Chlorotoluene	126	9.897	9.897	(0.932)	258926		50.0000	43
M 94 Xylene (Total)	106				1066060		150.000	130
87 tert-Butylbenzene	119	10.583	10.583	(0.997)	800919		50.0000	40
88 1,2,4-Trimethylbenzene	105	10.264	10.264	(0.967)	794837		50.0000	45
89 sec-Butylbenzene	105	10.441	10.441	(0.983)	928065		50.0000	44
90 1,3-Dichlorobenzene	146	10.548	10.548	(0.993)	490101		50.0000	44
91 4-Isopropyltoluene	119	10.583	10.583	(0.997)	800919		50.0000	45
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619	(1.000)	425139		50.0000	
93 1,4-Dichlorobenzene	146	10.642	10.642	(1.002)	544021		50.0000	43
95 n-Butylbenzene	91	10.985	10.985	(1.035)	741455		50.0000	46
96 1,2-Dichlorobenzene	146	11.009	11.009	(1.037)	518493		50.0000	45
97 Hexachloroethane	117	11.246	11.246	(1.059)	185966		50.0000	45
98 1,2-Dibromo-3-chloropropane	75	11.754	11.754	(1.107)	70809		50.0000	49
141 1,3,5-Trichlorobenzene	182	12.488	12.488	(2.435)	310705		50.0000	48(A)
99 1,2,4-Trichlorobenzene	180	12.488	12.488	(1.176)	324917		50.0000	47
100 Hexachlorobutadiene	225	12.630	12.630	(1.189)	115617		50.0000	46
101 Naphthalene	128	12.713	12.713	(1.197)	947183		50.0000	50
102 1,2,3-Trichlorobenzene	180	12.914	12.914	(1.216)	290384		50.0000	47

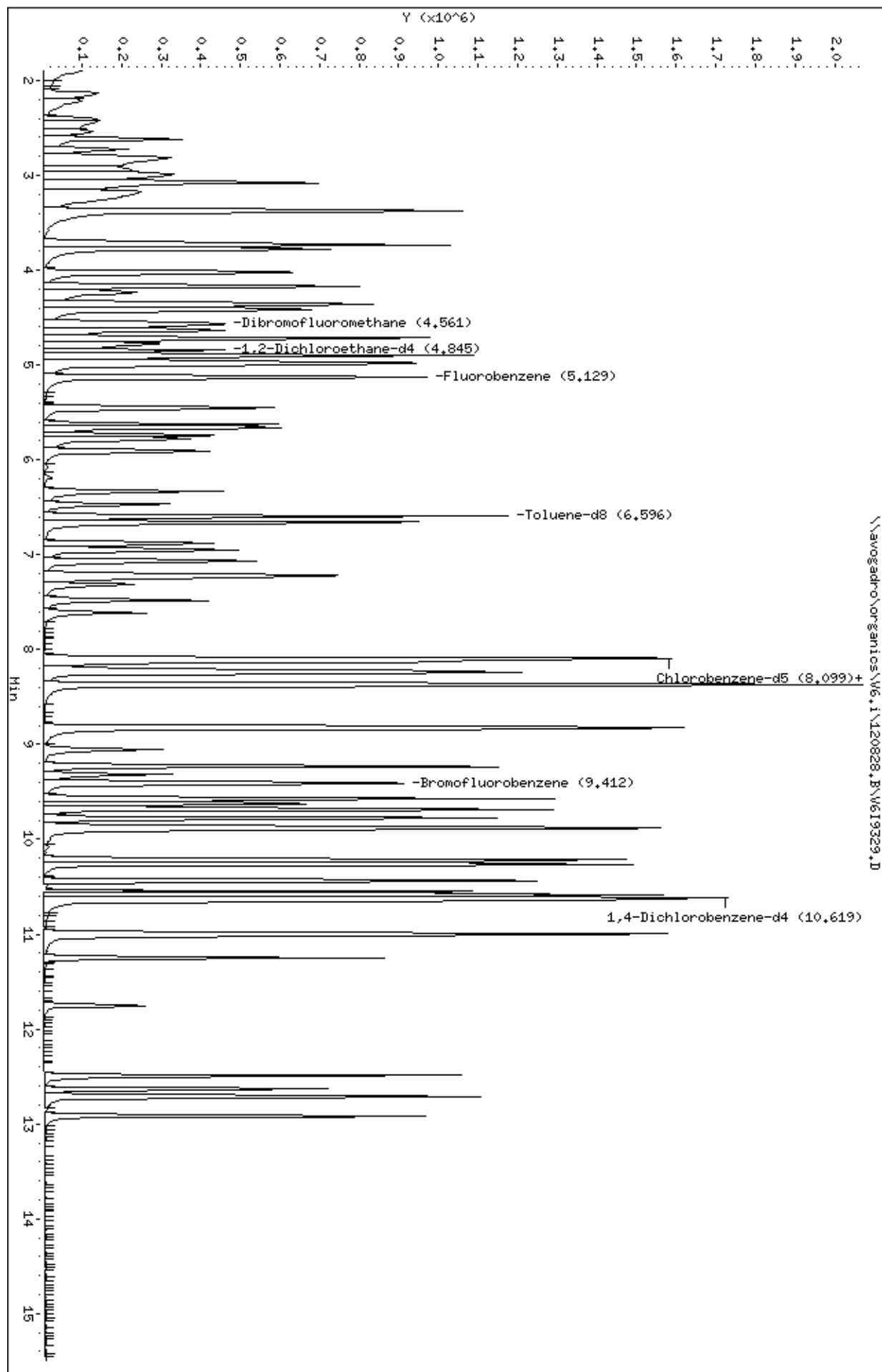
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120828.B\W6I9329.D
Date : 28-AUG-2012 12:57
Client ID: VICV0506Z
Sample Info: 5HL,VICV0506Z,VICV0506Z
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120830.B\V6I9392.D
Report Date: 04-Sep-2012 15:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120830.B\V6I9392.D
Lab Smp Id: VSTD0506C Client Smp ID: VSTD0506C
Inj Date : 30-AUG-2012 10:02
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0506C,VSTD0506C
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120830.B\v68260Gadd-6lvl.m
Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.591	1.591 (0.310)		165115	50.0000	50
2 Freon114	85	1.697	1.697 (0.331)		326104	50.0000	52
3 Chloromethane	50	1.780	1.780 (0.347)		375291	50.0000	54
4 Vinyl Chloride	62	1.851	1.851 (0.361)		309193	50.0000	50
5 Bromomethane	94	2.135	2.135 (0.416)		212593	50.0000	49
6 Chloroethane	64	2.218	2.218 (0.433)		171223	50.0000	48
7 Trichlorofluoromethane	101	2.407	2.407 (0.469)		428191	50.0000	53
126 Ethanol	46	2.538	2.538 (0.495)		43251	5000.00	5500(AQ)
8 Ether	59	2.609	2.609 (0.509)		186251	50.0000	51(Q)
9 Acrolein	56	2.727	2.727 (0.532)		100842	250.000	110
10 1,1-Dichloroethene	96	2.810	2.810 (0.548)		280987	50.0000	57
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.810	2.810 (0.548)		276599	50.0000	51
12 Acetone	58	2.833	2.833 (0.552)		30806	50.0000	50
13 Iodomethane	142	2.952	2.952 (0.576)		501327	50.0000	47
14 Carbon Disulfide	76	2.987	2.987 (0.582)		1002446	50.0000	50
15 Acetonitrile	41	3.070	3.070 (0.599)		601997	500.000	450(A)
16 Allyl Chloride	39	3.070	3.070 (0.599)		321291	50.0000	50
17 Methyl Acetate	43	3.082	3.082 (0.601)		218326	50.0000	45
18 Methylene Chloride	84	3.165	3.165 (0.617)		278288	50.0000	42
19 tert-Butanol	59	3.236	3.236 (0.631)		48008	100.000	94
20 Acrylonitrile	53	3.366	3.366 (0.656)		92172	50.0000	47
21 trans-1,2-Dichloroethene	96	3.378	3.378 (0.659)		240756	50.0000	50
22 Methyl tert-butyl ether	73	3.366	3.366 (0.656)		644558	50.0000	48

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.697	3.697	(0.721)	406136		50.0000	49
24 Vinyl acetate	43	3.733	3.733	(0.728)	763652		50.0000	49
25 Diisopropyl Ether	45	3.733	3.733	(0.728)	757862		50.0000	50
26 2-Chloro-1,3-Butadiene	53	3.768	3.768	(0.735)	360987		50.0000	51
27 Ethyl tert-butyl ether	59	4.017	4.017	(0.783)	687219		50.0000	49
29 2,2-Dichloropropane	77	4.159	4.159	(0.811)	204378		50.0000	50
28 cis-1,2-Dichloroethene	96	4.170	4.170	(0.813)	247941		50.0000	52
30 2-Butanone	72	4.170	4.170	(0.813)	29911		50.0000	46
32 Propionitrile	54	4.230	4.230	(0.825)	296581		500.000	400(A)
33 Methacrylonitrile	41	4.348	4.348	(0.848)	241668		100.000	85
34 Bromochloromethane	128	4.360	4.360	(0.850)	130861		50.0000	50
31 Tetrahydrofuran	72	4.395	4.395	(0.857)	53285		100.000	78
35 Chloroform	83	4.419	4.419	(0.862)	405201		50.0000	50
\$ 36 Dibromofluoromethane	113	4.549	4.549	(0.887)	250411		50.0000	50
37 1,1,1-Trichloroethane	97	4.573	4.573	(0.892)	330234		50.0000	47
38 Cyclohexane	56	4.632	4.632	(0.903)	378473		50.0000	49
39 1,1-Dichloropropene	110	4.715	4.715	(0.919)	115247		50.0000	50
40 Carbon Tetrachloride	117	4.715	4.715	(0.919)	353767		50.0000	49
41 Isobutyl Alcohol	43	4.774	4.774	(0.931)	186205		1000.00	830(A)
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.845	(0.945)	54362		50.0000	51
43 Benzene	78	4.892	4.892	(0.954)	827613		50.0000	50
44 1,2-Dichloroethane	62	4.904	4.904	(0.956)	341492		50.0000	51
45 tert-Amyl methyl ether	73	4.963	4.963	(0.968)	643575		50.0000	49
M 50 1,2-Dichloroethene (Total)	96				488697		100.000	(a)
* 46 Fluorobenzene	96	5.129	5.129	(1.000)	851208		50.0000	
47 Trichloroethene	130	5.448	5.448	(1.062)	243735		50.0000	48
48 Methylcyclohexane	83	5.626	5.626	(1.097)	310299		50.0000	52
49 1,2-Dichloropropane	63	5.661	5.661	(1.104)	227134		50.0000	50
51 Methyl Methacrylate	69	5.732	5.732	(1.118)	165689		50.0000	45
52 Dibromomethane	93	5.768	5.768	(1.125)	152461		50.0000	50
53 1,4-Dioxane	88	5.780	5.780	(1.127)	27230		1000.00	840(A)
54 Bromodichloromethane	83	5.898	5.898	(1.150)	323233		50.0000	51
55 2-Chloroethyl vinyl ether	63	6.655	6.655	(1.298)	83263		50.0000	52
56 cis-1,3-Dichloropropene	75	6.324	6.324	(1.233)	367087		50.0000	52
57 4-Methyl-2-pentanone	43	6.466	6.466	(1.261)	215808		50.0000	42
\$ 58 Toluene-d8	98	6.596	6.596	(0.814)	828492		50.0000	49
59 Toluene	91	6.655	6.655	(1.298)	904787		50.0000	50
60 trans-1,3-Dichloropropene	75	6.880	6.880	(1.341)	327506		50.0000	51
61 Ethyl Methacrylate	69	6.951	6.951	(1.355)	239479		50.0000	46
62 1,1,2-Trichloroethane	97	7.058	7.058	(1.376)	202895		50.0000	50
63 Tetrachloroethene	164	7.211	7.211	(0.890)	203406		50.0000	46
64 1,3-Dichloropropane	76	7.235	7.235	(0.893)	335121		50.0000	49
65 2-Hexanone	43	7.306	7.306	(0.902)	157387		50.0000	43
66 Dibromochloromethane	129	7.484	7.484	(0.924)	280603		50.0000	49
67 1,2-Dibromoethane	107	7.614	7.614	(0.940)	235408		50.0000	49
69 1-Chlorohexane	91	8.087	8.087	(0.999)	306954		50.0000	47
* 68 Chlorobenzene-d5	117	8.099	8.099	(1.000)	712269		50.0000	
70 Chlorobenzene	112	8.123	8.123	(1.003)	632021		50.0000	50
71 1,1,1,2-Tetrachloroethane	131	8.217	8.217	(1.015)	254639		50.0000	48
72 Ethylbenzene	106	8.241	8.241	(1.018)	331749		50.0000	50
73 m,p-Xylene	106	8.371	8.371	(1.034)	803545		100.000	99
74 o-Xylene	106	8.809	8.809	(1.088)	404603		50.0000	50
75 Styrene	104	8.833	8.833	(1.091)	690036		50.0000	50
76 Bromoform	173	9.046	9.046	(1.117)	200509		50.0000	48

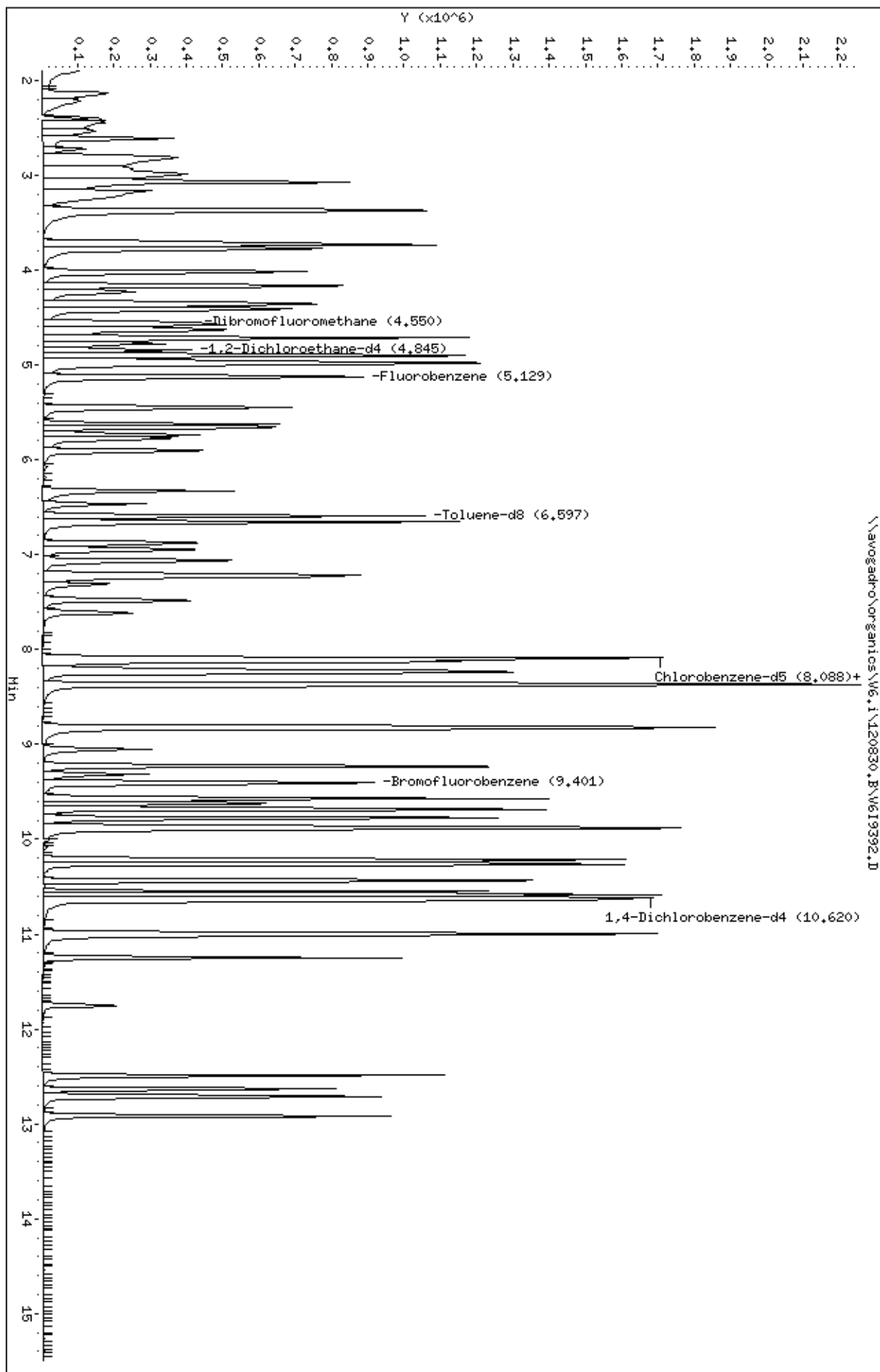
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.235	9.235	(1.140)	989887		50.0000	50
78 trans-1,4-Dichloro-2-butene	75	9.318	9.318	(1.150)	86312		50.0000	47
\$ 79 Bromofluorobenzene	95	9.401	9.401	(1.161)	365034		50.0000	49
80 1,1,2,2-Tetrachloroethane	77	9.566	9.566	(0.901)	509770		50.0000	49
81 Bromobenzene	156	9.578	9.578	(0.902)	306063		50.0000	49
82 1,2,3-Trichloropropane	75	9.614	9.614	(0.905)	322133		50.0000	39
83 n-Propylbenzene	120	9.685	9.685	(0.912)	279989		50.0000	48
84 2-Chlorotoluene	126	9.779	9.779	(0.921)	276366		50.0000	49
85 1,3,5-Trimethylbenzene	105	9.874	9.874	(0.930)	861580		50.0000	49
86 4-Chlorotoluene	126	9.898	9.898	(0.932)	291753		50.0000	48
M 94 Xylene (Total)	106				1208148		150.000	(a)
87 tert-Butylbenzene	119	10.584	10.584	(0.997)	895139		50.0000	50
88 1,2,4-Trimethylbenzene	105	10.264	10.264	(0.967)	879130		50.0000	49
89 sec-Butylbenzene	105	10.442	10.442	(0.983)	1033303		50.0000	49
90 1,3-Dichlorobenzene	146	10.548	10.548	(0.993)	547437		50.0000	49
91 4-Isopropyltoluene	119	10.584	10.584	(0.997)	895139		50.0000	50
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619	(1.000)	429494		50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.643	(1.002)	594994		50.0000	47
95 n-Butylbenzene	91	10.986	10.986	(1.035)	823263		50.0000	51
96 1,2-Dichlorobenzene	146	11.010	11.010	(1.037)	564294		50.0000	48
97 Hexachloroethane	117	11.246	11.246	(1.059)	202993		50.0000	48
98 1,2-Dibromo-3-chloropropane	75	11.755	11.755	(1.107)	60681		50.0000	41
141 1,3,5-Trichlorobenzene	182	12.489	12.489	(2.435)	320743		50.0000	51(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.489	(1.176)	334467		50.0000	48
100 Hexachlorobutadiene	225	12.631	12.631	(1.189)	130833		50.0000	52
101 Naphthalene	128	12.714	12.714	(1.197)	804839		50.0000	42
102 1,2,3-Trichlorobenzene	180	12.915	12.915	(1.216)	286925		50.0000	46

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6.1\120830.B\W619392.D
Date : 30-AUG-2012 10:02
Client ID: WSTD0506C
Sample Info: 5HL,WSTD0506C,WSTD0506C
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6.i
Operator: AH SRC: AH
Column diameter: 0.25



Data File: \\avogadro\organics\V6.i\120906.B\V6I9501.D
Report Date: 07-Sep-2012 10:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120906.B\V6I9501.D
Lab Smp Id: VSTD0506F Client Smp ID: VSTD0506F
Inj Date : 06-SEP-2012 09:32
Operator : AM SRC: AM Inst ID: V6.i
Smp Info : 5ML,VSTD0506F,VSTD0506F
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120906.B\v68260Gadd-6lvl.m
Meth Date : 07-Sep-2012 10:28 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 30 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.591	1.590 (0.310)		137306	50.0000	43
2 Freon114	85	1.698	1.697 (0.331)		272289	50.0000	46
3 Chloromethane	50	1.769	1.779 (0.345)		389782	50.0000	58
4 Vinyl Chloride	62	1.851	1.850 (0.361)		325932	50.0000	56
5 Bromomethane	94	2.135	2.134 (0.416)		220508	50.0000	53
6 Chloroethane	64	2.218	2.217 (0.433)		185055	50.0000	55
7 Trichlorofluoromethane	101	2.407	2.407 (0.469)		415930	50.0000	54
126 Ethanol	46	2.549	2.537 (0.497)		52982	5000.00	7100(A)
8 Ether	59	2.609	2.608 (0.509)		202037	50.0000	58(Q)
9 Acrolein	56	2.727	2.726 (0.532)		251288	250.000	300(A)
10 1,1-Dichloroethene	96	2.810	2.809 (0.548)		298951	50.0000	64
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.810	2.809 (0.548)		258664	50.0000	50
12 Acetone	58	2.845	2.844 (0.555)		21636	50.0000	37
13 Iodomethane	142	2.952	2.951 (0.576)		534143	50.0000	53
14 Carbon Disulfide	76	2.987	2.986 (0.582)		1053593	50.0000	55
15 Acetonitrile	41	3.070	3.069 (0.599)		647847	500.000	510(A)
16 Allyl Chloride	39	3.070	3.069 (0.599)		357121	50.0000	59
17 Methyl Acetate	43	3.082	3.081 (0.601)		228516	50.0000	50
18 Methylene Chloride	84	3.165	3.164 (0.617)		297446	50.0000	47
19 tert-Butanol	59	3.236	3.235 (0.631)		53847	100.000	110
20 Acrylonitrile	53	3.366	3.365 (0.656)		91968	50.0000	49
21 trans-1,2-Dichloroethene	96	3.378	3.377 (0.659)		257329	50.0000	56
22 Methyl tert-butyl ether	73	3.366	3.365 (0.656)		693957	50.0000	55

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.697	3.708 (0.721)		463965		50.0000	59
24 Vinyl acetate	43	3.733	3.732 (0.728)		802288		50.0000	54
25 Diisopropyl Ether	45	3.733	3.732 (0.728)		848650		50.0000	59
26 2-Chloro-1,3-Butadiene	53	3.768	3.779 (0.735)		388353		50.0000	57
27 Ethyl tert-butyl ether	59	4.017	4.016 (0.783)		769450		50.0000	57
29 2,2-Dichloropropane	77	4.171	4.170 (0.813)		211484		50.0000	54
28 cis-1,2-Dichloroethene	96	4.171	4.170 (0.813)		280140		50.0000	61
30 2-Butanone	72	4.171	4.170 (0.813)		27680		50.0000	44
32 Propionitrile	54	4.230	4.229 (0.825)		334276		500.000	480(A)
33 Methacrylonitrile	41	4.348	4.347 (0.848)		276897		100.000	100
34 Bromochloromethane	128	4.360	4.359 (0.850)		141094		50.0000	56
31 Tetrahydrofuran	72	4.395	4.394 (0.857)		60656		100.000	93
35 Chloroform	83	4.419	4.418 (0.862)		444841		50.0000	58
\$ 36 Dibromofluoromethane	113	4.549	4.548 (0.887)		252250		50.0000	53
37 1,1,1-Trichloroethane	97	4.585	4.584 (0.894)		359720		50.0000	54
38 Cyclohexane	56	4.632	4.631 (0.903)		372182		50.0000	50
39 1,1-Dichloropropene	110	4.715	4.714 (0.919)		127782		50.0000	58
40 Carbon Tetrachloride	117	4.715	4.714 (0.919)		375212		50.0000	55
41 Isobutyl Alcohol	43	4.774	4.773 (0.931)		202935		1000.00	950(A)
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.844 (0.945)		54898		50.0000	54
43 Benzene	78	4.892	4.891 (0.954)		915668		50.0000	58
44 1,2-Dichloroethane	62	4.904	4.903 (0.956)		373691		50.0000	58
45 tert-Amyl methyl ether	73	4.963	4.962 (0.968)		688965		50.0000	55
M 50 1,2-Dichloroethene (Total)	96				537469		100.000	(a)
* 46 Fluorobenzene	96	5.129	5.128 (1.000)		811869		50.0000	
47 Trichloroethene	130	5.449	5.448 (1.062)		271630		50.0000	56
48 Methylcyclohexane	83	5.626	5.625 (1.097)		281642		50.0000	49
49 1,2-Dichloropropane	63	5.661	5.661 (1.104)		253316		50.0000	59
51 Methyl Methacrylate	69	5.732	5.732 (1.118)		172135		50.0000	49
52 Dibromomethane	93	5.780	5.779 (1.127)		164009		50.0000	57
53 1,4-Dioxane	88	5.780	5.779 (1.127)		22606		1000.00	730(A)
54 Bromodichloromethane	83	5.898	5.909 (1.150)		356613		50.0000	59
55 2-Chloroethyl vinyl ether	63	6.655	6.654 (1.298)		91129		50.0000	60
56 cis-1,3-Dichloropropene	75	6.324	6.323 (1.233)		395356		50.0000	59
57 4-Methyl-2-pentanone	43	6.466	6.465 (1.261)		231361		50.0000	47
\$ 58 Toluene-d8	98	6.596	6.595 (0.814)		826644		50.0000	47
59 Toluene	91	6.655	6.654 (1.298)		983149		50.0000	57
60 trans-1,3-Dichloropropene	75	6.880	6.879 (1.341)		374735		50.0000	62
61 Ethyl Methacrylate	69	6.951	6.950 (1.355)		266612		50.0000	53
62 1,1,2-Trichloroethane	97	7.070	7.069 (1.378)		221539		50.0000	57
63 Tetrachloroethene	164	7.212	7.211 (0.890)		226443		50.0000	49
64 1,3-Dichloropropane	76	7.235	7.234 (0.893)		357172		50.0000	51
65 2-Hexanone	43	7.318	7.317 (0.904)		148304		50.0000	40
66 Dibromochloromethane	129	7.484	7.483 (0.924)		302911		50.0000	52
67 1,2-Dibromoethane	107	7.614	7.613 (0.940)		253746		50.0000	51
69 1-Chlorohexane	91	8.087	8.086 (0.999)		318289		50.0000	48
* 68 Chlorobenzene-d5	117	8.099	8.098 (1.000)		734917		50.0000	
70 Chlorobenzene	112	8.123	8.122 (1.003)		715722		50.0000	55
71 1,1,1,2-Tetrachloroethane	131	8.206	8.216 (1.013)		289785		50.0000	53
72 Ethylbenzene	106	8.241	8.240 (1.018)		363141		50.0000	53
73 m,p-Xylene	106	8.371	8.370 (1.034)		876614		100.000	100
74 o-Xylene	106	8.809	8.820 (1.088)		447486		50.0000	54
75 Styrene	104	8.833	8.832 (1.091)		753119		50.0000	52
76 Bromoform	173	9.046	9.057 (1.117)		209613		50.0000	49

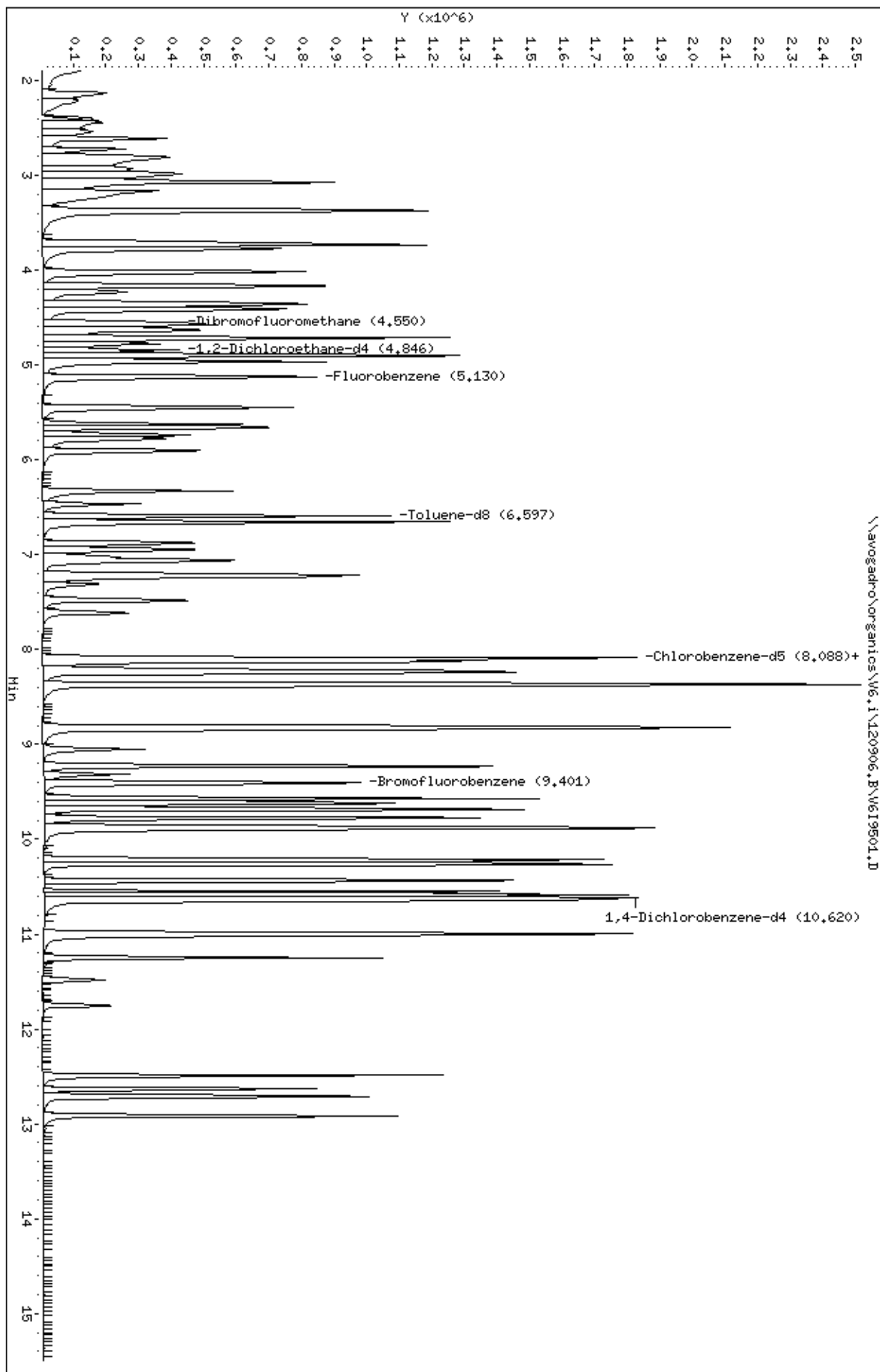
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.235	9.234 (1.140)		1076053		50.0000	53
78 trans-1,4-Dichloro-2-butene	75	9.318	9.317 (1.150)		77146		50.0000	40
\$ 79 Bromofluorobenzene	95	9.401	9.400 (1.161)		383922		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.566	9.565 (0.901)		546083		50.0000	49
81 Bromobenzene	156	9.578	9.577 (0.902)		339485		50.0000	52
82 1,2,3-Trichloropropane	75	9.614	9.613 (0.905)		368335		50.0000	42
83 n-Propylbenzene	120	9.685	9.684 (0.912)		310735		50.0000	50
84 2-Chlorotoluene	126	9.779	9.778 (0.921)		300557		50.0000	50
85 1,3,5-Trimethylbenzene	105	9.874	9.873 (0.930)		929322		50.0000	50
86 4-Chlorotoluene	126	9.898	9.897 (0.932)		323520		50.0000	50
M 94 Xylene (Total)	106				1324100		150.000	(a)
87 tert-Butylbenzene	119	10.584	10.583 (0.997)		953967		50.0000	50
88 1,2,4-Trimethylbenzene	105	10.264	10.263 (0.967)		951780		50.0000	50
89 sec-Butylbenzene	105	10.442	10.441 (0.983)		1102594		50.0000	49
90 1,3-Dichlorobenzene	146	10.548	10.547 (0.993)		601991		50.0000	50
91 4-Isopropyltoluene	119	10.584	10.583 (0.997)		953967		50.0000	50
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.618 (1.000)		455412		50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.642 (1.002)		676626		50.0000	50
95 n-Butylbenzene	91	10.986	10.985 (1.035)		881934		50.0000	52
96 1,2-Dichlorobenzene	146	11.010	11.009 (1.037)		621362		50.0000	50
97 Hexachloroethane	117	11.247	11.246 (1.059)		218952		50.0000	49
98 1,2-Dibromo-3-chloropropane	75	11.744	11.754 (1.106)		64457		50.0000	41
141 1,3,5-Trichlorobenzene	182	12.489	12.488 (2.435)		359260		50.0000	60(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.488 (1.176)		379301		50.0000	51
100 Hexachlorobutadiene	225	12.631	12.630 (1.189)		135332		50.0000	51
101 Naphthalene	128	12.714	12.713 (1.197)		895773		50.0000	44
102 1,2,3-Trichlorobenzene	180	12.915	12.914 (1.216)		322870		50.0000	48

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120906.B\W6I9501.D
Date : 06-SEP-2012 09:32
Client ID: WSTD0506F
Sample Info: 5HL,WSTD0506F,WSTD0506F
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: AH
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120828.B\V6I9320.D
 Lab Smp Id: BFB6Z Client Smp ID: BFB6Z
 Inj Date : 28-AUG-2012 08:48
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML, BFB6Z, BFB6Z
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120828.B\bfb8260.m
 Meth Date : 28-Aug-2012 16:12 adatta Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
ON-COL FINAL									
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb					CAS #: 460-00-4				
6.385	6.300 (0.000)	95	375808				0.00-	100.00	100.00
6.385	6.300 (0.000)	50	76224				15.00-	40.00	20.28
6.385	6.300 (0.000)	75	191360				30.00-	60.00	50.92
6.385	6.300 (0.000)	96	26936				5.00-	9.00	7.17
6.385	6.300 (0.000)	173	3279				0.00-	2.00	1.03
6.385	6.300 (0.000)	174	319488				50.00-	100.00	85.01
6.385	6.300 (0.000)	175	25992				5.00-	9.00	8.14
6.385	6.300 (0.000)	176	305920				95.00-	101.00	95.75
6.385	6.300 (0.000)	177	21320				5.00-	9.00	6.97

Date : 28-AUG-2012 08:48

Client ID: BFB6Z

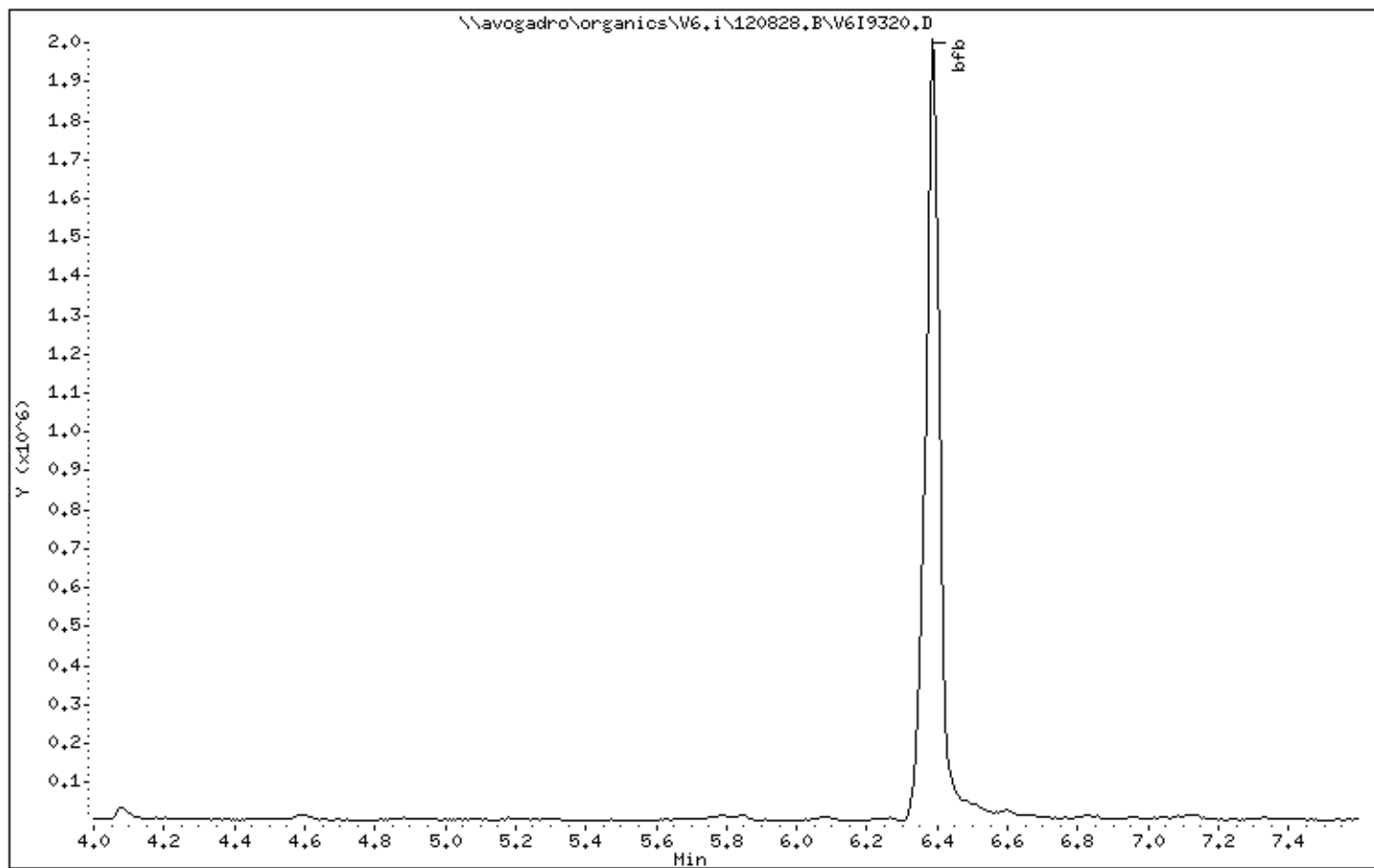
Instrument: V6.i

Sample Info: 5HL,BFB6Z,BFB6Z

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Date : 28-AUG-2012 08:48

Client ID: BFB6Z

Instrument: V6.i

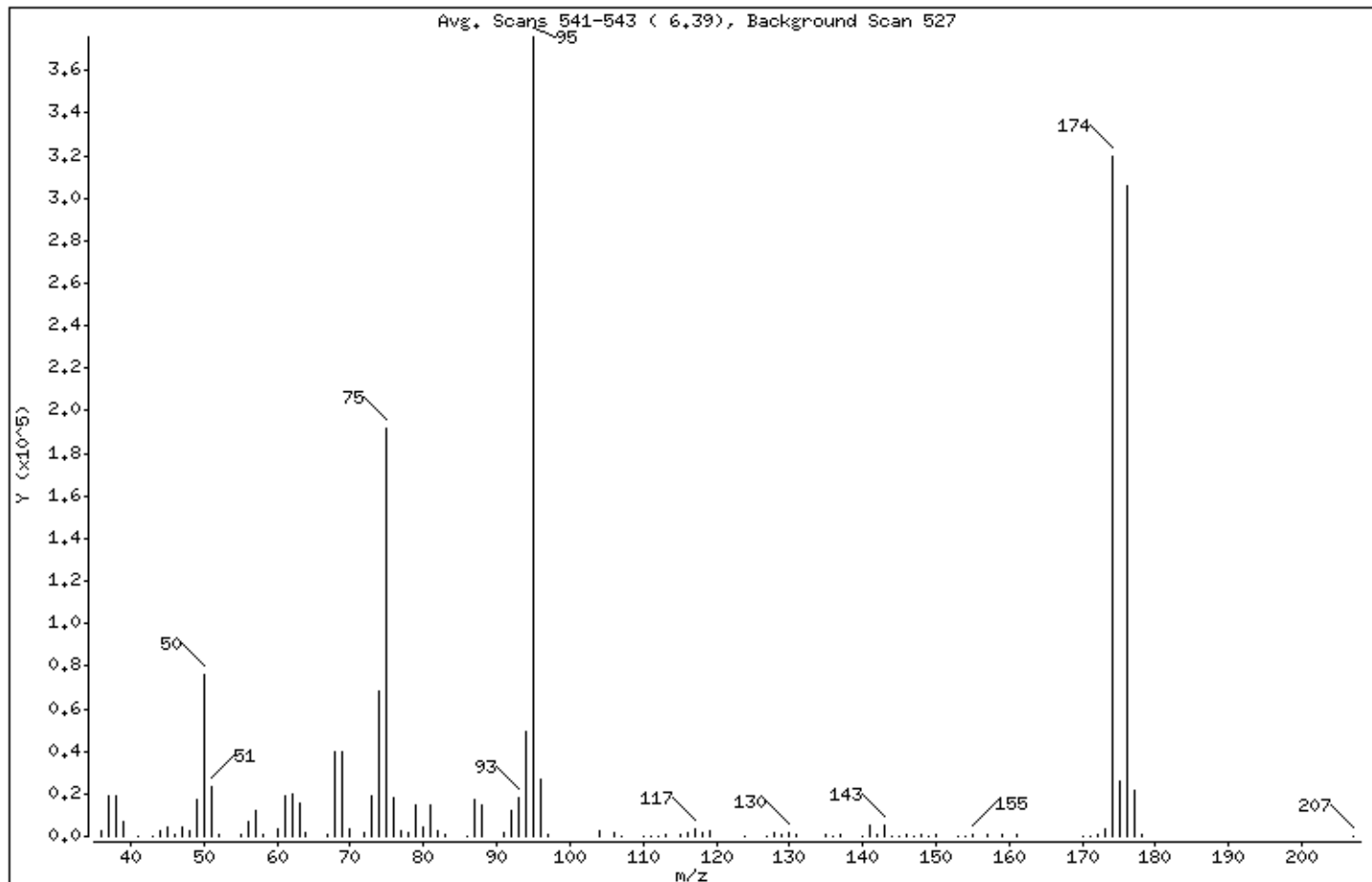
Sample Info: 5HL,BFB6Z,BFB6Z

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.28
75	30.00 - 60.00% of mass 95	50.92
96	5.00 - 9.00% of mass 95	7.17
173	Less than 2.00% of mass 174	0.87 (1.03)
174	50.00 - 100.00% of mass 95	85.01
175	5.00 - 9.00% of mass 174	6.92 (8.14)
176	95.00 - 101.00% of mass 174	81.40 (95.75)
177	5.00 - 9.00% of mass 176	5.67 (6.97)

Date : 28-AUG-2012 08:48

Client ID: BFB6Z

Instrument: V6.i

Sample Info: 5HL,BFB6Z,BFB6Z

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

Data File: V6I9320.D

Spectrum: Avg. Scans 541-543 (6.39), Background Scan 527

Location of Maximum: 95.00

Number of points: 98

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	3008	68.00	39792	104.00	2175	144.00	257
37.00	19320	69.00	39760	106.00	2069	145.00	391
38.00	19256	70.00	3520	107.00	330	146.00	565
39.00	6514	72.00	1859	110.00	122	147.00	101
41.00	104	73.00	19032	111.00	376	148.00	1244

43.00	386	74.00	68032	112.00	133	149.00	322
44.00	2881	75.00	191360	113.00	498	150.00	473
45.00	4246	76.00	17808	115.00	645	153.00	227
46.00	462	77.00	2203	116.00	1749	154.00	154
47.00	4062	78.00	1474	117.00	3404	155.00	957

48.00	2509	79.00	14382	118.00	1608	157.00	638
49.00	17376	80.00	3902	119.00	2319	159.00	507
50.00	76224	81.00	14255	124.00	243	161.00	685
51.00	23648	82.00	2618	127.00	133	170.00	151
52.00	1050	83.00	507	128.00	1488	171.00	119

55.00	1253	86.00	367	129.00	746	172.00	612
56.00	7000	87.00	17304	130.00	1515	173.00	3279
57.00	11673	88.00	14937	131.00	523	174.00	319488
58.00	600	91.00	1878	135.00	810	175.00	25992
60.00	3610	92.00	12162	136.00	124	176.00	305920

61.00	19216	93.00	17960	137.00	897	177.00	21320
62.00	19624	94.00	49632	140.00	138	178.00	609
63.00	15404	95.00	375808	141.00	4958	207.00	177
64.00	1419	96.00	26936	142.00	623		
67.00	1029	97.00	1001	143.00	5067		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120830.B\V6I9390.D
 Lab Smp Id: BFB6C Client Smp ID: BFB6C
 Inj Date : 30-AUG-2012 09:04
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML, BFB6C, BFB6C
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120830.B\bfb8260.m
 Meth Date : 04-Sep-2012 15:12 adatta Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
ON-COL FINAL									
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb						CAS #: 460-00-4			
6.195	6.300 (0.000)	95	308288				0.00-	100.00	100.00
6.195	6.300 (0.000)	50	62464				15.00-	40.00	20.26
6.195	6.300 (0.000)	75	151296				30.00-	60.00	49.08
6.195	6.300 (0.000)	96	22904				5.00-	9.00	7.43
6.195	6.300 (0.000)	173	1984				0.00-	2.00	0.75
6.195	6.300 (0.000)	174	262976				50.00-	100.00	85.30
6.195	6.300 (0.000)	175	20496				5.00-	9.00	7.79
6.195	6.300 (0.000)	176	256064				95.00-	101.00	97.37
6.195	6.300 (0.000)	177	18304				5.00-	9.00	7.15

Date : 30-AUG-2012 09:04

Client ID: BFB6C

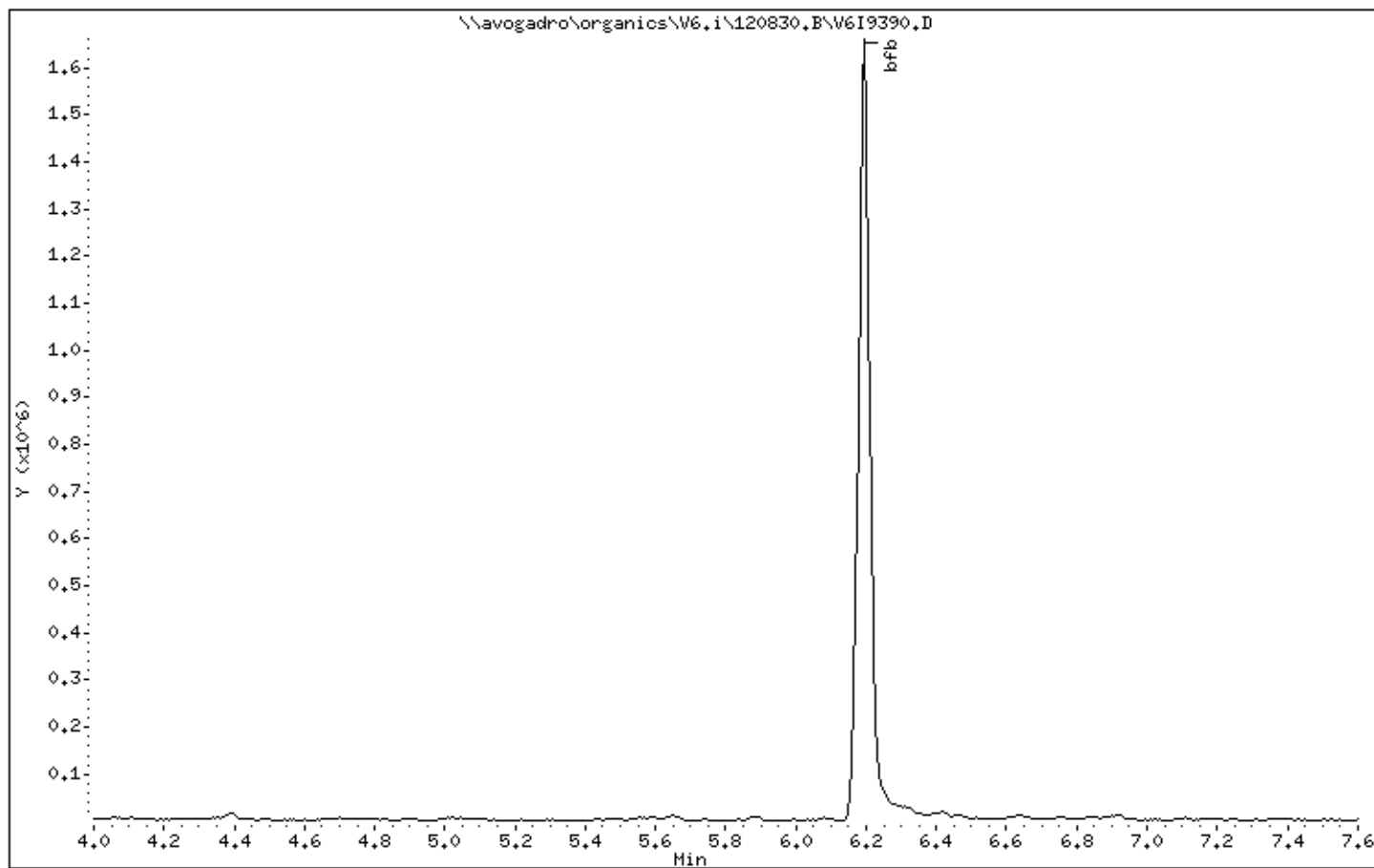
Instrument: V6.i

Sample Info: 5HL,BFB6C,BFB6C

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Date : 30-AUG-2012 09:04

Client ID: BFB6C

Instrument: V6.i

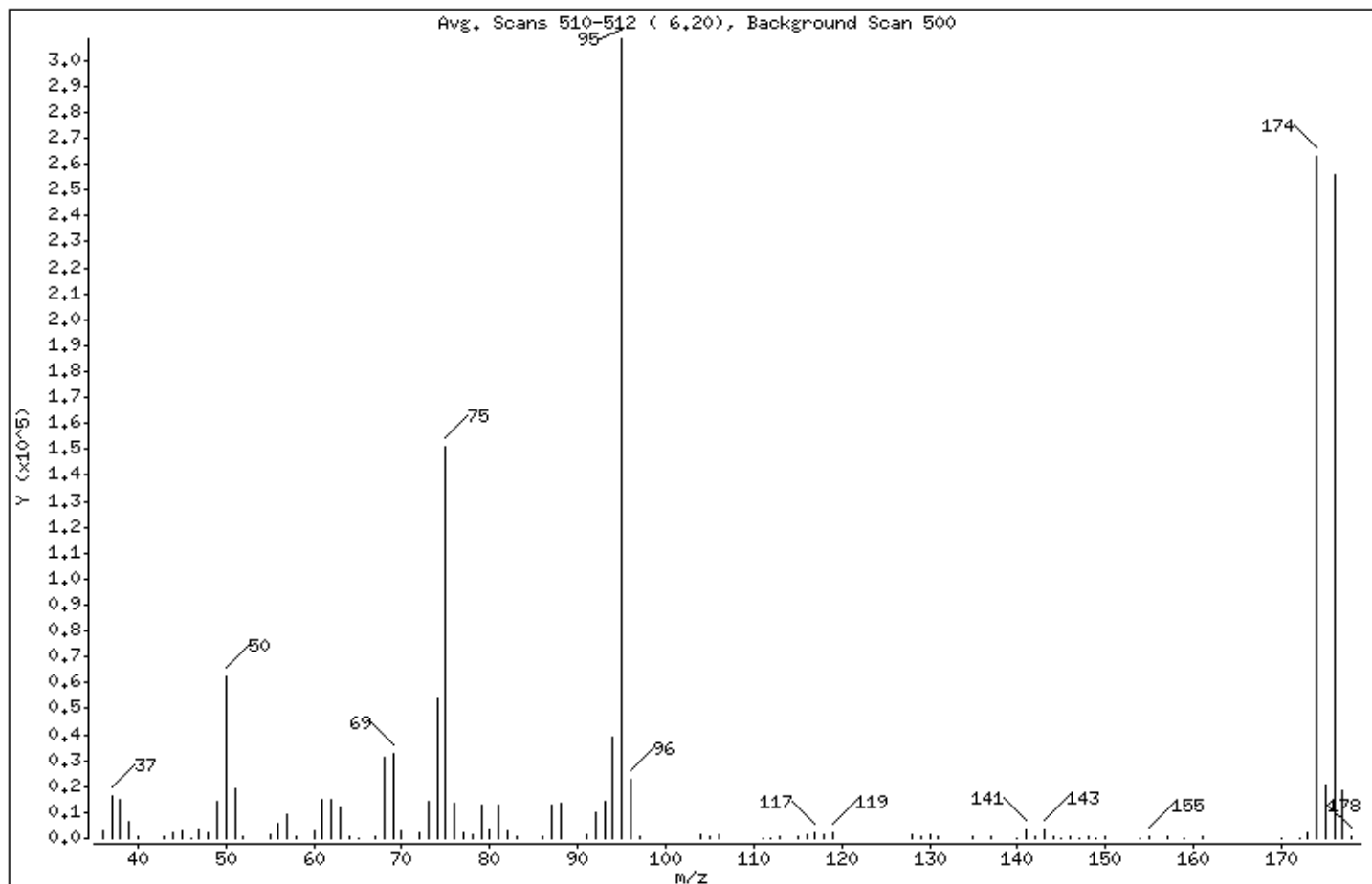
Sample Info: 5HL,BFB6C,BFB6C

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.26
75	30.00 - 60.00% of mass 95	49.08
96	5.00 - 9.00% of mass 95	7.43
173	Less than 2.00% of mass 174	0.64 (0.75)
174	50.00 - 100.00% of mass 95	85.30
175	5.00 - 9.00% of mass 174	6.65 (7.79)
176	95.00 - 101.00% of mass 174	83.06 (97.37)
177	5.00 - 9.00% of mass 176	5.94 (7.15)

Date : 30-AUG-2012 09:04

Client ID: BFB6C

Instrument: V6.i

Sample Info: 5HL,BFB6C,BFB6C

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

Data File: V6I9390.D

Spectrum: Avg. Scans 510-512 (6.20), Background Scan 500

Location of Maximum: 95.00

Number of points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	3026	65.00	103	95.00	308288	144.00	378
37.00	16496	67.00	775	96.00	22904	145.00	130
38.00	14636	68.00	31264	97.00	628	146.00	590
39.00	6242	69.00	32296	104.00	1626	147.00	110
40.00	408	70.00	2960	105.00	437	148.00	952

43.00	429	72.00	1821	106.00	1742	149.00	115
44.00	2036	73.00	13969	111.00	319	150.00	478
45.00	3183	74.00	53936	112.00	128	154.00	102
46.00	247	75.00	151296	113.00	440	155.00	978
47.00	3448	76.00	13790	115.00	498	157.00	681

48.00	2001	77.00	1860	116.00	1356	159.00	254
49.00	13990	78.00	1214	117.00	2306	161.00	537
50.00	62464	79.00	12694	118.00	1235	170.00	100
51.00	19032	80.00	3453	119.00	2167	172.00	241
52.00	968	81.00	12410	128.00	1422	173.00	1984

55.00	1064	82.00	2759	129.00	559	174.00	262976
56.00	5893	83.00	420	130.00	1323	175.00	20496
57.00	9235	86.00	613	131.00	589	176.00	256064
58.00	507	87.00	12879	135.00	664	177.00	18304
60.00	2611	88.00	13454	137.00	731	178.00	453

61.00	15115	91.00	1560	140.00	329		
62.00	15159	92.00	9957	141.00	3824		
63.00	12178	93.00	14090	142.00	391		
64.00	941	94.00	39312	143.00	3796		

Spectrum Analytical, Inc. RI Division

Data file : \\avogadro\organics\V6.i\120906.B\V6I9500.D
 Lab Smp Id: BFB6F Client Smp ID: BFB6F
 Inj Date : 06-SEP-2012 09:10
 Operator : AM SRC: AM Inst ID: V6.i
 Smp Info : 5ML,BFB6F,BFB6F
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120906.B\bfb8260.m
 Meth Date : 07-Sep-2012 10:25 adatta Quant Type: ISTD
 Cal Date : Cal File:
 Als bottle: 2 QC Sample: BFB
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14 Sample Matrix: WATER
 Processing Host: TARGET105

Concentration Formula: Amt * DF * Uf * Vf * VI * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
VI	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

CONCENTRATIONS									
ON-COL FINAL									
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET	RANGE	RATIO
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1 bfb					CAS #: 460-00-4				
6.322	6.300 (0.000)	95	225600				0.00-	100.00	100.00
6.322	6.300 (0.000)	50	45520				15.00-	40.00	20.18
6.322	6.300 (0.000)	75	113224				30.00-	60.00	50.19
6.322	6.300 (0.000)	96	15844				5.00-	9.00	7.02
6.322	6.300 (0.000)	173	1362				0.00-	2.00	0.70
6.322	6.300 (0.000)	174	195200				50.00-	100.00	86.52
6.322	6.300 (0.000)	175	14742				5.00-	9.00	7.55
6.322	6.300 (0.000)	176	192000				95.00-	101.00	98.36
6.322	6.300 (0.000)	177	12715				5.00-	9.00	6.62

Date : 06-SEP-2012 09:10

Client ID: BFB6F

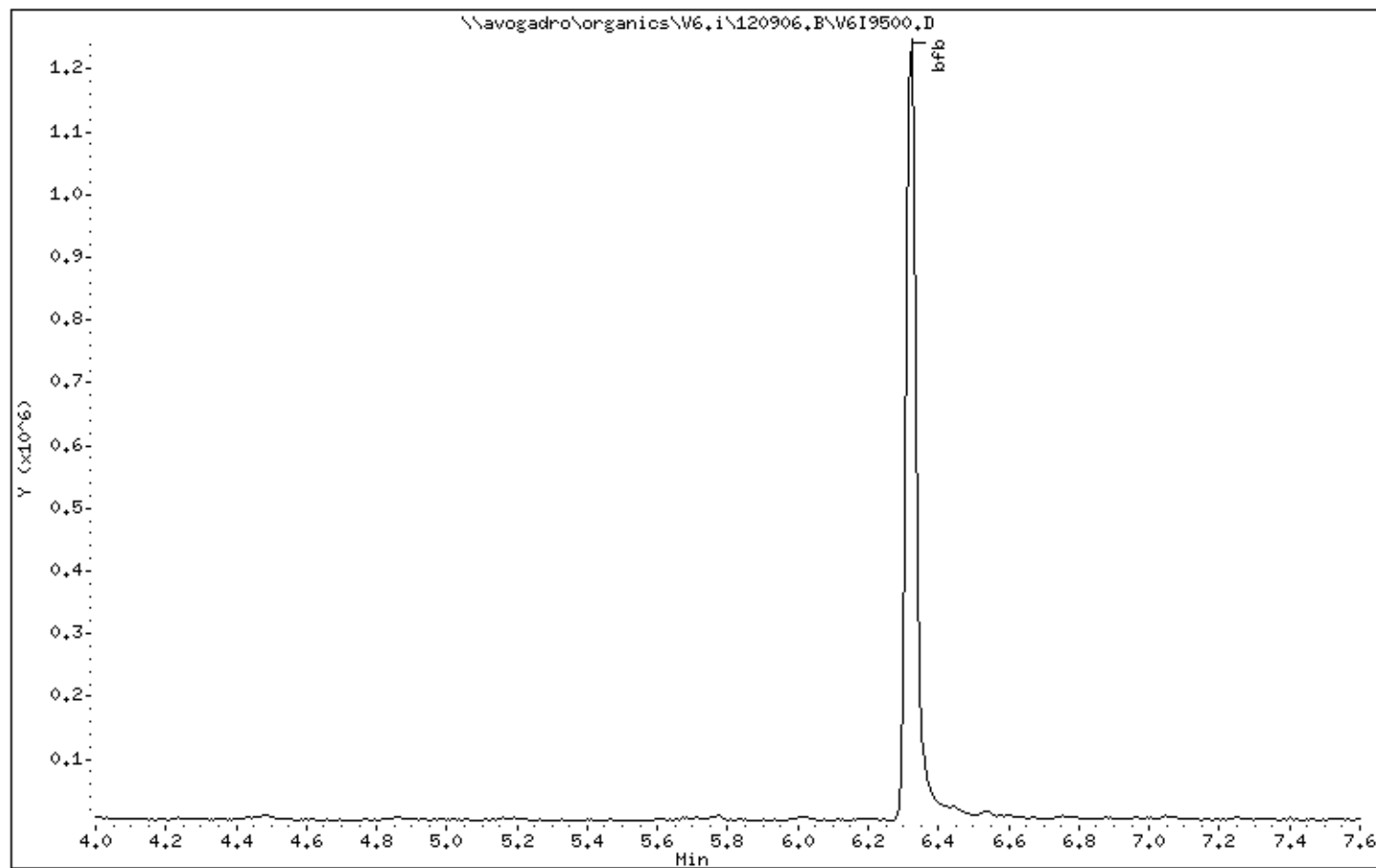
Instrument: V6.i

Sample Info: 5HL,BFB6F,BFB6F

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25



Date : 06-SEP-2012 09:10

Client ID: BFB6F

Instrument: V6.i

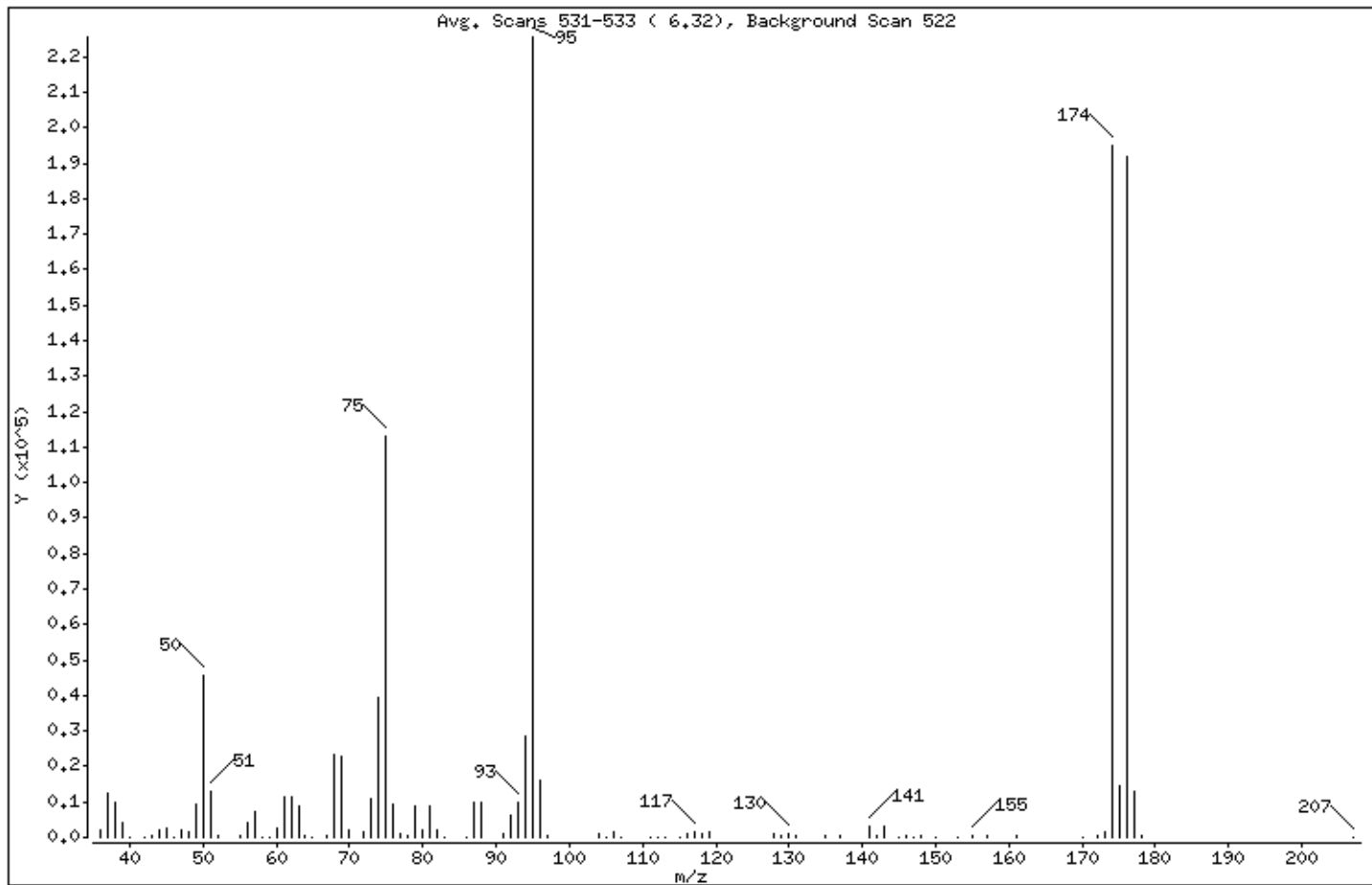
Sample Info: 5HL,BFB6F,BFB6F

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	20.18
75	30.00 - 60.00% of mass 95	50.19
96	5.00 - 9.00% of mass 95	7.02
173	Less than 2.00% of mass 174	0.60 (0.70)
174	50.00 - 100.00% of mass 95	86.52
175	5.00 - 9.00% of mass 174	6.53 (7.55)
176	95.00 - 101.00% of mass 174	85.11 (98.36)
177	5.00 - 9.00% of mass 176	5.64 (6.62)

Date : 06-SEP-2012 09:10

Client ID: BFB6F

Instrument: V6.i

Sample Info: 5HL,BFB6F,BFB6F

Operator: AM SRC: AM

Column phase: DB-624

Column diameter: 0.25

Data File: V6I9500.D

Spectrum: Avg. Scans 531-533 (6.32), Background Scan 522

Location of Maximum: 95.00

Number of points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y

36.00	2241	63.00	8862	93.00	9955	142.00	486
37.00	12190	64.00	742	94.00	28640	143.00	2924
38.00	9696	65.00	226	95.00	225600	145.00	136
39.00	4321	67.00	571	96.00	15844	146.00	267
40.00	68	68.00	23152	97.00	566	147.00	147

42.00	117	69.00	23072	104.00	1110	148.00	674
43.00	339	70.00	1950	105.00	249	150.00	108
44.00	2025	72.00	1303	106.00	1309	153.00	242
45.00	2467	73.00	11003	107.00	137	155.00	578
46.00	228	74.00	39424	111.00	126	157.00	484

47.00	2170	75.00	113224	112.00	111	161.00	260
48.00	1528	76.00	9418	113.00	130	170.00	111
49.00	9459	77.00	1232	115.00	239	172.00	738
50.00	45520	78.00	767	116.00	1083	173.00	1362
51.00	13093	79.00	8667	117.00	1770	174.00	195200

52.00	609	80.00	2156	118.00	1064	175.00	14742
55.00	600	81.00	8960	119.00	1520	176.00	192000
56.00	3897	82.00	1903	128.00	928	177.00	12715
57.00	7436	83.00	104	129.00	410	178.00	426
58.00	146	86.00	169	130.00	1057	207.00	254

59.00	113	87.00	9920	131.00	319		
60.00	2360	88.00	9745	135.00	648		
61.00	11544	91.00	1041	137.00	627		
62.00	11497	92.00	6454	141.00	2977		

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-67915

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67915

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9397.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/30/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-67915

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67915

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9397.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/30/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-67915

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67915
Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9397.D
Level: (TRACE or LOW/MED) LOW Date Received: _____
% Moisture: not dec. Date Analyzed: 08/30/2012
GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120830.B\V6I9397.D
 Report Date: 04-Sep-2012 15:14

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120830.B\V6I9397.D
 Lab Smp Id: MB-67915 Client Smp ID: MB-67915
 Inj Date : 30-AUG-2012 12:15
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,MB-67915,MB-67915,67915
 Misc Info :
 Comment :
 Method : \\Avogadro\Organics\V6.i\120830.B\v68260Gadd-6lvl.m
 Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 8 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.551	4.549	(0.887)	230038	51.3121	51
\$ 42 1,2-Dichloroethane-d4	102	4.846	4.845	(0.945)	47375	49.2609	49
* 46 Fluorobenzene	96	5.130	5.129	(1.000)	762418	50.0000	
\$ 58 Toluene-d8	98	6.586	6.596	(0.813)	762989	49.5863	50
* 68 Chlorobenzene-d5	117	8.101	8.099	(1.000)	648248	50.0000	
\$ 79 Bromofluorobenzene	95	9.402	9.401	(1.161)	324433	47.7520	48
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.619	(1.000)	363007	50.0000	

Data File: \\avogadro\organics\V6.i\120830.B\V6I9397.D
Report Date: 04-Sep-2012 15:14

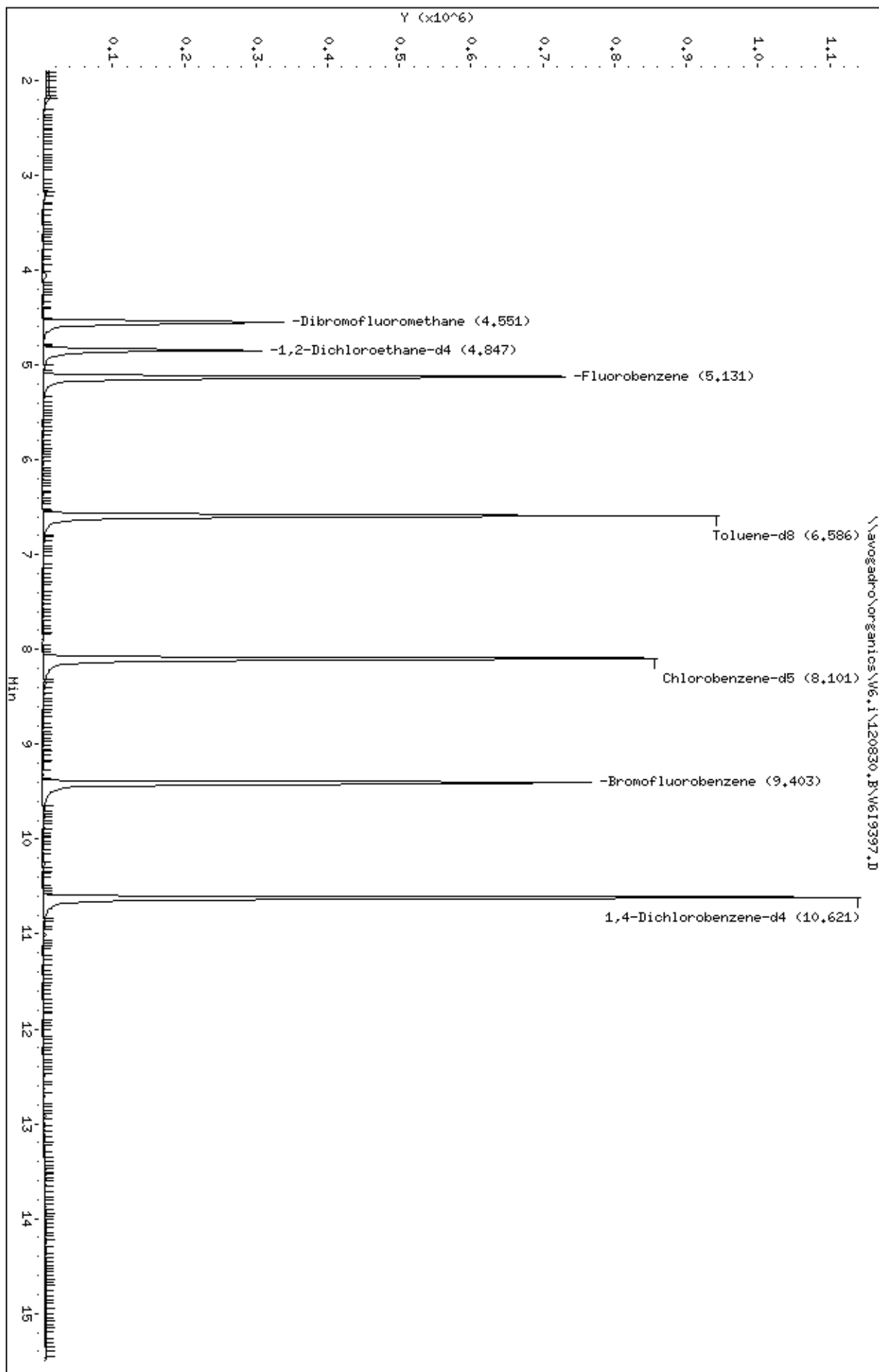
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120830.B\V6I9397.D
Lab Smp Id: MB-67915 Client Smp ID: MB-67915
Inj Date : 30-AUG-2012 12:15
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML, MB-67915, MB-67915, 67915
Misc Info :
Comment :
Method : \\Avogadro\Organics\V6.i\120830.B\v68260Gadd-6lvl.m
Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120830.B\W6I9397.D
Date : 30-AUG-2012 12:15
Client ID: MB-67915
Sample Info: 5HL,MB-67915,MB-67915,67915
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-67991

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67991

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9506.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 09/06/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-67991

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67991

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9506.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 09/06/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MB-67991

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-67991

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9506.D

Level: (TRACE or LOW/MED) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 09/06/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Purge Volume: 5.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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¹EPA-designated Registry Number.

Data File: \\avogadro\organics\V6.i\120906.B\V6I9506.D
 Report Date: 07-Sep-2012 10:30

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
 Data file : \\avogadro\organics\V6.i\120906.B\V6I9506.D
 Lab Smp Id: MB-67991 Client Smp ID: MB-67991
 Inj Date : 06-SEP-2012 11:44
 Operator : AM SRC: LIMS Inst ID: V6.i
 Smp Info : 5ML,MB-67991,MB-67991,67991
 Misc Info :
 Comment :
 Method : \\avogadro\organics\V6.i\120906.B\v68260Gadd-6lvl.m
 Meth Date : 07-Sep-2012 10:28 adatta Quant Type: ISTD
 Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
 Als bottle: 35 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/L)	FINAL (ug/L)
\$ 36 Dibromofluoromethane	113	4.552	4.548	(0.887)	225224	51.7432	52
\$ 42 1,2-Dichloroethane-d4	102	4.848	4.844	(0.945)	47190	50.5383	50
* 46 Fluorobenzene	96	5.131	5.128	(1.000)	740244	50.0000	
\$ 58 Toluene-d8	98	6.587	6.595	(0.813)	762976	46.8794	47
* 68 Chlorobenzene-d5	117	8.102	8.098	(1.000)	685667	50.0000	
\$ 79 Bromofluorobenzene	95	9.403	9.400	(1.161)	340359	47.3622	47
* 92 1,4-Dichlorobenzene-d4	152	10.622	10.618	(1.000)	392823	50.0000	

Data File: \\avogadro\organics\V6.i\120906.B\V6I9506.D
Report Date: 07-Sep-2012 10:30

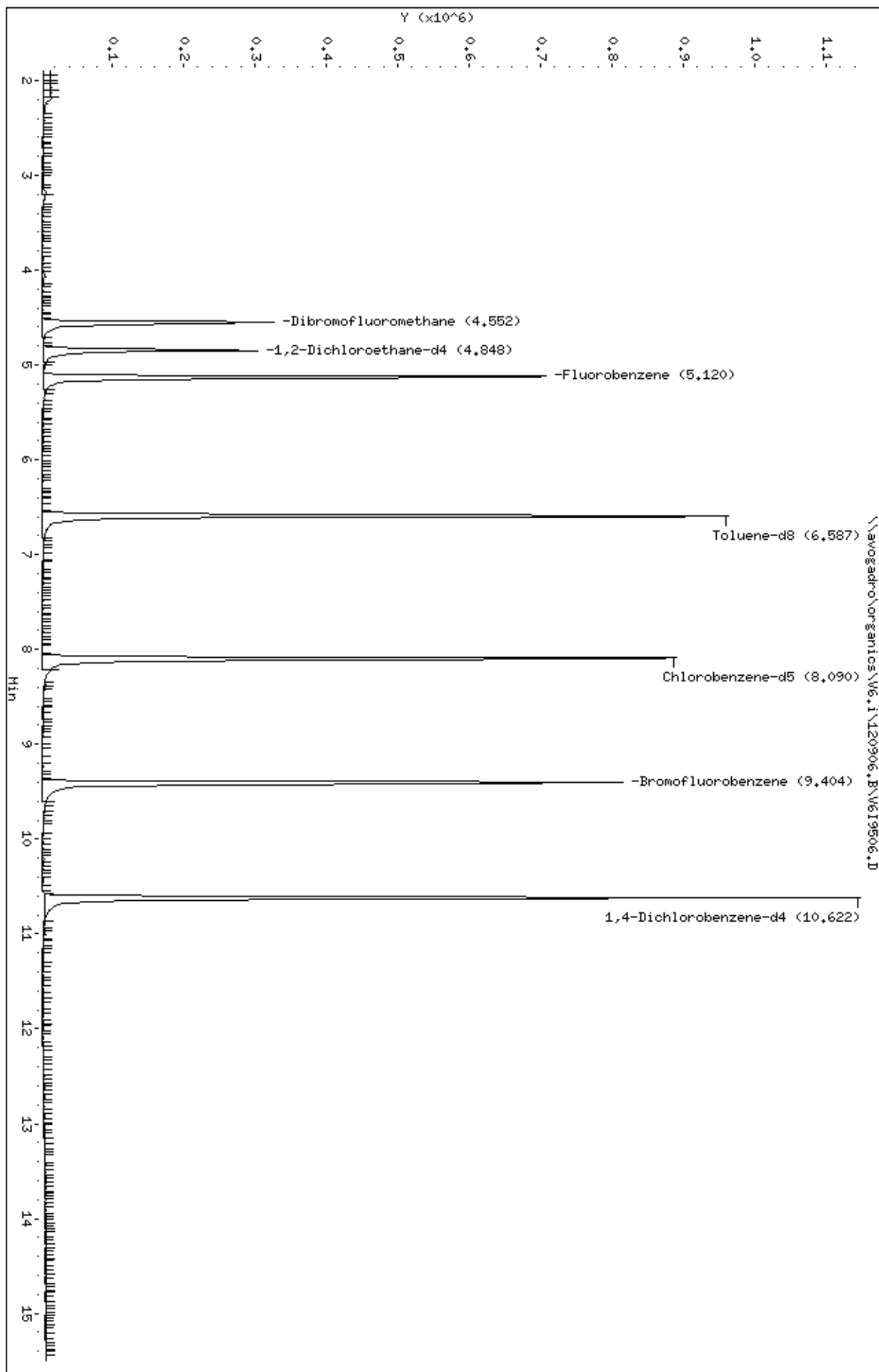
Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120906.B\V6I9506.D
Lab Smp Id: MB-67991 Client Smp ID: MB-67991
Inj Date : 06-SEP-2012 11:44
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,MB-67991,MB-67991,67991
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120906.B\v68260Gadd-6lvl.m
Meth Date : 07-Sep-2012 10:28 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 35 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

Data File: \\avogadro\organics\W6,i\120906.B\W6I9506.D
Date : 06-SEP-2012 11:44
Client ID: MB-67991
Sample Info: 5HL,MB-67991,MB-67991,67991
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-67915

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: LCS-67915
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9393.D
Level: (TRACE/LOW/MED) LOW	Date Received: _____
% Moisture: not dec.	Date Analyzed: 08/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	53	
74-87-3	Chloromethane	55	
75-01-4	Vinyl chloride	52	
74-83-9	Bromomethane	51	
75-00-3	Chloroethane	50	
75-69-4	Trichlorofluoromethane	55	
75-35-4	1,1-Dichloroethene	59	
67-64-1	Acetone	55	
74-88-4	Iodomethane	49	
75-15-0	Carbon disulfide	51	
75-09-2	Methylene chloride	42	
156-60-5	trans-1,2-Dichloroethene	51	
1634-04-4	Methyl tert-butyl ether	49	
75-34-3	1,1-Dichloroethane	51	
108-05-4	Vinyl acetate	50	
78-93-3	2-Butanone	50	
156-59-2	cis-1,2-Dichloroethene	53	
594-20-7	2,2-Dichloropropane	52	
74-97-5	Bromochloromethane	53	
67-66-3	Chloroform	52	
71-55-6	1,1,1-Trichloroethane	49	
563-58-6	1,1-Dichloropropene	53	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	51	
71-43-2	Benzene	52	
79-01-6	Trichloroethene	50	
78-87-5	1,2-Dichloropropane	53	
74-95-3	Dibromomethane	52	
75-27-4	Bromodichloromethane	53	
10061-01-5	cis-1,3-Dichloropropene	53	
108-10-1	4-Methyl-2-pentanone	43	
108-88-3	Toluene	52	
10061-02-6	trans-1,3-Dichloropropene	56	
79-00-5	1,1,2-Trichloroethane	52	
142-28-9	1,3-Dichloropropane	51	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-67915

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-67915

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9393.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 08/30/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	48	
591-78-6	2-Hexanone	45	
124-48-1	Dibromochloromethane	51	
106-93-4	1,2-Dibromoethane	50	
108-90-7	Chlorobenzene	52	
630-20-6	1,1,1,2-Tetrachloroethane	51	
100-41-4	Ethylbenzene	51	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	52	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	52	
75-25-2	Bromoform	50	
98-82-8	Isopropylbenzene	53	
79-34-5	1,1,2,2-Tetrachloroethane	51	
108-86-1	Bromobenzene	51	
96-18-4	1,2,3-Trichloropropane	45	
103-65-1	n-Propylbenzene	51	
95-49-8	2-Chlorotoluene	51	
108-67-8	1,3,5-Trimethylbenzene	50	
106-43-4	4-Chlorotoluene	50	
98-06-6	tert-Butylbenzene	52	
95-63-6	1,2,4-Trimethylbenzene	51	
135-98-8	sec-Butylbenzene	51	
99-87-6	4-Isopropyltoluene	52	
541-73-1	1,3-Dichlorobenzene	50	
106-46-7	1,4-Dichlorobenzene	48	
104-51-8	n-Butylbenzene	53	
95-50-1	1,2-Dichlorobenzene	50	
96-12-8	1,2-Dibromo-3-chloropropane	42	
120-82-1	1,2,4-Trichlorobenzene	50	
87-68-3	Hexachlorobutadiene	53	
87-61-6	1,2,3-Trichlorobenzene	47	
91-20-3	Naphthalene	44	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120830.B\V6I9393.D
Lab Smp Id: LCS-67915 Client Smp ID: LCS-67915
Inj Date : 30-AUG-2012 10:41
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML, LCS-67915, LCS-67915, 67915
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120830.B\v68260Gadd-6lvl.m
Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.591	1.591 (0.310)		173141	50.0000	53
2 Freon114	85	1.697	1.697 (0.331)		335339	50.0000	55
3 Chloromethane	50	1.768	1.780 (0.345)		375201	50.0000	55
4 Vinyl Chloride	62	1.851	1.851 (0.361)		312214	50.0000	52
5 Bromomethane	94	2.135	2.135 (0.416)		214765	50.0000	50
6 Chloroethane	64	2.218	2.218 (0.433)		172777	50.0000	50
7 Trichlorofluoromethane	101	2.407	2.407 (0.469)		433559	50.0000	55
126 Ethanol	46	2.538	2.538 (0.495)		67844	5000.00	8800(AQ)
8 Ether	59	2.609	2.609 (0.509)		185541	50.0000	52(Q)
9 Acrolein	56	2.727	2.727 (0.532)		103484	250.000	120
10 1,1-Dichloroethene	96	2.810	2.810 (0.548)		281689	50.0000	59(Q)
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.798	2.810 (0.546)		287635	50.0000	54
12 Acetone	58	2.833	2.833 (0.552)		33336	50.0000	55(Q)
13 Iodomethane	142	2.952	2.952 (0.576)		505951	50.0000	49
14 Carbon Disulfide	76	2.987	2.987 (0.582)		1000849	50.0000	51
15 Acetonitrile	41	3.070	3.070 (0.599)		624156	500.000	480(A)
16 Allyl Chloride	39	3.070	3.070 (0.599)		327690	50.0000	53
17 Methyl Acetate	43	3.082	3.082 (0.601)		216804	50.0000	46
18 Methylene Chloride	84	3.165	3.165 (0.617)		274183	50.0000	42(Q)
19 tert-Butanol	59	3.236	3.236 (0.631)		46568	100.000	93
20 Acrylonitrile	53	3.366	3.366 (0.656)		90877	50.0000	47
21 trans-1,2-Dichloroethene	96	3.378	3.378 (0.659)		240739	50.0000	51
22 Methyl tert-butyl ether	73	3.366	3.366 (0.656)		635315	50.0000	49

Data File: \\avogadro\organics\V6.i\120830.B\V6I9393.D
Report Date: 04-Sep-2012 15:14

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.697	3.697	(0.721)	415538		50.0000	51
24 Vinyl acetate	43	3.733	3.733	(0.728)	769737		50.0000	50
25 Diisopropyl Ether	45	3.733	3.733	(0.728)	764001		50.0000	52
26 2-Chloro-1,3-Butadiene	53	3.768	3.768	(0.735)	358242		50.0000	51
27 Ethyl tert-butyl ether	59	4.017	4.017	(0.783)	694758		50.0000	50
29 2,2-Dichloropropane	77	4.159	4.159	(0.811)	206344		50.0000	52
28 cis-1,2-Dichloroethene	96	4.171	4.170	(0.813)	245583		50.0000	52
30 2-Butanone	72	4.171	4.170	(0.813)	31693		50.0000	50
32 Propionitrile	54	4.230	4.230	(0.825)	317213		500.000	440(A)
33 Methacrylonitrile	41	4.348	4.348	(0.848)	270699		100.000	97
34 Bromochloromethane	128	4.360	4.360	(0.850)	135079		50.0000	53
31 Tetrahydrofuran	72	4.395	4.395	(0.857)	55637		100.000	83
35 Chloroform	83	4.419	4.419	(0.862)	407413		50.0000	52
\$ 36 Dibromofluoromethane	113	4.549	4.549	(0.887)	245380		50.0000	50
37 1,1,1-Trichloroethane	97	4.585	4.573	(0.894)	336312		50.0000	49
38 Cyclohexane	56	4.632	4.632	(0.903)	382028		50.0000	51
39 1,1-Dichloropropene	110	4.715	4.715	(0.919)	118945		50.0000	53
40 Carbon Tetrachloride	117	4.715	4.715	(0.919)	360948		50.0000	51
41 Isobutyl Alcohol	43	4.774	4.774	(0.931)	180171		1000.00	820(A)
\$ 42 1,2-Dichloroethane-d4	102	4.845	4.845	(0.945)	53859		50.0000	51
43 Benzene	78	4.892	4.892	(0.954)	839530		50.0000	52
44 1,2-Dichloroethane	62	4.904	4.904	(0.956)	335134		50.0000	51
45 tert-Amyl methyl ether	73	4.963	4.963	(0.968)	640990		50.0000	50
M 50 1,2-Dichloroethene (Total)	96				486322		100.000	100
* 46 Fluorobenzene	96	5.129	5.129	(1.000)	831915		50.0000	
47 Trichloroethene	130	5.448	5.448	(1.062)	248031		50.0000	50
48 Methylcyclohexane	83	5.626	5.626	(1.097)	323427		50.0000	55
49 1,2-Dichloropropane	63	5.661	5.661	(1.104)	232270		50.0000	53
51 Methyl Methacrylate	69	5.732	5.732	(1.118)	165870		50.0000	46
52 Dibromomethane	93	5.768	5.768	(1.125)	154500		50.0000	52
53 1,4-Dioxane	88	5.780	5.780	(1.127)	29919		1000.00	940(A)
54 Bromodichloromethane	83	5.898	5.898	(1.150)	326056		50.0000	52
55 2-Chloroethyl vinyl ether	63	6.655	6.655	(1.298)	85705		50.0000	55
56 cis-1,3-Dichloropropene	75	6.324	6.324	(1.233)	367431		50.0000	53
57 4-Methyl-2-pentanone	43	6.466	6.466	(1.261)	218730		50.0000	43
\$ 58 Toluene-d8	98	6.596	6.596	(0.814)	814070		50.0000	49
59 Toluene	91	6.655	6.655	(1.298)	908519		50.0000	52
60 trans-1,3-Dichloropropene	75	6.880	6.880	(1.341)	346624		50.0000	56
61 Ethyl Methacrylate	69	6.951	6.951	(1.355)	245664		50.0000	48
62 1,1,2-Trichloroethane	97	7.070	7.058	(1.378)	206473		50.0000	52
63 Tetrachloroethene	164	7.212	7.211	(0.890)	206345		50.0000	48
64 1,3-Dichloropropane	76	7.235	7.235	(0.893)	334611		50.0000	50
65 2-Hexanone	43	7.318	7.306	(0.904)	157490		50.0000	45
66 Dibromochloromethane	129	7.484	7.484	(0.924)	284049		50.0000	51
67 1,2-Dibromoethane	107	7.614	7.614	(0.940)	235843		50.0000	50
69 1-Chlorohexane	91	8.087	8.087	(0.999)	302966		50.0000	48
* 68 Chlorobenzene-d5	117	8.099	8.099	(1.000)	693117		50.0000	
70 Chlorobenzene	112	8.123	8.123	(1.003)	638811		50.0000	52
71 1,1,1,2-Tetrachloroethane	131	8.217	8.217	(1.015)	258297		50.0000	50
72 Ethylbenzene	106	8.241	8.241	(1.018)	328898		50.0000	51
73 m,p-Xylene	106	8.371	8.371	(1.034)	805610		100.000	100
74 o-Xylene	106	8.809	8.809	(1.088)	405894		50.0000	52
75 Styrene	104	8.833	8.833	(1.091)	703231		50.0000	52
76 Bromoform	173	9.057	9.046	(1.118)	203171		50.0000	50

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.235	9.235	(1.140)	1006689		50.0000	53
78 trans-1,4-Dichloro-2-butene	75	9.318	9.318	(1.150)	87420		50.0000	49
\$ 79 Bromofluorobenzene	95	9.401	9.401	(1.161)	352258		50.0000	48
80 1,1,2,2-Tetrachloroethane	77	9.566	9.566	(0.901)	511315		50.0000	50
81 Bromobenzene	156	9.578	9.578	(0.902)	308430		50.0000	51
82 1,2,3-Trichloropropane	75	9.614	9.614	(0.905)	360634		50.0000	44
83 n-Propylbenzene	120	9.685	9.685	(0.912)	288760		50.0000	51
84 2-Chlorotoluene	126	9.779	9.779	(0.921)	277335		50.0000	51
85 1,3,5-Trimethylbenzene	105	9.874	9.874	(0.930)	860384		50.0000	50
86 4-Chlorotoluene	126	9.898	9.898	(0.932)	293153		50.0000	50
M 94 Xylene (Total)	106				1211504		150.000	150
87 tert-Butylbenzene	119	10.584	10.584	(0.997)	899582		50.0000	52
88 1,2,4-Trimethylbenzene	105	10.264	10.264	(0.967)	882075		50.0000	51
89 sec-Butylbenzene	105	10.442	10.442	(0.983)	1040595		50.0000	51
90 1,3-Dichlorobenzene	146	10.548	10.548	(0.993)	550246		50.0000	50
91 4-Isopropyltoluene	119	10.584	10.584	(0.997)	899582		50.0000	52
* 92 1,4-Dichlorobenzene-d4	152	10.619	10.619	(1.000)	416991		50.0000	
93 1,4-Dichlorobenzene	146	10.643	10.643	(1.002)	599411		50.0000	48
95 n-Butylbenzene	91	10.986	10.986	(1.035)	828286		50.0000	53
96 1,2-Dichlorobenzene	146	11.010	11.010	(1.037)	560923		50.0000	50
97 Hexachloroethane	117	11.247	11.246	(1.059)	204511		50.0000	50
98 1,2-Dibromo-3-chloropropane	75	11.744	11.755	(1.106)	59143		50.0000	42
141 1,3,5-Trichlorobenzene	182	12.489	12.489	(2.435)	325278		50.0000	53(A)
99 1,2,4-Trichlorobenzene	180	12.489	12.489	(1.176)	340367		50.0000	50
100 Hexachlorobutadiene	225	12.631	12.631	(1.189)	127959		50.0000	52
101 Naphthalene	128	12.714	12.714	(1.197)	816218		50.0000	44
102 1,2,3-Trichlorobenzene	180	12.915	12.915	(1.216)	287356		50.0000	47

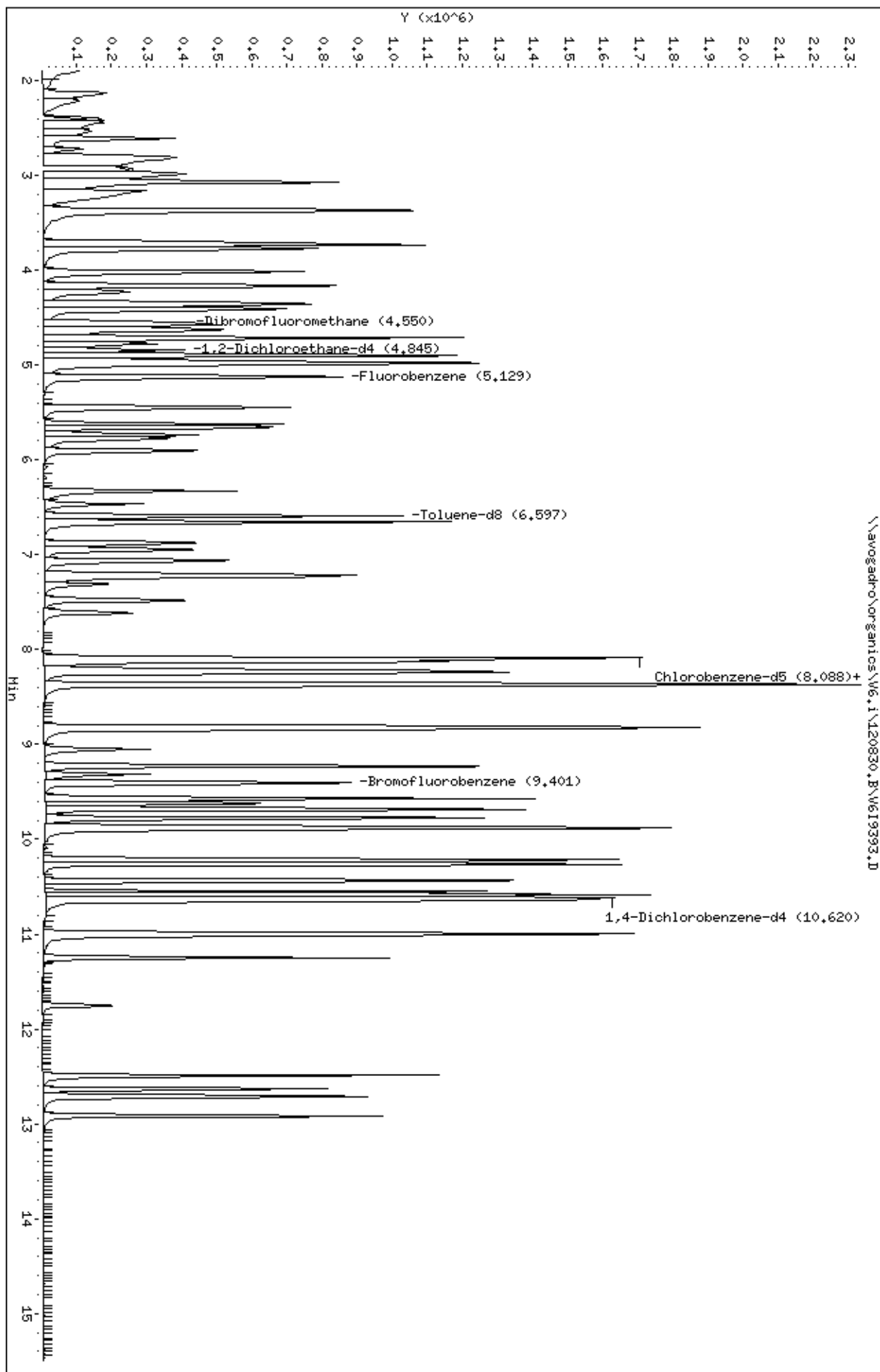
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120830.B\W6I9393.D
 Date : 30-AUG-2012 10:41
 Client ID: LCS-67915
 Sample Info: 5ML,LCS-67915,LCS-67915,67915
 Purge Volume: 5.0
 Column phase: DB-624

Instrument: W6,i
 Operator: AH SRC: LIMS
 Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-67991

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-67991

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9502.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 09/06/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	45	
74-87-3	Chloromethane	55	
75-01-4	Vinyl chloride	53	
74-83-9	Bromomethane	52	
75-00-3	Chloroethane	54	
75-69-4	Trichlorofluoromethane	56	
75-35-4	1,1-Dichloroethene	63	
67-64-1	Acetone	40	
74-88-4	Iodomethane	52	
75-15-0	Carbon disulfide	53	
75-09-2	Methylene chloride	45	
156-60-5	trans-1,2-Dichloroethene	54	
1634-04-4	Methyl tert-butyl ether	55	
75-34-3	1,1-Dichloroethane	55	
108-05-4	Vinyl acetate	54	
78-93-3	2-Butanone	47	
156-59-2	cis-1,2-Dichloroethene	56	
594-20-7	2,2-Dichloropropane	57	
74-97-5	Bromochloromethane	56	
67-66-3	Chloroform	55	
71-55-6	1,1,1-Trichloroethane	53	
563-58-6	1,1-Dichloropropene	55	
56-23-5	Carbon tetrachloride	54	
107-06-2	1,2-Dichloroethane	56	
71-43-2	Benzene	55	
79-01-6	Trichloroethene	53	
78-87-5	1,2-Dichloropropane	56	
74-95-3	Dibromomethane	56	
75-27-4	Bromodichloromethane	56	
10061-01-5	cis-1,3-Dichloropropene	55	
108-10-1	4-Methyl-2-pentanone	50	
108-88-3	Toluene	55	
10061-02-6	trans-1,3-Dichloropropene	59	
79-00-5	1,1,2-Trichloroethane	54	
142-28-9	1,3-Dichloropropane	51	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-67991

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: LCS-67991
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9502.D
Level: (TRACE/LOW/MED) LOW	Date Received:
% Moisture: not dec.	Date Analyzed: 09/06/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	48	
591-78-6	2-Hexanone	46	
124-48-1	Dibromochloromethane	51	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	52	
630-20-6	1,1,1,2-Tetrachloroethane	51	
100-41-4	Ethylbenzene	51	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	50	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	51	
75-25-2	Bromoform	50	
98-82-8	Isopropylbenzene	52	
79-34-5	1,1,2,2-Tetrachloroethane	49	
108-86-1	Bromobenzene	50	
96-18-4	1,2,3-Trichloropropane	39	
103-65-1	n-Propylbenzene	48	
95-49-8	2-Chlorotoluene	48	
108-67-8	1,3,5-Trimethylbenzene	49	
106-43-4	4-Chlorotoluene	48	
98-06-6	tert-Butylbenzene	49	
95-63-6	1,2,4-Trimethylbenzene	48	
135-98-8	sec-Butylbenzene	48	
99-87-6	4-Isopropyltoluene	49	
541-73-1	1,3-Dichlorobenzene	49	
106-46-7	1,4-Dichlorobenzene	47	
104-51-8	n-Butylbenzene	50	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	45	
120-82-1	1,2,4-Trichlorobenzene	51	
87-68-3	Hexachlorobutadiene	53	
87-61-6	1,2,3-Trichlorobenzene	49	
91-20-3	Naphthalene	46	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120906.B\V6I9502.D
Lab Smp Id: LCS-67991 Client Smp ID: LCS-67991
Inj Date : 06-SEP-2012 10:10
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML, LCS-67991, LCS-67991, 67991
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120906.B\v68260Gadd-6lvl.m
Meth Date : 07-Sep-2012 10:28 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 31 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.590	1.590 (0.310)		139817	50.0000	45
2 Freon114	85	1.697	1.697 (0.331)		282124	50.0000	48
3 Chloromethane	50	1.779	1.779 (0.347)		359565	50.0000	55
4 Vinyl Chloride	62	1.850	1.850 (0.361)		305964	50.0000	53
5 Bromomethane	94	2.134	2.134 (0.416)		211965	50.0000	52
6 Chloroethane	64	2.217	2.217 (0.432)		176758	50.0000	54
7 Trichlorofluoromethane	101	2.407	2.407 (0.469)		421838	50.0000	56
126 Ethanol	46	2.537	2.537 (0.495)		50794	5000.00	6900(A)
8 Ether	59	2.608	2.608 (0.509)		196076	50.0000	58(Q)
9 Acrolein	56	2.726	2.726 (0.532)		253605	250.000	300(A)
10 1,1-Dichloroethene	96	2.809	2.809 (0.548)		286772	50.0000	63
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.809	2.809 (0.548)		268506	50.0000	53
12 Acetone	58	2.844	2.844 (0.555)		23343	50.0000	40
13 Iodomethane	142	2.951	2.951 (0.575)		512044	50.0000	52
14 Carbon Disulfide	76	2.986	2.986 (0.582)		1004038	50.0000	53
15 Acetonitrile	41	3.069	3.069 (0.599)		649406	500.000	520(A)
16 Allyl Chloride	39	3.069	3.069 (0.599)		335910	50.0000	56
17 Methyl Acetate	43	3.081	3.081 (0.601)		250629	50.0000	56
18 Methylene Chloride	84	3.164	3.164 (0.617)		278551	50.0000	45
19 tert-Butanol	59	3.235	3.235 (0.631)		55963	100.000	120
20 Acrylonitrile	53	3.365	3.365 (0.656)		102614	50.0000	56
21 trans-1,2-Dichloroethene	96	3.377	3.377 (0.659)		240298	50.0000	54
22 Methyl tert-butyl ether	73	3.365	3.365 (0.656)		684525	50.0000	55

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.708	3.708	(0.723)	427705		50.0000	55
24 Vinyl acetate	43	3.732	3.732	(0.728)	794152		50.0000	54
25 Diisopropyl Ether	45	3.732	3.732	(0.728)	790298		50.0000	56
26 2-Chloro-1,3-Butadiene	53	3.779	3.779	(0.737)	366722		50.0000	55
27 Ethyl tert-butyl ether	59	4.016	4.016	(0.783)	713812		50.0000	54
29 2,2-Dichloropropane	77	4.170	4.170	(0.813)	218542		50.0000	57
28 cis-1,2-Dichloroethene	96	4.170	4.170	(0.813)	250527		50.0000	56
30 2-Butanone	72	4.170	4.170	(0.813)	28779		50.0000	47
32 Propionitrile	54	4.229	4.229	(0.825)	353647		500.000	520(A)
33 Methacrylonitrile	41	4.347	4.347	(0.848)	290340		100.000	110
34 Bromochloromethane	128	4.359	4.359	(0.850)	136739		50.0000	56
31 Tetrahydrofuran	72	4.394	4.394	(0.857)	64568		100.000	100
35 Chloroform	83	4.418	4.418	(0.862)	417082		50.0000	55
\$ 36 Dibromofluoromethane	113	4.548	4.548	(0.887)	240479		50.0000	51
37 1,1,1-Trichloroethane	97	4.584	4.584	(0.894)	347953		50.0000	53
38 Cyclohexane	56	4.631	4.631	(0.903)	381690		50.0000	53
39 1,1-Dichloropropene	110	4.714	4.714	(0.919)	119297		50.0000	55
40 Carbon Tetrachloride	117	4.714	4.714	(0.919)	364010		50.0000	54
41 Isobutyl Alcohol	43	4.773	4.773	(0.931)	219655		1000.00	1000(A)
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.844	(0.945)	54041		50.0000	54
43 Benzene	78	4.891	4.891	(0.954)	851863		50.0000	55
44 1,2-Dichloroethane	62	4.903	4.903	(0.956)	351606		50.0000	56
45 tert-Amyl methyl ether	73	4.962	4.962	(0.968)	665061		50.0000	54
M 50 1,2-Dichloroethene (Total)	96				490825		100.000	110
* 46 Fluorobenzene	96	5.128	5.128	(1.000)	796049		50.0000	
47 Trichloroethene	130	5.448	5.448	(1.062)	252147		50.0000	53
48 Methylcyclohexane	83	5.625	5.625	(1.097)	296974		50.0000	53
49 1,2-Dichloropropane	63	5.661	5.661	(1.104)	237625		50.0000	56
51 Methyl Methacrylate	69	5.732	5.732	(1.118)	167689		50.0000	49
52 Dibromomethane	93	5.779	5.779	(1.127)	157618		50.0000	56
53 1,4-Dioxane	88	5.779	5.779	(1.127)	26587		1000.00	880(A)
54 Bromodichloromethane	83	5.909	5.909	(1.152)	329995		50.0000	56
55 2-Chloroethyl vinyl ether	63	6.654	6.654	(1.298)	86443		50.0000	58
56 cis-1,3-Dichloropropene	75	6.323	6.323	(1.233)	363554		50.0000	55
57 4-Methyl-2-pentanone	43	6.465	6.465	(1.261)	239415		50.0000	50
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	807473		50.0000	48
59 Toluene	91	6.654	6.654	(1.298)	920651		50.0000	55
60 trans-1,3-Dichloropropene	75	6.879	6.879	(1.341)	348606		50.0000	58
61 Ethyl Methacrylate	69	6.950	6.950	(1.355)	257396		50.0000	52
62 1,1,2-Trichloroethane	97	7.069	7.069	(1.378)	206625		50.0000	54
63 Tetrachloroethene	164	7.211	7.211	(0.890)	209950		50.0000	48
64 1,3-Dichloropropane	76	7.234	7.234	(0.893)	341029		50.0000	51
65 2-Hexanone	43	7.317	7.317	(0.904)	166186		50.0000	46
66 Dibromochloromethane	129	7.483	7.483	(0.924)	285604		50.0000	51
67 1,2-Dibromoethane	107	7.613	7.613	(0.940)	244189		50.0000	51
69 1-Chlorohexane	91	8.086	8.086	(0.999)	305949		50.0000	48
* 68 Chlorobenzene-d5	117	8.098	8.098	(1.000)	705531		50.0000	
70 Chlorobenzene	112	8.122	8.122	(1.003)	649982		50.0000	52
71 1,1,1,2-Tetrachloroethane	131	8.216	8.216	(1.015)	262999		50.0000	50
72 Ethylbenzene	106	8.240	8.240	(1.018)	332944		50.0000	51
73 m,p-Xylene	106	8.370	8.370	(1.034)	819797		100.000	100
74 o-Xylene	106	8.820	8.820	(1.089)	401242		50.0000	50
75 Styrene	104	8.832	8.832	(1.091)	697340		50.0000	50
76 Bromoform	173	9.057	9.057	(1.118)	205567		50.0000	50

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.234	9.234	(1.140)	1004561		50.0000	52
78 trans-1,4-Dichloro-2-butene	75	9.317	9.317	(1.150)	78903		50.0000	43
\$ 79 Bromofluorobenzene	95	9.400	9.400	(1.161)	371024		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.565	9.565	(0.901)	515642		50.0000	49
81 Bromobenzene	156	9.577	9.577	(0.902)	310681		50.0000	50
82 1,2,3-Trichloropropane	75	9.613	9.613	(0.905)	332242		50.0000	39
83 n-Propylbenzene	120	9.684	9.684	(0.912)	285303		50.0000	48
84 2-Chlorotoluene	126	9.778	9.778	(0.921)	273495		50.0000	48
85 1,3,5-Trimethylbenzene	105	9.873	9.873	(0.930)	863290		50.0000	48
86 4-Chlorotoluene	126	9.897	9.897	(0.932)	293861		50.0000	48
M 94 Xylene (Total)	106				1221039		150.000	150
87 tert-Butylbenzene	119	10.583	10.583	(0.997)	886081		50.0000	49
88 1,2,4-Trimethylbenzene	105	10.263	10.263	(0.967)	866747		50.0000	48
89 sec-Butylbenzene	105	10.441	10.441	(0.983)	1037351		50.0000	48
90 1,3-Dichlorobenzene	146	10.547	10.547	(0.993)	557357		50.0000	49
91 4-Isopropyltoluene	119	10.583	10.583	(0.997)	886081		50.0000	49
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.618	(1.000)	435059		50.0000	
93 1,4-Dichlorobenzene	146	10.642	10.642	(1.002)	605473		50.0000	47
95 n-Butylbenzene	91	10.985	10.985	(1.035)	809301		50.0000	50
96 1,2-Dichlorobenzene	146	11.009	11.009	(1.037)	568652		50.0000	48
97 Hexachloroethane	117	11.246	11.246	(1.059)	201926		50.0000	48
98 1,2-Dibromo-3-chloropropane	75	11.754	11.754	(1.107)	67516		50.0000	45
141 1,3,5-Trichlorobenzene	182	12.488	12.488	(2.435)	336719		50.0000	58(A)
99 1,2,4-Trichlorobenzene	180	12.488	12.488	(1.176)	356567		50.0000	51
100 Hexachlorobutadiene	225	12.630	12.630	(1.189)	133683		50.0000	53
101 Naphthalene	128	12.713	12.713	(1.197)	906112		50.0000	46
102 1,2,3-Trichlorobenzene	180	12.914	12.914	(1.216)	310293		50.0000	49

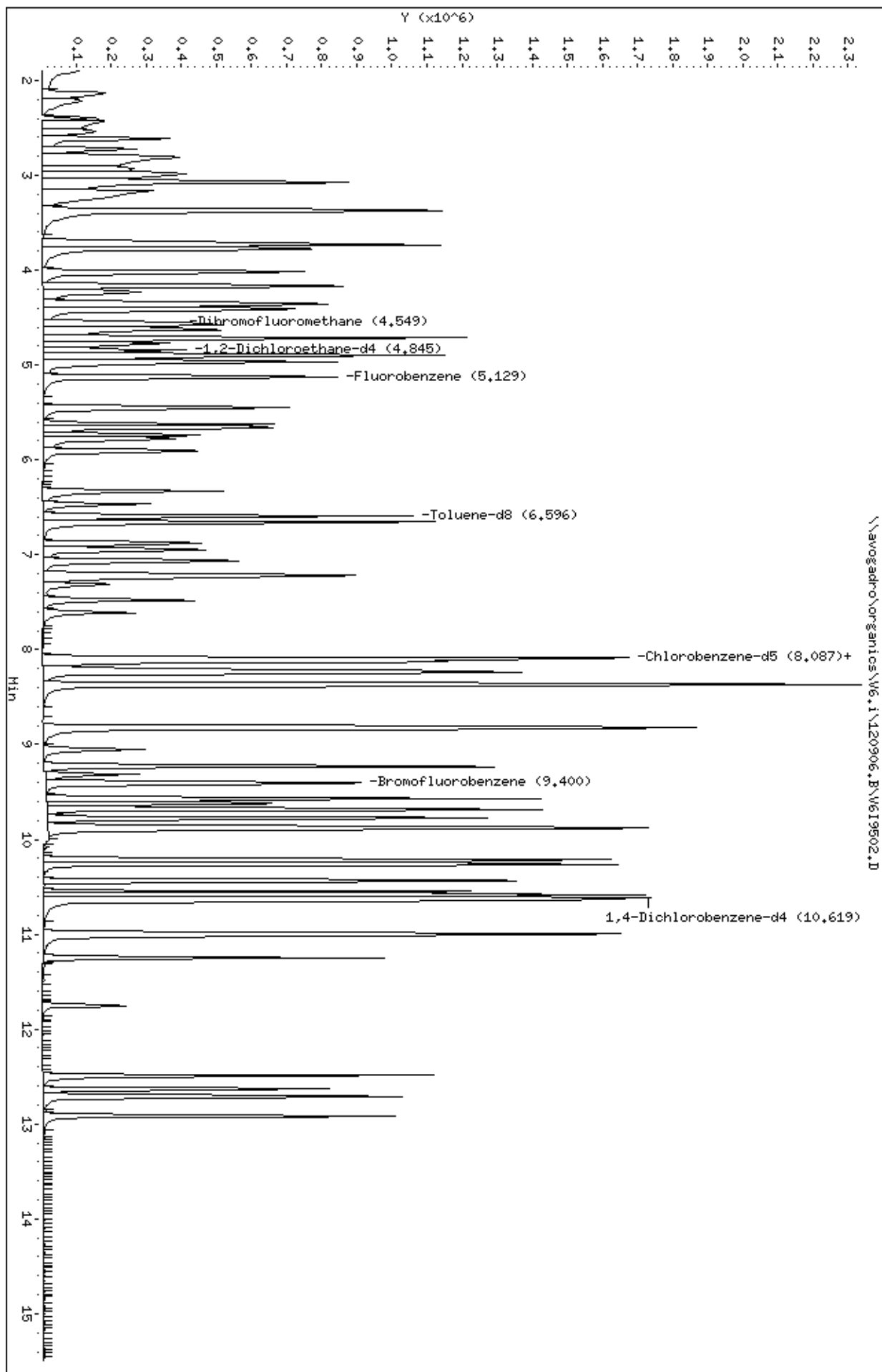
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120906.B\W6I9502.D
Date : 06-SEP-2012 10:10
Client ID: LCS-67991
Sample Info: SHL,LCS-67991,LCS-67991,67991
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-67915

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-67915
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9394.D
 Level: (TRACE/LOW/MED) LOW Date Received: _____
 % Moisture: not dec. Date Analyzed: 08/30/2012
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	53	
74-87-3	Chloromethane	55	
75-01-4	Vinyl chloride	52	
74-83-9	Bromomethane	50	
75-00-3	Chloroethane	51	
75-69-4	Trichlorofluoromethane	55	
75-35-4	1,1-Dichloroethene	60	
67-64-1	Acetone	56	
74-88-4	Iodomethane	48	
75-15-0	Carbon disulfide	51	
75-09-2	Methylene chloride	43	
156-60-5	trans-1,2-Dichloroethene	53	
1634-04-4	Methyl tert-butyl ether	51	
75-34-3	1,1-Dichloroethane	53	
108-05-4	Vinyl acetate	52	
78-93-3	2-Butanone	52	
156-59-2	cis-1,2-Dichloroethene	53	
594-20-7	2,2-Dichloropropane	52	
74-97-5	Bromochloromethane	53	
67-66-3	Chloroform	52	
71-55-6	1,1,1-Trichloroethane	49	
563-58-6	1,1-Dichloropropene	52	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	52	
71-43-2	Benzene	54	
79-01-6	Trichloroethene	51	
78-87-5	1,2-Dichloropropane	54	
74-95-3	Dibromomethane	53	
75-27-4	Bromodichloromethane	54	
10061-01-5	cis-1,3-Dichloropropene	55	
108-10-1	4-Methyl-2-pentanone	46	
108-88-3	Toluene	53	
10061-02-6	trans-1,3-Dichloropropene	57	
79-00-5	1,1,2-Trichloroethane	52	
142-28-9	1,3-Dichloropropane	52	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-67915

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract:
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: LCSD-67915
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9394.D
Level: (TRACE/LOW/MED) LOW	Date Received:
% Moisture: not dec.	Date Analyzed: 08/30/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	48	
591-78-6	2-Hexanone	48	
124-48-1	Dibromochloromethane	53	
106-93-4	1,2-Dibromoethane	53	
108-90-7	Chlorobenzene	53	
630-20-6	1,1,1,2-Tetrachloroethane	52	
100-41-4	Ethylbenzene	53	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	52	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	53	
75-25-2	Bromoform	53	
98-82-8	Isopropylbenzene	53	
79-34-5	1,1,2,2-Tetrachloroethane	51	
108-86-1	Bromobenzene	52	
96-18-4	1,2,3-Trichloropropane	46	
103-65-1	n-Propylbenzene	51	
95-49-8	2-Chlorotoluene	51	
108-67-8	1,3,5-Trimethylbenzene	50	
106-43-4	4-Chlorotoluene	51	
98-06-6	tert-Butylbenzene	52	
95-63-6	1,2,4-Trimethylbenzene	51	
135-98-8	sec-Butylbenzene	50	
99-87-6	4-Isopropyltoluene	52	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	50	
104-51-8	n-Butylbenzene	53	
95-50-1	1,2-Dichlorobenzene	50	
96-12-8	1,2-Dibromo-3-chloropropane	44	
120-82-1	1,2,4-Trichlorobenzene	50	
87-68-3	Hexachlorobutadiene	51	
87-61-6	1,2,3-Trichlorobenzene	48	
91-20-3	Naphthalene	45	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120830.B\V6I9394.D
Lab Smp Id: LCSD-67915 Client Smp ID: LCSD-67915
Inj Date : 30-AUG-2012 11:04
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,LCSD-67915,LCSD-67915,67915
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120830.B\v68260Gadd-6lv1.m
Meth Date : 04-Sep-2012 15:13 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.593	1.591 (0.310)		169727	50.0000	53
2 Freon114	85	1.699	1.697 (0.331)		327561	50.0000	54
3 Chloromethane	50	1.770	1.780 (0.345)		374718	50.0000	55
4 Vinyl Chloride	62	1.853	1.851 (0.361)		306847	50.0000	52
5 Bromomethane	94	2.137	2.135 (0.417)		210065	50.0000	50
6 Chloroethane	64	2.220	2.218 (0.433)		172929	50.0000	51
7 Trichlorofluoromethane	101	2.409	2.407 (0.470)		429656	50.0000	55
126 Ethanol	46	2.539	2.538 (0.495)		42558	5000.00	5600(AQ)
8 Ether	59	2.610	2.609 (0.509)		188406	50.0000	54(Q)
9 Acrolein	56	2.729	2.727 (0.532)		115812	250.000	130
10 1,1-Dichloroethene	96	2.811	2.810 (0.548)		285223	50.0000	60(Q)
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.811	2.810 (0.548)		273351	50.0000	52
12 Acetone	58	2.835	2.833 (0.553)		33494	50.0000	56
13 Iodomethane	142	2.953	2.952 (0.576)		489988	50.0000	48
14 Carbon Disulfide	76	2.989	2.987 (0.583)		999191	50.0000	51
15 Acetonitrile	41	3.072	3.070 (0.599)		652855	500.000	500(A)
16 Allyl Chloride	39	3.072	3.070 (0.599)		323707	50.0000	53
17 Methyl Acetate	43	3.084	3.082 (0.601)		226419	50.0000	49
18 Methylene Chloride	84	3.166	3.165 (0.617)		279095	50.0000	43(Q)
19 tert-Butanol	59	3.237	3.236 (0.631)		47474	100.000	96
20 Acrylonitrile	53	3.368	3.366 (0.656)		93951	50.0000	49
21 trans-1,2-Dichloroethene	96	3.379	3.378 (0.659)		246429	50.0000	53
22 Methyl tert-butyl ether	73	3.368	3.366 (0.656)		656546	50.0000	51

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.699	3.697 (0.721)		421391		50.0000	52
24 Vinyl acetate	43	3.723	3.733 (0.726)		780108		50.0000	52
25 Diisopropyl Ether	45	3.734	3.733 (0.728)		774267		50.0000	53
26 2-Chloro-1,3-Butadiene	53	3.770	3.768 (0.735)		353940		50.0000	51
27 Ethyl tert-butyl ether	59	4.018	4.017 (0.783)		706318		50.0000	52
29 2,2-Dichloropropane	77	4.160	4.159 (0.811)		206250		50.0000	52
28 cis-1,2-Dichloroethene	96	4.160	4.170 (0.811)		247254		50.0000	53
30 2-Butanone	72	4.172	4.170 (0.813)		32954		50.0000	52
32 Propionitrile	54	4.231	4.230 (0.825)		329450		500.000	460(A)
33 Methacrylonitrile	41	4.350	4.348 (0.848)		255864		100.000	93
34 Bromochloromethane	128	4.362	4.360 (0.850)		135062		50.0000	53
31 Tetrahydrofuran	72	4.397	4.395 (0.857)		59294		100.000	89
35 Chloroform	83	4.409	4.419 (0.859)		408308		50.0000	52
\$ 36 Dibromofluoromethane	113	4.551	4.549 (0.887)		241342		50.0000	50
37 1,1,1-Trichloroethane	97	4.575	4.573 (0.892)		332052		50.0000	49
38 Cyclohexane	56	4.622	4.632 (0.901)		380893		50.0000	51
39 1,1-Dichloropropene	110	4.717	4.715 (0.919)		116263		50.0000	52
40 Carbon Tetrachloride	117	4.717	4.715 (0.919)		356536		50.0000	51
41 Isobutyl Alcohol	43	4.776	4.774 (0.931)		180253		1000.00	830(A)
\$ 42 1,2-Dichloroethane-d4	102	4.847	4.845 (0.945)		53793		50.0000	52
43 Benzene	78	4.894	4.892 (0.954)		856590		50.0000	54
44 1,2-Dichloroethane	62	4.906	4.904 (0.956)		340772		50.0000	52
45 tert-Amyl methyl ether	73	4.965	4.963 (0.968)		654152		50.0000	51
M 50 1,2-Dichloroethene (Total)	96				493683		100.000	110
* 46 Fluorobenzene	96	5.131	5.129 (1.000)		823808		50.0000	
47 Trichloroethene	130	5.450	5.448 (1.062)		249840		50.0000	51
48 Methylcyclohexane	83	5.628	5.626 (1.097)		310382		50.0000	53
49 1,2-Dichloropropane	63	5.651	5.661 (1.101)		234217		50.0000	54
51 Methyl Methacrylate	69	5.734	5.732 (1.118)		176490		50.0000	49
52 Dibromomethane	93	5.770	5.768 (1.125)		156060		50.0000	53
53 1,4-Dioxane	88	5.782	5.780 (1.127)		22753		1000.00	720(A)
54 Bromodichloromethane	83	5.900	5.898 (1.150)		332843		50.0000	54
55 2-Chloroethyl vinyl ether	63	6.657	6.655 (1.297)		86011		50.0000	56
56 cis-1,3-Dichloropropene	75	6.326	6.324 (1.233)		377433		50.0000	55
57 4-Methyl-2-pentanone	43	6.468	6.466 (1.261)		227651		50.0000	46
\$ 58 Toluene-d8	98	6.586	6.596 (0.813)		809932		50.0000	50
59 Toluene	91	6.657	6.655 (1.297)		927249		50.0000	53
60 trans-1,3-Dichloropropene	75	6.870	6.880 (1.339)		350246		50.0000	57
61 Ethyl Methacrylate	69	6.941	6.951 (1.353)		253330		50.0000	50
62 1,1,2-Trichloroethane	97	7.059	7.058 (1.376)		206484		50.0000	52
63 Tetrachloroethene	164	7.213	7.211 (0.890)		208796		50.0000	48
64 1,3-Dichloropropane	76	7.237	7.235 (0.893)		339803		50.0000	52
65 2-Hexanone	43	7.308	7.306 (0.902)		167383		50.0000	48
66 Dibromochloromethane	129	7.474	7.484 (0.923)		289273		50.0000	53
67 1,2-Dibromoethane	107	7.604	7.614 (0.939)		244630		50.0000	53
69 1-Chlorohexane	91	8.089	8.087 (0.999)		308661		50.0000	49
* 68 Chlorobenzene-d5	117	8.101	8.099 (1.000)		689274		50.0000	
70 Chlorobenzene	112	8.124	8.123 (1.003)		650885		50.0000	53
71 1,1,1,2-Tetrachloroethane	131	8.207	8.217 (1.013)		263893		50.0000	52
72 Ethylbenzene	106	8.243	8.241 (1.018)		337378		50.0000	52
73 m,p-Xylene	106	8.373	8.371 (1.034)		816714		100.000	100
74 o-Xylene	106	8.811	8.809 (1.088)		408656		50.0000	52
75 Styrene	104	8.834	8.833 (1.091)		712072		50.0000	53
76 Bromoform	173	9.047	9.046 (1.117)		211997		50.0000	53

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.225	9.235 (1.139)		1001188		50.0000	53
78 trans-1,4-Dichloro-2-butene	75	9.308	9.318 (1.149)		90202		50.0000	50
\$ 79 Bromofluorobenzene	95	9.402	9.401 (1.161)		351575		50.0000	49
80 1,1,2,2-Tetrachloroethane	77	9.568	9.566 (0.901)		520261		50.0000	51
81 Bromobenzene	156	9.568	9.578 (0.901)		314067		50.0000	52
82 1,2,3-Trichloropropane	75	9.615	9.614 (0.905)		376621		50.0000	46
83 n-Propylbenzene	120	9.686	9.685 (0.912)		290531		50.0000	51
84 2-Chlorotoluene	126	9.781	9.779 (0.921)		278157		50.0000	51
85 1,3,5-Trimethylbenzene	105	9.876	9.874 (0.930)		857968		50.0000	50
86 4-Chlorotoluene	126	9.899	9.898 (0.932)		299137		50.0000	51
M 94 Xylene (Total)	106				1225370		150.000	160
87 tert-Butylbenzene	119	10.586	10.584 (0.997)		902267		50.0000	52
88 1,2,4-Trimethylbenzene	105	10.266	10.264 (0.967)		890946		50.0000	51
89 sec-Butylbenzene	105	10.432	10.442 (0.982)		1028861		50.0000	50
90 1,3-Dichlorobenzene	146	10.550	10.548 (0.993)		553536		50.0000	51
91 4-Isopropyltoluene	119	10.586	10.584 (0.997)		902267		50.0000	52
* 92 1,4-Dichlorobenzene-d4	152	10.621	10.619 (1.000)		417803		50.0000	
93 1,4-Dichlorobenzene	146	10.645	10.643 (1.002)		617957		50.0000	50
95 n-Butylbenzene	91	10.988	10.986 (1.035)		825849		50.0000	53
96 1,2-Dichlorobenzene	146	11.012	11.010 (1.037)		568877		50.0000	50
97 Hexachloroethane	117	11.248	11.246 (1.059)		206771		50.0000	51
98 1,2-Dibromo-3-chloropropane	75	11.745	11.755 (1.106)		63431		50.0000	44
141 1,3,5-Trichlorobenzene	182	12.491	12.489 (2.434)		326185		50.0000	54(A)
99 1,2,4-Trichlorobenzene	180	12.491	12.489 (1.176)		337408		50.0000	50
100 Hexachlorobutadiene	225	12.633	12.631 (1.189)		125501		50.0000	51
101 Naphthalene	128	12.704	12.714 (1.196)		840507		50.0000	45
102 1,2,3-Trichlorobenzene	180	12.917	12.915 (1.216)		290676		50.0000	48

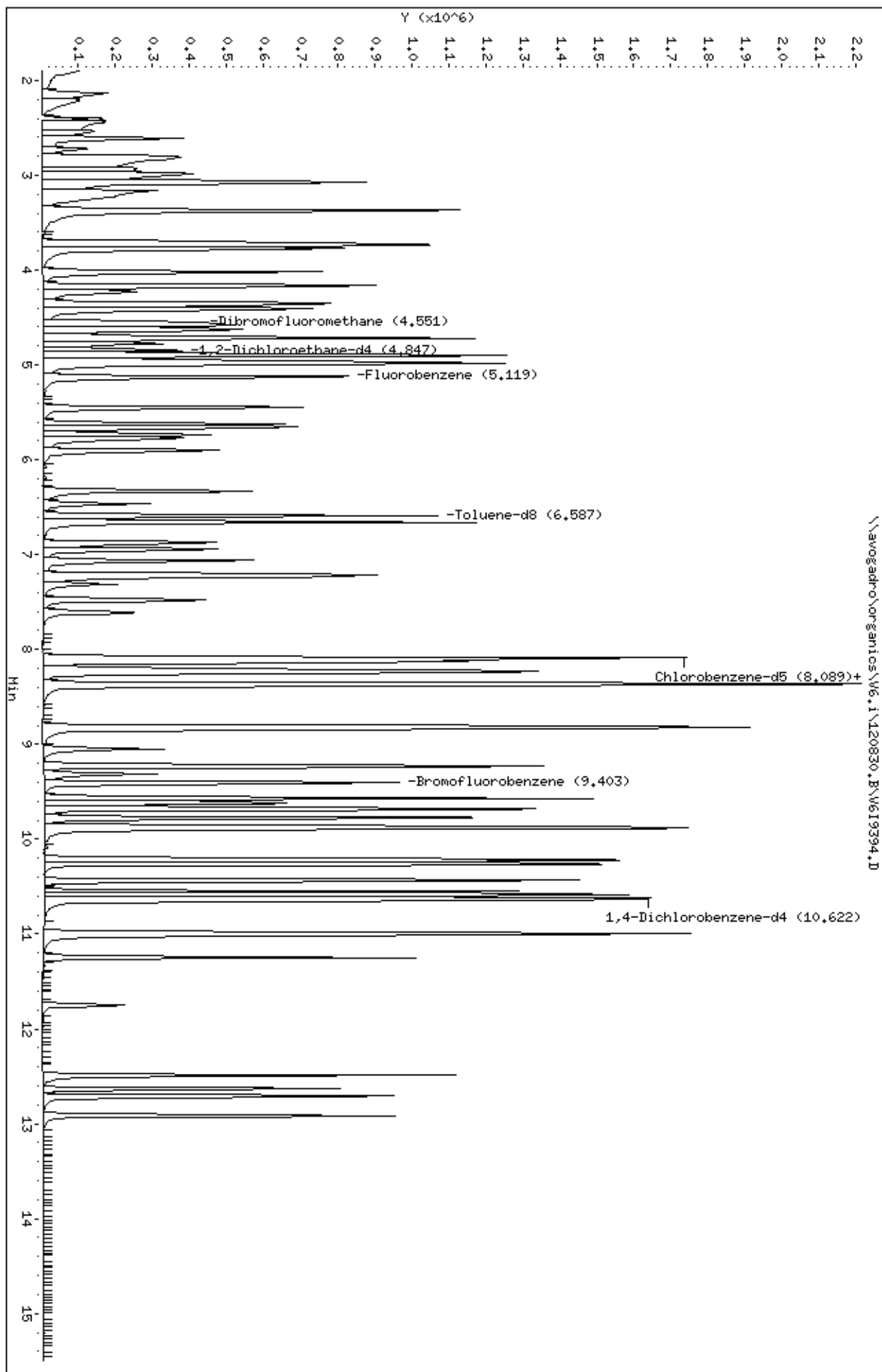
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120830.B\W6I9394.D
Date : 30-AUG-2012 11:04
Client ID: LCSD-67915
Sample Info: 5HL,LCSD-67915,LCSD-67915,67915
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-67991

Lab Name: SPECTRUM ANALYTICAL, INC.	Contract: _____
Lab Code: MITKEM Case No.: L1820	Mod. Ref No.: _____ SDG No.: SL1820
Matrix: (SOIL/SED/WATER) WATER	Lab Sample ID: LCSD-67991
Sample wt/vol: 5.00 (g/mL) ML	Lab File ID: V6I9503.D
Level: (TRACE/LOW/MED) LOW	Date Received: _____
% Moisture: not dec.	Date Analyzed: 09/06/2012
GC Column: DB-624 ID: 0.25 (mm)	Dilution Factor: 1.0
Soil Extract Volume: _____ (uL)	Soil Aliquot Volume: _____ (uL)
Purge Volume: 5.0 (mL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	43	
74-87-3	Chloromethane	57	
75-01-4	Vinyl chloride	55	
74-83-9	Bromomethane	53	
75-00-3	Chloroethane	55	
75-69-4	Trichlorofluoromethane	57	
75-35-4	1,1-Dichloroethene	63	
67-64-1	Acetone	40	
74-88-4	Iodomethane	54	
75-15-0	Carbon disulfide	55	
75-09-2	Methylene chloride	46	
156-60-5	trans-1,2-Dichloroethene	57	
1634-04-4	Methyl tert-butyl ether	58	
75-34-3	1,1-Dichloroethane	58	
108-05-4	Vinyl acetate	57	
78-93-3	2-Butanone	50	
156-59-2	cis-1,2-Dichloroethene	60	
594-20-7	2,2-Dichloropropane	58	
74-97-5	Bromochloromethane	59	
67-66-3	Chloroform	58	
71-55-6	1,1,1-Trichloroethane	55	
563-58-6	1,1-Dichloropropene	59	
56-23-5	Carbon tetrachloride	56	
107-06-2	1,2-Dichloroethane	59	
71-43-2	Benzene	58	
79-01-6	Trichloroethene	56	
78-87-5	1,2-Dichloropropane	58	
74-95-3	Dibromomethane	58	
75-27-4	Bromodichloromethane	58	
10061-01-5	cis-1,3-Dichloropropene	58	
108-10-1	4-Methyl-2-pentanone	52	
108-88-3	Toluene	57	
10061-02-6	trans-1,3-Dichloropropene	61	
79-00-5	1,1,2-Trichloroethane	57	
142-28-9	1,3-Dichloropropane	54	

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-67991

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____

Lab Code: MITKEM Case No.: L1820 Mod. Ref No.: _____ SDG No.: SL1820

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-67991

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I9503.D

Level: (TRACE/LOW/MED) LOW Date Received: _____

% Moisture: not dec. Date Analyzed: 09/06/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
127-18-4	Tetrachloroethene	49	
591-78-6	2-Hexanone	48	
124-48-1	Dibromochloromethane	52	
106-93-4	1,2-Dibromoethane	54	
108-90-7	Chlorobenzene	54	
630-20-6	1,1,1,2-Tetrachloroethane	52	
100-41-4	Ethylbenzene	53	
179601-23-1	m,p-Xylene	110	
95-47-6	o-Xylene	53	
1330-20-7	Xylene (Total)	160	
100-42-5	Styrene	53	
75-25-2	Bromoform	53	
98-82-8	Isopropylbenzene	53	
79-34-5	1,1,2,2-Tetrachloroethane	53	
108-86-1	Bromobenzene	52	
96-18-4	1,2,3-Trichloropropane	43	
103-65-1	n-Propylbenzene	51	
95-49-8	2-Chlorotoluene	51	
108-67-8	1,3,5-Trimethylbenzene	51	
106-43-4	4-Chlorotoluene	51	
98-06-6	tert-Butylbenzene	51	
95-63-6	1,2,4-Trimethylbenzene	51	
135-98-8	sec-Butylbenzene	51	
99-87-6	4-Isopropyltoluene	51	
541-73-1	1,3-Dichlorobenzene	51	
106-46-7	1,4-Dichlorobenzene	49	
104-51-8	n-Butylbenzene	52	
95-50-1	1,2-Dichlorobenzene	51	
96-12-8	1,2-Dibromo-3-chloropropane	47	
120-82-1	1,2,4-Trichlorobenzene	53	
87-68-3	Hexachlorobutadiene	54	
87-61-6	1,2,3-Trichlorobenzene	52	
91-20-3	Naphthalene	50	

Spectrum Analytical, Inc. RI Division

Method 8260 Water and Medium Soil
Data file : \\avogadro\organics\V6.i\120906.B\V6I9503.D
Lab Smp Id: LCSD-67991 Client Smp ID: LCSD-67991
Inj Date : 06-SEP-2012 10:34
Operator : AM SRC: LIMS Inst ID: V6.i
Smp Info : 5ML,LCSD-67991,LCSD-67991,67991
Misc Info :
Comment :
Method : \\avogadro\organics\V6.i\120906.B\v68260Gadd-6lvl.m
Meth Date : 07-Sep-2012 10:28 adatta Quant Type: ISTD
Cal Date : 28-AUG-2012 12:31 Cal File: V6I9328.D
Als bottle: 32 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Uf * 5/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Dichlorodifluoromethane	85	1.602	1.590 (0.312)		132832	50.0000	43
2 Freon114	85	1.696	1.697 (0.331)		271831	50.0000	47
3 Chloromethane	50	1.779	1.779 (0.347)		371543	50.0000	57
4 Vinyl Chloride	62	1.850	1.850 (0.361)		313942	50.0000	55
5 Bromomethane	94	2.134	2.134 (0.416)		215753	50.0000	53
6 Chloroethane	64	2.217	2.217 (0.432)		180182	50.0000	55
7 Trichlorofluoromethane	101	2.406	2.407 (0.469)		423685	50.0000	57
126 Ethanol	46	2.537	2.537 (0.495)		46829	5000.00	6400(A)
8 Ether	59	2.608	2.608 (0.509)		199689	50.0000	59(Q)
9 Acrolein	56	2.726	2.726 (0.532)		245174	250.000	300(A)
10 1,1-Dichloroethene	96	2.809	2.809 (0.548)		285327	50.0000	63
11 1,1,2-Trichloro-1,2,2-Trifluo	101	2.809	2.809 (0.548)		259775	50.0000	52
12 Acetone	58	2.844	2.844 (0.555)		23199	50.0000	40(Q)
13 Iodomethane	142	2.963	2.951 (0.578)		532580	50.0000	54
14 Carbon Disulfide	76	2.986	2.986 (0.582)		1022433	50.0000	54
15 Acetonitrile	41	3.069	3.069 (0.599)		668809	500.000	540(A)
16 Allyl Chloride	39	3.069	3.069 (0.599)		347351	50.0000	59
17 Methyl Acetate	43	3.081	3.081 (0.601)		259687	50.0000	58
18 Methylene Chloride	84	3.164	3.164 (0.617)		288296	50.0000	46
19 tert-Butanol	59	3.235	3.235 (0.631)		57710	100.000	120
20 Acrylonitrile	53	3.365	3.365 (0.656)		104272	50.0000	57
21 trans-1,2-Dichloroethene	96	3.377	3.377 (0.659)		255111	50.0000	57
22 Methyl tert-butyl ether	73	3.365	3.365 (0.656)		715424	50.0000	58

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 1,1-Dichloroethane	63	3.708	3.708	(0.723)	443365		50.0000	58
24 Vinyl acetate	43	3.732	3.732	(0.728)	826253		50.0000	57
25 Diisopropyl Ether	45	3.732	3.732	(0.728)	812581		50.0000	58
26 2-Chloro-1,3-Butadiene	53	3.779	3.779	(0.737)	379348		50.0000	57
27 Ethyl tert-butyl ether	59	4.016	4.016	(0.783)	750689		50.0000	57
29 2,2-Dichloropropane	77	4.170	4.170	(0.813)	221502		50.0000	58
28 cis-1,2-Dichloroethene	96	4.170	4.170	(0.813)	264792		50.0000	60
30 2-Butanone	72	4.170	4.170	(0.813)	30486		50.0000	50
32 Propionitrile	54	4.229	4.229	(0.825)	370539		500.000	540(A)
33 Methacrylonitrile	41	4.347	4.347	(0.848)	303204		100.000	110
34 Bromochloromethane	128	4.359	4.359	(0.850)	142965		50.0000	59
31 Tetrahydrofuran	72	4.406	4.394	(0.859)	66605		100.000	100
35 Chloroform	83	4.418	4.418	(0.862)	432001		50.0000	58
\$ 36 Dibromofluoromethane	113	4.548	4.548	(0.887)	237501		50.0000	51
37 1,1,1-Trichloroethane	97	4.584	4.584	(0.894)	358584		50.0000	55
38 Cyclohexane	56	4.631	4.631	(0.903)	375144		50.0000	52
39 1,1-Dichloropropene	110	4.714	4.714	(0.919)	126190		50.0000	59
40 Carbon Tetrachloride	117	4.714	4.714	(0.919)	377195		50.0000	56
41 Isobutyl Alcohol	43	4.773	4.773	(0.931)	218320		1000.00	1000(A)
\$ 42 1,2-Dichloroethane-d4	102	4.844	4.844	(0.945)	54123		50.0000	54
43 Benzene	78	4.891	4.891	(0.954)	891369		50.0000	58
44 1,2-Dichloroethane	62	4.903	4.903	(0.956)	369990		50.0000	59
45 tert-Amyl methyl ether	73	4.962	4.962	(0.968)	694215		50.0000	56
M 50 1,2-Dichloroethene (Total)	96				519903		100.000	120
* 46 Fluorobenzene	96	5.128	5.128	(1.000)	791365		50.0000	
47 Trichloroethene	130	5.447	5.448	(1.062)	262321		50.0000	56
48 Methylcyclohexane	83	5.625	5.625	(1.097)	293469		50.0000	52
49 1,2-Dichloropropane	63	5.660	5.661	(1.104)	243386		50.0000	58
51 Methyl Methacrylate	69	5.731	5.732	(1.118)	174017		50.0000	51
52 Dibromomethane	93	5.779	5.779	(1.127)	162592		50.0000	58
53 1,4-Dioxane	88	5.779	5.779	(1.127)	22954		1000.00	760(A)
54 Bromodichloromethane	83	5.909	5.909	(1.152)	339186		50.0000	58
55 2-Chloroethyl vinyl ether	63	6.654	6.654	(1.298)	88457		50.0000	60
56 cis-1,3-Dichloropropene	75	6.323	6.323	(1.233)	378113		50.0000	58
57 4-Methyl-2-pentanone	43	6.465	6.465	(1.261)	249380		50.0000	52
\$ 58 Toluene-d8	98	6.595	6.595	(0.814)	793808		50.0000	47
59 Toluene	91	6.654	6.654	(1.298)	955138		50.0000	57
60 trans-1,3-Dichloropropene	75	6.879	6.879	(1.341)	358829		50.0000	61
61 Ethyl Methacrylate	69	6.950	6.950	(1.355)	272016		50.0000	56
62 1,1,2-Trichloroethane	97	7.069	7.069	(1.378)	215176		50.0000	57
63 Tetrachloroethene	164	7.211	7.211	(0.890)	217223		50.0000	49
64 1,3-Dichloropropane	76	7.234	7.234	(0.893)	361306		50.0000	54
65 2-Hexanone	43	7.317	7.317	(0.904)	171738		50.0000	48
66 Dibromochloromethane	129	7.483	7.483	(0.924)	294257		50.0000	52
67 1,2-Dibromoethane	107	7.613	7.613	(0.940)	255352		50.0000	54
69 1-Chlorohexane	91	8.086	8.086	(0.999)	316201		50.0000	49
* 68 Chlorobenzene-d5	117	8.098	8.098	(1.000)	705971		50.0000	
70 Chlorobenzene	112	8.122	8.122	(1.003)	678262		50.0000	54
71 1,1,1,2-Tetrachloroethane	131	8.216	8.216	(1.015)	270023		50.0000	52
72 Ethylbenzene	106	8.240	8.240	(1.018)	348297		50.0000	53
73 m,p-Xylene	106	8.370	8.370	(1.034)	851047		100.000	100
74 o-Xylene	106	8.808	8.820	(1.088)	423180		50.0000	53
75 Styrene	104	8.832	8.832	(1.091)	726590		50.0000	53
76 Bromoform	173	9.056	9.057	(1.118)	217512		50.0000	53

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 Isopropylbenzene	105	9.234	9.234	(1.140)	1034470		50.0000	53
78 trans-1,4-Dichloro-2-butene	75	9.317	9.317	(1.150)	81359		50.0000	44
\$ 79 Bromofluorobenzene	95	9.400	9.400	(1.161)	369741		50.0000	50
80 1,1,2,2-Tetrachloroethane	77	9.565	9.565	(0.901)	545466		50.0000	52
81 Bromobenzene	156	9.577	9.577	(0.902)	321101		50.0000	52
82 1,2,3-Trichloropropane	75	9.613	9.613	(0.905)	354779		50.0000	43
83 n-Propylbenzene	120	9.684	9.684	(0.912)	299010		50.0000	51
84 2-Chlorotoluene	126	9.778	9.778	(0.921)	287439		50.0000	51
85 1,3,5-Trimethylbenzene	105	9.873	9.873	(0.930)	893788		50.0000	51
86 4-Chlorotoluene	126	9.897	9.897	(0.932)	308210		50.0000	51
M 94 Xylene (Total)	106				1274227		150.000	160
87 tert-Butylbenzene	119	10.583	10.583	(0.997)	918810		50.0000	51
88 1,2,4-Trimethylbenzene	105	10.263	10.263	(0.967)	914459		50.0000	51
89 sec-Butylbenzene	105	10.441	10.441	(0.983)	1063099		50.0000	50
90 1,3-Dichlorobenzene	146	10.547	10.547	(0.993)	574833		50.0000	51
91 4-Isopropyltoluene	119	10.583	10.583	(0.997)	918810		50.0000	51
* 92 1,4-Dichlorobenzene-d4	152	10.618	10.618	(1.000)	427472		50.0000	
93 1,4-Dichlorobenzene	146	10.642	10.642	(1.002)	620915		50.0000	49
95 n-Butylbenzene	91	10.985	10.985	(1.035)	838718		50.0000	52
96 1,2-Dichlorobenzene	146	11.009	11.009	(1.037)	586278		50.0000	51
97 Hexachloroethane	117	11.246	11.246	(1.059)	205885		50.0000	50
98 1,2-Dibromo-3-chloropropane	75	11.742	11.754	(1.106)	69182		50.0000	47
141 1,3,5-Trichlorobenzene	182	12.488	12.488	(2.435)	346569		50.0000	60(A)
99 1,2,4-Trichlorobenzene	180	12.488	12.488	(1.176)	367513		50.0000	53
100 Hexachlorobutadiene	225	12.630	12.630	(1.189)	135064		50.0000	54
101 Naphthalene	128	12.713	12.713	(1.197)	958566		50.0000	50
102 1,2,3-Trichlorobenzene	180	12.914	12.914	(1.216)	322771		50.0000	52

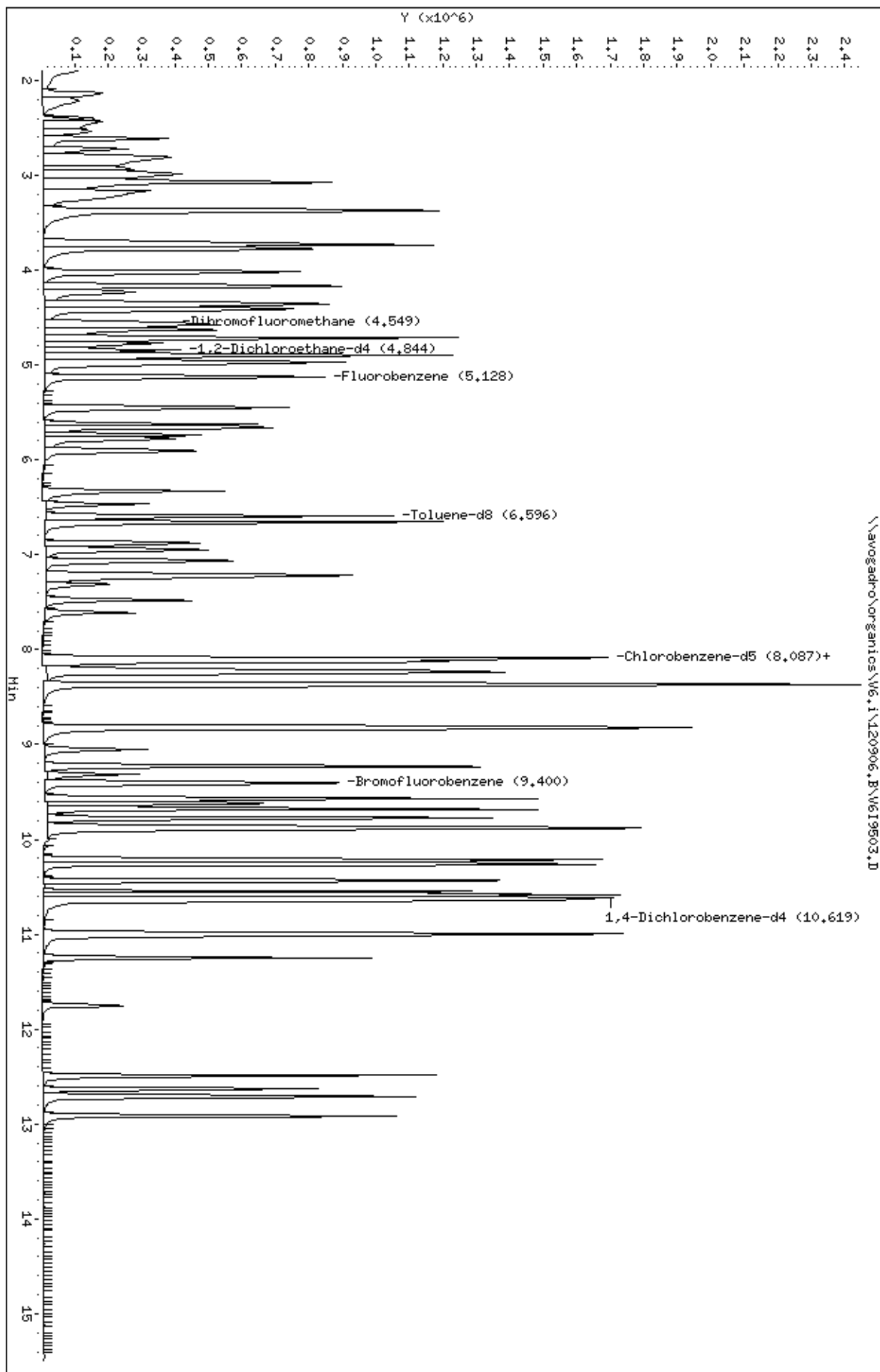
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Q - Qualifier signal failed the ratio test.

Data File: \\avogadro\organics\W6,i\120906.B\W6I9503.D
Date : 06-SEP-2012 10:34
Client ID: LCSD-67991
Sample Info: SHL,LCSD-67991,LCSD-67991,67991
Purge Volume: 5.0
Column phase: DB-624

Instrument: W6,i
Operator: AH SRC: LIMS
Column diameter: 0.25



Spectrum Analytical, Inc. RI Division V6 Injection Log
METHOD: 8260W ANALYST: AED
BATCH: 120828.B
Start: 28-AUG-12 08:48
End: 28-AUG-12 12:57

Comments:

Standards: BFB VW120404A 2 uL
IS/SS VW120805A APTD uL
STD VW120820A 20 uL
1 uL

Reviewed By: *PM 8-28-12* Manual Integration: AED 8/28/12 MI Review: *AK*

FILE	TIME	LAB ID	CLIENT ID	PREP	MT	BN	INTERNAL STDS		SURROGATES	DILN		FLG	COMMENTS	PH
				BATCH			FBZ	CBZ		DFM	DCE	TOL	BFB	
V6I9320	08:48	BFB6Z	BFB6Z			AQ								
V6I9321	09:10	VSTD0506Z	VSTD0506Z			AQ	101	101	100					
V6I9322	09:45	VSTD0506Z	VSTD0506Z			AQ	100	100	100					
V6I9323	10:31	VSTD0206Z	VSTD0206Z			AQ	98	98	98					
V6I9324	10:55	VSTD0056Z	VSTD0056Z			AQ	97	95	93					
V6I9325	11:19	VSTD0016Z	VSTD0016Z			AQ	97	99	91					
V6I9326	11:43	VSTD0016Z	VSTD0016Z			AQ	96	98	91					
V6I9327	12:07	VSTD2006Z	VSTD2006Z			AQ	103	104	108					
V6I9328	12:31	VSTD1006Z	VSTD1006Z			AQ	99	100	100					
V6I9329	12:57	VICV0506Z	VICV0506Z			AQ	98	97	97	100	101	100	98	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limit
D - Surrogates are diluted

AED 8/28/12

Comments:

Standards: BFB V120404A 2 UL
1585 V120805A NRD UL
STB V120820A 20 UL
UL

Reviewed By: gaur Manual Integration: N/A MI Review: N/A

FILE	TIME	LAB ID	CLIENT ID	PREP	MT BN	INTERNAL STDS				SURROGATES				DIIN	FLG	COMMENTS	pH
				BATCH		FBZ	CBZ	DCB	DFM	DCE	TOL	BFB					
V6I9390	09:04	BFB6C	BFB6C		AQ											OK	
V6I9391	09:26	VSTD0506C	VSTD0506C		AQ	100	100	100						1		NOT USED	
V6I9392	10:02	VSTD0506C	VSTD0506C		AQ	100	100	100						1		OK	
V6I9393	10:41	LCS-67915	LCS-67915		67915	AQ	98	97	97	100	103	99	97	1	ER		
V6I9394	11:04	LCS-67915	LCS-67915		67915	AQ	97	97	100	104	99	97	97	1	E	OK	
V6I9395	11:28	MB-67915	MB-67915		67915	AQ	92	91	85	102	94	99	94	1	E	NOT USED	
V6I9396	11:52	MB-67915	MB-67915		67915	AQ	90	91	82	101	97	98	94	1		NOT USED	
V6I9397	12:15	MB-67915	MB-67915		67915	AQ	90	91	85	103	98	99	96	1		OK	
V6I9398	12:39	L1820-05A	TB-03		67915	AQ	88	87	81	102	99	100	94	1		OK	
V6I9399	13:02	L1826-05A	TB-082712		67915	AQ	87	89	81	102	97	97	93	1		OK	
V6I9400	13:26	L1820-01A	SL-MW-3A		67915	AQ	89	90	81	100	96	97	94	1		OK	
V6I9401	13:49	L1820-02A	SL-MW-3B		67915	AQ	88	88	80	102	96	99	94	1		OK	
V6I9402	14:12	L1820-03A	SL-MW-6A		67915	AQ	86	88	79	101	97	93	93	1		OK	
V6I9403	14:36	L1820-04A	SL-MW-6B		67915	AQ	84	87	79	102	100	96	94	1		OK	
V6I9404	15:00	L1826-01A	MW-19D-W		67915	AQ	86	87	78	102	96	98	95	1		OK	
V6I9405	15:23	L1826-02A	MW-12-W		67915	AQ	84	85	79	102	98	98	94	1		OK	
V6I9406	15:47	L1826-03A	MW-13-W		67915	AQ	85	86	79	102	94	98	94	1		OK	
V6I9407	16:10	L1826-04A	MW-6-W		67915	AQ	84	84	79	102	95	100	99	1		OK	
V6I9408	16:33	L1819-08A	NM-MW-04S		67915	AQ	88	88	82	103	98	96	93	1	E	CIS-12-DCE = 3278, Run @ 50x	
V6I9409	16:57	L1819-09A	FD-082812		67915	AQ	91	90	82	102	95	98	96	1	E	CIS-12-DCE = 3200, Run @ 50x	
V6I9410	17:21	L1819-10A	NM-MW-04D		67915	AQ	88	88	81	103	101	96	94	1	E	Vinyl Chloride = 2964, Run @ 40x	
V6I9411	17:44	L1819-11A	NM-MW-02S		67915	AQ	86	87	86	101	99	98	99	1		RR @ 1x	
V6I9412	18:08	L1819-12A	NM-MW-02D		67915	AQ	91	86	76	101	98	98	94	1	E	CIS-12-DCE = 3256, Run @ 50x	
V6I9413	18:31	L1819-13A	NM-MW-09D		67915	AQ	87	87	79	104	99	98	95	1	E	CIS-12-DCE = 1382, Run @ 20x	
V6I9414	18:55	L1819-14A	NM-MW-06S		67915	AQ	84	86	76	104	97	99	93	1	E	CIS-12-DCE = 563, Run @ 10x	
V6I9415	19:19	L1819-15A	NM-MW-05S		67915	AQ	85	85	76	105	101	99	92	1	E	FCE = 2670, Run @ 40x	
V6I9416	19:42	L1819-10AMS	NM-MW-04DMS		67915	AQ	87	87	85	103	106	98	98	1	ER	OK	
V6I9417	20:05	L1819-10MSD	NM-MW-04DMSD		67915	AQ	89	88	88	104	105	99	97	1	ER	OK	
																	2

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limit
D - Surrogates are diluted

AED 9/4/12

INJECTION LOG

Start: 06-SEP-12 09:10
End: 06-SEP-12 19:11

BATCH: 120906.B

ANALYST: AED

Spectrum Analytical, Inc. RI Division V6 Injection Log
Volatiles Laboratory

METHOD: 82606/624
ICAL DATE: 8/28/12

Standards: 35B VW120404A 2 uL
15/55 VW120305A 20 uL
STD VW120302A 20 uL
20 uL

Reviewed By: *Jan* Manual Integration: N/A MI Review: N/A

FILE	TIME	IAB ID	CLIENT ID	PREP	MT	EN	INTERNAL STDS				SURROGATES				DIIN	FLG	COMMENTS	pH
				BATCH			FBZ	CBZ	DCB	DFM	DCE	TOL	BFB					
V6I9500	09:10	BFB6F	BFB6F			AQ									1		OK	
V6I9501	09:32	VSTD0506F	VSTD0506F			AQ	100	100	100						1		OK	
V6I9502	10:10	LCS-67991	LCS-67991	67991	AQ		98	96	96	103	108	96	100		1	ER	OK	
V6I9503	10:34	LCSD-67991	LCSD-67991	67991	AQ		97	96	94	102	108	95	100		1	E	OK	
V6I9504	10:57	MB-67991	MB-67991	67991	AQ		93	94	86	105	100	94	95		1		NOT USED	
V6I9505	11:21	MB-67991	MB-67991	67991	AQ		91	90	82	102	98	95	99		1		NOT USED	
V6I9506	11:44	MB-67991	MB-67991	67991	AQ		91	93	86	103	101	94	95		1		OK	
V6I9507	12:18	LB1820-08A	TB-04	67991	AQ		92	93	84	104	102	93	98		1		OK	
V6I9508	12:41	LB1820-06A	SL-MW-5	67991	AQ		89	91	81	105	97	91	93		1		OK	
V6I9509	13:05	LB1820-07A	SL-MW-4	67991	AQ		88	91	80	103	100	92	96		1		OK	
V6I9510	13:29	LB1824-01A	SUROVFLOTREN08	67979	AQ		89	90	82	104	103	93	96		1	E	PCE = 460, Run @ 10X	
V6I9511	13:52	LB1855-01A	WSP-601-0912	67979	AQ		89	90	83	104	102	92	94		1		OK	
V6I9512	14:16	LB1864-01A	016A	67979	AQ		92	94	86	105	101	92	94		1		OK	
V6I9513	14:41	LB1854-01A	WSP-601-0912	67991	AQ		87	88	80	104	101	95	97		1		OK	
V6I9514	15:05	LB1854-02A	WSP-030-0912	67991	AQ		87	90	80	106	104	91	97		100		OK, TCE = 79	
V6I9515	15:30	LB1854-03A	WSP-040-0912	67991	AQ		87	89	81	107	101	92	95		4	E	TCE = 906, Run @ 40X	
V6I9516	15:54	LB1854-04A	WSP-304-0912	67991	AQ		87	89	81	106	102	92	95		20	E	TCE = 359, Run @ 100X	
V6I9517	16:18	LB1867-04A	BLM-GW-CHT	67991	AQ		87	86	80	104	99	94	96		1000		RRC @ 100X	
V6I9518	16:43	LB1867-05A	BLM-GW-EFF	67991	AQ		87	89	79	105	100	92	95		1000		RRC @ 100X	
V6I9519	17:08	VBLK	VBLK		AQ		86	89	82	103	104	92	94		1		NOT USED	
V6I9520	17:33	LB1854-03ADL	WSP-040-0912DL	67991	AQ		87	89	83	107	101	93	95		40		OK, TCE = 98	
V6I9521	17:58	LB1854-04ADL	WSP-304-0912DL	67991	AQ		85	88	80	106	101	93	95		100		OK, TCE = 72	
V6I9522	18:22	LB1824-01ADL	SUROVFLOTREN08	67979	AQ		86	89	83	105	101	92	94		10		OK, PCE = 47	
V6I9523	18:46	VBLK	VBLK		AQ		86	88	79	105	101	92	96		1		NOT USED	
V6I9524	19:11	VBLK	VBLK		AQ		87	89	82	107	99	92	98		1		NOT USED	

E - One or more target compounds are above the calibration range
R - One or more spike compounds are outside of control limits
T - Sample was injected outside of the 12 hour sequence
* - Internal Standard or Surrogate outside of control limit
D - Surrogates are diluted

AED 9/7/12

Spectrum Analytical, Inc. RI Division : VOLATILE SAMPLES RECEIVING LOGBOOK

VOA Log-In Date	Workorder	Client ID	Sample Numbers	Relinquished by:	Received by:	Pres. Used	F/R	Returned to R1
8/23/12	L1803	Stantec	02	JV	CYA	US	R9	
↓	L1804	HDR	01-12	↓	↓	H	R9	
8/23/12	5010016	RIKRC	01	JV	CYA	H	R9	
8/24/12	L1802 Ed-B 8/24/12-9	Ed Bau	01-03	CYA	AED	US	R9	
8/27/12	L1804	HDR	13-26	AED	W	H	R9	
8/27/12	L1805	EPA	02,03	VEB	AED	H	R13	
8/27/12	L1805	EPA	01	VEB	AED	US	R13	
8/27/12	L1811	Earth	01-03	VEB	AED	H	R9	
8/28/12	L1819	URS	01-07	AED	W	H	R9	
8/29/12	L1820	AGCOM	01-05	VEB	AED	H	R9	
↓	L1822	Labella	01-05	↓	↓	US	R9	
↓	5010019	RIKRC	01	↓	↓	H	R10	
↓	5010020	RIKRC	01	↓	↓	H	R10	
8/29/12	L1819	URS	08-17	VEB	AED	H	R9	

Logbook ID 90.0191-04/12

Reviewed By: AED 8/28/12

"Preservative Used" Key

UA = Unpreserved Aqueous

H = HCL

A = Air

M = MeOH

E = Encore

US = Unpreserved Soil

N = NaHSO₄

F = Freeze

T = Trace, HCL



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

*** Metals ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : AECOM Environment

Project: Multi Site G - ServAll

Laboratory Workorder / SDG #: L1820

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 analysis:

Instrument Code: FIMS2
Instrument Type: CVAA
Description: FIMS
Manufacturer: Perkin-Elmer
Model: FIMS100

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 analysis was not performed on any sample in this SDG.

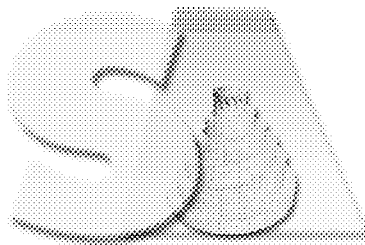
G. Samples:

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 Spectrum, 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:  _____

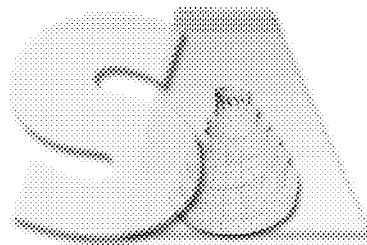
Date: 09/19/12



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.: SL1820
SOW No.: SW846

EPA Sample No.	Lab Sample ID
<u>SL-MW-3A</u>	<u>L1820-01</u>
<u>SL-MW-3B</u>	<u>L1820-02</u>
<u>SL-MW-4</u>	<u>L1820-07</u>
<u>SL-MW-5</u>	<u>L1820-06</u>
<u>SL-MW-6A</u>	<u>L1820-03</u>
<u>SL-MW-6B</u>	<u>L1820-04</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: *Dawn E Smart* Name: *Dawn E Smart*
Date: *9/19/12* Title: _____

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-3A

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

Case No.: _____

SAS No.: _____

SDG No.: SL1820Matrix (soil/water): WATERLab Sample ID: L1820-01Level (low/med): MEDDate Received: 08/28/2012% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3910			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	11.0	B		P
7440-39-3	Barium	42.0	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	21500			P
7440-47-3	Chromium	1520			P
7440-48-4	Cobalt	5.0	B		P
7440-50-8	Copper	44.9			P
7439-89-6	Iron	6990			P
7439-92-1	Lead	22.2			P
7439-95-4	Magnesium	5070			P
7439-96-5	Manganese	103			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	226			P
7440-09-7	Potassium	2930			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	22600			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	15.6	B		P
7440-66-6	Zinc	137			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-3B

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1820

Matrix (soil/water): WATER

Lab Sample ID: L1820-02

Level (low/med): MED

Date Received: 08/28/2012

% 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	4150			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	10.4	B		P
7440-39-3	Barium	64.5	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	10000			P
7440-47-3	Chromium	939			P
7440-48-4	Cobalt	2.4	B		P
7440-50-8	Copper	55.7			P
7439-89-6	Iron	6690			P
7439-92-1	Lead	25.2			P
7439-95-4	Magnesium	4010			P
7439-96-5	Manganese	303			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	28.8	B		P
7440-09-7	Potassium	2660			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	61900			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	15.5	B		P
7440-66-6	Zinc	205			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-4

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1820

Matrix (soil/water): WATER

Lab Sample ID: L1820-07

Level (low/med): MED

Date Received: 08/30/2012

% 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	6.8	B		P
7440-39-3	Barium	15.1	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	6940			P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	9.9	B		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	9190			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	1110			P
7439-96-5	Manganese	560			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	3.2	B		P
7440-09-7	Potassium	2590			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	9660			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	12.2	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-5

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1820

Matrix (soil/water): WATER

Lab Sample ID: L1820-06

Level (low/med): MED

Date Received: 08/30/2012

% 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	39.7	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	19100			P
7440-47-3	Chromium	35.9			P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	188	B		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	2480			P
7439-96-5	Manganese	4780			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	5.4	B		P
7440-09-7	Potassium	1880			P
7782-49-2	Selenium	12.0	B		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	129000			P
7440-28-0	Thallium	7.0	B		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	4.9	U		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-6A

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1820

Matrix (soil/water): WATER

Lab Sample ID: L1820-03

Level (low/med): MED

Date Received: 08/28/2012

% 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	1650			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	72.2	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	22600			P
7440-47-3	Chromium	68.1			P
7440-48-4	Cobalt	1.4	B		P
7440-50-8	Copper	25.7	B		P
7439-89-6	Iron	1440			P
7439-92-1	Lead	12.7			P
7439-95-4	Magnesium	3690			P
7439-96-5	Manganese	303			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	14.7	B		P
7440-09-7	Potassium	4190			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	51500			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	3.5	B		P
7440-66-6	Zinc	74.6			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-6B

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1820

Matrix (soil/water): WATER

Lab Sample ID: L1820-04

Level (low/med): MED

Date Received: 08/28/2012

% 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	4030			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	8.7	B		P
7440-39-3	Barium	30.2	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	11800			P
7440-47-3	Chromium	13.3	B		P
7440-48-4	Cobalt	1.2	B		P
7440-50-8	Copper	39.2			P
7439-89-6	Iron	3080			P
7439-92-1	Lead	22.0			P
7439-95-4	Magnesium	1810			P
7439-96-5	Manganese	69.2			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	8.3	B		P
7440-09-7	Potassium	3080			P
7782-49-2	Selenium	14.5	B		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	3360			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	8.1	B		P
7440-66-6	Zinc	80.8			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.:

SL1820

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
	09/04/12 14:49				09/04/12 15:08		09/04/12 15:45		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum	10000.0	9986.56	99.9	10000.0	10073.85	100.7	10119.37	101.2	P
Antimony	500.0	508.95	101.8	500.0	507.84	101.6	531.56	106.3	P
Arsenic	500.0	507.42	101.5	500.0	498.17	99.6	502.48	100.5	P
Barium	10000.0	10449.64	104.5	10000.0	10426.44	104.3	10497.96	105.0	P
Beryllium	250.0	249.63	99.9	250.0	249.22	99.7	250.71	100.3	P
Cadmium	250.0	245.41	98.2	250.0	245.05	98.0	247.66	99.1	P
Calcium	25000.0	24466.38	97.9	25000.0	24426.94	97.7	24592.52	98.4	P
Chromium	1000.0	993.96	99.4	1000.0	998.33	99.8	1009.57	101.0	P
Cobalt	2500.0	2601.77	104.1	2500.0	2600.80	104.0	2630.59	105.2	P
Copper	1250.0	1237.11	99.0	1250.0	1241.59	99.3	1255.58	100.4	P
Iron	5000.0	5097.21	101.9	5000.0	5131.89	102.6	5158.45	103.2	P
Lead	500.0	503.61	100.7	500.0	502.88	100.6	507.22	101.4	P
Magnesium	25000.0	25543.55	102.2	25000.0	25481.96	101.9	25645.55	102.6	P
Manganese	2500.0	2548.30	101.9	2500.0	2541.30	101.7	2555.45	102.2	P
Nickel	2500.0	2568.71	102.7	2500.0	2568.00	102.7	2600.22	104.0	P
Potassium	25000.0	25355.75	101.4	25000.0	25174.52	100.7	25034.50	100.1	P
Selenium	500.0	512.36	102.5	500.0	507.27	101.5	516.32	103.3	P
Silver	1250.0	1249.43	100	1250.0	1250.46	100.0	1262.66	101.0	P
Sodium	25000.0	25385.77	101.5	25000.0	25214.31	100.9	25377.52	101.5	P
Thallium	500.0	480.77	96.2	500.0	475.54	95.1	475.59	95.1	P
Vanadium	2500.0	2502.67	100.1	2500.0	2509.69	100.4	2536.01	101.4	P
Zinc	2500.0	2559.25	102.4	2500.0	2546.82	101.9	2575.36	103.0	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.: _____

SL1820

Initial Calibration Source: _____

Continuing Calibration Source: _____

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					09/04/12 16:22				
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	10185.41	101.9			P
Antimony				500.0	523.35	104.7			P
Arsenic				500.0	504.24	100.8			P
Barium				10000.0	10607.99	106.1			P
Beryllium				250.0	252.55	101.0			P
Cadmium				250.0	249.55	99.8			P
Calcium				25000.0	24695.42	98.8			P
Chromium				1000.0	1014.21	101.4			P
Cobalt				2500.0	2640.21	105.6			P
Copper				1250.0	1264.62	101.2			P
Iron				5000.0	5181.52	103.6			P
Lead				500.0	509.93	102.0			P
Magnesium				25000.0	25880.99	103.5			P
Manganese				2500.0	2574.15	103.0			P
Nickel				2500.0	2612.62	104.5			P
Potassium				25000.0	25541.46	102.2			P
Selenium				500.0	511.54	102.3			P
Silver				1250.0	1268.17	101.5			P
Sodium				25000.0	25697.23	102.8			P
Thallium				500.0	483.42	96.7			P
Vanadium				2500.0	2549.04	102.0			P
Zinc				2500.0	2577.36	103.1			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: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1820

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

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L **MB-67952**

FIMS2_120904B

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	09/04/12 15:06	C	09/04/12 15:25	C		C		C	
Mercury	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.: SL1820

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-67953

OPTIMA3_120904E

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	09/04/12 15:11	C	09/04/12 15:48	C	09/04/12 16:26	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	4.5	B	4.300	U	P
Barium	1.1	U	1.1	U	1.1	U	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	110.0	U	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
Potassium	76.0	U	76.0	U	76.0	U	76.0	U	76.000	U	P
Selenium	12.0	U	12.0	U	12.0	U	12.2	B	12.000	U	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	6.900	U	P
Sodium	40.4	B	36.9	B	51.8	B	45.0	B	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

U.S. EPA - CLP

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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.:

SL1820

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	477208	471430.1	94.3				
Antimony	0	600	-13	557.3	92.9				
Arsenic	0	100	13	102.9	102.9				
Barium	0	500	0	467.6	93.5				
Beryllium	0	500	0	443.6	88.7				
Cadmium	0	1000	0	833.2	83.3				
Calcium	500000	500000	486434	476991.9	95.4				
Chromium	0	500	2	446.9	89.4				
Cobalt	0	500	0	422.9	84.6				
Copper	0	500	0	476.9	95.4				
Iron	200000	200000	166625	164065.6	82.0				
Lead	0	500	6	454.4	90.9				
Magnesium	500000	500000	449734	443770.4	88.8				
Manganese	0	500	-5	438.4	87.7				
Nickel	0	1000	-2	824.7	82.5				
Potassium	0	25000	27	25873.6	103.5				
Selenium	0	500	11	479.4	95.9				
Silver	0	200	2	196.6	98.3				
Sodium	0	25000	78	25366.7	101.5				
Thallium	0	100	15	90.3	90.3				
Vanadium	0	500	-9	443.1	88.6				
Zinc	0	1000	10	850.7	85.1				

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc.		Contract: 95900-04	
Lab Code: MITKEM	Case No.:	SAS No.:	SDG No.: SL1820
Solid LCS Source:		LCS(D) ID:	
Aqueous LCS Source:		LCS-67952	

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Mercury	4.6	4.72	102.6						

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name:	Spectrum Analytical, Inc.	Contract:	95900-04
Lab Code:	MITKEM	Case No.:	
		SAS No.:	
		SDG No.:	SL1820
Solid LCS Source:			
			LCS(D) ID:
Aqueous LCS Source:			LCS-67953

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	9312.71	102.3						
Antimony	455.0	490.47	107.8						
Arsenic	455.0	471.71	103.7						
Barium	9100.0	9579.85	105.3						
Beryllium	227.0	235.09	103.6						
Cadmium	227.0	232.84	102.6						
Calcium	22700.0	22518.90	99.2						
Chromium	910.0	926.12	101.8						
Cobalt	2270.0	2318.66	102.1						
Copper	1130.0	1173.48	103.8						
Iron	4550.0	4642.45	102.0						
Lead	455.0	466.10	102.4						
Magnesium	22700.0	23457.08	103.3						
Manganese	2270.0	2338.62	103.0						
Nickel	2270.0	2325.10	102.4						
Potassium	22700.0	22666.48	99.9						
Selenium	455.0	482.23	106.0						
Silver	1130.0	1160.04	102.7						
Sodium	22700.0	23090.27	101.7						
Thallium	455.0	451.99	99.3						
Vanadium	2270.0	2322.97	102.3						
Zinc	2270.0	2296.00	101.1						

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name:	Spectrum Analytical, Inc.		Contract:	95900-04	
Lab Code:	MITKEM	Case No.:	SAS No.:	SDG No.:	SL1820
Solid LCS Source:				LCS(D) ID:	
Aqueous LCS Source:				LCSD-67953	

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	9408.47	103.4						
Antimony	455.0	492.44	108.2						
Arsenic	455.0	441.00	96.9						
Barium	9100.0	9650.04	106.0						
Beryllium	227.0	237.38	104.6						
Cadmium	227.0	217.14	95.7						
Calcium	22700.0	22880.06	100.8						
Chromium	910.0	945.26	103.9						
Cobalt	2270.0	2368.83	104.4						
Copper	1130.0	1159.15	102.6						
Iron	4550.0	4759.05	104.6						
Lead	455.0	437.73	96.2						
Magnesium	22700.0	23647.10	104.2						
Manganese	2270.0	2356.82	103.8						
Nickel	2270.0	2377.26	104.7						
Potassium	22700.0	22902.67	100.9						
Selenium	455.0	442.86	97.3						
Silver	1130.0	1163.52	103.0						
Sodium	22700.0	23352.16	102.9						
Thallium	455.0	417.23	91.7						
Vanadium	2270.0	2327.35	102.5						
Zinc	2270.0	2344.07	103.3						

U.S. EPA - CLP

10

METHOD DETECTION LIMITS (ANNUALLY)

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

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1820

Instrument Type: CV InstrumentID: FIMS2 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

10

METHOD DETECTION LIMITS (ANNUALLY)

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

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1820

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.:

SL1820

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Co
Aluminum	308.21		0.1950780	0.0000000	0.0689271	0.0000000
Antimony	206.83	0.0581013	0.0000000	0.0549587	0.0214185	0.0000000
Arsenic	188.97	0.0098790	-0.0124040	-0.0756686	0.0157247	0.1927900
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	0.0025914	0.0749299	0.0000000	-0.0433049
Calcium	227.54	0.0000000		7.8420900	0.5637690	253.7870000
Chromium	267.71	0.0000000	0.0000000	0.0000000	0.0064696	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0241432	0.0000000	
Copper	324.75	0.0000000	0.0000000	-0.0922443	0.0000000	-0.1349370
Iron	273.95	0.0000000	0.0000000		0.0000000	0.0000000
Lead	220.35	-0.1032270	-0.0123272	0.0209682	-0.0064852	-0.0680890
Magnesium	279.07	0.0000000	0.0000000	0.0000000		0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0301633	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0042808	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0219452	0.0000000	-0.3855700	0.0000000	-0.7432810
Silver	328.06	0.0000000	0.0000000	-0.0362359	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	-0.0153767	-0.0040303	-0.1223880	-0.0549555	5.8333800
Titanium	334.94	0.0000000	-0.0167659	0.0000000	0.0182020	0.0000000
Vanadium	292.40	0.0000000	0.0000000	-0.0307673	0.0000000	0.0000000
Zinc	206.20	-0.0121647	-0.0130048	-0.0501268	-0.0144316	-0.3012520

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.:

SL1820

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	Mn	Ni	Tl
Aluminum	308.21	0.0000000	0.0000000	1.5401500	0.0000000	0.0000000
Antimony	206.83	18.3748000	0.3246940	0.0000000	0.0000000	0.0000000
Arsenic	188.97	-8.8838000	0.0000000	0.2489140	0.0999179	0.1051500
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	0.0000000	-0.2126510	0.0000000
Calcium	227.54	5.3533500	3.5228400	3.8819800	26.7628000	0.0000000
Chromium	267.71		0.0000000	0.2043740	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.1584950	0.0000000
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	-0.0447064	0.3133570	-0.0606043	-0.1219210	-0.1744540
Magnesium	279.07	2.4873800	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000		0.0474986	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000		0.2920460
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.2759200	-0.2480870	0.0000000	-0.1215600	-0.4373880
Silver	328.06	0.0000000	0.0000000	0.2125900	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0860847	-0.1533400	-0.3345200	-0.0729483	
Titanium	334.94	0.1475450	0.0000000	0.0000000	0.0000000	0.1490420
Vanadium	292.40	-2.2898300	0.3129820	0.0000000	0.0000000	0.0000000
Zinc	206.20	-1.8283200	-0.3316020	-0.4006130	-0.1453040	-0.4071760

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.: _____

SL1820

ICP ID Number: _____

OPTIMA3

Date: _____

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Ti	V	_____	_____	_____
Aluminum	308.21	1.6328600	-0.3229200			
Antimony	206.83	-2.3648000	-1.1022500			
Arsenic	188.97	-0.2598760	0.0000000			
Barium	233.52	0.0000000	-1.4206100			
Beryllium	313.10	-1.8417600	-0.0298256			
Cadmium	226.50	0.0000000	0.0000000			
Calcium	227.54	7.1850200	24.4780000			
Chromium	267.71	0.0000000	-0.3095710			
Cobalt	228.61	2.3045300	0.0000000			
Copper	324.75	0.0000000	-0.1578650			
Iron	273.95	0.0000000	-1.6429000			
Lead	220.35	-0.9907230	-0.0982908			
Magnesium	279.07	0.0000000	0.0000000			
Manganese	257.61	0.0000000	0.0000000			
Nickel	231.60	0.5886010	0.0000000			
Potassium	766.49	0.0000000	0.0000000			
Selenium	196.02	-0.6097280	0.0000000			
Silver	328.06	0.0000000	-1.9059700			
Sodium	589.59	0.0000000	0.0000000			
Thallium	190.80	-0.2863380	4.5539900			
Titanium	334.94		0.0000000			
Vanadium	292.40	1.3967000				
Zinc	206.20	-0.8719450	-0.1607790			

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.: SL1820
ICP ID Number: OPTIMA3 Date: 5/10/2012

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	100000	P
Beryllium	0.20	5000	P
Cadmium	0.20	50000	P
Calcium	0.20	500000	P
Chromium	0.20	50000	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	50000	P
Nickel	0.20	100000	P
Potassium	0.20	500000	P
Selenium	0.20	50000	P
Silver	0.20	2500	P
Sodium	0.20	500000	P
Thallium	0.20	50000	P
Vanadium	0.20	50000	P
Zinc	0.20	50000	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.: SL1820
Preparation Method: 7470A Batch ID: 67952

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB	09/04/2012		100
CCV	09/04/2012		100
ICB	09/04/2012		100
ICV	09/04/2012		100
S0	09/04/2012		100
S0.2	09/04/2012		100
S1.0	09/04/2012		100
S10.0	09/04/2012		100
S2.0	09/04/2012		100
S5.0	09/04/2012		100
LCSW	09/04/2012		100
PBW	09/04/2012		100
SL-MW-3A	09/04/2012		100
SL-MW-3B	09/04/2012		100
SL-MW-4	09/04/2012		100
SL-MW-5	09/04/2012		100
SL-MW-6A	09/04/2012		100
SL-MW-6B	09/04/2012		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.: SL1820
Preparation Method: 3005A Batch ID: 67953

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	09/04/2012		50
LCSW02	09/04/2012		50
PBW	09/04/2012		50
SL -MW -3A	09/04/2012		50
SL -MW -3B	09/04/2012		50
SL -MW -4	09/04/2012		50
SL -MW -5	09/04/2012		50
SL -MW -6A	09/04/2012		50
SL -MW -6B	09/04/2012		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.: SL1820
 Instrument ID Number: FIMS2 Method: CV
 Start Date: 09/04/2012 End Date: 09/04/2012

FIMS2_120904B

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	1436															X														
S0.2	1.0	1438															X														
S1.0	1.0	1440															X														
S2.0	1.0	1441															X														
S5.0	1.0	1443															X														
S10.0	1.0	1445															X														
ICV	1.0	1446															X														
ICB	1.0	1448															X														
PBW	1.0	1450															X														
LCSW	1.0	1451															X														
SL -MW -3A	1.0	1453															X														
ZZZZZZ	1.0	1455																													
SL -MW -3B	1.0	1456															X														
ZZZZZZ	1.0	1458																													
SL -MW -6A	1.0	1500															X														
ZZZZZZ	1.0	1501																													
SL -MW -6B	1.0	1503															X														
CCV	1.0	1505															X														
CCB	1.0	1506															X														
ZZZZZZ	1.0	1508																													
SL -MW -5	1.0	1510															X														
ZZZZZZ	1.0	1511																													
SL -MW -4	1.0	1513															X														
ZZZZZZ	1.0	1515																													
ZZZZZZ	1.0	1516																													
ZZZZZZ	1.0	1518																													
ZZZZZZ	1.0	1520																													
ZZZZZZ	1.0	1521																													
CCV	1.0	1523															X														
CCB	1.0	1525															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.: SL1820
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 09/04/2012 End Date: 09/04/2012

OPTIMA3_120904E

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	1434		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
S1	1.0	1438		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
S2	1.0	1442		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
S3	1.0	1445		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICV	1.0	1449		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICB	1.0	1453		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ZZZZZZ	1.0	1456																											
ICSA	1.0	1500		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ICSAB	1.0	1504		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCV	1.0	1508		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCB	1.0	1511		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
PBW	1.0	1515		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
LCSW	1.0	1519		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
LCSW02	1.0	1522		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
SL-MW-3A	1.0	1526		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ZZZZZZ	1.0	1530																											
SL-MW-3B	1.0	1533		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ZZZZZZ	1.0	1537																											
ZZZZZZ	5.0	1541																											
CCV	1.0	1545		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCB	1.0	1548		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
SL-MW-6A	1.0	1552		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ZZZZZZ	1.0	1556																											
SL-MW-6B	1.0	1600		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ZZZZZZ	1.0	1603																											
SL-MW-5	1.0	1607		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ZZZZZZ	1.0	1611																											
SL-MW-4	1.0	1615		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
ZZZZZZ	1.0	1618																											
CCV	1.0	1622		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			
CCB	1.0	1626		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X			

Instrument Raw Data

=====
Analysis Begun

Start Time: 9/4/2012 2:34:20 PM

Plasma On Time: 9/4/2012 12:10:10 PM

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N3102302 Autosampler Model: AS-93plus

Sample Information File: G:\Metals\SIF\67953.SIF

Batch ID: Null

Results Data Set: B12090404

Results Library: C:\pe\Administrator\Results\Results.mdb

=====
Sequence No.: 1

Autosampler Location: 1

Sample ID: S0

Date Collected: 9/4/2012 2:34:38 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1755697.7	20586.81	1.17%	100.00	%
Lu 261.542	1128740.0	13508.77	1.20%	100.0	%
Ag 328.068	-2373.8	139.07	5.86%	[0.00]	mg/L
Al 308.215	2381.8	68.01	2.86%	[0.00]	mg/L
As 188.979	0.1	2.08	>999.9%	[0.00]	mg/L
Ba 233.527	-57.8	7.77	13.44%	[0.00]	mg/L
Be 313.107	-1180.4	35.21	2.98%	[0.00]	mg/L
Co 228.616	-8.3	3.58	43.00%	[0.00]	mg/L
Cr 267.716	60.1	13.43	22.36%	[0.00]	mg/L
Cu 324.752	3623.6	88.99	2.46%	[0.00]	mg/L
Fe 273.955	-71.5	10.28	14.38%	[0.00]	mg/L
Mg 279.077	-946.4	53.68	5.67%	[0.00]	mg/L
Mn 257.610	-197.7	29.52	14.93%	[0.00]	mg/L
Ni 231.604	-26.8	11.31	42.19%	[0.00]	mg/L
Pb 220.353	18.9	2.29	12.14%	[0.00]	mg/L
Sb 206.836	31.0	2.13	6.87%	[0.00]	mg/L
Se 196.026	-4.9	1.03	20.94%	[0.00]	mg/L
Tl 190.801	-9.0	2.11	23.39%	[0.00]	mg/L
V 292.402	31.8	46.70	146.71%	[0.00]	mg/L
Zn 206.200	28.0	1.78	6.34%	[0.00]	mg/L
Cd 226.502	-53.4	4.43	8.28%	[0.00]	mg/L
Ti 334.940	-49.3	15.28	30.98%	[0.00]	mg/L
Ca 227.546	163.1	4.54	2.79%	[0.00]	mg/L
Na 589.592	-708.3	89.75	12.67%	[0.00]	mg/L
K 766.490	711.5	54.18	7.62%	[0.00]	mg/L

=====
Sequence No.: 2

Autosampler Location: 9

Sample ID: S1

Date Collected: 9/4/2012 2:38:17 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1666475.1	20395.76	1.22%	94.918	%
Lu 261.542	1079015.3	14576.60	1.35%	95.59	%
Ag 328.068	394580.7	2125.72	0.54%	[2.5]	mg/L
Al 308.215	369730.6	3741.65	1.01%	[20]	mg/L
As 188.979	559.1	6.60	1.18%	[1]	mg/L
Ba 233.527	1534156.6	6769.02	0.44%	[20]	mg/L
Be 313.107	1158466.9	5982.75	0.52%	[0.5]	mg/L
Co 228.616	161063.0	1709.51	1.06%	[5]	mg/L
Cr 267.716	127402.5	1411.30	1.11%	[2]	mg/L
Cu 324.752	499299.9	2562.01	0.51%	[2.5]	mg/L

Fe 273.955	219816.2	2391.81	1.09%	[10]	mg/L
Mg 279.077	793827.2	4430.13	0.56%	[50]	mg/L
Mn 257.610	2661115.0	13864.16	0.52%	[5]	mg/L
Ni 231.604	132995.1	1446.38	1.09%	[5]	mg/L
Pb 220.353	4570.8	27.85	0.61%	[1]	mg/L
Sb 206.836	1026.9	9.78	0.95%	[1]	mg/L
Se 196.026	436.1	0.70	0.16%	[1]	mg/L
Tl 190.801	599.2	3.41	0.57%	[1]	mg/L
V 292.402	557186.4	2693.07	0.48%	[5]	mg/L
Zn 206.200	94466.8	1089.20	1.15%	[5]	mg/L
Cd 226.502	24956.0	240.41	0.96%	[0.5]	mg/L
Ti 334.940	492003.0	3022.39	0.61%	[1]	mg/L
Ca 227.546	8730.7	43.86	0.50%	[50]	mg/L
Na 589.592	231108.3	3308.67	1.43%	[50]	mg/L
K 766.490	51245.1	715.15	1.40%	[50]	mg/L

Sequence No.: 3

Sample ID: S2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 9/4/2012 2:42:02 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1738548.6	26360.80	1.52%	99.023	%
Lu 261.542	1124690.2	17108.46	1.52%	99.64	%
Ag 328.068	196093.4	594.78	0.30%	[1.25]	mg/L
Al 308.215	184248.6	413.21	0.22%	[10]	mg/L
As 188.979	281.5	1.18	0.42%	[0.5]	mg/L
Ba 233.527	788297.1	1531.34	0.19%	[10]	mg/L
Be 313.107	580419.5	2021.99	0.35%	[0.25]	mg/L
Co 228.616	82177.7	187.65	0.23%	[2.5]	mg/L
Cr 267.716	64270.8	161.96	0.25%	[1]	mg/L
Cu 324.752	244320.5	719.97	0.29%	[1.25]	mg/L
Fe 273.955	111679.1	215.50	0.19%	[5]	mg/L
Mg 279.077	401229.1	1079.47	0.27%	[25]	mg/L
Mn 257.610	1353987.6	4638.58	0.34%	[2.5]	mg/L
Ni 231.604	67955.4	229.35	0.34%	[2.5]	mg/L
Pb 220.353	2353.0	7.39	0.31%	[0.5]	mg/L
Sb 206.836	527.3	5.44	1.03%	[0.5]	mg/L
Se 196.026	220.6	4.67	2.12%	[0.5]	mg/L
Tl 190.801	306.7	1.48	0.48%	[0.5]	mg/L
V 292.402	276703.3	662.84	0.24%	[2.5]	mg/L
Zn 206.200	48176.9	56.19	0.12%	[2.5]	mg/L
Cd 226.502	12632.6	22.80	0.18%	[0.25]	mg/L
Ti 334.940	246886.1	393.37	0.16%	[0.5]	mg/L
Ca 227.546	4367.8	13.07	0.30%	[25]	mg/L
Na 589.592	116521.0	1480.35	1.27%	[25]	mg/L
K 766.490	25616.9	268.32	1.05%	[25]	mg/L

Sequence No.: 4

Sample ID: S3

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 9/4/2012 2:45:46 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1768305.1	11338.08	0.64%	100.72	%
Lu 261.542	1137842.7	7987.38	0.70%	100.8	%
Ag 328.068	4045.7	18.72	0.46%	[0.025]	mg/L
Al 308.215	3775.0	78.33	2.07%	[0.2]	mg/L
As 188.979	6.1	1.96	32.14%	[0.01]	mg/L
Ba 233.527	17130.8	177.64	1.04%	[0.2]	mg/L
Be 313.107	11987.0	140.05	1.17%	[0.005]	mg/L

Co 228.616	1724.6	15.94	0.92%	[0.05]	mg/L
Cr 267.716	1345.8	28.39	2.11%	[0.02]	mg/L
Cu 324.752	4997.7	78.11	1.56%	[0.025]	mg/L
Fe 273.955	2323.1	9.52	0.41%	[0.1]	mg/L
Mg 279.077	8647.9	90.75	1.05%	[0.5]	mg/L
Mn 257.610	29455.5	224.98	0.76%	[0.05]	mg/L
Ni 231.604	1434.4	16.07	1.12%	[0.05]	mg/L
Pb 220.353	59.7	3.52	5.91%	[0.01]	mg/L
Sb 206.836	19.5	2.68	13.79%	[0.01]	mg/L
Se 196.026	7.9	3.33	42.07%	[0.01]	mg/L
Tl 190.801	7.3	3.24	44.17%	[0.01]	mg/L
V 292.402	5707.0	49.73	0.87%	[0.05]	mg/L
Zn 206.200	1036.7	11.36	1.10%	[0.05]	mg/L
Cd 226.502	271.9	7.19	2.65%	[0.005]	mg/L
Ti 334.940	5152.5	69.05	1.34%	[0.01]	mg/L
Ca 227.546	75.5	2.38	3.16%	[0.5]	mg/L
Na 589.592	2623.7	88.13	3.36%	[0.5]	mg/L
K 766.490	595.0	44.51	7.48%	[0.5]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	157600	0.00000	0.999997	
Al 308.215	3	Lin Thru 0	0.0	18470	0.00000	0.999999	
As 188.979	3	Lin Thru 0	0.0	559.9	0.00000	0.999996	
Ba 233.527	3	Lin Thru 0	0.0	77130	0.00000	0.999939	
Be 313.107	3	Lin Thru 0	0.0	2318000	0.00000	1.000000	
Co 228.616	3	Lin Thru 0	0.0	32340	0.00000	0.999967	
Cr 267.716	3	Lin Thru 0	0.0	63820	0.00000	0.999994	
Cu 324.752	3	Lin Thru 0	0.0	198900	0.00000	0.999963	
Fe 273.955	3	Lin Thru 0	0.0	22050	0.00000	0.999979	
Mg 279.077	3	Lin Thru 0	0.0	15910	0.00000	0.999990	
Mn 257.610	3	Lin Thru 0	0.0	534100	0.00000	0.999975	
Ni 231.604	3	Lin Thru 0	0.0	26720	0.00000	0.999962	
Pb 220.353	3	Lin Thru 0	0.0	4598	0.00000	0.999927	
Sb 206.836	3	Lin Thru 0	0.0	1033	0.00000	0.999911	
Se 196.026	3	Lin Thru 0	0.0	437.1	0.00000	0.999963	
Tl 190.801	3	Lin Thru 0	0.0	602.0	0.00000	0.999953	
V 292.402	3	Lin Thru 0	0.0	111300	0.00000	0.999996	
Zn 206.200	3	Lin Thru 0	0.0	18970	0.00000	0.999968	
Cd 226.502	3	Lin Thru 0	0.0	50040	0.00000	0.999987	
Ti 334.940	3	Lin Thru 0	0.0	492400	0.00000	0.999999	
Ca 227.546	3	Lin Thru 0	0.0	174.6	0.00000	0.999999	
Na 589.592	3	Lin Thru 0	0.0	4630	0.00000	0.999994	
K 766.490	3	Lin Thru 0	0.0	1025	0.00000	0.999999	

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Sequence No.: 5

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 9/4/2012 2:49:27 PM

Data Type: Original

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	1737403.4	98.958 %	0.6606			0.67%
Lu 261.542	1123409.5	99.53 %	0.760			0.76%
Ag 328.068	196295.5	1.2494 mg/L	0.00980	1.2494 mg/L	0.00980	0.78%
QC value within limits for Ag 328.068 Recovery = 99.95%						
Al 308.215	184690.9	9.9866 mg/L	0.08461	9.9866 mg/L	0.08461	0.85%
QC value within limits for Al 308.215 Recovery = 99.87%						
As 188.979	279.5	0.50742 mg/L	0.004217	0.50742 mg/L	0.004217	0.83%
QC value within limits for As 188.979 Recovery = 101.48%						
Ba 233.527	805736.9	10.450 mg/L	0.0920	10.450 mg/L	0.0920	0.88%
QC value within limits for Ba 233.527 Recovery = 104.50%						
Be 313.107	576248.8	0.24963 mg/L	0.002756	0.24963 mg/L	0.002756	1.10%
QC value within limits for Be 313.107 Recovery = 99.85%						
Co 228.616	84208.2	2.6018 mg/L	0.02513	2.6018 mg/L	0.02513	0.97%

Cr	267.716	63414.0	0.99396 mg/L	0.007495	0.99396 mg/L	0.007495	0.75%
QC value within limits for Co 228.616 Recovery = 104.07%							
Cu	324.752	245778.0	1.2371 mg/L	0.01142	1.2371 mg/L	0.01142	0.92%
QC value within limits for Cr 267.716 Recovery = 99.40%							
Fe	273.955	112315.9	5.0972 mg/L	0.04777	5.0972 mg/L	0.04777	0.94%
QC value within limits for Cu 324.752 Recovery = 98.97%							
Mg	279.077	406467.3	25.544 mg/L	0.2463	25.544 mg/L	0.2463	0.96%
QC value within limits for Fe 273.955 Recovery = 101.94%							
Mn	257.610	1361252.6	2.5483 mg/L	0.02335	2.5483 mg/L	0.02335	0.92%
QC value within limits for Mg 279.077 Recovery = 102.17%							
Ni	231.604	68640.2	2.5687 mg/L	0.02658	2.5687 mg/L	0.02658	1.03%
QC value within limits for Mn 257.610 Recovery = 101.93%							
Pb	220.353	2306.1	0.50361 mg/L	0.002671	0.50361 mg/L	0.002671	0.53%
QC value within limits for Ni 231.604 Recovery = 102.75%							
Sb	206.836	542.4	0.50895 mg/L	0.002596	0.50895 mg/L	0.002596	0.51%
QC value within limits for Pb 220.353 Recovery = 100.72%							
Se	196.026	221.4	0.51236 mg/L	0.003741	0.51236 mg/L	0.003741	0.73%
QC value within limits for Sb 206.836 Recovery = 101.79%							
Tl	190.801	303.9	0.48077 mg/L	0.005993	0.48077 mg/L	0.005993	1.25%
QC value within limits for Se 196.026 Recovery = 102.47%							
V	292.402	278365.4	2.5027 mg/L	0.02099	2.5027 mg/L	0.02099	0.84%
QC value within limits for Tl 190.801 Recovery = 96.15%							
Zn	206.200	48438.0	2.5592 mg/L	0.02696	2.5592 mg/L	0.02696	1.05%
QC value within limits for V 292.402 Recovery = 100.11%							
Cd	226.502	12268.7	0.24541 mg/L	0.002142	0.24541 mg/L	0.002142	0.87%
QC value within limits for Zn 206.200 Recovery = 102.37%							
Ti	334.940	252078.4	0.51172 mg/L	0.005462	0.51172 mg/L	0.005462	1.07%
QC value within limits for Cd 226.502 Recovery = 98.16%							
Ca	227.546	4424.2	24.466 mg/L	0.0327	24.466 mg/L	0.0327	0.13%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Na	589.592	117534.9	25.386 mg/L	0.3260	25.386 mg/L	0.3260	1.28%
QC value within limits for Ca 227.546 Recovery = 97.87%							
K	766.490	25986.3	25.356 mg/L	0.2708	25.356 mg/L	0.2708	1.07%
QC value within limits for Na 589.592 Recovery = 101.54%							
QC value within limits for K 766.490 Recovery = 101.42%							
All analyte(s) passed QC.							

Sequence No.: 6

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 9/4/2012 2:53:10 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1767332.2	100.66 %	2.098			2.08%
Lu 261.542	1134592.6	100.5 %	2.13			2.12%
Ag 328.068	-65.3	-0.00042 mg/L	0.000196	-0.00042 mg/L	0.000196	47.08%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 308.215	43.4	0.00235 mg/L	0.003648	0.00235 mg/L	0.003648	155.45%
QC value within limits for Al 308.215 Recovery = Not calculated						
As 188.979	2.4	0.00430 mg/L	0.002566	0.00430 mg/L	0.002566	59.68%
QC value within limits for As 188.979 Recovery = Not calculated						
Ba 233.527	49.1	0.00064 mg/L	0.000184	0.00064 mg/L	0.000184	28.95%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107	17.3	0.00001 mg/L	0.000011	0.00001 mg/L	0.000011	149.43%
QC value within limits for Be 313.107 Recovery = Not calculated						
Co 228.616	3.8	0.00012 mg/L	0.000066	0.00012 mg/L	0.000066	56.66%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716	-17.0	-0.00027 mg/L	0.000044	-0.00027 mg/L	0.000044	16.47%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752	-22.0	-0.00011 mg/L	0.000288	-0.00011 mg/L	0.000288	260.01%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 273.955	-18.2	-0.00083 mg/L	0.000833	-0.00083 mg/L	0.000833	100.80%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	103.6	0.00651 mg/L	0.004601	0.00651 mg/L	0.004601	70.65%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	59.3	0.00011 mg/L	0.000057	0.00011 mg/L	0.000057	51.23%

QC value within limits for Mn 257.610 Recovery = Not calculated
 Ni 231.604 2.8 0.00010 mg/L 0.000201 0.00010 mg/L 0.000201 194.53%
 QC value within limits for Ni 231.604 Recovery = Not calculated
 Pb 220.353 -0.0 -0.00001 mg/L 0.000916 -0.00001 mg/L 0.000916 >999.9%
 QC value within limits for Pb 220.353 Recovery = Not calculated
 Sb 206.836 6.2 0.00605 mg/L 0.003708 0.00605 mg/L 0.003708 61.30%
 QC value within limits for Sb 206.836 Recovery = Not calculated
 Se 196.026 0.4 0.00100 mg/L 0.009675 0.00100 mg/L 0.009675 967.65%
 QC value within limits for Se 196.026 Recovery = Not calculated
 Tl 190.801 0.2 0.00033 mg/L 0.002151 0.00033 mg/L 0.002151 656.08%
 QC value within limits for Tl 190.801 Recovery = Not calculated
 V 292.402 -71.1 -0.00064 mg/L 0.000282 -0.00064 mg/L 0.000282 44.10%
 QC value within limits for V 292.402 Recovery = Not calculated
 Zn 206.200 23.9 0.00126 mg/L 0.000319 0.00126 mg/L 0.000319 25.26%
 QC value within limits for Zn 206.200 Recovery = Not calculated
 Cd 226.502 -2.7 -0.00005 mg/L 0.000096 -0.00005 mg/L 0.000096 181.98%
 QC value within limits for Cd 226.502 Recovery = Not calculated
 Ti 334.940 48.8 0.00010 mg/L 0.000053 0.00010 mg/L 0.000053 53.58%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546 -0.7 -0.00407 mg/L 0.094006 -0.00407 mg/L 0.094006 >999.9%
 QC value within limits for Ca 227.546 Recovery = Not calculated
 Na 589.592 187.2 0.04044 mg/L 0.007078 0.04044 mg/L 0.007078 17.50%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490 38.1 0.03719 mg/L 0.071217 0.03719 mg/L 0.071217 191.49%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 9/4/2012 2:56:52 PM

Data Type: Original

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	1775400.4	101.12 %	0.945			0.93%
Lu 261.542	1140377.8	101.0 %	0.94			0.93%
Ag 328.068	4847.2	0.03083 mg/L	0.000161	0.03083 mg/L	0.000161	0.52%
QC value within limits for Ag 328.068		Recovery = 102.78%				
Al 308.215	3820.1	0.20649 mg/L	0.000747	0.20649 mg/L	0.000747	0.36%
QC value within limits for Al 308.215		Recovery = 103.24%				
As 188.979	13.1	0.02358 mg/L	0.005382	0.02358 mg/L	0.005382	22.82%
QC value within limits for As 188.979		Recovery = 117.90%				
Ba 233.527	16884.4	0.21897 mg/L	0.001047	0.21897 mg/L	0.001047	0.48%
QC value within limits for Ba 233.527		Recovery = 109.49%				
Be 313.107	11913.4	0.00518 mg/L	0.000078	0.00518 mg/L	0.000078	1.52%
QC value within limits for Be 313.107		Recovery = 103.56%				
Co 228.616	1733.0	0.05352 mg/L	0.000519	0.05352 mg/L	0.000519	0.97%
QC value within limits for Co 228.616		Recovery = 107.04%				
Cr 267.716	1345.7	0.02109 mg/L	0.000516	0.02109 mg/L	0.000516	2.45%
QC value within limits for Cr 267.716		Recovery = 105.46%				
Cu 324.752	6016.6	0.03029 mg/L	0.000315	0.03029 mg/L	0.000315	1.04%
QC value within limits for Cu 324.752		Recovery = 100.96%				
Fe 273.955	4521.2	0.20510 mg/L	0.002584	0.20510 mg/L	0.002584	1.26%
QC value within limits for Fe 273.955		Recovery = 102.55%				
Mg 279.077	8573.4	0.53878 mg/L	0.007783	0.53878 mg/L	0.007783	1.44%
QC value within limits for Mg 279.077		Recovery = 107.76%				
Mn 257.610	28728.6	0.05378 mg/L	0.000279	0.05378 mg/L	0.000279	0.52%
QC value within limits for Mn 257.610		Recovery = 107.56%				
Ni 231.604	1456.3	0.05449 mg/L	0.000325	0.05449 mg/L	0.000325	0.60%
QC value within limits for Ni 231.604		Recovery = 108.98%				
Pb 220.353	54.4	0.01188 mg/L	0.001853	0.01188 mg/L	0.001853	15.60%
QC value within limits for Pb 220.353		Recovery = 118.80%				
Sb 206.836	21.7	0.02072 mg/L	0.002751	0.02072 mg/L	0.002751	13.28%
QC value within limits for Sb 206.836		Recovery = 103.61%				
Se 196.026	11.3	0.02609 mg/L	0.004719	0.02609 mg/L	0.004719	18.09%
QC value within limits for Se 196.026		Recovery = 86.95%				
Tl 190.801	13.4	0.02174 mg/L	0.003893	0.02174 mg/L	0.003893	17.91%

QC value within limits for Tl 190.801 Recovery = 108.68%
V 292.402 5700.4 0.05124 mg/L 0.000259 0.05124 mg/L 0.000259 0.50%
QC value within limits for V 292.402 Recovery = 102.48%
Zn 206.200 1020.4 0.05393 mg/L 0.000260 0.05393 mg/L 0.000260 0.48%
QC value within limits for Zn 206.200 Recovery = 107.86%
Cd 226.502 267.6 0.00534 mg/L 0.000029 0.00534 mg/L 0.000029 0.55%
QC value within limits for Cd 226.502 Recovery = 106.89%
Ti 334.940 9787.4 0.01988 mg/L 0.000018 0.01988 mg/L 0.000018 0.09%
QC value within limits for Ti 334.940 Recovery = 99.38%
Ca 227.546 139.7 0.78137 mg/L 0.057819 0.78137 mg/L 0.057819 7.40%
QC value within limits for Ca 227.546 Recovery = 97.67%
Na 589.592 4889.3 1.0560 mg/L 0.02310 1.0560 mg/L 0.02310 2.19%
QC value within limits for Na 589.592 Recovery = 105.60%
K 766.490 1022.2 0.99743 mg/L 0.124628 0.99743 mg/L 0.124628 12.49%
QC value within limits for K 766.490 Recovery = 99.74%
All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 9/4/2012 3:00:31 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1554681.9	88.551 %	0.4015			0.45%
Lu 261.542	1000248.6	88.62 %	0.307			0.35%
Ag 328.068	315.1	0.00197 mg/L	0.000131	0.00197 mg/L	0.000131	6.66%
QC value within limits for Ag 328.068		Recovery =	Not calculated			
Al 308.215	8818378.4	477.21 mg/L	5.127	477.21 mg/L	5.127	1.07%
QC value within limits for Al 308.215		Recovery =	95.44%			
As 188.979	-4.5	0.01298 mg/L	0.006884	0.01298 mg/L	0.006884	53.04%
QC value within limits for As 188.979		Recovery =	Not calculated			
Ba 233.527	7.0	0.00007 mg/L	0.000143	0.00007 mg/L	0.000143	204.68%
QC value within limits for Ba 233.527		Recovery =	Not calculated			
Be 313.107	-32.9	-0.00004 mg/L	0.000019	-0.00004 mg/L	0.000019	53.72%
QC value within limits for Be 313.107		Recovery =	Not calculated			
Co 228.616	113.9	-0.00048 mg/L	0.000385	-0.00048 mg/L	0.000385	80.93%
QC value within limits for Co 228.616		Recovery =	Not calculated			
Cr 267.716	151.3	0.00237 mg/L	0.000084	0.00237 mg/L	0.000084	3.57%
QC value within limits for Cr 267.716		Recovery =	Not calculated			
Cu 324.752	-3038.6	0.00009 mg/L	0.000113	0.00009 mg/L	0.000113	127.77%
QC value within limits for Cu 324.752		Recovery =	Not calculated			
Fe 273.955	3674503.7	166.62 mg/L	0.532	166.62 mg/L	0.532	0.32%
QC value within limits for Fe 273.955		Recovery =	83.31%			
Mg 279.077	7155800.5	449.73 mg/L	5.515	449.73 mg/L	5.515	1.23%
QC value within limits for Mg 279.077		Recovery =	89.95%			
Mn 257.610	-271.8	-0.00501 mg/L	0.000086	-0.00501 mg/L	0.000086	1.72%
QC value within limits for Mn 257.610		Recovery =	Not calculated			
Ni 231.604	4.3	-0.00175 mg/L	0.000095	-0.00175 mg/L	0.000095	5.43%
QC value within limits for Ni 231.604		Recovery =	Not calculated			
Pb 220.353	-182.2	0.00614 mg/L	0.000315	0.00614 mg/L	0.000315	5.13%
QC value within limits for Pb 220.353		Recovery =	Not calculated			
Sb 206.836	39.8	-0.01298 mg/L	0.005326	-0.01298 mg/L	0.005326	41.04%
QC value within limits for Sb 206.836		Recovery =	Not calculated			
Se 196.026	-31.8	0.01143 mg/L	0.008005	0.01143 mg/L	0.008005	70.04%
QC value within limits for Se 196.026		Recovery =	Not calculated			
Tl 190.801	-10.1	0.01484 mg/L	0.003032	0.01484 mg/L	0.003032	20.43%
QC value within limits for Tl 190.801		Recovery =	Not calculated			
V 292.402	-1608.3	-0.00930 mg/L	0.000087	-0.00930 mg/L	0.000087	0.94%
QC value within limits for V 292.402		Recovery =	Not calculated			
Zn 206.200	22.9	0.00954 mg/L	0.000003	0.00954 mg/L	0.000003	0.04%
QC value within limits for Zn 206.200		Recovery =	Not calculated			
Cd 226.502	653.2	-0.00070 mg/L	0.000155	-0.00070 mg/L	0.000155	22.28%
QC value within limits for Cd 226.502		Recovery =	Not calculated			
Ti 334.940	-5503.3	-0.01118 mg/L	0.000150	-0.01118 mg/L	0.000150	1.34%
QC value within limits for Ti 334.940		Recovery =	Not calculated			
Ca 227.546	85219.2	486.43 mg/L	1.434	486.43 mg/L	1.434	0.29%

QC value within limits for Ca 227.546 Recovery = 97.29%
 Na 589.592 359.7 0.07769 mg/L 0.004543 0.07769 mg/L 0.004543 5.85%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490 27.2 0.02652 mg/L 0.047102 0.02652 mg/L 0.047102 177.61%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSAB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 9/4/2012 3:04:18 PM

Data Type: Original

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	1560857.0	88.902 %	1.3322			1.50%
Lu 261.542	1004531.3	89.00 %	1.320			1.48%
Ag 328.068	30870.6	0.19657 mg/L	0.001564	0.19657 mg/L	0.001564	0.80%
QC value within limits for Ag 328.068						Recovery = 98.28%
Al 308.215	8711605.4	471.43 mg/L	2.627	471.43 mg/L	2.627	0.56%
QC value within limits for Al 308.215						Recovery = 94.29%
As 188.979	44.0	0.10292 mg/L	0.008197	0.10292 mg/L	0.008197	7.96%
QC value within limits for As 188.979						Recovery = 102.92%
Ba 233.527	36015.7	0.46755 mg/L	0.005202	0.46755 mg/L	0.005202	1.11%
QC value within limits for Ba 233.527						Recovery = 93.51%
Be 313.107	1028254.0	0.44361 mg/L	0.005856	0.44361 mg/L	0.005856	1.32%
QC value within limits for Be 313.107						Recovery = 88.72%
Co 228.616	13811.3	0.42294 mg/L	0.000818	0.42294 mg/L	0.000818	0.19%
QC value within limits for Co 228.616						Recovery = 84.59%
Cr 267.716	28514.2	0.44687 mg/L	0.005068	0.44687 mg/L	0.005068	1.13%
QC value within limits for Cr 267.716						Recovery = 89.37%
Cu 324.752	91802.3	0.47689 mg/L	0.004973	0.47689 mg/L	0.004973	1.04%
QC value within limits for Cu 324.752						Recovery = 95.38%
Fe 273.955	3618049.6	164.07 mg/L	2.015	164.07 mg/L	2.015	1.23%
QC value within limits for Fe 273.955						Recovery = 82.03%
Mg 279.077	7060928.0	443.77 mg/L	1.987	443.77 mg/L	1.987	0.45%
QC value within limits for Mg 279.077						Recovery = 88.75%
Mn 257.610	236529.1	0.43838 mg/L	0.005658	0.43838 mg/L	0.005658	1.29%
QC value within limits for Mn 257.610						Recovery = 87.68%
Ni 231.604	22083.3	0.82469 mg/L	0.001178	0.82469 mg/L	0.001178	0.14%
QC value within limits for Ni 231.604						Recovery = 82.47%
Pb 220.353	1881.0	0.45441 mg/L	0.001560	0.45441 mg/L	0.001560	0.34%
QC value within limits for Pb 220.353						Recovery = 90.88%
Sb 206.836	635.9	0.55730 mg/L	0.006580	0.55730 mg/L	0.006580	1.18%
QC value within limits for Sb 206.836						Recovery = 92.88%
Se 196.026	173.0	0.47942 mg/L	0.005135	0.47942 mg/L	0.005135	1.07%
QC value within limits for Se 196.026						Recovery = 95.88%
Tl 190.801	38.2	0.09032 mg/L	0.003813	0.09032 mg/L	0.003813	4.22%
QC value within limits for Tl 190.801						Recovery = 90.32%
V 292.402	48646.9	0.44307 mg/L	0.005165	0.44307 mg/L	0.005165	1.17%
QC value within limits for V 292.402						Recovery = 88.61%
Zn 206.200	15952.4	0.85068 mg/L	0.002444	0.85068 mg/L	0.002444	0.29%
QC value within limits for Zn 206.200						Recovery = 85.07%
Cd 226.502	42357.1	0.83319 mg/L	0.012005	0.83319 mg/L	0.012005	1.44%
QC value within limits for Cd 226.502						Recovery = 83.32%
Ti 334.940	-5349.9	-0.01099 mg/L	0.000141	-0.01099 mg/L	0.000141	1.29%
QC value within limits for Ti 334.940						Recovery = Not calculated
Ca 227.546	83591.8	476.99 mg/L	4.940	476.99 mg/L	4.940	1.04%
QC value within limits for Ca 227.546						Recovery = 95.40%
Na 589.592	117446.5	25.367 mg/L	0.3324	25.367 mg/L	0.3324	1.31%
QC value within limits for Na 589.592						Recovery = 101.47%
K 766.490	26517.1	25.874 mg/L	0.2967	25.874 mg/L	0.2967	1.15%
QC value within limits for K 766.490						Recovery = 103.49%

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Autosampler Location: 3

Date Collected: 9/4/2012 3:08:05 PM

Analyst:
Initial Sample Wt:
Dilution:

Data Type: Original
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	1680813.1	95.735 %	0.0996			0.10%
Lu 261.542	1085407.3	96.16 %	0.094			0.10%
Ag 328.068	196454.8	1.2505 mg/L	0.01052	1.2505 mg/L	0.01052	0.84%
QC value within limits for Ag 328.068 Recovery = 100.04%						
Al 308.215	186302.7	10.074 mg/L	0.0893	10.074 mg/L	0.0893	0.89%
QC value within limits for Al 308.215 Recovery = 100.74%						
As 188.979	274.3	0.49817 mg/L	0.004443	0.49817 mg/L	0.004443	0.89%
QC value within limits for As 188.979 Recovery = 99.63%						
Ba 233.527	803946.4	10.426 mg/L	0.0304	10.426 mg/L	0.0304	0.29%
QC value within limits for Ba 233.527 Recovery = 104.26%						
Be 313.107	575367.9	0.24922 mg/L	0.000672	0.24922 mg/L	0.000672	0.27%
QC value within limits for Be 313.107 Recovery = 99.69%						
Co 228.616	84175.9	2.6008 mg/L	0.02920	2.6008 mg/L	0.02920	1.12%
QC value within limits for Co 228.616 Recovery = 104.03%						
Cr 267.716	63692.2	0.99833 mg/L	0.010023	0.99833 mg/L	0.010023	1.00%
QC value within limits for Cr 267.716 Recovery = 99.83%						
Cu 324.752	246669.2	1.2416 mg/L	0.01163	1.2416 mg/L	0.01163	0.94%
QC value within limits for Cu 324.752 Recovery = 99.33%						
Fe 273.955	113080.4	5.1319 mg/L	0.04953	5.1319 mg/L	0.04953	0.97%
QC value within limits for Fe 273.955 Recovery = 102.64%						
Mg 279.077	405487.5	25.482 mg/L	0.0712	25.482 mg/L	0.0712	0.28%
QC value within limits for Mg 279.077 Recovery = 101.93%						
Mn 257.610	1357516.6	2.5413 mg/L	0.00747	2.5413 mg/L	0.00747	0.29%
QC value within limits for Mn 257.610 Recovery = 101.65%						
Ni 231.604	68620.9	2.5680 mg/L	0.02703	2.5680 mg/L	0.02703	1.05%
QC value within limits for Ni 231.604 Recovery = 102.72%						
Pb 220.353	2302.7	0.50288 mg/L	0.000288	0.50288 mg/L	0.000288	0.06%
QC value within limits for Pb 220.353 Recovery = 100.58%						
Sb 206.836	541.4	0.50784 mg/L	0.005568	0.50784 mg/L	0.005568	1.10%
QC value within limits for Sb 206.836 Recovery = 101.57%						
Se 196.026	219.2	0.50727 mg/L	0.008536	0.50727 mg/L	0.008536	1.68%
QC value within limits for Se 196.026 Recovery = 101.45%						
Tl 190.801	300.8	0.47554 mg/L	0.003781	0.47554 mg/L	0.003781	0.80%
QC value within limits for Tl 190.801 Recovery = 95.11%						
V 292.402	279143.0	2.5097 mg/L	0.02394	2.5097 mg/L	0.02394	0.95%
QC value within limits for V 292.402 Recovery = 100.39%						
Zn 206.200	48202.3	2.5468 mg/L	0.03411	2.5468 mg/L	0.03411	1.34%
QC value within limits for Zn 206.200 Recovery = 101.87%						
Cd 226.502	12251.1	0.24505 mg/L	0.002105	0.24505 mg/L	0.002105	0.86%
QC value within limits for Cd 226.502 Recovery = 98.02%						
Ti 334.940	245872.2	0.49911 mg/L	0.005365	0.49911 mg/L	0.005365	1.07%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546	4417.4	24.427 mg/L	0.1101	24.427 mg/L	0.1101	0.45%
QC value within limits for Ca 227.546 Recovery = 97.71%						
Na 589.592	116741.0	25.214 mg/L	0.3395	25.214 mg/L	0.3395	1.35%
QC value within limits for Na 589.592 Recovery = 100.86%						
K 766.490	25800.6	25.175 mg/L	0.2920	25.175 mg/L	0.2920	1.16%
QC value within limits for K 766.490 Recovery = 100.70%						

All analyte(s) passed QC.

User canceled analysis.

=====
Analysis Begun

Start Time: 9/4/2012 3:11:43 PM

Plasma On Time: 9/4/2012 12:10:10 PM

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N3102302 Autosampler Model: AS-93plus

Sample Information File: G:\Metals\SIF\67953.SIF

Batch ID: Null

Results Data Set: B12090404

Results Library: C:\pe\Administrator\Results\Results.mdb
=====

Sequence No.: 1

Autosampler Location: 4

Sample ID: CCB

Date Collected: 9/4/2012 3:11:44 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1718222.5	97.866 %		0.1370			0.14%
Lu 261.542	1102708.2	97.69 %		0.117			0.12%
Ag 328.068	-25.2	-0.00016 mg/L		0.000481	-0.00016 mg/L	0.000481	300.24%
QC value within limits for Ag 328.068			Recovery =	Not calculated			
Al 308.215	174.1	0.00942 mg/L		0.005317	0.00942 mg/L	0.005317	56.47%
QC value within limits for Al 308.215			Recovery =	Not calculated			
As 188.979	1.3	0.00234 mg/L		0.001823	0.00234 mg/L	0.001823	77.79%
QC value within limits for As 188.979			Recovery =	Not calculated			
Ba 233.527	27.9	0.00036 mg/L		0.000114	0.00036 mg/L	0.000114	31.64%
QC value within limits for Ba 233.527			Recovery =	Not calculated			
Be 313.107	109.5	0.00005 mg/L		0.000012	0.00005 mg/L	0.000012	25.21%
QC value within limits for Be 313.107			Recovery =	Not calculated			
Co 228.616	-5.7	-0.00018 mg/L		0.000156	-0.00018 mg/L	0.000156	88.08%
QC value within limits for Co 228.616			Recovery =	Not calculated			
Cr 267.716	-12.1	-0.00019 mg/L		0.000121	-0.00019 mg/L	0.000121	64.09%
QC value within limits for Cr 267.716			Recovery =	Not calculated			
Cu 324.752	-10.7	-0.00005 mg/L		0.000189	-0.00005 mg/L	0.000189	351.31%
QC value within limits for Cu 324.752			Recovery =	Not calculated			
Fe 273.955	49.8	0.00226 mg/L		0.000215	0.00226 mg/L	0.000215	9.54%
QC value within limits for Fe 273.955			Recovery =	Not calculated			
Mg 279.077	100.5	0.00631 mg/L		0.002348	0.00631 mg/L	0.002348	37.18%
QC value within limits for Mg 279.077			Recovery =	Not calculated			
Mn 257.610	13.1	0.00002 mg/L		0.000063	0.00002 mg/L	0.000063	257.33%
QC value within limits for Mn 257.610			Recovery =	Not calculated			
Ni 231.604	8.2	0.00031 mg/L		0.000129	0.00031 mg/L	0.000129	42.11%
QC value within limits for Ni 231.604			Recovery =	Not calculated			
Pb 220.353	2.8	0.00062 mg/L		0.000823	0.00062 mg/L	0.000823	132.88%
QC value within limits for Pb 220.353			Recovery =	Not calculated			
Sb 206.836	3.0	0.00292 mg/L		0.003104	0.00292 mg/L	0.003104	106.21%
QC value within limits for Sb 206.836			Recovery =	Not calculated			
Se 196.026	4.5	0.01025 mg/L		0.008300	0.01025 mg/L	0.008300	80.95%
QC value within limits for Se 196.026			Recovery =	Not calculated			
Tl 190.801	1.1	0.00185 mg/L		0.002156	0.00185 mg/L	0.002156	116.60%
QC value within limits for Tl 190.801			Recovery =	Not calculated			
V 292.402	-33.0	-0.00030 mg/L		0.000373	-0.00030 mg/L	0.000373	125.81%
QC value within limits for V 292.402			Recovery =	Not calculated			
Zn 206.200	15.6	0.00082 mg/L		0.000302	0.00082 mg/L	0.000302	36.75%
QC value within limits for Zn 206.200			Recovery =	Not calculated			
Cd 226.502	-3.0	-0.00006 mg/L		0.000089	-0.00006 mg/L	0.000089	149.41%
QC value within limits for Cd 226.502			Recovery =	Not calculated			
Ti 334.940	4.1	0.00001 mg/L		0.000151	0.00001 mg/L	0.000151	>999.9%
QC value within limits for Ti 334.940			Recovery =	Not calculated			
Ca 227.546	6.8	0.03920 mg/L		0.019851	0.03920 mg/L	0.019851	50.64%
QC value within limits for Ca 227.546			Recovery =	Not calculated			
Na 589.592	170.7	0.03688 mg/L		0.012493	0.03688 mg/L	0.012493	33.88%
QC value within limits for Na 589.592			Recovery =	Not calculated			
K 766.490	53.5	0.05222 mg/L		0.030994	0.05222 mg/L	0.030994	59.35%

QC value within limits for K 766.490 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 2
Sample ID: MB-67953-PBW
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 9/4/2012 3:15:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB-67953-PBW

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1809390.3	103.06	%	0.977				0.95%
Lu 261.542	1162358.3	103.0	%	1.05				1.02%
Ag 328.068	-51.5	-0.00033	mg/L	0.000775	-0.00033	mg/L	0.000775	236.39%
Al 308.215	170.8	0.00925	mg/L	0.002853	0.00925	mg/L	0.002853	30.83%
As 188.979	0.3	0.00059	mg/L	0.002759	0.00059	mg/L	0.002759	467.49%
Ba 233.527	11.2	0.00014	mg/L	0.000057	0.00014	mg/L	0.000057	39.68%
Be 313.107	27.6	0.00001	mg/L	0.000024	0.00001	mg/L	0.000024	199.25%
Co 228.616	-4.3	-0.00013	mg/L	0.000008	-0.00013	mg/L	0.000008	6.04%
Cr 267.716	-15.6	-0.00024	mg/L	0.000096	-0.00024	mg/L	0.000096	39.34%
Cu 324.752	106.2	0.00053	mg/L	0.000164	0.00053	mg/L	0.000164	30.68%
Fe 273.955	55.0	0.00249	mg/L	0.001140	0.00249	mg/L	0.001140	45.73%
Mg 279.077	20.8	0.00131	mg/L	0.001859	0.00131	mg/L	0.001859	142.01%
Mn 257.610	143.5	0.00027	mg/L	0.000019	0.00027	mg/L	0.000019	7.04%
Ni 231.604	0.4	0.00001	mg/L	0.000258	0.00001	mg/L	0.000258	>999.9%
Pb 220.353	4.4	0.00096	mg/L	0.001620	0.00096	mg/L	0.001620	169.00%
Sb 206.836	5.7	0.00552	mg/L	0.001847	0.00552	mg/L	0.001847	33.44%
Se 196.026	3.9	0.00888	mg/L	0.004796	0.00888	mg/L	0.004796	53.98%
Tl 190.801	2.5	0.00418	mg/L	0.006082	0.00418	mg/L	0.006082	145.34%
V 292.402	-55.5	-0.00050	mg/L	0.000625	-0.00050	mg/L	0.000625	125.18%
Zn 206.200	33.4	0.00176	mg/L	0.000170	0.00176	mg/L	0.000170	9.66%
Cd 226.502	10.1	0.00020	mg/L	0.000107	0.00020	mg/L	0.000107	53.00%
Ti 334.940	31.6	0.00006	mg/L	0.000087	0.00006	mg/L	0.000087	139.03%
Ca 227.546	-8.5	-0.04872	mg/L	0.034487	-0.04872	mg/L	0.034487	70.78%
Na 589.592	55.0	0.01188	mg/L	0.003998	0.01188	mg/L	0.003998	33.66%
K 766.490	-20.0	-0.01953	mg/L	0.068827	-0.01953	mg/L	0.068827	352.36%

Sequence No.: 3
Sample ID: LCS-67953-LCS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 9/4/2012 3:19:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS-67953-LCS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1743161.9	99.286	%	0.9383				0.95%
Lu 261.542	1125276.0	99.69	%	0.989				0.99%
Ag 328.068	182251.6	1.1600	mg/L	0.00508	1.1600	mg/L	0.00508	0.44%
Al 308.215	172211.6	9.3127	mg/L	0.05630	9.3127	mg/L	0.05630	0.60%
As 188.979	259.8	0.47171	mg/L	0.002365	0.47171	mg/L	0.002365	0.50%
Ba 233.527	738667.1	9.5798	mg/L	0.05991	9.5798	mg/L	0.05991	0.63%
Be 313.107	544739.3	0.23509	mg/L	0.001680	0.23509	mg/L	0.001680	0.71%
Co 228.616	75011.3	2.3187	mg/L	0.02951	2.3187	mg/L	0.02951	1.27%
Cr 267.716	59085.5	0.92612	mg/L	0.011236	0.92612	mg/L	0.011236	1.21%
Cu 324.752	233147.0	1.1735	mg/L	0.00516	1.1735	mg/L	0.00516	0.44%
Fe 273.955	102293.7	4.6424	mg/L	0.05838	4.6424	mg/L	0.05838	1.26%
Mg 279.077	373266.4	23.457	mg/L	0.1860	23.457	mg/L	0.1860	0.79%
Mn 257.610	1249245.8	2.3386	mg/L	0.01629	2.3386	mg/L	0.01629	0.70%
Ni 231.604	62123.4	2.3251	mg/L	0.02914	2.3251	mg/L	0.02914	1.25%
Pb 220.353	2136.5	0.46610	mg/L	0.001809	0.46610	mg/L	0.001809	0.39%
Sb 206.836	523.3	0.49047	mg/L	0.004238	0.49047	mg/L	0.004238	0.86%
Se 196.026	208.6	0.48223	mg/L	0.005896	0.48223	mg/L	0.005896	1.22%
Tl 190.801	285.3	0.45199	mg/L	0.002063	0.45199	mg/L	0.002063	0.46%
V 292.402	258304.3	2.3230	mg/L	0.01719	2.3230	mg/L	0.01719	0.74%
Zn 206.200	43460.8	2.2960	mg/L	0.02863	2.2960	mg/L	0.02863	1.25%

Cd 226.502	11641.1	0.23284 mg/L	0.002778	0.23284 mg/L	0.002778	1.19%
Ti 334.940	232.5	0.00023 mg/L	0.000098	0.00023 mg/L	0.000098	42.76%
Ca 227.546	4067.9	22.519 mg/L	0.0693	22.519 mg/L	0.0693	0.31%
Na 589.592	106906.8	23.090 mg/L	0.2344	23.090 mg/L	0.2344	1.02%
K 766.490	23230.2	22.666 mg/L	0.3014	22.666 mg/L	0.3014	1.33%

Sequence No.: 4

Sample ID: LCSD-67953-LCSD

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 40

Date Collected: 9/4/2012 3:22:48 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCSD-67953-LCSD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1738863.1	99.041 %		0.7090				0.72%
Lu 261.542	1123524.8	99.54 %		0.725				0.73%
Ag 328.068	182799.6	1.1635 mg/L		0.00388	1.1635 mg/L		0.00388	0.33%
Al 308.215	173982.8	9.4085 mg/L		0.02919	9.4085 mg/L		0.02919	0.31%
As 188.979	242.6	0.44100 mg/L		0.008133	0.44100 mg/L		0.008133	1.84%
Ba 233.527	744080.4	9.6500 mg/L		0.08993	9.6500 mg/L		0.08993	0.93%
Be 313.107	550048.5	0.23738 mg/L		0.002197	0.23738 mg/L		0.002197	0.93%
Co 228.616	76634.5	2.3688 mg/L		0.00678	2.3688 mg/L		0.00678	0.29%
Cr 267.716	60306.9	0.94526 mg/L		0.003223	0.94526 mg/L		0.003223	0.34%
Cu 324.752	230294.1	1.1592 mg/L		0.00566	1.1592 mg/L		0.00566	0.49%
Fe 273.955	104864.8	4.7590 mg/L		0.02036	4.7590 mg/L		0.02036	0.43%
Mg 279.077	376290.6	23.647 mg/L		0.1972	23.647 mg/L		0.1972	0.83%
Mn 257.610	1258970.2	2.3568 mg/L		0.01846	2.3568 mg/L		0.01846	0.78%
Ni 231.604	63516.6	2.3773 mg/L		0.00871	2.3773 mg/L		0.00871	0.37%
Pb 220.353	2006.0	0.43773 mg/L		0.002010	0.43773 mg/L		0.002010	0.46%
Sb 206.836	525.7	0.49244 mg/L		0.000603	0.49244 mg/L		0.000603	0.12%
Se 196.026	191.4	0.44286 mg/L		0.003729	0.44286 mg/L		0.003729	0.84%
Tl 190.801	264.5	0.41723 mg/L		0.002622	0.41723 mg/L		0.002622	0.63%
V 292.402	258785.1	2.3273 mg/L		0.00823	2.3273 mg/L		0.00823	0.35%
Zn 206.200	44371.6	2.3441 mg/L		0.00951	2.3441 mg/L		0.00951	0.41%
Cd 226.502	10855.1	0.21714 mg/L		0.001190	0.21714 mg/L		0.001190	0.55%
Ti 334.940	227.4	0.00022 mg/L		0.000113	0.00022 mg/L		0.000113	50.78%
Ca 227.546	4133.7	22.880 mg/L		0.1331	22.880 mg/L		0.1331	0.58%
Na 589.592	108119.4	23.352 mg/L		0.2669	23.352 mg/L		0.2669	1.14%
K 766.490	23472.2	22.903 mg/L		0.2445	22.903 mg/L		0.2445	1.07%

Sequence No.: 5

Sample ID: L1820-01B-SL-MW-3A

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 41

Date Collected: 9/4/2012 3:26:31 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-01B-SL-MW-3A

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1787431.2	101.81 %		0.200				0.20%
Lu 261.542	1151599.3	102.0 %		0.34				0.33%
Ag 328.068	20.9	0.00013 mg/L		0.000364	0.00013 mg/L		0.000364	272.75%
Al 308.215	72237.8	3.9052 mg/L		0.01220	3.9052 mg/L		0.01220	0.31%
As 188.979	-1.9	0.01103 mg/L		0.003605	0.01103 mg/L		0.003605	32.68%
Ba 233.527	3238.7	0.04201 mg/L		0.000667	0.04201 mg/L		0.000667	1.59%
Be 313.107	-702.9	-0.00002 mg/L		0.000019	-0.00002 mg/L		0.000019	77.20%
Co 228.616	180.2	0.00502 mg/L		0.000291	0.00502 mg/L		0.000291	5.81%
Cr 267.716	97070.2	1.5211 mg/L		0.01012	1.5211 mg/L		0.01012	0.67%
Cu 324.752	8792.6	0.04486 mg/L		0.000264	0.04486 mg/L		0.000264	0.59%
Fe 273.955	154120.3	6.9888 mg/L		0.03475	6.9888 mg/L		0.03475	0.50%
Mg 279.077	80700.2	5.0681 mg/L		0.03121	5.0681 mg/L		0.03121	0.62%
Mn 257.610	55201.3	0.10329 mg/L		0.000806	0.10329 mg/L		0.000806	0.78%
Ni 231.604	6040.4	0.22599 mg/L		0.002837	0.22599 mg/L		0.002837	1.26%
Pb 220.353	99.7	0.02217 mg/L		0.000019	0.02217 mg/L		0.000019	0.08%
Sb 206.836	35.7	0.00603 mg/L		0.001377	0.00603 mg/L		0.001377	22.83%
Se 196.026	0.2	0.00413 mg/L		0.009767	0.00413 mg/L		0.009767	236.24%

Tl 190.801	1.3	0.00296 mg/L	0.001768	0.00296 mg/L	0.001768	59.66%
V 292.402	1350.4	0.01561 mg/L	0.000321	0.01561 mg/L	0.000321	2.06%
Zn 206.200	2532.5	0.13686 mg/L	0.000360	0.13686 mg/L	0.000360	0.26%
Cd 226.502	39.2	0.00025 mg/L	0.000035	0.00025 mg/L	0.000035	13.76%
Ti 334.940	74310.0	0.15097 mg/L	0.006600	0.15097 mg/L	0.006600	4.37%
Ca 227.546	3766.0	21.490 mg/L	0.0770	21.490 mg/L	0.0770	0.36%
Na 589.592	104495.1	22.569 mg/L	0.1502	22.569 mg/L	0.1502	0.67%
K 766.490	3002.0	2.9292 mg/L	0.09325	2.9292 mg/L	0.09325	3.18%

User canceled analysis.

=====
Analysis Begun

Start Time: 9/4/2012 3:30:04 PM

Plasma On Time: 9/4/2012 12:10:10 PM

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N3102302 Autosampler Model: AS-93plus

Sample Information File: G:\Metals\SIF\67953.SIF

Batch ID: Null

Results Data Set: B12090404

Results Library: C:\pe\Administrator\Results\Results.mdb
=====

Sequence No.: 1

Autosampler Location: 42

Sample ID: L1820-01C-SL-MW-3A

Date Collected: 9/4/2012 3:30:05 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: L1820-01C-SL-MW-3A

Mean Corrected		Calib.	Sample				
Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD	
Y 360.073	1757166.8	100.08 %	0.789			0.79%	
Lu 261.542	1135026.9	100.6 %	0.78			0.77%	
Ag 328.068	-56.5	-0.00037 mg/L	0.000614	-0.00037 mg/L	0.000614	167.23%	
Al 308.215	296.1	0.01165 mg/L	0.002149	0.01165 mg/L	0.002149	18.45%	
As 188.979	1.6	0.00336 mg/L	0.001467	0.00336 mg/L	0.001467	43.74%	
Ba 233.527	1706.1	0.02212 mg/L	0.000155	0.02212 mg/L	0.000155	0.70%	
Be 313.107	56.2	0.00002 mg/L	0.000024	0.00002 mg/L	0.000024	99.53%	
Co 228.616	60.5	0.00184 mg/L	0.000199	0.00184 mg/L	0.000199	10.76%	
Cr 267.716	1265.4	0.01982 mg/L	0.000523	0.01982 mg/L	0.000523	2.64%	
Cu 324.752	573.6	0.00289 mg/L	0.000181	0.00289 mg/L	0.000181	6.28%	
Fe 273.955	733.5	0.03326 mg/L	0.003616	0.03326 mg/L	0.003616	10.87%	
Mg 279.077	67989.9	4.2730 mg/L	0.02274	4.2730 mg/L	0.02274	0.53%	
Mn 257.610	21139.4	0.03953 mg/L	0.000140	0.03953 mg/L	0.000140	0.35%	
Ni 231.604	4223.7	0.15808 mg/L	0.000161	0.15808 mg/L	0.000161	0.10%	
Pb 220.353	9.1	0.00201 mg/L	0.000671	0.00201 mg/L	0.000671	33.39%	
Sb 206.836	-0.3	-0.00098 mg/L	0.001735	-0.00098 mg/L	0.001735	176.62%	
Se 196.026	7.7	0.01757 mg/L	0.012329	0.01757 mg/L	0.012329	70.15%	
Tl 190.801	-1.0	-0.00154 mg/L	0.004725	-0.00154 mg/L	0.004725	307.06%	
V 292.402	-12.2	-0.00006 mg/L	0.000284	-0.00006 mg/L	0.000284	447.67%	
Zn 206.200	236.2	0.01253 mg/L	0.000292	0.01253 mg/L	0.000292	2.33%	
Cd 226.502	2.7	0.00003 mg/L	0.000074	0.00003 mg/L	0.000074	236.13%	
Ti 334.940	-170.3	-0.00008 mg/L	0.000035	-0.00008 mg/L	0.000035	43.17%	
Ca 227.546	3607.4	20.649 mg/L	0.0643	20.649 mg/L	0.0643	0.31%	
Na 589.592	104526.4	22.576 mg/L	0.2978	22.576 mg/L	0.2978	1.32%	
K 766.490	2567.3	2.5050 mg/L	0.07854	2.5050 mg/L	0.07854	3.14%	

Sequence No.: 2

Autosampler Location: 43

Sample ID: L1820-02B-SL-MW-3B

Date Collected: 9/4/2012 3:33:45 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: L1820-02B-SL-MW-3B

	Mean Corrected		Calib.		Sample			
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 360.073	1806978.8	102.92	%	0.699				0.68%
Lu 261.542	1166685.9	103.4	%	0.69				0.67%
Ag 328.068	-110.4	-0.00074	mg/L	0.000400	-0.00074	mg/L	0.000400	54.16%
Al 308.215	76662.7	4.1468	mg/L	0.08649	4.1468	mg/L	0.08649	2.09%
As 188.979	0.8	0.01038	mg/L	0.004752	0.01038	mg/L	0.004752	45.76%
Ba 233.527	4970.9	0.06447	mg/L	0.001488	0.06447	mg/L	0.001488	2.31%
Be 313.107	-571.3	0.00004	mg/L	0.000054	0.00004	mg/L	0.000054	137.99%
Co 228.616	95.6	0.00243	mg/L	0.000119	0.00243	mg/L	0.000119	4.91%
Cr 267.716	59896.6	0.93853	mg/L	0.015352	0.93853	mg/L	0.015352	1.64%
Cu 324.752	10954.7	0.05571	mg/L	0.001170	0.05571	mg/L	0.001170	2.10%

Fe 273.955	147574.7	6.6920 mg/L	0.12067	6.6920 mg/L	0.12067	1.80%
Mg 279.077	63808.3	4.0079 mg/L	0.06761	4.0079 mg/L	0.06761	1.69%
Mn 257.610	161778.1	0.30286 mg/L	0.004015	0.30286 mg/L	0.004015	1.33%
Ni 231.604	771.7	0.02878 mg/L	0.000123	0.02878 mg/L	0.000123	0.43%
Pb 220.353	113.8	0.02524 mg/L	0.001117	0.02524 mg/L	0.001117	4.43%
Sb 206.836	19.7	0.00135 mg/L	0.001477	0.00135 mg/L	0.001477	109.23%
Se 196.026	1.8	0.00751 mg/L	0.010509	0.00751 mg/L	0.010509	139.89%
Tl 190.801	0.1	0.00109 mg/L	0.005002	0.00109 mg/L	0.005002	457.22%
V 292.402	1483.8	0.01546 mg/L	0.000115	0.01546 mg/L	0.000115	0.74%
Zn 206.200	3837.5	0.20464 mg/L	0.005132	0.20464 mg/L	0.005132	2.51%
Cd 226.502	51.3	0.00050 mg/L	0.000135	0.00050 mg/L	0.000135	26.77%
Ti 334.940	76214.6	0.15475 mg/L	0.022055	0.15475 mg/L	0.022055	14.25%
Ca 227.546	1760.5	10.017 mg/L	0.0686	10.017 mg/L	0.0686	0.68%
Na 589.592	286556.1	61.892 mg/L	1.3122	61.892 mg/L	1.3122	2.12%
K 766.490	2729.8	2.6636 mg/L	0.03479	2.6636 mg/L	0.03479	1.31%

Sequence No.: 3

Sample ID: L1820-02C-SL-MW-3B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 44

Date Collected: 9/4/2012 3:37:32 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-02C-SL-MW-3B

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1750631.5	99.711 %		0.5297				0.53%
Lu 261.542	1132514.2	100.3 %		0.59				0.59%
Ag 328.068	-71.9	-0.00046 mg/L		0.000760	-0.00046 mg/L		0.000760	164.08%
Al 308.215	257.9	0.01210 mg/L		0.001596	0.01210 mg/L		0.001596	13.19%
As 188.979	0.6	0.00111 mg/L		0.002942	0.00111 mg/L		0.002942	264.88%
Ba 233.527	2056.7	0.02666 mg/L		0.000348	0.02666 mg/L		0.000348	1.30%
Be 313.107	-26.1	-0.00001 mg/L		0.000017	-0.00001 mg/L		0.000017	147.84%
Co 228.616	-7.1	-0.00022 mg/L		0.000312	-0.00022 mg/L		0.000312	142.40%
Cr 267.716	198.3	0.00310 mg/L		0.000226	0.00310 mg/L		0.000226	7.27%
Cu 324.752	451.0	0.00227 mg/L		0.000605	0.00227 mg/L		0.000605	26.67%
Fe 273.955	277.7	0.01259 mg/L		0.000090	0.01259 mg/L		0.000090	0.72%
Mg 279.077	48934.9	3.0755 mg/L		0.03802	3.0755 mg/L		0.03802	1.24%
Mn 257.610	14211.3	0.02658 mg/L		0.000395	0.02658 mg/L		0.000395	1.49%
Ni 231.604	155.8	0.00582 mg/L		0.000554	0.00582 mg/L		0.000554	9.51%
Pb 220.353	-5.2	-0.00114 mg/L		0.001024	-0.00114 mg/L		0.001024	90.07%
Sb 206.836	3.4	0.00312 mg/L		0.001526	0.00312 mg/L		0.001526	48.92%
Se 196.026	6.8	0.01553 mg/L		0.009065	0.01553 mg/L		0.009065	58.38%
Tl 190.801	0.2	0.00048 mg/L		0.001649	0.00048 mg/L		0.001649	341.99%
V 292.402	-91.3	-0.00081 mg/L		0.000092	-0.00081 mg/L		0.000092	11.32%
Zn 206.200	345.8	0.01825 mg/L		0.000131	0.01825 mg/L		0.000131	0.72%
Cd 226.502	5.6	0.00009 mg/L		0.000081	0.00009 mg/L		0.000081	89.11%
Ti 334.940	-24.6	0.00003 mg/L		0.000091	0.00003 mg/L		0.000091	289.33%
Ca 227.546	1438.0	8.2325 mg/L		0.11371	8.2325 mg/L		0.11371	1.38%
Na 589.592	296149.9	63.964 mg/L		0.4500	63.964 mg/L		0.4500	0.70%
K 766.490	2173.8	2.1211 mg/L		0.02364	2.1211 mg/L		0.02364	1.11%

Sequence No.: 4

Sample ID: L1820-02CSD-SL-MW-3B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 45

Date Collected: 9/4/2012 3:41:22 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-02CSD-SL-MW-3B

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1758304.4	100.15 %		1.080				1.08%
Lu 261.542	1133760.3	100.4 %		1.09				1.09%
Ag 328.068	-79.2	-0.00050 mg/L		0.000391	-0.00050 mg/L		0.000391	77.40%
Al 308.215	51.7	0.00243 mg/L		0.002058	0.00243 mg/L		0.002058	84.75%
As 188.979	1.8	0.00333 mg/L		0.000544	0.00333 mg/L		0.000544	16.34%
Ba 233.527	409.5	0.00531 mg/L		0.000128	0.00531 mg/L		0.000128	2.41%
Be 313.107	-42.0	-0.00002 mg/L		0.000016	-0.00002 mg/L		0.000016	89.58%

Co 228.616	-5.6	-0.00017 mg/L	0.000140	-0.00017 mg/L	0.000140	80.66%
Cr 267.716	137.5	0.00215 mg/L	0.000175	0.00215 mg/L	0.000175	8.11%
Cu 324.752	34.6	0.00017 mg/L	0.000162	0.00017 mg/L	0.000162	92.53%
Fe 273.955	286.3	0.01298 mg/L	0.001275	0.01298 mg/L	0.001275	9.82%
Mg 279.077	9977.1	0.62704 mg/L	0.017218	0.62704 mg/L	0.017218	2.75%
Mn 257.610	2961.6	0.00554 mg/L	0.000107	0.00554 mg/L	0.000107	1.92%
Ni 231.604	30.3	0.00113 mg/L	0.000188	0.00113 mg/L	0.000188	16.64%
Pb 220.353	1.4	0.00030 mg/L	0.001103	0.00030 mg/L	0.001103	362.85%
Sb 206.836	-3.2	-0.00315 mg/L	0.005803	-0.00315 mg/L	0.005803	184.46%
Se 196.026	5.4	0.01240 mg/L	0.005999	0.01240 mg/L	0.005999	48.38%
Tl 190.801	0.4	0.00068 mg/L	0.001351	0.00068 mg/L	0.001351	197.40%
V 292.402	-49.9	-0.00044 mg/L	0.000231	-0.00044 mg/L	0.000231	52.17%
Zn 206.200	74.3	0.00392 mg/L	0.000323	0.00392 mg/L	0.000323	8.22%
Cd 226.502	6.3	0.00012 mg/L	0.000180	0.00012 mg/L	0.000180	149.57%
Ti 334.940	-19.1	-0.00002 mg/L	0.000119	-0.00002 mg/L	0.000119	513.14%
Ca 227.546	284.1	1.6266 mg/L	0.04541	1.6266 mg/L	0.04541	2.79%
Na 589.592	58566.7	12.650 mg/L	0.0534	12.650 mg/L	0.0534	0.42%
K 766.490	417.0	0.40690 mg/L	0.057249	0.40690 mg/L	0.057249	14.07%

Sequence No.: 5

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 9/4/2012 3:45:03 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1723106.5	98.144 %	0.4793			0.49%
Lu 261.542	1111387.6	98.46 %	0.486			0.49%
Ag 328.068	198370.5	1.2627 mg/L	0.01071	1.2627 mg/L	0.01071	0.85%
QC value within limits for Ag 328.068 Recovery = 101.01%						
Al 308.215	187145.2	10.119 mg/L	0.0887	10.119 mg/L	0.0887	0.88%
QC value within limits for Al 308.215 Recovery = 101.19%						
As 188.979	276.6	0.50248 mg/L	0.003184	0.50248 mg/L	0.003184	0.63%
QC value within limits for As 188.979 Recovery = 100.50%						
Ba 233.527	809460.5	10.498 mg/L	0.0315	10.498 mg/L	0.0315	0.30%
QC value within limits for Ba 233.527 Recovery = 104.98%						
Be 313.107	578730.8	0.25071 mg/L	0.000632	0.25071 mg/L	0.000632	0.25%
QC value within limits for Be 313.107 Recovery = 100.28%						
Co 228.616	85140.7	2.6306 mg/L	0.02772	2.6306 mg/L	0.02772	1.05%
QC value within limits for Co 228.616 Recovery = 105.22%						
Cr 267.716	64409.6	1.0096 mg/L	0.00899	1.0096 mg/L	0.00899	0.89%
QC value within limits for Cr 267.716 Recovery = 100.96%						
Cu 324.752	249449.6	1.2556 mg/L	0.01367	1.2556 mg/L	0.01367	1.09%
QC value within limits for Cu 324.752 Recovery = 100.45%						
Fe 273.955	113665.1	5.1584 mg/L	0.05682	5.1584 mg/L	0.05682	1.10%
QC value within limits for Fe 273.955 Recovery = 103.17%						
Mg 279.077	408090.8	25.646 mg/L	0.0803	25.646 mg/L	0.0803	0.31%
QC value within limits for Mg 279.077 Recovery = 102.58%						
Mn 257.610	1365072.9	2.5554 mg/L	0.00670	2.5554 mg/L	0.00670	0.26%
QC value within limits for Mn 257.610 Recovery = 102.22%						
Ni 231.604	69482.0	2.6002 mg/L	0.02846	2.6002 mg/L	0.02846	1.09%
QC value within limits for Ni 231.604 Recovery = 104.01%						
Pb 220.353	2322.6	0.50722 mg/L	0.001932	0.50722 mg/L	0.001932	0.38%
QC value within limits for Pb 220.353 Recovery = 101.44%						
Sb 206.836	566.0	0.53156 mg/L	0.009595	0.53156 mg/L	0.009595	1.81%
QC value within limits for Sb 206.836 Recovery = 106.31%						
Se 196.026	223.1	0.51632 mg/L	0.003792	0.51632 mg/L	0.003792	0.73%
QC value within limits for Se 196.026 Recovery = 103.26%						
Tl 190.801	301.0	0.47559 mg/L	0.008550	0.47559 mg/L	0.008550	1.80%
QC value within limits for Tl 190.801 Recovery = 95.12%						
V 292.402	282072.5	2.5360 mg/L	0.02376	2.5360 mg/L	0.02376	0.94%
QC value within limits for V 292.402 Recovery = 101.44%						
Zn 206.200	48742.4	2.5754 mg/L	0.03020	2.5754 mg/L	0.03020	1.17%
QC value within limits for Zn 206.200 Recovery = 103.01%						
Cd 226.502	12381.0	0.24766 mg/L	0.003056	0.24766 mg/L	0.003056	1.23%
QC value within limits for Cd 226.502 Recovery = 99.06%						
Ti 334.940	254153.7	0.51593 mg/L	0.002780	0.51593 mg/L	0.002780	0.54%

QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546 4448.0 24.593 mg/L 0.1801 24.593 mg/L 0.1801 0.73%
 QC value within limits for Ca 227.546 Recovery = 98.37%
 Na 589.592 117496.7 25.378 mg/L 0.4465 25.378 mg/L 0.4465 1.76%
 QC value within limits for Na 589.592 Recovery = 101.51%
 K 766.490 25657.1 25.035 mg/L 0.4109 25.035 mg/L 0.4109 1.64%
 QC value within limits for K 766.490 Recovery = 100.14%
 All analyte(s) passed QC.

Sequence No.: 6

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 9/4/2012 3:48:45 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1795946.5	102.29 %		1.480			1.45%
Lu 261.542	1150264.0	101.9 %		1.32			1.29%
Ag 328.068	-128.2	-0.00081 mg/L		0.000331	-0.00081 mg/L	0.000331	40.63%
QC value within limits for Ag 328.068							Recovery = Not calculated
Al 308.215	82.4	0.00446 mg/L		0.001201	0.00446 mg/L	0.001201	26.91%
QC value within limits for Al 308.215							Recovery = Not calculated
As 188.979	0.9	0.00167 mg/L		0.001987	0.00167 mg/L	0.001987	119.15%
QC value within limits for As 188.979							Recovery = Not calculated
Ba 233.527	21.1	0.00027 mg/L		0.000177	0.00027 mg/L	0.000177	64.67%
QC value within limits for Ba 233.527							Recovery = Not calculated
Be 313.107	5.0	0.00000 mg/L		0.000005	0.00000 mg/L	0.000005	249.25%
QC value within limits for Be 313.107							Recovery = Not calculated
Co 228.616	-3.0	-0.00009 mg/L		0.000124	-0.00009 mg/L	0.000124	135.35%
QC value within limits for Co 228.616							Recovery = Not calculated
Cr 267.716	-6.7	-0.00010 mg/L		0.000140	-0.00010 mg/L	0.000140	133.44%
QC value within limits for Cr 267.716							Recovery = Not calculated
Cu 324.752	25.3	0.00013 mg/L		0.000258	0.00013 mg/L	0.000258	203.17%
QC value within limits for Cu 324.752							Recovery = Not calculated
Fe 273.955	-20.9	-0.00095 mg/L		0.000462	-0.00095 mg/L	0.000462	48.64%
QC value within limits for Fe 273.955							Recovery = Not calculated
Mg 279.077	118.9	0.00747 mg/L		0.004697	0.00747 mg/L	0.004697	62.88%
QC value within limits for Mg 279.077							Recovery = Not calculated
Mn 257.610	30.4	0.00006 mg/L		0.000071	0.00006 mg/L	0.000071	125.03%
QC value within limits for Mn 257.610							Recovery = Not calculated
Ni 231.604	10.8	0.00040 mg/L		0.000304	0.00040 mg/L	0.000304	75.38%
QC value within limits for Ni 231.604							Recovery = Not calculated
Pb 220.353	3.0	0.00065 mg/L		0.001074	0.00065 mg/L	0.001074	166.30%
QC value within limits for Pb 220.353							Recovery = Not calculated
Sb 206.836	-2.1	-0.00201 mg/L		0.005354	-0.00201 mg/L	0.005354	266.85%
QC value within limits for Sb 206.836							Recovery = Not calculated
Se 196.026	4.4	0.01010 mg/L		0.001130	0.01010 mg/L	0.001130	11.19%
QC value within limits for Se 196.026							Recovery = Not calculated
Tl 190.801	-0.5	-0.00086 mg/L		0.002139	-0.00086 mg/L	0.002139	248.85%
QC value within limits for Tl 190.801							Recovery = Not calculated
V 292.402	-35.6	-0.00032 mg/L		0.000126	-0.00032 mg/L	0.000126	39.51%
QC value within limits for V 292.402							Recovery = Not calculated
Zn 206.200	20.2	0.00106 mg/L		0.000206	0.00106 mg/L	0.000206	19.39%
QC value within limits for Zn 206.200							Recovery = Not calculated
Cd 226.502	6.9	0.00014 mg/L		0.000069	0.00014 mg/L	0.000069	49.66%
QC value within limits for Cd 226.502							Recovery = Not calculated
Ti 334.940	2.2	0.00000 mg/L		0.000021	0.00000 mg/L	0.000021	479.81%
QC value within limits for Ti 334.940							Recovery = Not calculated
Ca 227.546	-0.7	-0.00386 mg/L		0.026158	-0.00386 mg/L	0.026158	678.02%
QC value within limits for Ca 227.546							Recovery = Not calculated
Na 589.592	239.9	0.05182 mg/L		0.017213	0.05182 mg/L	0.017213	33.22%
QC value within limits for Na 589.592							Recovery = Not calculated
K 766.490	-1.7	-0.00167 mg/L		0.010521	-0.00167 mg/L	0.010521	628.51%
QC value within limits for K 766.490							Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: L1820-03B-SL-MW-6A

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 46

Date Collected: 9/4/2012 3:52:27 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-03B-SL-MW-6A

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1759651.5	100.23	%	0.943				0.94%
Lu 261.542	1134987.3	100.6	%	0.98				0.97%
Ag 328.068	-122.9	-0.00084	mg/L	0.000245	-0.00084	mg/L	0.000245	29.29%
Al 308.215	30565.7	1.6493	mg/L	0.00975	1.6493	mg/L	0.00975	0.59%
As 188.979	1.3	0.00333	mg/L	0.003659	0.00333	mg/L	0.003659	109.94%
Ba 233.527	5565.5	0.07216	mg/L	0.000346	0.07216	mg/L	0.000346	0.48%
Be 313.107	-230.7	-0.00002	mg/L	0.000007	-0.00002	mg/L	0.000007	43.31%
Co 228.616	49.2	0.00138	mg/L	0.000047	0.00138	mg/L	0.000047	3.42%
Cr 267.716	4349.9	0.06810	mg/L	0.000565	0.06810	mg/L	0.000565	0.83%
Cu 324.752	5085.7	0.02571	mg/L	0.000191	0.02571	mg/L	0.000191	0.74%
Fe 273.955	31863.8	1.4449	mg/L	0.01098	1.4449	mg/L	0.01098	0.76%
Mg 279.077	58778.6	3.6940	mg/L	0.02555	3.6940	mg/L	0.02555	0.69%
Mn 257.610	161781.8	0.30287	mg/L	0.002195	0.30287	mg/L	0.002195	0.72%
Ni 231.604	392.7	0.01466	mg/L	0.000376	0.01466	mg/L	0.000376	2.57%
Pb 220.353	57.5	0.01271	mg/L	0.000488	0.01271	mg/L	0.000488	3.84%
Sb 206.836	2.3	0.00062	mg/L	0.001071	0.00062	mg/L	0.001071	171.90%
Se 196.026	0.5	0.00185	mg/L	0.007670	0.00185	mg/L	0.007670	413.97%
Tl 190.801	1.7	0.00315	mg/L	0.007139	0.00315	mg/L	0.007139	226.68%
V 292.402	370.6	0.00346	mg/L	0.000087	0.00346	mg/L	0.000087	2.52%
Zn 206.200	1408.1	0.07460	mg/L	0.000102	0.07460	mg/L	0.000102	0.14%
Cd 226.502	23.4	0.00030	mg/L	0.000069	0.00030	mg/L	0.000069	22.78%
Ti 334.940	22446.0	0.04589	mg/L	0.001367	0.04589	mg/L	0.001367	2.98%
Ca 227.546	3941.7	22.555	mg/L	0.0489	22.555	mg/L	0.0489	0.22%
Na 589.592	238631.8	51.541	mg/L	0.5326	51.541	mg/L	0.5326	1.03%
K 766.490	4296.9	4.1926	mg/L	0.12457	4.1926	mg/L	0.12457	2.97%

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Sequence No.: 8

Sample ID: L1820-03C-SL-MW-6A

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 47

Date Collected: 9/4/2012 3:56:15 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-03C-SL-MW-6A

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1721996.0	98.080	%	0.2711				0.28%
Lu 261.542	1112018.9	98.52	%	0.413				0.42%
Ag 328.068	-21.9	-0.00021	mg/L	0.000209	-0.00021	mg/L	0.000209	100.72%
Al 308.215	280.7	0.00988	mg/L	0.002681	0.00988	mg/L	0.002681	27.13%
As 188.979	-0.1	0.00010	mg/L	0.003841	0.00010	mg/L	0.003841	>999.9%
Ba 233.527	5631.8	0.07301	mg/L	0.000443	0.07301	mg/L	0.000443	0.61%
Be 313.107	20.8	0.00001	mg/L	0.000019	0.00001	mg/L	0.000019	238.60%
Co 228.616	14.8	0.00046	mg/L	0.000175	0.00046	mg/L	0.000175	38.12%
Cr 267.716	41.0	0.00058	mg/L	0.000619	0.00058	mg/L	0.000619	107.23%
Cu 324.752	298.0	0.00150	mg/L	0.000286	0.00150	mg/L	0.000286	19.05%
Fe 273.955	91.6	0.00415	mg/L	0.000355	0.00415	mg/L	0.000355	8.56%
Mg 279.077	57448.1	3.6105	mg/L	0.02107	3.6105	mg/L	0.02107	0.58%
Mn 257.610	169271.6	0.31689	mg/L	0.000745	0.31689	mg/L	0.000745	0.23%
Ni 231.604	92.4	0.00344	mg/L	0.000158	0.00344	mg/L	0.000158	4.60%
Pb 220.353	3.4	0.00076	mg/L	0.001364	0.00076	mg/L	0.001364	179.71%
Sb 206.836	0.4	0.00005	mg/L	0.003118	0.00005	mg/L	0.003118	>999.9%
Se 196.026	4.3	0.00988	mg/L	0.014572	0.00988	mg/L	0.014572	147.47%
Tl 190.801	2.2	0.00380	mg/L	0.001173	0.00380	mg/L	0.001173	30.82%
V 292.402	-75.0	-0.00067	mg/L	0.000243	-0.00067	mg/L	0.000243	36.13%
Zn 206.200	319.9	0.01699	mg/L	0.000281	0.01699	mg/L	0.000281	1.65%
Cd 226.502	12.8	0.00020	mg/L	0.000078	0.00020	mg/L	0.000078	39.97%
Ti 334.940	-238.8	-0.00016	mg/L	0.000094	-0.00016	mg/L	0.000094	59.69%
Ca 227.546	4095.9	23.451	mg/L	0.0633	23.451	mg/L	0.0633	0.27%
Na 589.592	266507.4	57.562	mg/L	0.5459	57.562	mg/L	0.5459	0.95%

K 766.490 3675.5 3.5863 mg/L 0.00703 3.5863 mg/L 0.00703 0.20%

Sequence No.: 9

Sample ID: L1820-04B-SL-MW-6B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 48

Date Collected: 9/4/2012 4:00:03 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-04B-SL-MW-6B

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1783506.4	101.58	%	0.650				0.64%
Lu 261.542	1145987.0	101.5	%	0.73				0.72%
Ag 328.068	-115.6	-0.00073	mg/L	0.000125	-0.00073	mg/L	0.000125	17.11%
Al 308.215	74495.8	4.0297	mg/L	0.03890	4.0297	mg/L	0.03890	0.97%
As 188.979	4.5	0.00866	mg/L	0.001152	0.00866	mg/L	0.001152	13.30%
Ba 233.527	2331.5	0.03024	mg/L	0.000149	0.03024	mg/L	0.000149	0.49%
Be 313.107	-562.8	-0.00001	mg/L	0.000007	-0.00001	mg/L	0.000007	126.87%
Co 228.616	50.8	0.00120	mg/L	0.000013	0.00120	mg/L	0.000013	1.12%
Cr 267.716	848.2	0.01328	mg/L	0.000057	0.01328	mg/L	0.000057	0.43%
Cu 324.752	7732.6	0.03917	mg/L	0.000047	0.03917	mg/L	0.000047	0.12%
Fe 273.955	67902.2	3.0791	mg/L	0.02519	3.0791	mg/L	0.02519	0.82%
Mg 279.077	28722.3	1.8051	mg/L	0.01439	1.8051	mg/L	0.01439	0.80%
Mn 257.610	36987.4	0.06923	mg/L	0.007730	0.06923	mg/L	0.007730	11.16%
Ni 231.604	224.6	0.00832	mg/L	0.000292	0.00832	mg/L	0.000292	3.51%
Pb 220.353	99.1	0.02204	mg/L	0.001621	0.02204	mg/L	0.001621	7.36%
Sb 206.836	5.0	0.00436	mg/L	0.001733	0.00436	mg/L	0.001733	39.74%
Se 196.026	5.7	0.01446	mg/L	0.000938	0.01446	mg/L	0.000938	6.49%
Tl 190.801	-0.2	0.00011	mg/L	0.003614	0.00011	mg/L	0.003614	>999.9%
V 292.402	912.1	0.00813	mg/L	0.000605	0.00813	mg/L	0.000605	7.44%
Zn 206.200	1527.2	0.08084	mg/L	0.000132	0.08084	mg/L	0.000132	0.16%
Cd 226.502	25.0	0.00024	mg/L	0.000065	0.00024	mg/L	0.000065	27.30%
Ti 334.940	63395.9	0.12892	mg/L	0.008346	0.12892	mg/L	0.008346	6.47%
Ca 227.546	2061.3	11.776	mg/L	0.0758	11.776	mg/L	0.0758	0.64%
Na 589.592	15576.6	3.3643	mg/L	0.02679	3.3643	mg/L	0.02679	0.80%
K 766.490	3159.9	3.0833	mg/L	0.01990	3.0833	mg/L	0.01990	0.65%

Sequence No.: 10

Sample ID: L1820-04C-SL-MW-6B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 49

Date Collected: 9/4/2012 4:03:45 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-04C-SL-MW-6B

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1826310.8	104.02	%	0.935				0.90%
Lu 261.542	1176139.0	104.2	%	0.90				0.86%
Ag 328.068	-142.5	-0.00091	mg/L	0.000469	-0.00091	mg/L	0.000469	51.78%
Al 308.215	1668.3	0.08673	mg/L	0.000696	0.08673	mg/L	0.000696	0.80%
As 188.979	1.8	0.00336	mg/L	0.002458	0.00336	mg/L	0.002458	73.23%
Ba 233.527	1123.1	0.01456	mg/L	0.000108	0.01456	mg/L	0.000108	0.74%
Be 313.107	39.4	0.00002	mg/L	0.000024	0.00002	mg/L	0.000024	140.23%
Co 228.616	0.2	0.00001	mg/L	0.000154	0.00001	mg/L	0.000154	>999.9%
Cr 267.716	-3.3	-0.00005	mg/L	0.000544	-0.00005	mg/L	0.000544	998.48%
Cu 324.752	1063.7	0.00535	mg/L	0.000226	0.00535	mg/L	0.000226	4.22%
Fe 273.955	184.7	0.00838	mg/L	0.000631	0.00838	mg/L	0.000631	7.53%
Mg 279.077	40128.5	2.5220	mg/L	0.03789	2.5220	mg/L	0.03789	1.50%
Mn 257.610	6317.4	0.01180	mg/L	0.000137	0.01180	mg/L	0.000137	1.16%
Ni 231.604	59.4	0.00221	mg/L	0.000232	0.00221	mg/L	0.000232	10.48%
Pb 220.353	7.4	0.00161	mg/L	0.001649	0.00161	mg/L	0.001649	102.55%
Sb 206.836	3.1	0.00279	mg/L	0.002347	0.00279	mg/L	0.002347	84.26%
Se 196.026	2.2	0.00503	mg/L	0.012782	0.00503	mg/L	0.012782	253.95%
Tl 190.801	0.2	0.00034	mg/L	0.004096	0.00034	mg/L	0.004096	>999.9%
V 292.402	32.3	0.00029	mg/L	0.000355	0.00029	mg/L	0.000355	123.11%
Zn 206.200	177.9	0.00938	mg/L	0.000118	0.00938	mg/L	0.000118	1.26%
Cd 226.502	7.6	0.00011	mg/L	0.000095	0.00011	mg/L	0.000095	89.09%

Ti 334.940	-33.3	0.00018 mg/L	0.000130	0.00018 mg/L	0.000130	73.03%
Ca 227.546	3032.8	17.365 mg/L	0.1039	17.365 mg/L	0.1039	0.60%
Na 589.592	49351.2	10.659 mg/L	0.1150	10.659 mg/L	0.1150	1.08%
K 766.490	2320.8	2.2645 mg/L	0.05529	2.2645 mg/L	0.05529	2.44%

Sequence No.: 11

Sample ID: L1820-06B-SL-MW-5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 50

Date Collected: 9/4/2012 4:07:27 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-06B-SL-MW-5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1744937.9	99.387	%	0.5510				0.55%
Lu 261.542	1127620.2	99.90	%	0.553				0.55%
Ag 328.068	358.2	0.00125	mg/L	0.000294	0.00125	mg/L	0.000294	23.48%
Al 308.215	1119.2	0.04931	mg/L	0.008851	0.04931	mg/L	0.008851	17.95%
As 188.979	1.9	0.00282	mg/L	0.002084	0.00282	mg/L	0.002084	73.88%
Ba 233.527	3060.3	0.03968	mg/L	0.000244	0.03968	mg/L	0.000244	0.62%
Be 313.107	-53.1	-0.00002	mg/L	0.000012	-0.00002	mg/L	0.000012	56.32%
Co 228.616	8.9	0.00027	mg/L	0.000103	0.00027	mg/L	0.000103	38.48%
Cr 267.716	2351.2	0.03587	mg/L	0.000673	0.03587	mg/L	0.000673	1.88%
Cu 324.752	436.8	0.00221	mg/L	0.000276	0.00221	mg/L	0.000276	12.48%
Fe 273.955	4148.0	0.18809	mg/L	0.004100	0.18809	mg/L	0.004100	2.18%
Mg 279.077	39464.7	2.4802	mg/L	0.01884	2.4802	mg/L	0.01884	0.76%
Mn 257.610	2554614.4	4.7830	mg/L	0.01675	4.7830	mg/L	0.01675	0.35%
Ni 231.604	145.9	0.00545	mg/L	0.000115	0.00545	mg/L	0.000115	2.11%
Pb 220.353	3.7	0.00110	mg/L	0.001086	0.00110	mg/L	0.001086	98.81%
Sb 206.836	2.2	0.00119	mg/L	0.004643	0.00119	mg/L	0.004643	390.01%
Se 196.026	5.2	0.01203	mg/L	0.005918	0.01203	mg/L	0.005918	49.20%
Tl 190.801	3.2	0.00696	mg/L	0.005248	0.00696	mg/L	0.005248	75.42%
V 292.402	-78.7	-0.00062	mg/L	0.000369	-0.00062	mg/L	0.000369	59.56%
Zn 206.200	27.1	0.00342	mg/L	0.000250	0.00342	mg/L	0.000250	7.30%
Cd 226.502	28.5	0.00051	mg/L	0.000048	0.00051	mg/L	0.000048	9.40%
Ti 334.940	489.2	0.00126	mg/L	0.001216	0.00126	mg/L	0.001216	96.31%
Ca 227.546	3339.4	19.101	mg/L	0.1242	19.101	mg/L	0.1242	0.65%
Na 589.592	597274.0	129.00	mg/L	0.471	129.00	mg/L	0.471	0.36%
K 766.490	1927.9	1.8811	mg/L	0.05835	1.8811	mg/L	0.05835	3.10%

Sequence No.: 12

Sample ID: L1820-06C-SL-MW-5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 51

Date Collected: 9/4/2012 4:11:15 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-06C-SL-MW-5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1759249.6	100.20	%	0.783				0.78%
Lu 261.542	1137081.6	100.7	%	0.88				0.88%
Ag 328.068	207.4	0.00033	mg/L	0.001002	0.00033	mg/L	0.001002	303.88%
Al 308.215	294.5	0.00503	mg/L	0.003845	0.00503	mg/L	0.003845	76.45%
As 188.979	2.8	0.00416	mg/L	0.003435	0.00416	mg/L	0.003435	82.62%
Ba 233.527	2980.3	0.03864	mg/L	0.000185	0.03864	mg/L	0.000185	0.48%
Be 313.107	16.0	0.00001	mg/L	0.000017	0.00001	mg/L	0.000017	274.03%
Co 228.616	-0.1	0.00000	mg/L	0.000325	0.00000	mg/L	0.000325	>999.9%
Cr 267.716	203.8	0.00225	mg/L	0.000258	0.00225	mg/L	0.000258	11.49%
Cu 324.752	136.0	0.00068	mg/L	0.000042	0.00068	mg/L	0.000042	6.14%
Fe 273.955	11.6	0.00053	mg/L	0.000378	0.00053	mg/L	0.000378	71.77%
Mg 279.077	38633.8	2.4281	mg/L	0.01839	2.4281	mg/L	0.01839	0.76%
Mn 257.610	2473122.5	4.6304	mg/L	0.02469	4.6304	mg/L	0.02469	0.53%
Ni 231.604	104.8	0.00391	mg/L	0.000413	0.00391	mg/L	0.000413	10.58%
Pb 220.353	-2.6	-0.00027	mg/L	0.001518	-0.00027	mg/L	0.001518	555.23%
Sb 206.836	-0.6	-0.00083	mg/L	0.002102	-0.00083	mg/L	0.002102	252.42%
Se 196.026	3.3	0.00766	mg/L	0.001541	0.00766	mg/L	0.001541	20.11%
Tl 190.801	5.7	0.01105	mg/L	0.003615	0.01105	mg/L	0.003615	32.72%

V 292.402	-95.4	-0.00085 mg/L	0.000355	-0.00085 mg/L	0.000355	41.78%
Zn 206.200	22.5	0.00305 mg/L	0.000286	0.00305 mg/L	0.000286	9.36%
Cd 226.502	19.8	0.00035 mg/L	0.000080	0.00035 mg/L	0.000080	22.84%
Ti 334.940	-216.3	-0.00017 mg/L	0.000065	-0.00017 mg/L	0.000065	37.04%
Ca 227.546	3235.1	18.506 mg/L	0.0824	18.506 mg/L	0.0824	0.45%
Na 589.592	576370.0	124.49 mg/L	1.227	124.49 mg/L	1.227	0.99%
K 766.490	1984.2	1.9360 mg/L	0.09775	1.9360 mg/L	0.09775	5.05%

Sequence No.: 13

Sample ID: L1820-07B-SL-MW-4

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 52

Date Collected: 9/4/2012 4:15:03 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-07B-SL-MW-4

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD	
	Intensity	Conc.			Conc.	Units		Std.Dev.
Y 360.073	1791626.7	102.05	%	0.995			0.98%	
Lu 261.542	1152441.8	102.1	%	0.96			0.94%	
Ag 328.068	185.5	0.00106	mg/L	0.000183	0.00106	mg/L	0.000183	17.34%
Al 308.215	348.6	0.01656	mg/L	0.005486	0.01656	mg/L	0.005486	33.13%
As 188.979	3.4	0.00680	mg/L	0.003560	0.00680	mg/L	0.003560	52.37%
Ba 233.527	1161.6	0.01506	mg/L	0.000036	0.01506	mg/L	0.000036	0.24%
Be 313.107	101.5	0.00004	mg/L	0.000020	0.00004	mg/L	0.000020	46.85%
Co 228.616	328.0	0.00992	mg/L	0.000069	0.00992	mg/L	0.000069	0.70%
Cr 267.716	34.6	0.00043	mg/L	0.000198	0.00043	mg/L	0.000198	46.23%
Cu 324.752	56.0	0.00113	mg/L	0.000084	0.00113	mg/L	0.000084	7.41%
Fe 273.955	202727.2	9.1929	mg/L	0.08140	9.1929	mg/L	0.08140	0.89%
Mg 279.077	17592.3	1.1057	mg/L	0.01039	1.1057	mg/L	0.01039	0.94%
Mn 257.610	299161.2	0.56011	mg/L	0.005072	0.56011	mg/L	0.005072	0.91%
Ni 231.604	85.8	0.00321	mg/L	0.000207	0.00321	mg/L	0.000207	6.45%
Pb 220.353	5.4	0.00101	mg/L	0.001737	0.00101	mg/L	0.001737	171.92%
Sb 206.836	1.8	0.00109	mg/L	0.002994	0.00109	mg/L	0.002994	275.09%
Se 196.026	-0.9	0.00175	mg/L	0.012475	0.00175	mg/L	0.012475	711.99%
Tl 190.801	1.5	0.00381	mg/L	0.006488	0.00381	mg/L	0.006488	170.18%
V 292.402	-133.7	-0.00092	mg/L	0.000243	-0.00092	mg/L	0.000243	26.45%
Zn 206.200	217.9	0.01218	mg/L	0.000257	0.01218	mg/L	0.000257	2.11%
Cd 226.502	44.5	0.00018	mg/L	0.000106	0.00018	mg/L	0.000106	58.19%
Ti 334.940	-55.5	-0.00002	mg/L	0.000130	-0.00002	mg/L	0.000130	829.61%
Ca 227.546	1225.9	6.9421	mg/L	0.08047	6.9421	mg/L	0.08047	1.16%
Na 589.592	44709.2	9.6565	mg/L	0.02075	9.6565	mg/L	0.02075	0.21%
K 766.490	2651.0	2.5867	mg/L	0.10789	2.5867	mg/L	0.10789	4.17%

Sequence No.: 14

Sample ID: L1820-07C-SL-MW-4

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 53

Date Collected: 9/4/2012 4:18:45 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-07C-SL-MW-4

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Y 360.073	1802553.1	102.67	%	1.199			1.17%
Lu 261.542	1160327.3	102.8	%	1.30			1.27%
Ag 328.068	236.5	0.00138	mg/L	0.000419	0.00138	mg/L	30.37%
Al 308.215	216.7	0.00945	mg/L	0.003276	0.00945	mg/L	34.66%
As 188.979	3.6	0.00726	mg/L	0.001683	0.00726	mg/L	23.17%
Ba 233.527	1154.4	0.01496	mg/L	0.000176	0.01496	mg/L	1.18%
Be 313.107	117.3	0.00005	mg/L	0.000003	0.00005	mg/L	6.83%
Co 228.616	325.0	0.00983	mg/L	0.000210	0.00983	mg/L	2.14%
Cr 267.716	14.4	0.00011	mg/L	0.000396	0.00011	mg/L	347.61%
Cu 324.752	-87.2	0.00039	mg/L	0.000266	0.00039	mg/L	68.72%
Fe 273.955	196996.9	8.9331	mg/L	0.11969	8.9331	mg/L	1.34%
Mg 279.077	17416.8	1.0946	mg/L	0.00421	1.0946	mg/L	0.38%
Mn 257.610	291154.1	0.54512	mg/L	0.007009	0.54512	mg/L	1.29%
Ni 231.604	84.7	0.00317	mg/L	0.000409	0.00317	mg/L	12.91%
Pb 220.353	6.7	0.00130	mg/L	0.001628	0.00130	mg/L	124.84%

Sb 206.836	-0.2	-0.00080 mg/L	0.002991	-0.00080 mg/L	0.002991	375.97%
Se 196.026	0.9	0.00573 mg/L	0.007857	0.00573 mg/L	0.007857	137.07%
Tl 190.801	-1.6	-0.00134 mg/L	0.004902	-0.00134 mg/L	0.004902	365.11%
V 292.402	-200.7	-0.00153 mg/L	0.000101	-0.00153 mg/L	0.000101	6.63%
Zn 206.200	128.6	0.00745 mg/L	0.000280	0.00745 mg/L	0.000280	3.76%
Cd 226.502	34.7	0.00001 mg/L	0.000066	0.00001 mg/L	0.000066	>999.9%
Ti 334.940	-77.1	-0.00006 mg/L	0.000075	-0.00006 mg/L	0.000075	127.78%
Ca 227.546	1220.4	6.9129 mg/L	0.01881	6.9129 mg/L	0.01881	0.27%
Na 589.592	44747.6	9.6648 mg/L	0.11139	9.6648 mg/L	0.11139	1.15%
K 766.490	2637.8	2.5737 mg/L	0.04183	2.5737 mg/L	0.04183	1.63%

Sequence No.: 15

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 9/4/2012 4:22:25 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1724770.3	98.238	%	0.5527				0.56%
Lu 261.542	1112587.6	98.57	%	0.440				0.45%
Ag 328.068	199236.4	1.2682	mg/L	0.01246	1.2682	mg/L	0.01246	0.98%
QC value within limits for Ag 328.068 Recovery = 101.45%								
Al 308.215	188366.5	10.185	mg/L	0.0969	10.185	mg/L	0.0969	0.95%
QC value within limits for Al 308.215 Recovery = 101.85%								
As 188.979	277.6	0.50424	mg/L	0.004883	0.50424	mg/L	0.004883	0.97%
QC value within limits for As 188.979 Recovery = 100.85%								
Ba 233.527	817945.4	10.608	mg/L	0.0764	10.608	mg/L	0.0764	0.72%
QC value within limits for Ba 233.527 Recovery = 106.08%								
Be 313.107	582972.4	0.25255	mg/L	0.001590	0.25255	mg/L	0.001590	0.63%
QC value within limits for Be 313.107 Recovery = 101.02%								
Co 228.616	85452.5	2.6402	mg/L	0.02659	2.6402	mg/L	0.02659	1.01%
QC value within limits for Co 228.616 Recovery = 105.61%								
Cr 267.716	64705.5	1.0142	mg/L	0.01025	1.0142	mg/L	0.01025	1.01%
QC value within limits for Cr 267.716 Recovery = 101.42%								
Cu 324.752	251246.2	1.2646	mg/L	0.00988	1.2646	mg/L	0.00988	0.78%
QC value within limits for Cu 324.752 Recovery = 101.17%								
Fe 273.955	114173.4	5.1815	mg/L	0.05187	5.1815	mg/L	0.05187	1.00%
QC value within limits for Fe 273.955 Recovery = 103.63%								
Mg 279.077	411837.2	25.881	mg/L	0.2077	25.881	mg/L	0.2077	0.80%
QC value within limits for Mg 279.077 Recovery = 103.52%								
Mn 257.610	1375063.6	2.5742	mg/L	0.01865	2.5742	mg/L	0.01865	0.72%
QC value within limits for Mn 257.610 Recovery = 102.97%								
Ni 231.604	69813.5	2.6126	mg/L	0.02931	2.6126	mg/L	0.02931	1.12%
QC value within limits for Ni 231.604 Recovery = 104.50%								
Pb 220.353	2334.9	0.50993	mg/L	0.002840	0.50993	mg/L	0.002840	0.56%
QC value within limits for Pb 220.353 Recovery = 101.99%								
Sb 206.836	557.6	0.52335	mg/L	0.004182	0.52335	mg/L	0.004182	0.80%
QC value within limits for Sb 206.836 Recovery = 104.67%								
Se 196.026	221.0	0.51154	mg/L	0.009116	0.51154	mg/L	0.009116	1.78%
QC value within limits for Se 196.026 Recovery = 102.31%								
Tl 190.801	305.7	0.48342	mg/L	0.008795	0.48342	mg/L	0.008795	1.82%
QC value within limits for Tl 190.801 Recovery = 96.68%								
V 292.402	283522.4	2.5490	mg/L	0.02359	2.5490	mg/L	0.02359	0.93%
QC value within limits for V 292.402 Recovery = 101.96%								
Zn 206.200	48779.6	2.5774	mg/L	0.03361	2.5774	mg/L	0.03361	1.30%
QC value within limits for Zn 206.200 Recovery = 103.09%								
Cd 226.502	12475.5	0.24955	mg/L	0.002371	0.24955	mg/L	0.002371	0.95%
QC value within limits for Cd 226.502 Recovery = 99.82%								
Ti 334.940	257207.3	0.52213	mg/L	0.003021	0.52213	mg/L	0.003021	0.58%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Ca 227.546	4466.6	24.695	mg/L	0.1694	24.695	mg/L	0.1694	0.69%
QC value within limits for Ca 227.546 Recovery = 98.78%								
Na 589.592	118976.9	25.697	mg/L	0.2531	25.697	mg/L	0.2531	0.98%
QC value within limits for Na 589.592 Recovery = 102.79%								
K 766.490	26176.7	25.541	mg/L	0.2317	25.541	mg/L	0.2317	0.91%
QC value within limits for K 766.490 Recovery = 102.17%								

All analyte(s) passed QC.

Sequence No.: 16

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 9/4/2012 4:26:09 PM

Data Type: Original

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	1795492.1	102.27	%	0.553			0.54%
Lu 261.542	1149888.6	101.9	%	0.60			0.58%
Ag 328.068	-223.7	-0.00142	mg/L	0.000546	-0.00142 mg/L	0.000546	38.45%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 308.215	105.4	0.00572	mg/L	0.001955	0.00572 mg/L	0.001955	34.20%
QC value within limits for Al 308.215 Recovery = Not calculated							
As 188.979	2.5	0.00448	mg/L	0.001640	0.00448 mg/L	0.001640	36.62%
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527	25.8	0.00033	mg/L	0.000237	0.00033 mg/L	0.000237	70.94%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107	111.9	0.00005	mg/L	0.000011	0.00005 mg/L	0.000011	22.50%
QC value within limits for Be 313.107 Recovery = Not calculated							
Co 228.616	-5.7	-0.00018	mg/L	0.000356	-0.00018 mg/L	0.000356	200.28%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716	-12.5	-0.00020	mg/L	0.000137	-0.00020 mg/L	0.000137	69.57%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752	-43.2	-0.00022	mg/L	0.000246	-0.00022 mg/L	0.000246	113.40%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 273.955	3.7	0.00017	mg/L	0.000516	0.00017 mg/L	0.000516	304.82%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077	53.5	0.00337	mg/L	0.003666	0.00337 mg/L	0.003666	108.95%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610	78.7	0.00015	mg/L	0.000049	0.00015 mg/L	0.000049	33.12%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Ni 231.604	-0.5	-0.00002	mg/L	0.000190	-0.00002 mg/L	0.000190	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353	3.0	0.00066	mg/L	0.000780	0.00066 mg/L	0.000780	118.04%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836	6.3	0.00606	mg/L	0.001945	0.00606 mg/L	0.001945	32.12%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026	5.3	0.01221	mg/L	0.001732	0.01221 mg/L	0.001732	14.18%
QC value within limits for Se 196.026 Recovery = Not calculated							
Tl 190.801	-2.6	-0.00427	mg/L	0.000234	-0.00427 mg/L	0.000234	5.47%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402	-34.1	-0.00031	mg/L	0.000289	-0.00031 mg/L	0.000289	94.21%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200	13.9	0.00073	mg/L	0.000186	0.00073 mg/L	0.000186	25.56%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Cd 226.502	4.0	0.00008	mg/L	0.000096	0.00008 mg/L	0.000096	121.56%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Ti 334.940	-11.2	-0.00002	mg/L	0.000122	-0.00002 mg/L	0.000122	526.26%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546	-11.9	-0.06834	mg/L	0.066598	-0.06834 mg/L	0.066598	97.46%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Na 589.592	208.4	0.04502	mg/L	0.006576	0.04502 mg/L	0.006576	14.61%
QC value within limits for Na 589.592 Recovery = Not calculated							
K 766.490	5.9	0.00574	mg/L	0.022900	0.00574 mg/L	0.022900	398.85%
QC value within limits for K 766.490 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 17

Sample ID: 2925~PBW

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 54

Date Collected: 9/4/2012 4:29:50 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 2925~PBW

=====
Analysis Begun

Logged In Analyst: mitFIMS2
Spectrometer Model: FIMS-100, S/N B050-9550

Technique: AA FIMS-MHS
Autosampler Model: AS-90

Sample Information File: C:\data-AA\mitFIMS2\Sample Information\0904B.sif
Batch ID: Null
Results Data Set: HG12090402
Results Library: C:\data-AA\mitFIMS2\Results\Results.mdb

=====
Method Loaded

Method Name: Comm Hg

Method Last Saved: 7/27/2011 10:10:28 AM

Method Description: Hg Analysis by Cold Vapor AA

Analyte	Calibration Equation	Wavelength
Hg 253.7	Lin Thru 0	253.7

=====
Sequence No.: 1

Sample ID: S0

Autosampler Location: 1

Date Collected: 9/4/2012 2:36:56 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Repl #	Sample Conc ug/L	Std Conc ug/L	Blk Corr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0014	0.0076	0.0014	14:37:55	Yes
2		[0.00]	0.0013	0.0070	0.0013	14:38:35	Yes
Mean:		[0.00]	0.0014				
SD:		0.00	0.0000				
%RSD:		0.00	2.33				

Auto-zero performed.

=====
Sequence No.: 2

Sample ID: S0.20

Autosampler Location: 2

Date Collected: 9/4/2012 2:38:37 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0.20

Repl #	Sample Conc ug/L	Std Conc ug/L	Blk Corr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0026	0.0194	0.0039	14:39:35	Yes
2		[0.2]	0.0024	0.0184	0.0038	14:40:15	Yes
Mean:		[0.2]	0.0025				
SD:		0.0	0.0001				
%RSD:		0.0	4.04				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01251 Intercept: 0.00000

=====
Sequence No.: 3

Sample ID: S1.0

Autosampler Location: 3

Date Collected: 9/4/2012 2:40:17 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S1.0

Repl #	Sample Conc ug/L	Std Conc ug/L	Blk Corr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0135	0.0719	0.0149	14:41:14	Yes
2		[1]	0.0131	0.0715	0.0145	14:41:54	Yes
Mean:		[1]	0.0133				

SD: 0 0.0003
%RSD: 0 2.24
Standard number 2 applied. [1]
Correlation Coef.: 0.999770 Slope: 0.01330 Intercept: 0.00000

Sequence No.: 4 Autosampler Location: 4
Sample ID: S2.0 Date Collected: 9/4/2012 2:41:56 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0272	0.1403	0.0286	14:42:54	Yes
2		[2]	0.0267	0.1375	0.0280	14:43:34	Yes
Mean:		[2]	0.0269				
SD:		0	0.0004				
%RSD:		0	1.38				

Standard number 3 applied. [2]
Correlation Coef.: 0.999917 Slope: 0.01343 Intercept: 0.00000

Sequence No.: 5 Autosampler Location: 5
Sample ID: S5.0 Date Collected: 9/4/2012 2:43:36 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S5.0

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0669	0.3302	0.0683	14:44:34	Yes
2		[5]	0.0646	0.3203	0.0659	14:45:14	Yes
Mean:		[5]	0.0657				
SD:		0	0.0017				
%RSD:		0	2.54				

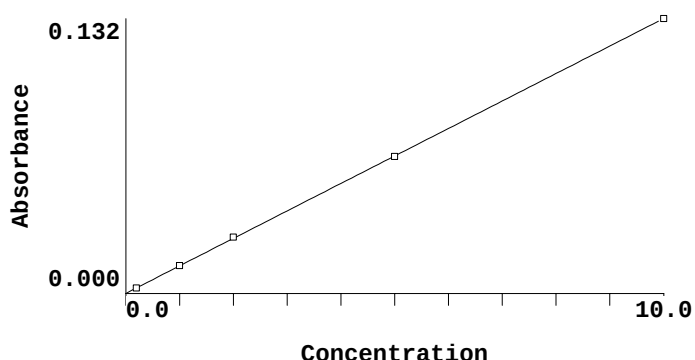
Standard number 4 applied. [5]
Correlation Coef.: 0.999915 Slope: 0.01320 Intercept: 0.00000

Sequence No.: 6 Autosampler Location: 6
Sample ID: S10.0 Date Collected: 9/4/2012 2:45:16 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.1342	0.6588	0.1356	14:46:13	Yes
2		[10]	0.1299	0.6401	0.1312	14:46:53	Yes
Mean:		[10]	0.1320				
SD:		0	0.0031				
%RSD:		0	2.32				

Standard number 5 applied. [10]
Correlation Coef.: 0.999982 Slope: 0.01320 Intercept: 0.00000



Calibration data for Hg 253.7

Equation: Linear Through Zero

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
S0	0.0000	0	0.000	0.00	2.3
S0.20	0.0025	0.2	0.190	0.00	4.0
S1.0	0.0133	1.0	1.010	0.00	2.2
S2.0	0.0269	2.0	2.040	0.00	1.4
S5.0	0.0657	5.0	4.980	0.00	2.5
S10.0	0.1320	10.0	10.001	0.00	2.3

Correlation Coef.: 0.999982 Slope: 0.01320 Intercept: 0.00000

Sequence No.: 7

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 9/4/2012 2:46:55 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.301	5.301	0.0700	0.3451	0.0713	14:47:53	Yes
2	5.181	5.181	0.0684	0.3402	0.0698	14:48:33	Yes
Mean:	5.241	5.241	0.0692				
SD:	0.085	0.085	0.0011				
%RSD:	1.616	1.616	1.62				

QC value within limits for Hg 253.7 Recovery = 104.82%

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 9/4/2012 2:48:35 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0074	0.0015	14:49:35	Yes
2	0.007	0.007	0.0001	0.0071	0.0015	14:50:15	Yes
Mean:	0.007	0.007	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	1.667	1.667	1.67				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: MB-67952

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 17

Date Collected: 9/4/2012 2:50:17 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: MB-67952

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.091	-0.091	-0.0012	0.0008	0.0002	14:51:16	Yes
2	-0.092	-0.092	-0.0012	0.0001	0.0001	14:51:55	Yes
Mean:	-0.091	-0.091	-0.0012				
SD:	0.001	0.001	0.0000				
%RSD:	1.460	1.460	1.46				

Sequence No.: 10

Sample ID: LCS-67952

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 18

Date Collected: 9/4/2012 2:51:57 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LCS-67952

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.765	4.765	0.0629	0.3147	0.0643	14:52:55	Yes
2	4.671	4.671	0.0617	0.3060	0.0630	14:53:35	Yes
Mean:	4.718	4.718	0.0623				
SD:	0.066	0.066	0.0009				
%RSD:	1.409	1.409	1.41				

Sequence No.: 11

Sample ID: L1820-01B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 19

Date Collected: 9/4/2012 2:53:37 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-01B

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.021	-0.021	-0.0003	0.0049	0.0011	14:54:34	Yes
2	-0.022	-0.022	-0.0003	0.0056	0.0011	14:55:14	Yes
Mean:	-0.021	-0.021	-0.0003				
SD:	0.000	0.000	0.0000				
%RSD:	1.510	1.510	1.51				

Sequence No.: 12

Sample ID: L1820-01C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 20

Date Collected: 9/4/2012 2:55:16 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-01C

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0012	0.0005	0.0002	14:56:14	Yes
2	-0.096	-0.096	-0.0013	-0.0002	0.0001	14:56:54	Yes
Mean:	-0.094	-0.094	-0.0012				
SD:	0.003	0.003	0.0000				
%RSD:	3.380	3.380	3.38				

Sequence No.: 13

Sample ID: L1820-02B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 21

Date Collected: 9/4/2012 2:56:56 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-02B

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	-0.0005	0.0038	0.0008	14:57:53	Yes
2	-0.040	-0.040	-0.0005	0.0045	0.0008	14:58:33	Yes
Mean:	-0.040	-0.040	-0.0005				
SD:	0.000	0.000	0.0000				
%RSD:	1.086	1.086	1.09				

Sequence No.: 14

Sample ID: L1820-02C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 22

Date Collected: 9/4/2012 2:58:35 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-02C

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.091	-0.091	-0.0012	0.0000	0.0002	14:59:33	Yes
2	-0.094	-0.094	-0.0012	0.0002	0.0001	15:00:13	Yes
Mean:	-0.092	-0.092	-0.0012				
SD:	0.002	0.002	0.0000				
%RSD:	2.367	2.367	2.37				

Sequence No.: 15

Sample ID: L1820-03B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 23

Date Collected: 9/4/2012 3:00:15 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-03B

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.047	-0.047	-0.0006	0.0037	0.0008	15:01:12	Yes
2	-0.050	-0.050	-0.0007	0.0031	0.0007	15:01:52	Yes
Mean:	-0.048	-0.048	-0.0006				
SD:	0.002	0.002	0.0000				
%RSD:	4.817	4.817	4.82				

Sequence No.: 16

Sample ID: L1820-03C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 24

Date Collected: 9/4/2012 3:01:54 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-03C

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0013	-0.0003	0.0001	15:02:52	Yes
2	-0.097	-0.097	-0.0013	0.0000	0.0001	15:03:32	Yes
Mean:	-0.098	-0.098	-0.0013				
SD:	0.002	0.002	0.0000				
%RSD:	1.638	1.638	1.64				

Sequence No.: 17

Sample ID: L1820-04B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 25

Date Collected: 9/4/2012 3:03:34 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-04B

Repl #	SampleConc ug/L	StndConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.059	-0.059	-0.0008	0.0028	0.0006	15:04:31	Yes

2	-0.058	-0.058	-0.0008	0.0031	0.0006	15:05:12	Yes
Mean:	-0.058	-0.058	-0.0008				
SD:	0.001	0.001	0.0000				
%RSD:	1.420	1.420	1.42				

Sequence No.: 18

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 9/4/2012 3:05:14 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.249	5.249	0.0693	0.3480	0.0707	15:06:12	Yes
2	5.210	5.210	0.0688	0.3433	0.0701	15:06:52	Yes
Mean:	5.230	5.230	0.0690				
SD:	0.028	0.028	0.0004				
%RSD:	0.528	0.528	0.53				

QC value within limits for Hg 253.7 Recovery = 104.59%
All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 9/4/2012 3:06:54 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0068	0.0015	15:07:55	Yes
2	0.010	0.010	0.0001	0.0073	0.0015	15:08:35	Yes
Mean:	0.009	0.009	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	21.68	21.68	21.68				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 20

Sample ID: L1820-04C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 26

Date Collected: 9/4/2012 3:08:36 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-04C

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.090	-0.090	-0.0012	0.0004	0.0002	15:09:37	Yes
2	-0.088	-0.088	-0.0012	0.0006	0.0002	15:10:17	Yes
Mean:	-0.089	-0.089	-0.0012				
SD:	0.001	0.001	0.0000				
%RSD:	1.624	1.624	1.62				

Sequence No.: 21

Sample ID: L1820-06B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 27

Date Collected: 9/4/2012 3:10:19 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-06B

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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1	-0.095	-0.095	-0.0013	-0.0007	0.0001	15:11:16	Yes
2	-0.092	-0.092	-0.0012	0.0002	0.0002	15:11:57	Yes
Mean:	-0.093	-0.093	-0.0012				
SD:	0.002	0.002	0.0000				
%RSD:	2.557	2.557	2.56				

Sequence No.: 22
Sample ID: L1820-06C
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 9/4/2012 3:11:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1820-06C

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0013	-0.0003	0.0001	15:12:56	Yes
2	-0.097	-0.097	-0.0013	-0.0004	0.0001	15:13:35	Yes
Mean:	-0.098	-0.098	-0.0013				
SD:	0.001	0.001	0.0000				
%RSD:	1.172	1.172	1.17				

Sequence No.: 23
Sample ID: L1820-07B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 9/4/2012 3:13:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1820-07B

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0013	-0.0005	0.0001	15:14:35	Yes
2	-0.097	-0.097	-0.0013	0.0005	0.0001	15:15:14	Yes
Mean:	-0.098	-0.098	-0.0013				
SD:	0.002	0.002	0.0000				
%RSD:	2.165	2.165	2.17				

Sequence No.: 24
Sample ID: L1820-07C
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 9/4/2012 3:15:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1820-07C

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0013	0.0001	0.0001	15:16:14	Yes
2	-0.098	-0.098	-0.0013	-0.0010	0.0001	15:16:53	Yes
Mean:	-0.098	-0.098	-0.0013				
SD:	0.001	0.001	0.0000				
%RSD:	0.689	0.689	0.69				

Sequence No.: 25
Sample ID: L1823-01C
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 9/4/2012 3:16:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1823-01C

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.058	-0.058	-0.0008	0.0028	0.0006	15:17:53	Yes
2	-0.064	-0.064	-0.0008	0.0014	0.0005	15:18:33	Yes
Mean:	-0.061	-0.061	-0.0008				

SD: 0.005 0.005 0.0001
%RSD: 7.679 7.679 7.68

Sequence No.: 26
Sample ID: L1823-03D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 9/4/2012 3:18:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1823-03D

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.071	-0.071	-0.0009	0.0018	0.0004	15:19:36	Yes
2	-0.072	-0.072	-0.0010	0.0011	0.0004	15:20:16	Yes
Mean:	-0.072	-0.072	-0.0009				
SD:	0.001	0.001	0.0000				
%RSD:	1.333	1.333	1.33				

Sequence No.: 27
Sample ID: L1823-05D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 9/4/2012 3:20:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1823-05D

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.075	-0.075	-0.0010	0.0009	0.0004	15:21:15	Yes
2	-0.073	-0.073	-0.0010	0.0015	0.0004	15:21:55	Yes
Mean:	-0.074	-0.074	-0.0010				
SD:	0.002	0.002	0.0000				
%RSD:	2.082	2.082	2.08				

Sequence No.: 28
Sample ID: L1829-01A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 9/4/2012 3:21:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1829-01A

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0005	0.0041	0.0009	15:22:54	Yes
2	-0.035	-0.035	-0.0005	0.0041	0.0009	15:23:34	Yes
Mean:	-0.035	-0.035	-0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	2.340	2.340	2.34				

Sequence No.: 29
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 9/4/2012 3:23:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.207	5.207	0.0687	0.3451	0.0701	15:24:37	Yes
2	5.107	5.107	0.0674	0.3406	0.0688	15:25:17	Yes
Mean:	5.157	5.157	0.0681				
SD:	0.071	0.071	0.0009				
%RSD:	1.377	1.377	1.38				

QC value within limits for Hg 253.7 Recovery = 103.14%

All analyte(s) passed QC.

Sequence No.: 30

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 9/4/2012 3:25:19 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	-0.0000	0.0061	0.0013	15:26:19	Yes
2	0.000	0.000	-0.0000	0.0065	0.0014	15:26:59	Yes
Mean:	-0.001	-0.001	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	99.85	99.85	99.85				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 31

Sample ID: L1829-06A

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 35

Date Collected: 9/4/2012 3:27:01 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1829-06A

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.175	0.175	0.0023	0.0180	0.0037	15:28:00	Yes
2	0.180	0.180	0.0024	0.0178	0.0037	15:28:40	Yes
Mean:	0.178	0.178	0.0023				
SD:	0.003	0.003	0.0000				
%RSD:	1.952	1.952	1.95				

Sequence No.: 32

Sample ID: L1837-03A

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 36

Date Collected: 9/4/2012 3:28:42 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1837-03A

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.056	-0.056	-0.0007	0.0026	0.0006	15:29:39	Yes
2	-0.054	-0.054	-0.0007	0.0032	0.0007	15:30:19	Yes
Mean:	-0.055	-0.055	-0.0007				
SD:	0.002	0.002	0.0000				
%RSD:	3.354	3.354	3.35				

Sequence No.: 33

Sample ID: MB-67951

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 9/4/2012 3:30:21 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: MB-67951

Repl #	SampleConc ug/L	StdConc ug/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.091	-0.091	-0.0012	-0.0002	0.0002	15:31:18	Yes
2	-0.091	-0.091	-0.0012	0.0003	0.0002	15:31:58	Yes
Mean:	-0.091	-0.091	-0.0012				
SD:	0.000	0.000	0.0000				
%RSD:	0.508	0.508	0.51				

Prep Start Date: 9/4/2012 11:30:00

Prep End Date: 9/4/2012 1:30:00 P

Prep Batch ID: 67952

Prep Code: SW7470A_PR

Prep Type: 7470A/METHOD

Technician: JILL L Cartwright

Prep Factor Units:
mL / mL

QC Matrix: N/A

Conc H2SO4 3110100

5% KMnO4 IR12082808

Reagent 5 Lot: N/A

QC Matrix Lot: N/A

Conc H2SO4 (mL): 5.0

5% KMnO4 (mL): 15.0

Reagent 5 (mL): N/A

Filter?: N/A

Conc HNO3 1112012

5% K2S2O8 IR12082809

Reagent 6 Lot: N/A

Filter Lot: N/A

Conc HNO3 (mL): 2.5

5% K2S2O8 (mL): 8.0

Reagent 6 (mL): N/A

Digestion Start Time 1: 09/04/2012 11:30

Digestion Start Time 2: N/A

Therm ID1: MT-47

Digestion End Time 1: 09/04/2012 13:30

Digestion End Time 2: N/A

Block Temp (C): 97

Corr Fac-3

Mikem Sample ID	Client Samp ID	Final L/g	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11 <2	HOT BLOCK
S0		100	--	--	--	--			09/04/12	JLC			☐	HB-A
S0.2		100	--	--	--	--			09/04/12	JLC			☐	HB-A
40 uL III 20830A														
S1.0		100	--	--	--	--			09/04/12	JLC			☐	HB-A
200 uL III 20830A														
S2.0		100	--	--	--	--			09/04/12	JLC			☐	HB-A
400 uL III 20830A														
S5.0		100	--	--	--	--			09/04/12	JLC			☐	HB-A
1000 uL III 20830A														
S10.0		100	--	--	--	--			09/04/12	JLC			☐	HB-A
2000 uL III 20830A														
ICV		100	--	--	--	--			09/04/12	JLC			☐	HB-A
1000 uL III 20828A														
ICB		100	--	--	--	--			09/04/12	JLC			☐	HB-A
CCV		100	--	--	--	--			09/04/12	JLC			☐	HB-A
1000 uL III 20828A														
CCB		100	--	--	--	--			09/04/12	JLC			☐	HB-A
MB-67952		100	--	--	--	--			09/04/12	JLC			☐	HB-A
LCS-67952		100	--	--	--	--			09/04/12	JLC			☐	HB-A
1000 uL III 20828B														
L1820-01B	SL-MW-3A	A	100	--	--	--	09/18/12	01	09/04/12	JLC		2	☐	HB-2
TAL														
L1820-01C	SL-MW-3A	A	100	--	--	--	09/18/12	01	09/04/12	JLC		2	☐	HB-2
TAL														
L1820-02B	SL-MW-3B	A	100	--	--	--	09/18/12	01	09/04/12	JLC		2	☐	HB-2
TAL														
L1820-02C	SL-MW-3B	A	100	--	--	--	09/18/12	01	09/04/12	JLC		2	☐	HB-2
TAL														
L1820-03B	SL-MW-6A	A	100	--	--	--	09/18/12	01	09/04/12	JLC		2	☐	HB-2
TAL														
L1820-03C	SL-MW-6A	A	100	--	--	--	09/18/12	01	09/04/12	JLC		2	☐	HB-2
TAL														

Logbook ID: 100.0128 -08/12

249

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

Prep Start Date: 9/4/2012 11:30:00
 Prep End Date: 9/4/2012 1:30:00 P
 Prep Batch ID: 67952

Prep Code: SW7470A_PR
 Technician: JILL L Cartwright

Prep Type: 7470A/METHOD
 Prep Factor Units: mL / mL

QC Matrix: N/A
 QC Matrix Lot: N/A
 Filter?: N/A
 Filter Lot: N/A

Digestion Start Time 1: 09/04/2012 11:30
 Digestion End Time 1: 09/04/2012 13:30

Digestion Start Time 2: N/A
 Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-47
 Corr Fac-3

Mitkem Sample ID	Client Samp ID	Final (L/g)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11 <2	HOT BLOCK
L1820-04B	SL-MW-6B	A 100	100	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-2
TAL														
L1820-04C	SL-MW-6B	A 100	100	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-2
TAL														
L1820-06B	SL-MW-5	A 100	100	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-2
TAL														
L1820-06C	SL-MW-5	A 100	100	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-2
TAL														
L1820-07B	SL-MW-4	A 100	100	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-2
TAL														
L1820-07C	SL-MW-4	A 100	100	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-2
TAL														
L1823-01C	EW-2 82812	A 100	100	--	--	--	09/14/12	01	09/04/12	JLC		2		HB-C
TAL														
L1823-03D	EW2 82912	A 100	100	--	--	--	09/14/12	01	09/04/12	JLC		2		HB-C
TAL														
L1823-05D	EW2 83012	A 100	100	--	--	--	09/14/12	01	09/04/12	JLC		2		HB-C
TAL														
L1829-01A	TP-A1/D1	S 100	100	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-C
TCLP METALS														
L1829-06A	DW-I/J/V/S	S 100	100	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-C
TCLP METALS														
L1837-03A	TP-E/G/01	S 100	100	--	--	--	09/21/12	01	09/04/12	JLC		2		HB-C
TCLP METALS														
MB-67951		100	100	--	--	--	09/04/12		09/04/12	JLC		2		HB-C
L1837-09A	TP C1/C2/C3/C4/H-1	S 100	100	--	--	--	09/21/12		09/04/12	JLC		2		HB-C
TCLP METALS														
L1837-09AMS	TP C1/C2/C3/C4/H-1	S 100	100	--	--	--	09/21/12		09/04/12	JLC		2		HB-C
TCLP METALS														

Jill L Cartwright
 Analyst Reviewed
 Logbook ID: 100.0128 -08/12

Manager Reviewed
 HZA

Date
 09/04/2012

Date
 9/5/12

8 9/4/12 JC 9/4/12 JC

Start time:

Prep Start Date: 9/4/2012 10:00:00

Prep End Date: 9/4/2012 2:00:00 P

Prep Batch ID: 67953

Spectrum Analytical, Inc. RI Division: Aqueous Metals Preparation Logbook

Prep Code: ICP_W_PR

Prep Type: 3005A/SW3005A

Technician: David T Camara

Prep Factor Units:
mL / mL

QC Matrix: N/A

QC Matrix Lot: N/A

Filter?: N/A

Filter Lot: N/A

Digestion Start Time 1: 09/04/2012 10:00

Digestion End Time 1: 09/04/2012 14:00

Reagent 5 Lot: N/A

Reagent 5 (mL): N/A

Reagent 6 Lot: N/A

Reagent 6 (mL): N/A

Digestion Start Time 2: N/A

Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-111
Corr Fac-2

Mitkem Sample ID	Client Samp ID	Final (L/g)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	HOT BLOCK
MB-67953		50	--	--	--	--			09/04/12	DTC	ICPLab	2	☐	HB-K
LCS-67953		50	--	--	--	--			09/04/12	DTC	ICPLab	2	☐	HB-K
455 uL III120727B, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP120321A														
LCSD-67953		50	--	--	--	--			09/04/12	DTC	ICPLab	2	☐	HB-K
455 uL III120727B, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP120321A														
MB-67951		50	--	--	--	--			09/04/12	DTC	ICPLab	2	☐	HB-K
L1829-01A	TP-A1/D1	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TCLP METALS														
L1829-06A	DW-I/J/V/S	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TCLP METALS														
L1837-03A	TP-E/G/J01	50	--	--	--	--	09/21/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TCLP METALS														
L1837-09A	TP C1/C2/C3/C4/H-1	50	--	--	--	--	09/21/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TCLP METALS														
L1837-09AMS	TP C1/C2/C3/C4/H-1	50	--	--	--	--	09/21/12		09/04/12	DTC	ICPLab	2	☐	HB-K
455 uL III120727B, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP120321A, TCLP METALS														
L1820-01B	SL-MW-3A	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-01C	SL-MW-3A	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-02B	SL-MW-3B	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-02C	SL-MW-3B	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-03B	SL-MW-6A	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-03C	SL-MW-6A	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-04B	SL-MW-6B	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-04C	SL-MW-6B	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														

Logbook ID 100.0125 -06/12

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

Prep Start Date: 9/4/2012 10:00:00

Prep End Date: 9/4/2012 2:00:00 P

Prep Batch ID: 67953

Prep Code: ICP_W_PR
Technician: David T Camara

Prep Type: 3005A/SW3005A

Prep Factor Units:
mL / mL

QC Matrix: N/A
QC Matrix Lot: N/A

Reagent 5 Lot: N/A
Reagent 5 (mL): N/A

Filter?: N/A
Filter Lot: N/A

Reagent 6 Lot: N/A
Reagent 6 (mL): N/A

Digestion Start Time 1: 09/04/2012 10:00
Digestion End Time 1: 09/04/2012 14:00

Digestion Start Time 2: N/A
Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-111
Corr Fac-2

Mitkem Sample ID	Client Samp ID	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH	HOT BLOCK
L1820-06B	SL-MW-5	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	>11 <2	HB-K
TAL														
L1820-06C	SL-MW-5	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2		HB-K
TAL														
L1820-07B	SL-MW-4	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2		HB-K
TAL														
L1820-07C	SL-MW-4	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2		HB-K
TAL														

David T Camara
Analyst Reviewed

Manager Reviewed

9/5/12
Date

Comments:

100-9412



SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

*** Metals ***

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : AECOM Environment

Project: Multi Site G - ServAll

Laboratory Workorder / SDG #: L1820

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 analysis:

Instrument Code: FIMS2
Instrument Type: CVAA
Description: FIMS
Manufacturer: Perkin-Elmer
Model: FIMS100

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):

Serial Dilution analysis was performed on sample: SL-MW-3B (L1820-02CSD).

Percent differences were within the QC limits.

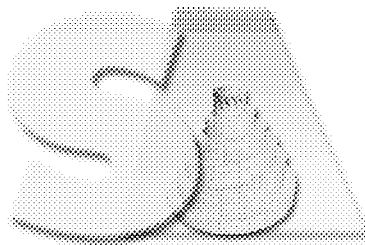
G. Samples:

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 Spectrum, 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:  _____

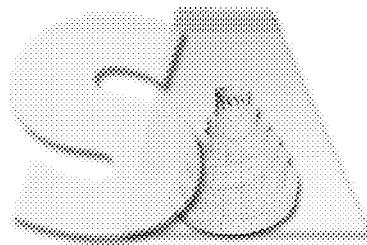
Date: 09/19/12



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.: SL1820D
SOW No.: SW846

EPA Sample No.	Lab Sample ID
<u>SL-MW-3A</u>	<u>L1820-01</u>
<u>SL-MW-3B</u>	<u>L1820-02</u>
<u>SL-MW-4</u>	<u>L1820-07</u>
<u>SL-MW-5</u>	<u>L1820-06</u>
<u>SL-MW-6A</u>	<u>L1820-03</u>
<u>SL-MW-6B</u>	<u>L1820-04</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: *Dawn E. Smart* Name: *Dawn E. Smart*
Date: *9/19/12* Title: _____

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-3A

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1820D

Matrix (soil/water): WATER

Lab Sample ID: L1820-01

Level (low/med): MED

Date Received: 08/28/2012

% 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	22.1	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	20600			P
7440-47-3	Chromium	19.8	B		P
7440-48-4	Cobalt	1.8	B		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	33.3	B		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	4270			P
7439-96-5	Manganese	39.5	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	158			P
7440-09-7	Potassium	2510			P
7782-49-2	Selenium	17.6	B		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	22600			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	12.5	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-3B

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1820D

Matrix (soil/water): WATER

Lab Sample ID: L1820-02

Level (low/med): MED

Date Received: 08/28/2012

% 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	26.7	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	8230			P
7440-47-3	Chromium	3.1	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		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	3080			P
7439-96-5	Manganese	26.6	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	5.8	B		P
7440-09-7	Potassium	2120			P
7782-49-2	Selenium	15.5	B		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	64000			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	18.3	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-4

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1820D

Matrix (soil/water): WATER

Lab Sample ID: L1820-07

Level (low/med): MED

Date Received: 08/30/2012

% 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	7.3	B		P
7440-39-3	Barium	15.0	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	6910			P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	9.8	B		P
7440-50-8	Copper	3.6	U		P
7439-89-6	Iron	8930			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	1090			P
7439-96-5	Manganese	545			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	3.2	B		P
7440-09-7	Potassium	2570			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	9660			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	7.4	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-5

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1820D

Matrix (soil/water): WATER

Lab Sample ID: L1820-06

Level (low/med): MED

Date Received: 08/30/2012

% 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	38.6	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	18500			P
7440-47-3	Chromium	2.2	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		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	2430			P
7439-96-5	Manganese	4630			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	3.9	B		P
7440-09-7	Potassium	1940			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	124000			P
7440-28-0	Thallium	11.1	B		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	4.9	U		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-6A

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1820D

Matrix (soil/water): WATER

Lab Sample ID: L1820-03

Level (low/med): MED

Date Received: 08/28/2012

% 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	73.0	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	23500			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	3610			P
7439-96-5	Manganese	317			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	3.4	B		P
7440-09-7	Potassium	3590			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	57600			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	17.0	B		P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SL-MW-6B

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1820D

Matrix (soil/water): WATER

Lab Sample ID: L1820-04

Level (low/med): MED

Date Received: 08/28/2012

% 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	86.7	B		P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	14.6	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	17400			P
7440-47-3	Chromium	0.64	U		P
7440-48-4	Cobalt	0.67	U		P
7440-50-8	Copper	5.3	B		P
7439-89-6	Iron	31.0	U		P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	2520			P
7439-96-5	Manganese	11.8	B		P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	2.2	B		P
7440-09-7	Potassium	2260			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	10700			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	9.4	B		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.:

SL1820D

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
	09/04/12 14:49				09/04/12 15:08		09/04/12 15:45		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum	10000.0	9986.56	99.9	10000.0	10073.85	100.7	10119.37	101.2	P
Antimony	500.0	508.95	101.8	500.0	507.84	101.6	531.56	106.3	P
Arsenic	500.0	507.42	101.5	500.0	498.17	99.6	502.48	100.5	P
Barium	10000.0	10449.64	104.5	10000.0	10426.44	104.3	10497.96	105.0	P
Beryllium	250.0	249.63	99.9	250.0	249.22	99.7	250.71	100.3	P
Cadmium	250.0	245.41	98.2	250.0	245.05	98.0	247.66	99.1	P
Calcium	25000.0	24466.38	97.9	25000.0	24426.94	97.7	24592.52	98.4	P
Chromium	1000.0	993.96	99.4	1000.0	998.33	99.8	1009.57	101.0	P
Cobalt	2500.0	2601.77	104.1	2500.0	2600.80	104.0	2630.59	105.2	P
Copper	1250.0	1237.11	99.0	1250.0	1241.59	99.3	1255.58	100.4	P
Iron	5000.0	5097.21	101.9	5000.0	5131.89	102.6	5158.45	103.2	P
Lead	500.0	503.61	100.7	500.0	502.88	100.6	507.22	101.4	P
Magnesium	25000.0	25543.55	102.2	25000.0	25481.96	101.9	25645.55	102.6	P
Manganese	2500.0	2548.30	101.9	2500.0	2541.30	101.7	2555.45	102.2	P
Nickel	2500.0	2568.71	102.7	2500.0	2568.00	102.7	2600.22	104.0	P
Potassium	25000.0	25355.75	101.4	25000.0	25174.52	100.7	25034.50	100.1	P
Selenium	500.0	512.36	102.5	500.0	507.27	101.5	516.32	103.3	P
Silver	1250.0	1249.43	100	1250.0	1250.46	100.0	1262.66	101.0	P
Sodium	25000.0	25385.77	101.5	25000.0	25214.31	100.9	25377.52	101.5	P
Thallium	500.0	480.77	96.2	500.0	475.54	95.1	475.59	95.1	P
Vanadium	2500.0	2502.67	100.1	2500.0	2509.69	100.4	2536.01	101.4	P
Zinc	2500.0	2559.25	102.4	2500.0	2546.82	101.9	2575.36	103.0	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.: _____

SL1820D

Initial Calibration Source: _____

Continuing Calibration Source: _____

Concentration Units: ug/L

	Initial Calibration			Continuing Calibration					
					09/04/12 16:22				
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Aluminum				10000.0	10185.41	101.9			P
Antimony				500.0	523.35	104.7			P
Arsenic				500.0	504.24	100.8			P
Barium				10000.0	10607.99	106.1			P
Beryllium				250.0	252.55	101.0			P
Cadmium				250.0	249.55	99.8			P
Calcium				25000.0	24695.42	98.8			P
Chromium				1000.0	1014.21	101.4			P
Cobalt				2500.0	2640.21	105.6			P
Copper				1250.0	1264.62	101.2			P
Iron				5000.0	5181.52	103.6			P
Lead				500.0	509.93	102.0			P
Magnesium				25000.0	25880.99	103.5			P
Manganese				2500.0	2574.15	103.0			P
Nickel				2500.0	2612.62	104.5			P
Potassium				25000.0	25541.46	102.2			P
Selenium				500.0	511.54	102.3			P
Silver				1250.0	1268.17	101.5			P
Sodium				25000.0	25697.23	102.8			P
Thallium				500.0	483.42	96.7			P
Vanadium				2500.0	2549.04	102.0			P
Zinc				2500.0	2577.36	103.1			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: 95900-04

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1820D

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

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L **MB-67952**

FIMS2_120904B

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	09/04/12 15:06	C	09/04/12 15:25	C		C		C	
Mercury	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.: SL1820D

Preparation Blank Matrix (soil/water): WATER

Method Blank ID:

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

MB-67953

OPTIMA3_120904E

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	09/04/12 15:11	C	09/04/12 15:48	C	09/04/12 16:26	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	4.5	B	4.300	U	P
Barium	1.1	U	1.1	U	1.1	U	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	110.0	U	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
Potassium	76.0	U	76.0	U	76.0	U	76.0	U	76.000	U	P
Selenium	12.0	U	12.0	U	12.0	U	12.2	B	12.000	U	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	6.900	U	P
Sodium	40.4	B	36.9	B	51.8	B	45.0	B	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.:

SL1820D

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	477208	471430.1	94.3				
Antimony	0	600	-13	557.3	92.9				
Arsenic	0	100	13	102.9	102.9				
Barium	0	500	0	467.6	93.5				
Beryllium	0	500	0	443.6	88.7				
Cadmium	0	1000	0	833.2	83.3				
Calcium	500000	500000	486434	476991.9	95.4				
Chromium	0	500	2	446.9	89.4				
Cobalt	0	500	0	422.9	84.6				
Copper	0	500	0	476.9	95.4				
Iron	200000	200000	166625	164065.6	82.0				
Lead	0	500	6	454.4	90.9				
Magnesium	500000	500000	449734	443770.4	88.8				
Manganese	0	500	-5	438.4	87.7				
Nickel	0	1000	-2	824.7	82.5				
Potassium	0	25000	27	25873.6	103.5				
Selenium	0	500	11	479.4	95.9				
Silver	0	200	2	196.6	98.3				
Sodium	0	25000	78	25366.7	101.5				
Thallium	0	100	15	90.3	90.3				
Vanadium	0	500	-9	443.1	88.6				
Zinc	0	1000	10	850.7	85.1				

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc.	Contract: 95900-04
Lab Code: MITKEM Case No.:	SAS No.: SDG No.: SL1820D
Solid LCS Source:	LCS(D) ID:
Aqueous LCS Source:	LCS-67952

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte	True	Found	%R	True	Found	C	Limits	%R	
Mercury	4.6	4.72	102.6						

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name:	Spectrum Analytical, Inc.	Contract:	95900-04				
Lab Code:	MITKEM	Case No.:		SAS No.:		SDG No.:	SL1820D
Solid LCS Source:						LCS(D) ID:	
Aqueous LCS Source:						LCS-67953	

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	9312.71	102.3						
Antimony	455.0	490.47	107.8						
Arsenic	455.0	471.71	103.7						
Barium	9100.0	9579.85	105.3						
Beryllium	227.0	235.09	103.6						
Cadmium	227.0	232.84	102.6						
Calcium	22700.0	22518.90	99.2						
Chromium	910.0	926.12	101.8						
Cobalt	2270.0	2318.66	102.1						
Copper	1130.0	1173.48	103.8						
Iron	4550.0	4642.45	102.0						
Lead	455.0	466.10	102.4						
Magnesium	22700.0	23457.08	103.3						
Manganese	2270.0	2338.62	103.0						
Nickel	2270.0	2325.10	102.4						
Potassium	22700.0	22666.48	99.9						
Selenium	455.0	482.23	106.0						
Silver	1130.0	1160.04	102.7						
Sodium	22700.0	23090.27	101.7						
Thallium	455.0	451.99	99.3						
Vanadium	2270.0	2322.97	102.3						
Zinc	2270.0	2296.00	101.1						

U.S. EPA - CLP
7
LABORATORY CONTROL SAMPLE

Lab Name:	Spectrum Analytical, Inc.	Contract:	95900-04				
Lab Code:	MITKEM	Case No.:		SAS No.:		SDG No.:	SL1820D
Solid LCS Source:						LCS(D) ID:	
Aqueous LCS Source:						LCSD-67953	

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte	True	Found	%R	True	Found	C	Limits	%R	
Aluminum	9100.0	9408.47	103.4						
Antimony	455.0	492.44	108.2						
Arsenic	455.0	441.00	96.9						
Barium	9100.0	9650.04	106.0						
Beryllium	227.0	237.38	104.6						
Cadmium	227.0	217.14	95.7						
Calcium	22700.0	22880.06	100.8						
Chromium	910.0	945.26	103.9						
Cobalt	2270.0	2368.83	104.4						
Copper	1130.0	1159.15	102.6						
Iron	4550.0	4759.05	104.6						
Lead	455.0	437.73	96.2						
Magnesium	22700.0	23647.10	104.2						
Manganese	2270.0	2356.82	103.8						
Nickel	2270.0	2377.26	104.7						
Potassium	22700.0	22902.67	100.9						
Selenium	455.0	442.86	97.3						
Silver	1130.0	1163.52	103.0						
Sodium	22700.0	23352.16	102.9						
Thallium	455.0	417.23	91.7						
Vanadium	2270.0	2327.35	102.5						
Zinc	2270.0	2344.07	103.3						

U.S. EPA - CLP

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EPA SAMPLE NO.

ICP SERIAL DILUTIONS

SL-MW-3B

Lab Name: Spectrum Analytical, Inc.

Contract: 95900-04

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: SL1820D

Matrix (soil/water): WATER

Level (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	21.50	U			P
Barium	26.66	B	26.54	B	1		P
Beryllium	0.26	U	1.30	U			P
Cadmium	0.89	U	4.45	U			P
Calcium	8232.46		8132.94		1		P
Chromium	3.10	B	10.77	B	247		P
Cobalt	0.67	U	3.35	U			P
Copper	3.60	U	18.00	U			P
Iron	31.00	U	155.00	U			P
Lead	4.20	U	21.00	U			P
Magnesium	3075.50		3135.21		2		P
Manganese	26.58	B	50.00	U	100		P
Nickel	5.82	B	5.66	B	3		P
Potassium	2121.06		2034.52		4		P
Selenium	15.53	B	62.00		299		P
Silver	6.90	U	34.50	U			P
Sodium	63963.93		63247.59		1		P
Thallium	6.20	U	31.00	U			P
Vanadium	1.10	U	5.50	U			P
Zinc	18.25	B	24.50	U	100		P

U.S. EPA - CLP
10
METHOD DETECTION LIMITS (ANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1820D
Instrument Type: CV InstrumentID: FIMS2 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.: SL1820D

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.:

SL1820D

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Co
Aluminum	308.21		0.1950780	0.0000000	0.0689271	0.0000000
Antimony	206.83	0.0581013	0.0000000	0.0549587	0.0214185	0.0000000
Arsenic	188.97	0.0098790	-0.0124040	-0.0756686	0.0157247	0.1927900
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	0.0025914	0.0749299	0.0000000	-0.0433049
Calcium	227.54	0.0000000		7.8420900	0.5637690	253.7870000
Chromium	267.71	0.0000000	0.0000000	0.0000000	0.0064696	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0241432	0.0000000	
Copper	324.75	0.0000000	0.0000000	-0.0922443	0.0000000	-0.1349370
Iron	273.95	0.0000000	0.0000000		0.0000000	0.0000000
Lead	220.35	-0.1032270	-0.0123272	0.0209682	-0.0064852	-0.0680890
Magnesium	279.07	0.0000000	0.0000000	0.0000000		0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0301633	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0042808	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0219452	0.0000000	-0.3855700	0.0000000	-0.7432810
Silver	328.06	0.0000000	0.0000000	-0.0362359	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	-0.0153767	-0.0040303	-0.1223880	-0.0549555	5.8333800
Titanium	334.94	0.0000000	-0.0167659	0.0000000	0.0182020	0.0000000
Vanadium	292.40	0.0000000	0.0000000	-0.0307673	0.0000000	0.0000000
Zinc	206.20	-0.0121647	-0.0130048	-0.0501268	-0.0144316	-0.3012520

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.:

SL1820D

ICP ID Number:

OPTIMA3

Date:

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	Mn	Ni	Tl
Aluminum	308.21	0.0000000	0.0000000	1.5401500	0.0000000	0.0000000
Antimony	206.83	18.3748000	0.3246940	0.0000000	0.0000000	0.0000000
Arsenic	188.97	-8.8838000	0.0000000	0.2489140	0.0999179	0.1051500
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	0.0000000	-0.2126510	0.0000000
Calcium	227.54	5.3533500	3.5228400	3.8819800	26.7628000	0.0000000
Chromium	267.71		0.0000000	0.2043740	0.0000000	0.0000000
Cobalt	228.61	0.0000000	0.0000000	0.0000000	0.1584950	0.0000000
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	-0.0447064	0.3133570	-0.0606043	-0.1219210	-0.1744540
Magnesium	279.07	2.4873800	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000		0.0474986	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000		0.2920460
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.2759200	-0.2480870	0.0000000	-0.1215600	-0.4373880
Silver	328.06	0.0000000	0.0000000	0.2125900	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0860847	-0.1533400	-0.3345200	-0.0729483	
Titanium	334.94	0.1475450	0.0000000	0.0000000	0.0000000	0.1490420
Vanadium	292.40	-2.2898300	0.3129820	0.0000000	0.0000000	0.0000000
Zinc	206.20	-1.8283200	-0.3316020	-0.4006130	-0.1453040	-0.4071760

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.: _____

SL1820D

ICP ID Number: _____

OPTIMA3

Date: _____

4/10/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Ti	V	_____	_____	_____
Aluminum	308.21	1.6328600	-0.3229200			
Antimony	206.83	-2.3648000	-1.1022500			
Arsenic	188.97	-0.2598760	0.0000000			
Barium	233.52	0.0000000	-1.4206100			
Beryllium	313.10	-1.8417600	-0.0298256			
Cadmium	226.50	0.0000000	0.0000000			
Calcium	227.54	7.1850200	24.4780000			
Chromium	267.71	0.0000000	-0.3095710			
Cobalt	228.61	2.3045300	0.0000000			
Copper	324.75	0.0000000	-0.1578650			
Iron	273.95	0.0000000	-1.6429000			
Lead	220.35	-0.9907230	-0.0982908			
Magnesium	279.07	0.0000000	0.0000000			
Manganese	257.61	0.0000000	0.0000000			
Nickel	231.60	0.5886010	0.0000000			
Potassium	766.49	0.0000000	0.0000000			
Selenium	196.02	-0.6097280	0.0000000			
Silver	328.06	0.0000000	-1.9059700			
Sodium	589.59	0.0000000	0.0000000			
Thallium	190.80	-0.2863380	4.5539900			
Titanium	334.94		0.0000000			
Vanadium	292.40	1.3967000				
Zinc	206.20	-0.8719450	-0.1607790			

Comments:

U.S. EPA - CLP
12
ICP LINEAR RANGES (BIANNUALLY)

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: _____ SAS No.: _____ SDG No.: SL1820D
ICP ID Number: OPTIMA3 Date: 5/10/2012

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	100000	P
Beryllium	0.20	5000	P
Cadmium	0.20	50000	P
Calcium	0.20	500000	P
Chromium	0.20	50000	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	50000	P
Nickel	0.20	100000	P
Potassium	0.20	500000	P
Selenium	0.20	50000	P
Silver	0.20	2500	P
Sodium	0.20	500000	P
Thallium	0.20	50000	P
Vanadium	0.20	50000	P
Zinc	0.20	50000	P

Comments:

U.S. EPA - CLP
13
PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1820D
Preparation Method: 7470A Batch ID: 67952

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB	09/04/2012		100
CCV	09/04/2012		100
ICB	09/04/2012		100
ICV	09/04/2012		100
S0	09/04/2012		100
S0.2	09/04/2012		100
S1.0	09/04/2012		100
S10.0	09/04/2012		100
S2.0	09/04/2012		100
S5.0	09/04/2012		100
LCSW	09/04/2012		100
PBW	09/04/2012		100
SL-MW-3A	09/04/2012		100
SL-MW-3B	09/04/2012		100
SL-MW-4	09/04/2012		100
SL-MW-5	09/04/2012		100
SL-MW-6A	09/04/2012		100
SL-MW-6B	09/04/2012		100

Comments:

U.S. EPA - CLP
13
PREPARATION LOG

Lab Name: Spectrum Analytical, Inc. Contract: 95900-04
Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1820D
Preparation Method: 3005A Batch ID: 67953

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
LCSW	09/04/2012		50
LCSW02	09/04/2012		50
PBW	09/04/2012		50
SL -MW -3A	09/04/2012		50
SL -MW -3B	09/04/2012		50
SL -MW -4	09/04/2012		50
SL -MW -5	09/04/2012		50
SL -MW -6A	09/04/2012		50
SL -MW -6B	09/04/2012		50

Comments:

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.: SL1820D
 Instrument ID Number: FIMS2 Method: CV
 Start Date: 09/04/2012 End Date: 09/04/2012

FIMS2_120904B

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	1436															X												
S0.2	1.0	1438															X												
S1.0	1.0	1440															X												
S2.0	1.0	1441															X												
S5.0	1.0	1443															X												
S10.0	1.0	1445															X												
ICV	1.0	1446															X												
ICB	1.0	1448															X												
PBW	1.0	1450															X												
LCSW	1.0	1451															X												
ZZZZZZ	1.0	1453																											
SL-MW-3A	1.0	1455															X												
ZZZZZZ	1.0	1456																											
SL-MW-3B	1.0	1458															X												
ZZZZZZ	1.0	1500																											
SL-MW-6A	1.0	1501															X												
ZZZZZZ	1.0	1503																											
CCV	1.0	1505															X												
CCB	1.0	1506															X												
SL-MW-6B	1.0	1508															X												
ZZZZZZ	1.0	1510																											
SL-MW-5	1.0	1511															X												
ZZZZZZ	1.0	1513																											
SL-MW-4	1.0	1515															X												
ZZZZZZ	1.0	1516																											
ZZZZZZ	1.0	1518																											
ZZZZZZ	1.0	1520																											
ZZZZZZ	1.0	1521																											
CCV	1.0	1523															X												
CCB	1.0	1525															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.: SL1820D
 Instrument ID Number: OPTIMA3 Method: P
 Start Date: 09/04/2012 End Date: 09/04/2012

OPTIMA3_120904E

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	1434		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
S1	1.0	1438		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
S2	1.0	1442		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
S3	1.0	1445		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ICV	1.0	1449		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ICB	1.0	1453		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	1456																													
ICSA	1.0	1500		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ICSAB	1.0	1504		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCV	1.0	1508		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCB	1.0	1511		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
PBW	1.0	1515		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LCSW	1.0	1519		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
LCSW02	1.0	1522		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	1526																													
SL-MW-3A	1.0	1530		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	1533																													
SL-MW-3B	1.0	1537		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
SL-MW-3BL	5.0	1541		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCV	1.0	1545		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCB	1.0	1548		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	1552																													
SL-MW-6A	1.0	1556		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	1600																													
SL-MW-6B	1.0	1603		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	1607																													
SL-MW-5	1.0	1611		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
ZZZZZZ	1.0	1615																													
SL-MW-4	1.0	1618		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCV	1.0	1622		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCB	1.0	1626		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						

Instrument Raw Data

=====
Analysis Begun

Start Time: 9/4/2012 2:34:20 PM

Plasma On Time: 9/4/2012 12:10:10 PM

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N3102302 Autosampler Model: AS-93plus

Sample Information File: G:\Metals\SIF\67953.SIF

Batch ID: Null

Results Data Set: B12090404

Results Library: C:\pe\Administrator\Results\Results.mdb

=====
Sequence No.: 1

Autosampler Location: 1

Sample ID: S0

Date Collected: 9/4/2012 2:34:38 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1755697.7	20586.81	1.17%	100.00	%
Lu 261.542	1128740.0	13508.77	1.20%	100.0	%
Ag 328.068	-2373.8	139.07	5.86%	[0.00]	mg/L
Al 308.215	2381.8	68.01	2.86%	[0.00]	mg/L
As 188.979	0.1	2.08	>999.9%	[0.00]	mg/L
Ba 233.527	-57.8	7.77	13.44%	[0.00]	mg/L
Be 313.107	-1180.4	35.21	2.98%	[0.00]	mg/L
Co 228.616	-8.3	3.58	43.00%	[0.00]	mg/L
Cr 267.716	60.1	13.43	22.36%	[0.00]	mg/L
Cu 324.752	3623.6	88.99	2.46%	[0.00]	mg/L
Fe 273.955	-71.5	10.28	14.38%	[0.00]	mg/L
Mg 279.077	-946.4	53.68	5.67%	[0.00]	mg/L
Mn 257.610	-197.7	29.52	14.93%	[0.00]	mg/L
Ni 231.604	-26.8	11.31	42.19%	[0.00]	mg/L
Pb 220.353	18.9	2.29	12.14%	[0.00]	mg/L
Sb 206.836	31.0	2.13	6.87%	[0.00]	mg/L
Se 196.026	-4.9	1.03	20.94%	[0.00]	mg/L
Tl 190.801	-9.0	2.11	23.39%	[0.00]	mg/L
V 292.402	31.8	46.70	146.71%	[0.00]	mg/L
Zn 206.200	28.0	1.78	6.34%	[0.00]	mg/L
Cd 226.502	-53.4	4.43	8.28%	[0.00]	mg/L
Ti 334.940	-49.3	15.28	30.98%	[0.00]	mg/L
Ca 227.546	163.1	4.54	2.79%	[0.00]	mg/L
Na 589.592	-708.3	89.75	12.67%	[0.00]	mg/L
K 766.490	711.5	54.18	7.62%	[0.00]	mg/L

=====
Sequence No.: 2

Autosampler Location: 9

Sample ID: S1

Date Collected: 9/4/2012 2:38:17 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1666475.1	20395.76	1.22%	94.918	%
Lu 261.542	1079015.3	14576.60	1.35%	95.59	%
Ag 328.068	394580.7	2125.72	0.54%	[2.5]	mg/L
Al 308.215	369730.6	3741.65	1.01%	[20]	mg/L
As 188.979	559.1	6.60	1.18%	[1]	mg/L
Ba 233.527	1534156.6	6769.02	0.44%	[20]	mg/L
Be 313.107	1158466.9	5982.75	0.52%	[0.5]	mg/L
Co 228.616	161063.0	1709.51	1.06%	[5]	mg/L
Cr 267.716	127402.5	1411.30	1.11%	[2]	mg/L
Cu 324.752	499299.9	2562.01	0.51%	[2.5]	mg/L

Fe 273.955	219816.2	2391.81	1.09%	[10]	mg/L
Mg 279.077	793827.2	4430.13	0.56%	[50]	mg/L
Mn 257.610	2661115.0	13864.16	0.52%	[5]	mg/L
Ni 231.604	132995.1	1446.38	1.09%	[5]	mg/L
Pb 220.353	4570.8	27.85	0.61%	[1]	mg/L
Sb 206.836	1026.9	9.78	0.95%	[1]	mg/L
Se 196.026	436.1	0.70	0.16%	[1]	mg/L
Tl 190.801	599.2	3.41	0.57%	[1]	mg/L
V 292.402	557186.4	2693.07	0.48%	[5]	mg/L
Zn 206.200	94466.8	1089.20	1.15%	[5]	mg/L
Cd 226.502	24956.0	240.41	0.96%	[0.5]	mg/L
Ti 334.940	492003.0	3022.39	0.61%	[1]	mg/L
Ca 227.546	8730.7	43.86	0.50%	[50]	mg/L
Na 589.592	231108.3	3308.67	1.43%	[50]	mg/L
K 766.490	51245.1	715.15	1.40%	[50]	mg/L

Sequence No.: 3

Sample ID: S2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 9/4/2012 2:42:02 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1738548.6	26360.80	1.52%	99.023	%
Lu 261.542	1124690.2	17108.46	1.52%	99.64	%
Ag 328.068	196093.4	594.78	0.30%	[1.25]	mg/L
Al 308.215	184248.6	413.21	0.22%	[10]	mg/L
As 188.979	281.5	1.18	0.42%	[0.5]	mg/L
Ba 233.527	788297.1	1531.34	0.19%	[10]	mg/L
Be 313.107	580419.5	2021.99	0.35%	[0.25]	mg/L
Co 228.616	82177.7	187.65	0.23%	[2.5]	mg/L
Cr 267.716	64270.8	161.96	0.25%	[1]	mg/L
Cu 324.752	244320.5	719.97	0.29%	[1.25]	mg/L
Fe 273.955	111679.1	215.50	0.19%	[5]	mg/L
Mg 279.077	401229.1	1079.47	0.27%	[25]	mg/L
Mn 257.610	1353987.6	4638.58	0.34%	[2.5]	mg/L
Ni 231.604	67955.4	229.35	0.34%	[2.5]	mg/L
Pb 220.353	2353.0	7.39	0.31%	[0.5]	mg/L
Sb 206.836	527.3	5.44	1.03%	[0.5]	mg/L
Se 196.026	220.6	4.67	2.12%	[0.5]	mg/L
Tl 190.801	306.7	1.48	0.48%	[0.5]	mg/L
V 292.402	276703.3	662.84	0.24%	[2.5]	mg/L
Zn 206.200	48176.9	56.19	0.12%	[2.5]	mg/L
Cd 226.502	12632.6	22.80	0.18%	[0.25]	mg/L
Ti 334.940	246886.1	393.37	0.16%	[0.5]	mg/L
Ca 227.546	4367.8	13.07	0.30%	[25]	mg/L
Na 589.592	116521.0	1480.35	1.27%	[25]	mg/L
K 766.490	25616.9	268.32	1.05%	[25]	mg/L

Sequence No.: 4

Sample ID: S3

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 9/4/2012 2:45:46 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 360.073	1768305.1	11338.08	0.64%	100.72	%
Lu 261.542	1137842.7	7987.38	0.70%	100.8	%
Ag 328.068	4045.7	18.72	0.46%	[0.025]	mg/L
Al 308.215	3775.0	78.33	2.07%	[0.2]	mg/L
As 188.979	6.1	1.96	32.14%	[0.01]	mg/L
Ba 233.527	17130.8	177.64	1.04%	[0.2]	mg/L
Be 313.107	11987.0	140.05	1.17%	[0.005]	mg/L

Co 228.616	1724.6	15.94	0.92%	[0.05]	mg/L
Cr 267.716	1345.8	28.39	2.11%	[0.02]	mg/L
Cu 324.752	4997.7	78.11	1.56%	[0.025]	mg/L
Fe 273.955	2323.1	9.52	0.41%	[0.1]	mg/L
Mg 279.077	8647.9	90.75	1.05%	[0.5]	mg/L
Mn 257.610	29455.5	224.98	0.76%	[0.05]	mg/L
Ni 231.604	1434.4	16.07	1.12%	[0.05]	mg/L
Pb 220.353	59.7	3.52	5.91%	[0.01]	mg/L
Sb 206.836	19.5	2.68	13.79%	[0.01]	mg/L
Se 196.026	7.9	3.33	42.07%	[0.01]	mg/L
Tl 190.801	7.3	3.24	44.17%	[0.01]	mg/L
V 292.402	5707.0	49.73	0.87%	[0.05]	mg/L
Zn 206.200	1036.7	11.36	1.10%	[0.05]	mg/L
Cd 226.502	271.9	7.19	2.65%	[0.005]	mg/L
Ti 334.940	5152.5	69.05	1.34%	[0.01]	mg/L
Ca 227.546	75.5	2.38	3.16%	[0.5]	mg/L
Na 589.592	2623.7	88.13	3.36%	[0.5]	mg/L
K 766.490	595.0	44.51	7.48%	[0.5]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	157600	0.00000	0.999997	
Al 308.215	3	Lin Thru 0	0.0	18470	0.00000	0.999999	
As 188.979	3	Lin Thru 0	0.0	559.9	0.00000	0.999996	
Ba 233.527	3	Lin Thru 0	0.0	77130	0.00000	0.999939	
Be 313.107	3	Lin Thru 0	0.0	2318000	0.00000	1.000000	
Co 228.616	3	Lin Thru 0	0.0	32340	0.00000	0.999967	
Cr 267.716	3	Lin Thru 0	0.0	63820	0.00000	0.999994	
Cu 324.752	3	Lin Thru 0	0.0	198900	0.00000	0.999963	
Fe 273.955	3	Lin Thru 0	0.0	22050	0.00000	0.999979	
Mg 279.077	3	Lin Thru 0	0.0	15910	0.00000	0.999990	
Mn 257.610	3	Lin Thru 0	0.0	534100	0.00000	0.999975	
Ni 231.604	3	Lin Thru 0	0.0	26720	0.00000	0.999962	
Pb 220.353	3	Lin Thru 0	0.0	4598	0.00000	0.999927	
Sb 206.836	3	Lin Thru 0	0.0	1033	0.00000	0.999911	
Se 196.026	3	Lin Thru 0	0.0	437.1	0.00000	0.999963	
Tl 190.801	3	Lin Thru 0	0.0	602.0	0.00000	0.999953	
V 292.402	3	Lin Thru 0	0.0	111300	0.00000	0.999996	
Zn 206.200	3	Lin Thru 0	0.0	18970	0.00000	0.999968	
Cd 226.502	3	Lin Thru 0	0.0	50040	0.00000	0.999987	
Ti 334.940	3	Lin Thru 0	0.0	492400	0.00000	0.999999	
Ca 227.546	3	Lin Thru 0	0.0	174.6	0.00000	0.999999	
Na 589.592	3	Lin Thru 0	0.0	4630	0.00000	0.999994	
K 766.490	3	Lin Thru 0	0.0	1025	0.00000	0.999999	

=====

Sequence No.: 5

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 9/4/2012 2:49:27 PM

Data Type: Original

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	1737403.4	98.958 %	0.6606			0.67%
Lu 261.542	1123409.5	99.53 %	0.760			0.76%
Ag 328.068	196295.5	1.2494 mg/L	0.00980	1.2494 mg/L	0.00980	0.78%
QC value within limits for Ag 328.068 Recovery = 99.95%						
Al 308.215	184690.9	9.9866 mg/L	0.08461	9.9866 mg/L	0.08461	0.85%
QC value within limits for Al 308.215 Recovery = 99.87%						
As 188.979	279.5	0.50742 mg/L	0.004217	0.50742 mg/L	0.004217	0.83%
QC value within limits for As 188.979 Recovery = 101.48%						
Ba 233.527	805736.9	10.450 mg/L	0.0920	10.450 mg/L	0.0920	0.88%
QC value within limits for Ba 233.527 Recovery = 104.50%						
Be 313.107	576248.8	0.24963 mg/L	0.002756	0.24963 mg/L	0.002756	1.10%
QC value within limits for Be 313.107 Recovery = 99.85%						
Co 228.616	84208.2	2.6018 mg/L	0.02513	2.6018 mg/L	0.02513	0.97%

Cr	267.716	63414.0	0.99396 mg/L	0.007495	0.99396 mg/L	0.007495	0.75%
QC value within limits for Co 228.616 Recovery = 104.07%							
Cu	324.752	245778.0	1.2371 mg/L	0.01142	1.2371 mg/L	0.01142	0.92%
QC value within limits for Cr 267.716 Recovery = 99.40%							
Fe	273.955	112315.9	5.0972 mg/L	0.04777	5.0972 mg/L	0.04777	0.94%
QC value within limits for Cu 324.752 Recovery = 98.97%							
Mg	279.077	406467.3	25.544 mg/L	0.2463	25.544 mg/L	0.2463	0.96%
QC value within limits for Fe 273.955 Recovery = 101.94%							
Mn	257.610	1361252.6	2.5483 mg/L	0.02335	2.5483 mg/L	0.02335	0.92%
QC value within limits for Mg 279.077 Recovery = 102.17%							
Ni	231.604	68640.2	2.5687 mg/L	0.02658	2.5687 mg/L	0.02658	1.03%
QC value within limits for Mn 257.610 Recovery = 101.93%							
Pb	220.353	2306.1	0.50361 mg/L	0.002671	0.50361 mg/L	0.002671	0.53%
QC value within limits for Ni 231.604 Recovery = 102.75%							
Sb	206.836	542.4	0.50895 mg/L	0.002596	0.50895 mg/L	0.002596	0.51%
QC value within limits for Pb 220.353 Recovery = 100.72%							
Se	196.026	221.4	0.51236 mg/L	0.003741	0.51236 mg/L	0.003741	0.73%
QC value within limits for Sb 206.836 Recovery = 101.79%							
Tl	190.801	303.9	0.48077 mg/L	0.005993	0.48077 mg/L	0.005993	1.25%
QC value within limits for Se 196.026 Recovery = 102.47%							
V	292.402	278365.4	2.5027 mg/L	0.02099	2.5027 mg/L	0.02099	0.84%
QC value within limits for Tl 190.801 Recovery = 96.15%							
Zn	206.200	48438.0	2.5592 mg/L	0.02696	2.5592 mg/L	0.02696	1.05%
QC value within limits for V 292.402 Recovery = 100.11%							
Cd	226.502	12268.7	0.24541 mg/L	0.002142	0.24541 mg/L	0.002142	0.87%
QC value within limits for Zn 206.200 Recovery = 102.37%							
Ti	334.940	252078.4	0.51172 mg/L	0.005462	0.51172 mg/L	0.005462	1.07%
QC value within limits for Cd 226.502 Recovery = 98.16%							
Ca	227.546	4424.2	24.466 mg/L	0.0327	24.466 mg/L	0.0327	0.13%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Na	589.592	117534.9	25.386 mg/L	0.3260	25.386 mg/L	0.3260	1.28%
QC value within limits for Ca 227.546 Recovery = 97.87%							
K	766.490	25986.3	25.356 mg/L	0.2708	25.356 mg/L	0.2708	1.07%
QC value within limits for Na 589.592 Recovery = 101.54%							
QC value within limits for K 766.490 Recovery = 101.42%							
All analyte(s) passed QC.							

Sequence No.: 6

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 9/4/2012 2:53:10 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1767332.2	100.66 %	2.098			2.08%
Lu 261.542	1134592.6	100.5 %	2.13			2.12%
Ag 328.068	-65.3	-0.00042 mg/L	0.000196	-0.00042 mg/L	0.000196	47.08%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 308.215	43.4	0.00235 mg/L	0.003648	0.00235 mg/L	0.003648	155.45%
QC value within limits for Al 308.215 Recovery = Not calculated						
As 188.979	2.4	0.00430 mg/L	0.002566	0.00430 mg/L	0.002566	59.68%
QC value within limits for As 188.979 Recovery = Not calculated						
Ba 233.527	49.1	0.00064 mg/L	0.000184	0.00064 mg/L	0.000184	28.95%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107	17.3	0.00001 mg/L	0.000011	0.00001 mg/L	0.000011	149.43%
QC value within limits for Be 313.107 Recovery = Not calculated						
Co 228.616	3.8	0.00012 mg/L	0.000066	0.00012 mg/L	0.000066	56.66%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716	-17.0	-0.00027 mg/L	0.000044	-0.00027 mg/L	0.000044	16.47%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752	-22.0	-0.00011 mg/L	0.000288	-0.00011 mg/L	0.000288	260.01%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 273.955	-18.2	-0.00083 mg/L	0.000833	-0.00083 mg/L	0.000833	100.80%
QC value within limits for Fe 273.955 Recovery = Not calculated						
Mg 279.077	103.6	0.00651 mg/L	0.004601	0.00651 mg/L	0.004601	70.65%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610	59.3	0.00011 mg/L	0.000057	0.00011 mg/L	0.000057	51.23%

QC value within limits for Mn 257.610 Recovery = Not calculated
 Ni 231.604 2.8 0.00010 mg/L 0.000201 0.00010 mg/L 0.000201 194.53%
 QC value within limits for Ni 231.604 Recovery = Not calculated
 Pb 220.353 -0.0 -0.00001 mg/L 0.000916 -0.00001 mg/L 0.000916 >999.9%
 QC value within limits for Pb 220.353 Recovery = Not calculated
 Sb 206.836 6.2 0.00605 mg/L 0.003708 0.00605 mg/L 0.003708 61.30%
 QC value within limits for Sb 206.836 Recovery = Not calculated
 Se 196.026 0.4 0.00100 mg/L 0.009675 0.00100 mg/L 0.009675 967.65%
 QC value within limits for Se 196.026 Recovery = Not calculated
 Tl 190.801 0.2 0.00033 mg/L 0.002151 0.00033 mg/L 0.002151 656.08%
 QC value within limits for Tl 190.801 Recovery = Not calculated
 V 292.402 -71.1 -0.00064 mg/L 0.000282 -0.00064 mg/L 0.000282 44.10%
 QC value within limits for V 292.402 Recovery = Not calculated
 Zn 206.200 23.9 0.00126 mg/L 0.000319 0.00126 mg/L 0.000319 25.26%
 QC value within limits for Zn 206.200 Recovery = Not calculated
 Cd 226.502 -2.7 -0.00005 mg/L 0.000096 -0.00005 mg/L 0.000096 181.98%
 QC value within limits for Cd 226.502 Recovery = Not calculated
 Ti 334.940 48.8 0.00010 mg/L 0.000053 0.00010 mg/L 0.000053 53.58%
 QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546 -0.7 -0.00407 mg/L 0.094006 -0.00407 mg/L 0.094006 >999.9%
 QC value within limits for Ca 227.546 Recovery = Not calculated
 Na 589.592 187.2 0.04044 mg/L 0.007078 0.04044 mg/L 0.007078 17.50%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490 38.1 0.03719 mg/L 0.071217 0.03719 mg/L 0.071217 191.49%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 7

Sample ID: LLICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 9/4/2012 2:56:52 PM

Data Type: Original

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	1775400.4	101.12 %	0.945			0.93%
Lu 261.542	1140377.8	101.0 %	0.94			0.93%
Ag 328.068	4847.2	0.03083 mg/L	0.000161	0.03083 mg/L	0.000161	0.52%
QC value within limits for Ag 328.068		Recovery = 102.78%				
Al 308.215	3820.1	0.20649 mg/L	0.000747	0.20649 mg/L	0.000747	0.36%
QC value within limits for Al 308.215		Recovery = 103.24%				
As 188.979	13.1	0.02358 mg/L	0.005382	0.02358 mg/L	0.005382	22.82%
QC value within limits for As 188.979		Recovery = 117.90%				
Ba 233.527	16884.4	0.21897 mg/L	0.001047	0.21897 mg/L	0.001047	0.48%
QC value within limits for Ba 233.527		Recovery = 109.49%				
Be 313.107	11913.4	0.00518 mg/L	0.000078	0.00518 mg/L	0.000078	1.52%
QC value within limits for Be 313.107		Recovery = 103.56%				
Co 228.616	1733.0	0.05352 mg/L	0.000519	0.05352 mg/L	0.000519	0.97%
QC value within limits for Co 228.616		Recovery = 107.04%				
Cr 267.716	1345.7	0.02109 mg/L	0.000516	0.02109 mg/L	0.000516	2.45%
QC value within limits for Cr 267.716		Recovery = 105.46%				
Cu 324.752	6016.6	0.03029 mg/L	0.000315	0.03029 mg/L	0.000315	1.04%
QC value within limits for Cu 324.752		Recovery = 100.96%				
Fe 273.955	4521.2	0.20510 mg/L	0.002584	0.20510 mg/L	0.002584	1.26%
QC value within limits for Fe 273.955		Recovery = 102.55%				
Mg 279.077	8573.4	0.53878 mg/L	0.007783	0.53878 mg/L	0.007783	1.44%
QC value within limits for Mg 279.077		Recovery = 107.76%				
Mn 257.610	28728.6	0.05378 mg/L	0.000279	0.05378 mg/L	0.000279	0.52%
QC value within limits for Mn 257.610		Recovery = 107.56%				
Ni 231.604	1456.3	0.05449 mg/L	0.000325	0.05449 mg/L	0.000325	0.60%
QC value within limits for Ni 231.604		Recovery = 108.98%				
Pb 220.353	54.4	0.01188 mg/L	0.001853	0.01188 mg/L	0.001853	15.60%
QC value within limits for Pb 220.353		Recovery = 118.80%				
Sb 206.836	21.7	0.02072 mg/L	0.002751	0.02072 mg/L	0.002751	13.28%
QC value within limits for Sb 206.836		Recovery = 103.61%				
Se 196.026	11.3	0.02609 mg/L	0.004719	0.02609 mg/L	0.004719	18.09%
QC value within limits for Se 196.026		Recovery = 86.95%				
Tl 190.801	13.4	0.02174 mg/L	0.003893	0.02174 mg/L	0.003893	17.91%

QC value within limits for Tl 190.801 Recovery = 108.68%
V 292.402 5700.4 0.05124 mg/L 0.000259 0.05124 mg/L 0.000259 0.50%
QC value within limits for V 292.402 Recovery = 102.48%
Zn 206.200 1020.4 0.05393 mg/L 0.000260 0.05393 mg/L 0.000260 0.48%
QC value within limits for Zn 206.200 Recovery = 107.86%
Cd 226.502 267.6 0.00534 mg/L 0.000029 0.00534 mg/L 0.000029 0.55%
QC value within limits for Cd 226.502 Recovery = 106.89%
Ti 334.940 9787.4 0.01988 mg/L 0.000018 0.01988 mg/L 0.000018 0.09%
QC value within limits for Ti 334.940 Recovery = 99.38%
Ca 227.546 139.7 0.78137 mg/L 0.057819 0.78137 mg/L 0.057819 7.40%
QC value within limits for Ca 227.546 Recovery = 97.67%
Na 589.592 4889.3 1.0560 mg/L 0.02310 1.0560 mg/L 0.02310 2.19%
QC value within limits for Na 589.592 Recovery = 105.60%
K 766.490 1022.2 0.99743 mg/L 0.124628 0.99743 mg/L 0.124628 12.49%
QC value within limits for K 766.490 Recovery = 99.74%
All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 5

Date Collected: 9/4/2012 3:00:31 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1554681.9	88.551 %	0.4015			0.45%
Lu 261.542	1000248.6	88.62 %	0.307			0.35%
Ag 328.068	315.1	0.00197 mg/L	0.000131	0.00197 mg/L	0.000131	6.66%
QC value within limits for Ag 328.068		Recovery =	Not calculated			
Al 308.215	8818378.4	477.21 mg/L	5.127	477.21 mg/L	5.127	1.07%
QC value within limits for Al 308.215		Recovery =	95.44%			
As 188.979	-4.5	0.01298 mg/L	0.006884	0.01298 mg/L	0.006884	53.04%
QC value within limits for As 188.979		Recovery =	Not calculated			
Ba 233.527	7.0	0.00007 mg/L	0.000143	0.00007 mg/L	0.000143	204.68%
QC value within limits for Ba 233.527		Recovery =	Not calculated			
Be 313.107	-32.9	-0.00004 mg/L	0.000019	-0.00004 mg/L	0.000019	53.72%
QC value within limits for Be 313.107		Recovery =	Not calculated			
Co 228.616	113.9	-0.00048 mg/L	0.000385	-0.00048 mg/L	0.000385	80.93%
QC value within limits for Co 228.616		Recovery =	Not calculated			
Cr 267.716	151.3	0.00237 mg/L	0.000084	0.00237 mg/L	0.000084	3.57%
QC value within limits for Cr 267.716		Recovery =	Not calculated			
Cu 324.752	-3038.6	0.00009 mg/L	0.000113	0.00009 mg/L	0.000113	127.77%
QC value within limits for Cu 324.752		Recovery =	Not calculated			
Fe 273.955	3674503.7	166.62 mg/L	0.532	166.62 mg/L	0.532	0.32%
QC value within limits for Fe 273.955		Recovery =	83.31%			
Mg 279.077	7155800.5	449.73 mg/L	5.515	449.73 mg/L	5.515	1.23%
QC value within limits for Mg 279.077		Recovery =	89.95%			
Mn 257.610	-271.8	-0.00501 mg/L	0.000086	-0.00501 mg/L	0.000086	1.72%
QC value within limits for Mn 257.610		Recovery =	Not calculated			
Ni 231.604	4.3	-0.00175 mg/L	0.000095	-0.00175 mg/L	0.000095	5.43%
QC value within limits for Ni 231.604		Recovery =	Not calculated			
Pb 220.353	-182.2	0.00614 mg/L	0.000315	0.00614 mg/L	0.000315	5.13%
QC value within limits for Pb 220.353		Recovery =	Not calculated			
Sb 206.836	39.8	-0.01298 mg/L	0.005326	-0.01298 mg/L	0.005326	41.04%
QC value within limits for Sb 206.836		Recovery =	Not calculated			
Se 196.026	-31.8	0.01143 mg/L	0.008005	0.01143 mg/L	0.008005	70.04%
QC value within limits for Se 196.026		Recovery =	Not calculated			
Tl 190.801	-10.1	0.01484 mg/L	0.003032	0.01484 mg/L	0.003032	20.43%
QC value within limits for Tl 190.801		Recovery =	Not calculated			
V 292.402	-1608.3	-0.00930 mg/L	0.000087	-0.00930 mg/L	0.000087	0.94%
QC value within limits for V 292.402		Recovery =	Not calculated			
Zn 206.200	22.9	0.00954 mg/L	0.000003	0.00954 mg/L	0.000003	0.04%
QC value within limits for Zn 206.200		Recovery =	Not calculated			
Cd 226.502	653.2	-0.00070 mg/L	0.000155	-0.00070 mg/L	0.000155	22.28%
QC value within limits for Cd 226.502		Recovery =	Not calculated			
Ti 334.940	-5503.3	-0.01118 mg/L	0.000150	-0.01118 mg/L	0.000150	1.34%
QC value within limits for Ti 334.940		Recovery =	Not calculated			
Ca 227.546	85219.2	486.43 mg/L	1.434	486.43 mg/L	1.434	0.29%

QC value within limits for Ca 227.546 Recovery = 97.29%
 Na 589.592 359.7 0.07769 mg/L 0.004543 0.07769 mg/L 0.004543 5.85%
 QC value within limits for Na 589.592 Recovery = Not calculated
 K 766.490 27.2 0.02652 mg/L 0.047102 0.02652 mg/L 0.047102 177.61%
 QC value within limits for K 766.490 Recovery = Not calculated
 All analyte(s) passed QC.

Sequence No.: 9

Sample ID: ICSAB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 9/4/2012 3:04:18 PM

Data Type: Original

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	1560857.0	88.902 %	1.3322			1.50%
Lu 261.542	1004531.3	89.00 %	1.320			1.48%
Ag 328.068	30870.6	0.19657 mg/L	0.001564	0.19657 mg/L	0.001564	0.80%
QC value within limits for Ag 328.068						Recovery = 98.28%
Al 308.215	8711605.4	471.43 mg/L	2.627	471.43 mg/L	2.627	0.56%
QC value within limits for Al 308.215						Recovery = 94.29%
As 188.979	44.0	0.10292 mg/L	0.008197	0.10292 mg/L	0.008197	7.96%
QC value within limits for As 188.979						Recovery = 102.92%
Ba 233.527	36015.7	0.46755 mg/L	0.005202	0.46755 mg/L	0.005202	1.11%
QC value within limits for Ba 233.527						Recovery = 93.51%
Be 313.107	1028254.0	0.44361 mg/L	0.005856	0.44361 mg/L	0.005856	1.32%
QC value within limits for Be 313.107						Recovery = 88.72%
Co 228.616	13811.3	0.42294 mg/L	0.000818	0.42294 mg/L	0.000818	0.19%
QC value within limits for Co 228.616						Recovery = 84.59%
Cr 267.716	28514.2	0.44687 mg/L	0.005068	0.44687 mg/L	0.005068	1.13%
QC value within limits for Cr 267.716						Recovery = 89.37%
Cu 324.752	91802.3	0.47689 mg/L	0.004973	0.47689 mg/L	0.004973	1.04%
QC value within limits for Cu 324.752						Recovery = 95.38%
Fe 273.955	3618049.6	164.07 mg/L	2.015	164.07 mg/L	2.015	1.23%
QC value within limits for Fe 273.955						Recovery = 82.03%
Mg 279.077	7060928.0	443.77 mg/L	1.987	443.77 mg/L	1.987	0.45%
QC value within limits for Mg 279.077						Recovery = 88.75%
Mn 257.610	236529.1	0.43838 mg/L	0.005658	0.43838 mg/L	0.005658	1.29%
QC value within limits for Mn 257.610						Recovery = 87.68%
Ni 231.604	22083.3	0.82469 mg/L	0.001178	0.82469 mg/L	0.001178	0.14%
QC value within limits for Ni 231.604						Recovery = 82.47%
Pb 220.353	1881.0	0.45441 mg/L	0.001560	0.45441 mg/L	0.001560	0.34%
QC value within limits for Pb 220.353						Recovery = 90.88%
Sb 206.836	635.9	0.55730 mg/L	0.006580	0.55730 mg/L	0.006580	1.18%
QC value within limits for Sb 206.836						Recovery = 92.88%
Se 196.026	173.0	0.47942 mg/L	0.005135	0.47942 mg/L	0.005135	1.07%
QC value within limits for Se 196.026						Recovery = 95.88%
Tl 190.801	38.2	0.09032 mg/L	0.003813	0.09032 mg/L	0.003813	4.22%
QC value within limits for Tl 190.801						Recovery = 90.32%
V 292.402	48646.9	0.44307 mg/L	0.005165	0.44307 mg/L	0.005165	1.17%
QC value within limits for V 292.402						Recovery = 88.61%
Zn 206.200	15952.4	0.85068 mg/L	0.002444	0.85068 mg/L	0.002444	0.29%
QC value within limits for Zn 206.200						Recovery = 85.07%
Cd 226.502	42357.1	0.83319 mg/L	0.012005	0.83319 mg/L	0.012005	1.44%
QC value within limits for Cd 226.502						Recovery = 83.32%
Ti 334.940	-5349.9	-0.01099 mg/L	0.000141	-0.01099 mg/L	0.000141	1.29%
QC value within limits for Ti 334.940						Recovery = Not calculated
Ca 227.546	83591.8	476.99 mg/L	4.940	476.99 mg/L	4.940	1.04%
QC value within limits for Ca 227.546						Recovery = 95.40%
Na 589.592	117446.5	25.367 mg/L	0.3324	25.367 mg/L	0.3324	1.31%
QC value within limits for Na 589.592						Recovery = 101.47%
K 766.490	26517.1	25.874 mg/L	0.2967	25.874 mg/L	0.2967	1.15%
QC value within limits for K 766.490						Recovery = 103.49%

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Autosampler Location: 3

Date Collected: 9/4/2012 3:08:05 PM

Analyst:
Initial Sample Wt:
Dilution:

Data Type: Original
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	1680813.1	95.735 %	0.0996			0.10%
Lu 261.542	1085407.3	96.16 %	0.094			0.10%
Ag 328.068	196454.8	1.2505 mg/L	0.01052	1.2505 mg/L	0.01052	0.84%
QC value within limits for Ag 328.068 Recovery = 100.04%						
Al 308.215	186302.7	10.074 mg/L	0.0893	10.074 mg/L	0.0893	0.89%
QC value within limits for Al 308.215 Recovery = 100.74%						
As 188.979	274.3	0.49817 mg/L	0.004443	0.49817 mg/L	0.004443	0.89%
QC value within limits for As 188.979 Recovery = 99.63%						
Ba 233.527	803946.4	10.426 mg/L	0.0304	10.426 mg/L	0.0304	0.29%
QC value within limits for Ba 233.527 Recovery = 104.26%						
Be 313.107	575367.9	0.24922 mg/L	0.000672	0.24922 mg/L	0.000672	0.27%
QC value within limits for Be 313.107 Recovery = 99.69%						
Co 228.616	84175.9	2.6008 mg/L	0.02920	2.6008 mg/L	0.02920	1.12%
QC value within limits for Co 228.616 Recovery = 104.03%						
Cr 267.716	63692.2	0.99833 mg/L	0.010023	0.99833 mg/L	0.010023	1.00%
QC value within limits for Cr 267.716 Recovery = 99.83%						
Cu 324.752	246669.2	1.2416 mg/L	0.01163	1.2416 mg/L	0.01163	0.94%
QC value within limits for Cu 324.752 Recovery = 99.33%						
Fe 273.955	113080.4	5.1319 mg/L	0.04953	5.1319 mg/L	0.04953	0.97%
QC value within limits for Fe 273.955 Recovery = 102.64%						
Mg 279.077	405487.5	25.482 mg/L	0.0712	25.482 mg/L	0.0712	0.28%
QC value within limits for Mg 279.077 Recovery = 101.93%						
Mn 257.610	1357516.6	2.5413 mg/L	0.00747	2.5413 mg/L	0.00747	0.29%
QC value within limits for Mn 257.610 Recovery = 101.65%						
Ni 231.604	68620.9	2.5680 mg/L	0.02703	2.5680 mg/L	0.02703	1.05%
QC value within limits for Ni 231.604 Recovery = 102.72%						
Pb 220.353	2302.7	0.50288 mg/L	0.000288	0.50288 mg/L	0.000288	0.06%
QC value within limits for Pb 220.353 Recovery = 100.58%						
Sb 206.836	541.4	0.50784 mg/L	0.005568	0.50784 mg/L	0.005568	1.10%
QC value within limits for Sb 206.836 Recovery = 101.57%						
Se 196.026	219.2	0.50727 mg/L	0.008536	0.50727 mg/L	0.008536	1.68%
QC value within limits for Se 196.026 Recovery = 101.45%						
Tl 190.801	300.8	0.47554 mg/L	0.003781	0.47554 mg/L	0.003781	0.80%
QC value within limits for Tl 190.801 Recovery = 95.11%						
V 292.402	279143.0	2.5097 mg/L	0.02394	2.5097 mg/L	0.02394	0.95%
QC value within limits for V 292.402 Recovery = 100.39%						
Zn 206.200	48202.3	2.5468 mg/L	0.03411	2.5468 mg/L	0.03411	1.34%
QC value within limits for Zn 206.200 Recovery = 101.87%						
Cd 226.502	12251.1	0.24505 mg/L	0.002105	0.24505 mg/L	0.002105	0.86%
QC value within limits for Cd 226.502 Recovery = 98.02%						
Ti 334.940	245872.2	0.49911 mg/L	0.005365	0.49911 mg/L	0.005365	1.07%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546	4417.4	24.427 mg/L	0.1101	24.427 mg/L	0.1101	0.45%
QC value within limits for Ca 227.546 Recovery = 97.71%						
Na 589.592	116741.0	25.214 mg/L	0.3395	25.214 mg/L	0.3395	1.35%
QC value within limits for Na 589.592 Recovery = 100.86%						
K 766.490	25800.6	25.175 mg/L	0.2920	25.175 mg/L	0.2920	1.16%
QC value within limits for K 766.490 Recovery = 100.70%						

All analyte(s) passed QC.

User canceled analysis.

=====
Analysis Begun

Start Time: 9/4/2012 3:11:43 PM

Plasma On Time: 9/4/2012 12:10:10 PM

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N3102302 Autosampler Model: AS-93plus

Sample Information File: G:\Metals\SIF\67953.SIF

Batch ID: Null

Results Data Set: B12090404

Results Library: C:\pe\Administrator\Results\Results.mdb
=====

Sequence No.: 1

Autosampler Location: 4

Sample ID: CCB

Date Collected: 9/4/2012 3:11:44 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1718222.5	97.866 %		0.1370			0.14%
Lu 261.542	1102708.2	97.69 %		0.117			0.12%
Ag 328.068	-25.2	-0.00016 mg/L		0.000481	-0.00016 mg/L	0.000481	300.24%
QC value within limits for Ag 328.068			Recovery =	Not calculated			
Al 308.215	174.1	0.00942 mg/L		0.005317	0.00942 mg/L	0.005317	56.47%
QC value within limits for Al 308.215			Recovery =	Not calculated			
As 188.979	1.3	0.00234 mg/L		0.001823	0.00234 mg/L	0.001823	77.79%
QC value within limits for As 188.979			Recovery =	Not calculated			
Ba 233.527	27.9	0.00036 mg/L		0.000114	0.00036 mg/L	0.000114	31.64%
QC value within limits for Ba 233.527			Recovery =	Not calculated			
Be 313.107	109.5	0.00005 mg/L		0.000012	0.00005 mg/L	0.000012	25.21%
QC value within limits for Be 313.107			Recovery =	Not calculated			
Co 228.616	-5.7	-0.00018 mg/L		0.000156	-0.00018 mg/L	0.000156	88.08%
QC value within limits for Co 228.616			Recovery =	Not calculated			
Cr 267.716	-12.1	-0.00019 mg/L		0.000121	-0.00019 mg/L	0.000121	64.09%
QC value within limits for Cr 267.716			Recovery =	Not calculated			
Cu 324.752	-10.7	-0.00005 mg/L		0.000189	-0.00005 mg/L	0.000189	351.31%
QC value within limits for Cu 324.752			Recovery =	Not calculated			
Fe 273.955	49.8	0.00226 mg/L		0.000215	0.00226 mg/L	0.000215	9.54%
QC value within limits for Fe 273.955			Recovery =	Not calculated			
Mg 279.077	100.5	0.00631 mg/L		0.002348	0.00631 mg/L	0.002348	37.18%
QC value within limits for Mg 279.077			Recovery =	Not calculated			
Mn 257.610	13.1	0.00002 mg/L		0.000063	0.00002 mg/L	0.000063	257.33%
QC value within limits for Mn 257.610			Recovery =	Not calculated			
Ni 231.604	8.2	0.00031 mg/L		0.000129	0.00031 mg/L	0.000129	42.11%
QC value within limits for Ni 231.604			Recovery =	Not calculated			
Pb 220.353	2.8	0.00062 mg/L		0.000823	0.00062 mg/L	0.000823	132.88%
QC value within limits for Pb 220.353			Recovery =	Not calculated			
Sb 206.836	3.0	0.00292 mg/L		0.003104	0.00292 mg/L	0.003104	106.21%
QC value within limits for Sb 206.836			Recovery =	Not calculated			
Se 196.026	4.5	0.01025 mg/L		0.008300	0.01025 mg/L	0.008300	80.95%
QC value within limits for Se 196.026			Recovery =	Not calculated			
Tl 190.801	1.1	0.00185 mg/L		0.002156	0.00185 mg/L	0.002156	116.60%
QC value within limits for Tl 190.801			Recovery =	Not calculated			
V 292.402	-33.0	-0.00030 mg/L		0.000373	-0.00030 mg/L	0.000373	125.81%
QC value within limits for V 292.402			Recovery =	Not calculated			
Zn 206.200	15.6	0.00082 mg/L		0.000302	0.00082 mg/L	0.000302	36.75%
QC value within limits for Zn 206.200			Recovery =	Not calculated			
Cd 226.502	-3.0	-0.00006 mg/L		0.000089	-0.00006 mg/L	0.000089	149.41%
QC value within limits for Cd 226.502			Recovery =	Not calculated			
Ti 334.940	4.1	0.00001 mg/L		0.000151	0.00001 mg/L	0.000151	>999.9%
QC value within limits for Ti 334.940			Recovery =	Not calculated			
Ca 227.546	6.8	0.03920 mg/L		0.019851	0.03920 mg/L	0.019851	50.64%
QC value within limits for Ca 227.546			Recovery =	Not calculated			
Na 589.592	170.7	0.03688 mg/L		0.012493	0.03688 mg/L	0.012493	33.88%
QC value within limits for Na 589.592			Recovery =	Not calculated			
K 766.490	53.5	0.05222 mg/L		0.030994	0.05222 mg/L	0.030994	59.35%

QC value within limits for K 766.490 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 2
Sample ID: MB-67953-PBW
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 9/4/2012 3:15:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: MB-67953-PBW

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1809390.3	103.06	%	0.977				0.95%
Lu 261.542	1162358.3	103.0	%	1.05				1.02%
Ag 328.068	-51.5	-0.00033	mg/L	0.000775	-0.00033	mg/L	0.000775	236.39%
Al 308.215	170.8	0.00925	mg/L	0.002853	0.00925	mg/L	0.002853	30.83%
As 188.979	0.3	0.00059	mg/L	0.002759	0.00059	mg/L	0.002759	467.49%
Ba 233.527	11.2	0.00014	mg/L	0.000057	0.00014	mg/L	0.000057	39.68%
Be 313.107	27.6	0.00001	mg/L	0.000024	0.00001	mg/L	0.000024	199.25%
Co 228.616	-4.3	-0.00013	mg/L	0.000008	-0.00013	mg/L	0.000008	6.04%
Cr 267.716	-15.6	-0.00024	mg/L	0.000096	-0.00024	mg/L	0.000096	39.34%
Cu 324.752	106.2	0.00053	mg/L	0.000164	0.00053	mg/L	0.000164	30.68%
Fe 273.955	55.0	0.00249	mg/L	0.001140	0.00249	mg/L	0.001140	45.73%
Mg 279.077	20.8	0.00131	mg/L	0.001859	0.00131	mg/L	0.001859	142.01%
Mn 257.610	143.5	0.00027	mg/L	0.000019	0.00027	mg/L	0.000019	7.04%
Ni 231.604	0.4	0.00001	mg/L	0.000258	0.00001	mg/L	0.000258	>999.9%
Pb 220.353	4.4	0.00096	mg/L	0.001620	0.00096	mg/L	0.001620	169.00%
Sb 206.836	5.7	0.00552	mg/L	0.001847	0.00552	mg/L	0.001847	33.44%
Se 196.026	3.9	0.00888	mg/L	0.004796	0.00888	mg/L	0.004796	53.98%
Tl 190.801	2.5	0.00418	mg/L	0.006082	0.00418	mg/L	0.006082	145.34%
V 292.402	-55.5	-0.00050	mg/L	0.000625	-0.00050	mg/L	0.000625	125.18%
Zn 206.200	33.4	0.00176	mg/L	0.000170	0.00176	mg/L	0.000170	9.66%
Cd 226.502	10.1	0.00020	mg/L	0.000107	0.00020	mg/L	0.000107	53.00%
Ti 334.940	31.6	0.00006	mg/L	0.000087	0.00006	mg/L	0.000087	139.03%
Ca 227.546	-8.5	-0.04872	mg/L	0.034487	-0.04872	mg/L	0.034487	70.78%
Na 589.592	55.0	0.01188	mg/L	0.003998	0.01188	mg/L	0.003998	33.66%
K 766.490	-20.0	-0.01953	mg/L	0.068827	-0.01953	mg/L	0.068827	352.36%

Sequence No.: 3
Sample ID: LCS-67953-LCS
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 9/4/2012 3:19:05 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: LCS-67953-LCS

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1743161.9	99.286	%	0.9383				0.95%
Lu 261.542	1125276.0	99.69	%	0.989				0.99%
Ag 328.068	182251.6	1.1600	mg/L	0.00508	1.1600	mg/L	0.00508	0.44%
Al 308.215	172211.6	9.3127	mg/L	0.05630	9.3127	mg/L	0.05630	0.60%
As 188.979	259.8	0.47171	mg/L	0.002365	0.47171	mg/L	0.002365	0.50%
Ba 233.527	738667.1	9.5798	mg/L	0.05991	9.5798	mg/L	0.05991	0.63%
Be 313.107	544739.3	0.23509	mg/L	0.001680	0.23509	mg/L	0.001680	0.71%
Co 228.616	75011.3	2.3187	mg/L	0.02951	2.3187	mg/L	0.02951	1.27%
Cr 267.716	59085.5	0.92612	mg/L	0.011236	0.92612	mg/L	0.011236	1.21%
Cu 324.752	233147.0	1.1735	mg/L	0.00516	1.1735	mg/L	0.00516	0.44%
Fe 273.955	102293.7	4.6424	mg/L	0.05838	4.6424	mg/L	0.05838	1.26%
Mg 279.077	373266.4	23.457	mg/L	0.1860	23.457	mg/L	0.1860	0.79%
Mn 257.610	1249245.8	2.3386	mg/L	0.01629	2.3386	mg/L	0.01629	0.70%
Ni 231.604	62123.4	2.3251	mg/L	0.02914	2.3251	mg/L	0.02914	1.25%
Pb 220.353	2136.5	0.46610	mg/L	0.001809	0.46610	mg/L	0.001809	0.39%
Sb 206.836	523.3	0.49047	mg/L	0.004238	0.49047	mg/L	0.004238	0.86%
Se 196.026	208.6	0.48223	mg/L	0.005896	0.48223	mg/L	0.005896	1.22%
Tl 190.801	285.3	0.45199	mg/L	0.002063	0.45199	mg/L	0.002063	0.46%
V 292.402	258304.3	2.3230	mg/L	0.01719	2.3230	mg/L	0.01719	0.74%
Zn 206.200	43460.8	2.2960	mg/L	0.02863	2.2960	mg/L	0.02863	1.25%

Cd 226.502	11641.1	0.23284 mg/L	0.002778	0.23284 mg/L	0.002778	1.19%
Ti 334.940	232.5	0.00023 mg/L	0.000098	0.00023 mg/L	0.000098	42.76%
Ca 227.546	4067.9	22.519 mg/L	0.0693	22.519 mg/L	0.0693	0.31%
Na 589.592	106906.8	23.090 mg/L	0.2344	23.090 mg/L	0.2344	1.02%
K 766.490	23230.2	22.666 mg/L	0.3014	22.666 mg/L	0.3014	1.33%

Sequence No.: 4

Sample ID: LCSD-67953-LCSD

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 40

Date Collected: 9/4/2012 3:22:48 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: LCSD-67953-LCSD

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1738863.1	99.041 %		0.7090				0.72%
Lu 261.542	1123524.8	99.54 %		0.725				0.73%
Ag 328.068	182799.6	1.1635 mg/L		0.00388	1.1635 mg/L		0.00388	0.33%
Al 308.215	173982.8	9.4085 mg/L		0.02919	9.4085 mg/L		0.02919	0.31%
As 188.979	242.6	0.44100 mg/L		0.008133	0.44100 mg/L		0.008133	1.84%
Ba 233.527	744080.4	9.6500 mg/L		0.08993	9.6500 mg/L		0.08993	0.93%
Be 313.107	550048.5	0.23738 mg/L		0.002197	0.23738 mg/L		0.002197	0.93%
Co 228.616	76634.5	2.3688 mg/L		0.00678	2.3688 mg/L		0.00678	0.29%
Cr 267.716	60306.9	0.94526 mg/L		0.003223	0.94526 mg/L		0.003223	0.34%
Cu 324.752	230294.1	1.1592 mg/L		0.00566	1.1592 mg/L		0.00566	0.49%
Fe 273.955	104864.8	4.7590 mg/L		0.02036	4.7590 mg/L		0.02036	0.43%
Mg 279.077	376290.6	23.647 mg/L		0.1972	23.647 mg/L		0.1972	0.83%
Mn 257.610	1258970.2	2.3568 mg/L		0.01846	2.3568 mg/L		0.01846	0.78%
Ni 231.604	63516.6	2.3773 mg/L		0.00871	2.3773 mg/L		0.00871	0.37%
Pb 220.353	2006.0	0.43773 mg/L		0.002010	0.43773 mg/L		0.002010	0.46%
Sb 206.836	525.7	0.49244 mg/L		0.000603	0.49244 mg/L		0.000603	0.12%
Se 196.026	191.4	0.44286 mg/L		0.003729	0.44286 mg/L		0.003729	0.84%
Tl 190.801	264.5	0.41723 mg/L		0.002622	0.41723 mg/L		0.002622	0.63%
V 292.402	258785.1	2.3273 mg/L		0.00823	2.3273 mg/L		0.00823	0.35%
Zn 206.200	44371.6	2.3441 mg/L		0.00951	2.3441 mg/L		0.00951	0.41%
Cd 226.502	10855.1	0.21714 mg/L		0.001190	0.21714 mg/L		0.001190	0.55%
Ti 334.940	227.4	0.00022 mg/L		0.000113	0.00022 mg/L		0.000113	50.78%
Ca 227.546	4133.7	22.880 mg/L		0.1331	22.880 mg/L		0.1331	0.58%
Na 589.592	108119.4	23.352 mg/L		0.2669	23.352 mg/L		0.2669	1.14%
K 766.490	23472.2	22.903 mg/L		0.2445	22.903 mg/L		0.2445	1.07%

Sequence No.: 5

Sample ID: L1820-01B-SL-MW-3A

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 41

Date Collected: 9/4/2012 3:26:31 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-01B-SL-MW-3A

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1787431.2	101.81 %		0.200				0.20%
Lu 261.542	1151599.3	102.0 %		0.34				0.33%
Ag 328.068	20.9	0.00013 mg/L		0.000364	0.00013 mg/L		0.000364	272.75%
Al 308.215	72237.8	3.9052 mg/L		0.01220	3.9052 mg/L		0.01220	0.31%
As 188.979	-1.9	0.01103 mg/L		0.003605	0.01103 mg/L		0.003605	32.68%
Ba 233.527	3238.7	0.04201 mg/L		0.000667	0.04201 mg/L		0.000667	1.59%
Be 313.107	-702.9	-0.00002 mg/L		0.000019	-0.00002 mg/L		0.000019	77.20%
Co 228.616	180.2	0.00502 mg/L		0.000291	0.00502 mg/L		0.000291	5.81%
Cr 267.716	97070.2	1.5211 mg/L		0.01012	1.5211 mg/L		0.01012	0.67%
Cu 324.752	8792.6	0.04486 mg/L		0.000264	0.04486 mg/L		0.000264	0.59%
Fe 273.955	154120.3	6.9888 mg/L		0.03475	6.9888 mg/L		0.03475	0.50%
Mg 279.077	80700.2	5.0681 mg/L		0.03121	5.0681 mg/L		0.03121	0.62%
Mn 257.610	55201.3	0.10329 mg/L		0.000806	0.10329 mg/L		0.000806	0.78%
Ni 231.604	6040.4	0.22599 mg/L		0.002837	0.22599 mg/L		0.002837	1.26%
Pb 220.353	99.7	0.02217 mg/L		0.000019	0.02217 mg/L		0.000019	0.08%
Sb 206.836	35.7	0.00603 mg/L		0.001377	0.00603 mg/L		0.001377	22.83%
Se 196.026	0.2	0.00413 mg/L		0.009767	0.00413 mg/L		0.009767	236.24%

Tl 190.801	1.3	0.00296 mg/L	0.001768	0.00296 mg/L	0.001768	59.66%
V 292.402	1350.4	0.01561 mg/L	0.000321	0.01561 mg/L	0.000321	2.06%
Zn 206.200	2532.5	0.13686 mg/L	0.000360	0.13686 mg/L	0.000360	0.26%
Cd 226.502	39.2	0.00025 mg/L	0.000035	0.00025 mg/L	0.000035	13.76%
Ti 334.940	74310.0	0.15097 mg/L	0.006600	0.15097 mg/L	0.006600	4.37%
Ca 227.546	3766.0	21.490 mg/L	0.0770	21.490 mg/L	0.0770	0.36%
Na 589.592	104495.1	22.569 mg/L	0.1502	22.569 mg/L	0.1502	0.67%
K 766.490	3002.0	2.9292 mg/L	0.09325	2.9292 mg/L	0.09325	3.18%

User canceled analysis.

=====
Analysis Begun

Start Time: 9/4/2012 3:30:04 PM

Plasma On Time: 9/4/2012 12:10:10 PM

Logged In Analyst: mitOptima3

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N3102302 Autosampler Model: AS-93plus

Sample Information File: G:\Metals\SIF\67953.SIF

Batch ID: Null

Results Data Set: B12090404

Results Library: C:\pe\Administrator\Results\Results.mdb

=====
Sequence No.: 1

Autosampler Location: 42

Sample ID: L1820-01C-SL-MW-3A

Date Collected: 9/4/2012 3:30:05 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: L1820-01C-SL-MW-3A

Mean Corrected		Calib.	Sample				
Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD	
Y 360.073	1757166.8	100.08 %	0.789			0.79%	
Lu 261.542	1135026.9	100.6 %	0.78			0.77%	
Ag 328.068	-56.5	-0.00037 mg/L	0.000614	-0.00037 mg/L	0.000614	167.23%	
Al 308.215	296.1	0.01165 mg/L	0.002149	0.01165 mg/L	0.002149	18.45%	
As 188.979	1.6	0.00336 mg/L	0.001467	0.00336 mg/L	0.001467	43.74%	
Ba 233.527	1706.1	0.02212 mg/L	0.000155	0.02212 mg/L	0.000155	0.70%	
Be 313.107	56.2	0.00002 mg/L	0.000024	0.00002 mg/L	0.000024	99.53%	
Co 228.616	60.5	0.00184 mg/L	0.000199	0.00184 mg/L	0.000199	10.76%	
Cr 267.716	1265.4	0.01982 mg/L	0.000523	0.01982 mg/L	0.000523	2.64%	
Cu 324.752	573.6	0.00289 mg/L	0.000181	0.00289 mg/L	0.000181	6.28%	
Fe 273.955	733.5	0.03326 mg/L	0.003616	0.03326 mg/L	0.003616	10.87%	
Mg 279.077	67989.9	4.2730 mg/L	0.02274	4.2730 mg/L	0.02274	0.53%	
Mn 257.610	21139.4	0.03953 mg/L	0.000140	0.03953 mg/L	0.000140	0.35%	
Ni 231.604	4223.7	0.15808 mg/L	0.000161	0.15808 mg/L	0.000161	0.10%	
Pb 220.353	9.1	0.00201 mg/L	0.000671	0.00201 mg/L	0.000671	33.39%	
Sb 206.836	-0.3	-0.00098 mg/L	0.001735	-0.00098 mg/L	0.001735	176.62%	
Se 196.026	7.7	0.01757 mg/L	0.012329	0.01757 mg/L	0.012329	70.15%	
Tl 190.801	-1.0	-0.00154 mg/L	0.004725	-0.00154 mg/L	0.004725	307.06%	
V 292.402	-12.2	-0.00006 mg/L	0.000284	-0.00006 mg/L	0.000284	447.67%	
Zn 206.200	236.2	0.01253 mg/L	0.000292	0.01253 mg/L	0.000292	2.33%	
Cd 226.502	2.7	0.00003 mg/L	0.000074	0.00003 mg/L	0.000074	236.13%	
Ti 334.940	-170.3	-0.00008 mg/L	0.000035	-0.00008 mg/L	0.000035	43.17%	
Ca 227.546	3607.4	20.649 mg/L	0.0643	20.649 mg/L	0.0643	0.31%	
Na 589.592	104526.4	22.576 mg/L	0.2978	22.576 mg/L	0.2978	1.32%	
K 766.490	2567.3	2.5050 mg/L	0.07854	2.5050 mg/L	0.07854	3.14%	

=====
Sequence No.: 2

Autosampler Location: 43

Sample ID: L1820-02B-SL-MW-3B

Date Collected: 9/4/2012 3:33:45 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Mean Data: L1820-02B-SL-MW-3B

	Mean Corrected		Calib.		Sample			
Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 360.073	1806978.8	102.92	%	0.699				0.68%
Lu 261.542	1166685.9	103.4	%	0.69				0.67%
Ag 328.068	-110.4	-0.00074	mg/L	0.000400	-0.00074	mg/L	0.000400	54.16%
Al 308.215	76662.7	4.1468	mg/L	0.08649	4.1468	mg/L	0.08649	2.09%
As 188.979	0.8	0.01038	mg/L	0.004752	0.01038	mg/L	0.004752	45.76%
Ba 233.527	4970.9	0.06447	mg/L	0.001488	0.06447	mg/L	0.001488	2.31%
Be 313.107	-571.3	0.00004	mg/L	0.000054	0.00004	mg/L	0.000054	137.99%
Co 228.616	95.6	0.00243	mg/L	0.000119	0.00243	mg/L	0.000119	4.91%
Cr 267.716	59896.6	0.93853	mg/L	0.015352	0.93853	mg/L	0.015352	1.64%
Cu 324.752	10954.7	0.05571	mg/L	0.001170	0.05571	mg/L	0.001170	2.10%

Fe 273.955	147574.7	6.6920 mg/L	0.12067	6.6920 mg/L	0.12067	1.80%
Mg 279.077	63808.3	4.0079 mg/L	0.06761	4.0079 mg/L	0.06761	1.69%
Mn 257.610	161778.1	0.30286 mg/L	0.004015	0.30286 mg/L	0.004015	1.33%
Ni 231.604	771.7	0.02878 mg/L	0.000123	0.02878 mg/L	0.000123	0.43%
Pb 220.353	113.8	0.02524 mg/L	0.001117	0.02524 mg/L	0.001117	4.43%
Sb 206.836	19.7	0.00135 mg/L	0.001477	0.00135 mg/L	0.001477	109.23%
Se 196.026	1.8	0.00751 mg/L	0.010509	0.00751 mg/L	0.010509	139.89%
Tl 190.801	0.1	0.00109 mg/L	0.005002	0.00109 mg/L	0.005002	457.22%
V 292.402	1483.8	0.01546 mg/L	0.000115	0.01546 mg/L	0.000115	0.74%
Zn 206.200	3837.5	0.20464 mg/L	0.005132	0.20464 mg/L	0.005132	2.51%
Cd 226.502	51.3	0.00050 mg/L	0.000135	0.00050 mg/L	0.000135	26.77%
Ti 334.940	76214.6	0.15475 mg/L	0.022055	0.15475 mg/L	0.022055	14.25%
Ca 227.546	1760.5	10.017 mg/L	0.0686	10.017 mg/L	0.0686	0.68%
Na 589.592	286556.1	61.892 mg/L	1.3122	61.892 mg/L	1.3122	2.12%
K 766.490	2729.8	2.6636 mg/L	0.03479	2.6636 mg/L	0.03479	1.31%

Sequence No.: 3

Sample ID: L1820-02C-SL-MW-3B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 44

Date Collected: 9/4/2012 3:37:32 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-02C-SL-MW-3B

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1750631.5	99.711 %		0.5297				0.53%
Lu 261.542	1132514.2	100.3 %		0.59				0.59%
Ag 328.068	-71.9	-0.00046 mg/L		0.000760	-0.00046 mg/L		0.000760	164.08%
Al 308.215	257.9	0.01210 mg/L		0.001596	0.01210 mg/L		0.001596	13.19%
As 188.979	0.6	0.00111 mg/L		0.002942	0.00111 mg/L		0.002942	264.88%
Ba 233.527	2056.7	0.02666 mg/L		0.000348	0.02666 mg/L		0.000348	1.30%
Be 313.107	-26.1	-0.00001 mg/L		0.000017	-0.00001 mg/L		0.000017	147.84%
Co 228.616	-7.1	-0.00022 mg/L		0.000312	-0.00022 mg/L		0.000312	142.40%
Cr 267.716	198.3	0.00310 mg/L		0.000226	0.00310 mg/L		0.000226	7.27%
Cu 324.752	451.0	0.00227 mg/L		0.000605	0.00227 mg/L		0.000605	26.67%
Fe 273.955	277.7	0.01259 mg/L		0.000090	0.01259 mg/L		0.000090	0.72%
Mg 279.077	48934.9	3.0755 mg/L		0.03802	3.0755 mg/L		0.03802	1.24%
Mn 257.610	14211.3	0.02658 mg/L		0.000395	0.02658 mg/L		0.000395	1.49%
Ni 231.604	155.8	0.00582 mg/L		0.000554	0.00582 mg/L		0.000554	9.51%
Pb 220.353	-5.2	-0.00114 mg/L		0.001024	-0.00114 mg/L		0.001024	90.07%
Sb 206.836	3.4	0.00312 mg/L		0.001526	0.00312 mg/L		0.001526	48.92%
Se 196.026	6.8	0.01553 mg/L		0.009065	0.01553 mg/L		0.009065	58.38%
Tl 190.801	0.2	0.00048 mg/L		0.001649	0.00048 mg/L		0.001649	341.99%
V 292.402	-91.3	-0.00081 mg/L		0.000092	-0.00081 mg/L		0.000092	11.32%
Zn 206.200	345.8	0.01825 mg/L		0.000131	0.01825 mg/L		0.000131	0.72%
Cd 226.502	5.6	0.00009 mg/L		0.000081	0.00009 mg/L		0.000081	89.11%
Ti 334.940	-24.6	0.00003 mg/L		0.000091	0.00003 mg/L		0.000091	289.33%
Ca 227.546	1438.0	8.2325 mg/L		0.11371	8.2325 mg/L		0.11371	1.38%
Na 589.592	296149.9	63.964 mg/L		0.4500	63.964 mg/L		0.4500	0.70%
K 766.490	2173.8	2.1211 mg/L		0.02364	2.1211 mg/L		0.02364	1.11%

Sequence No.: 4

Sample ID: L1820-02CSD-SL-MW-3B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 45

Date Collected: 9/4/2012 3:41:22 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-02CSD-SL-MW-3B

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1758304.4	100.15 %		1.080				1.08%
Lu 261.542	1133760.3	100.4 %		1.09				1.09%
Ag 328.068	-79.2	-0.00050 mg/L		0.000391	-0.00050 mg/L		0.000391	77.40%
Al 308.215	51.7	0.00243 mg/L		0.002058	0.00243 mg/L		0.002058	84.75%
As 188.979	1.8	0.00333 mg/L		0.000544	0.00333 mg/L		0.000544	16.34%
Ba 233.527	409.5	0.00531 mg/L		0.000128	0.00531 mg/L		0.000128	2.41%
Be 313.107	-42.0	-0.00002 mg/L		0.000016	-0.00002 mg/L		0.000016	89.58%

Co 228.616	-5.6	-0.00017 mg/L	0.000140	-0.00017 mg/L	0.000140	80.66%
Cr 267.716	137.5	0.00215 mg/L	0.000175	0.00215 mg/L	0.000175	8.11%
Cu 324.752	34.6	0.00017 mg/L	0.000162	0.00017 mg/L	0.000162	92.53%
Fe 273.955	286.3	0.01298 mg/L	0.001275	0.01298 mg/L	0.001275	9.82%
Mg 279.077	9977.1	0.62704 mg/L	0.017218	0.62704 mg/L	0.017218	2.75%
Mn 257.610	2961.6	0.00554 mg/L	0.000107	0.00554 mg/L	0.000107	1.92%
Ni 231.604	30.3	0.00113 mg/L	0.000188	0.00113 mg/L	0.000188	16.64%
Pb 220.353	1.4	0.00030 mg/L	0.001103	0.00030 mg/L	0.001103	362.85%
Sb 206.836	-3.2	-0.00315 mg/L	0.005803	-0.00315 mg/L	0.005803	184.46%
Se 196.026	5.4	0.01240 mg/L	0.005999	0.01240 mg/L	0.005999	48.38%
Tl 190.801	0.4	0.00068 mg/L	0.001351	0.00068 mg/L	0.001351	197.40%
V 292.402	-49.9	-0.00044 mg/L	0.000231	-0.00044 mg/L	0.000231	52.17%
Zn 206.200	74.3	0.00392 mg/L	0.000323	0.00392 mg/L	0.000323	8.22%
Cd 226.502	6.3	0.00012 mg/L	0.000180	0.00012 mg/L	0.000180	149.57%
Ti 334.940	-19.1	-0.00002 mg/L	0.000119	-0.00002 mg/L	0.000119	513.14%
Ca 227.546	284.1	1.6266 mg/L	0.04541	1.6266 mg/L	0.04541	2.79%
Na 589.592	58566.7	12.650 mg/L	0.0534	12.650 mg/L	0.0534	0.42%
K 766.490	417.0	0.40690 mg/L	0.057249	0.40690 mg/L	0.057249	14.07%

Sequence No.: 5

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 9/4/2012 3:45:03 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1723106.5	98.144 %	0.4793			0.49%
Lu 261.542	1111387.6	98.46 %	0.486			0.49%
Ag 328.068	198370.5	1.2627 mg/L	0.01071	1.2627 mg/L	0.01071	0.85%
QC value within limits for Ag 328.068 Recovery = 101.01%						
Al 308.215	187145.2	10.119 mg/L	0.0887	10.119 mg/L	0.0887	0.88%
QC value within limits for Al 308.215 Recovery = 101.19%						
As 188.979	276.6	0.50248 mg/L	0.003184	0.50248 mg/L	0.003184	0.63%
QC value within limits for As 188.979 Recovery = 100.50%						
Ba 233.527	809460.5	10.498 mg/L	0.0315	10.498 mg/L	0.0315	0.30%
QC value within limits for Ba 233.527 Recovery = 104.98%						
Be 313.107	578730.8	0.25071 mg/L	0.000632	0.25071 mg/L	0.000632	0.25%
QC value within limits for Be 313.107 Recovery = 100.28%						
Co 228.616	85140.7	2.6306 mg/L	0.02772	2.6306 mg/L	0.02772	1.05%
QC value within limits for Co 228.616 Recovery = 105.22%						
Cr 267.716	64409.6	1.0096 mg/L	0.00899	1.0096 mg/L	0.00899	0.89%
QC value within limits for Cr 267.716 Recovery = 100.96%						
Cu 324.752	249449.6	1.2556 mg/L	0.01367	1.2556 mg/L	0.01367	1.09%
QC value within limits for Cu 324.752 Recovery = 100.45%						
Fe 273.955	113665.1	5.1584 mg/L	0.05682	5.1584 mg/L	0.05682	1.10%
QC value within limits for Fe 273.955 Recovery = 103.17%						
Mg 279.077	408090.8	25.646 mg/L	0.0803	25.646 mg/L	0.0803	0.31%
QC value within limits for Mg 279.077 Recovery = 102.58%						
Mn 257.610	1365072.9	2.5554 mg/L	0.00670	2.5554 mg/L	0.00670	0.26%
QC value within limits for Mn 257.610 Recovery = 102.22%						
Ni 231.604	69482.0	2.6002 mg/L	0.02846	2.6002 mg/L	0.02846	1.09%
QC value within limits for Ni 231.604 Recovery = 104.01%						
Pb 220.353	2322.6	0.50722 mg/L	0.001932	0.50722 mg/L	0.001932	0.38%
QC value within limits for Pb 220.353 Recovery = 101.44%						
Sb 206.836	566.0	0.53156 mg/L	0.009595	0.53156 mg/L	0.009595	1.81%
QC value within limits for Sb 206.836 Recovery = 106.31%						
Se 196.026	223.1	0.51632 mg/L	0.003792	0.51632 mg/L	0.003792	0.73%
QC value within limits for Se 196.026 Recovery = 103.26%						
Tl 190.801	301.0	0.47559 mg/L	0.008550	0.47559 mg/L	0.008550	1.80%
QC value within limits for Tl 190.801 Recovery = 95.12%						
V 292.402	282072.5	2.5360 mg/L	0.02376	2.5360 mg/L	0.02376	0.94%
QC value within limits for V 292.402 Recovery = 101.44%						
Zn 206.200	48742.4	2.5754 mg/L	0.03020	2.5754 mg/L	0.03020	1.17%
QC value within limits for Zn 206.200 Recovery = 103.01%						
Cd 226.502	12381.0	0.24766 mg/L	0.003056	0.24766 mg/L	0.003056	1.23%
QC value within limits for Cd 226.502 Recovery = 99.06%						
Ti 334.940	254153.7	0.51593 mg/L	0.002780	0.51593 mg/L	0.002780	0.54%

QC value within limits for Ti 334.940 Recovery = Not calculated
 Ca 227.546 4448.0 24.593 mg/L 0.1801 24.593 mg/L 0.1801 0.73%
 QC value within limits for Ca 227.546 Recovery = 98.37%
 Na 589.592 117496.7 25.378 mg/L 0.4465 25.378 mg/L 0.4465 1.76%
 QC value within limits for Na 589.592 Recovery = 101.51%
 K 766.490 25657.1 25.035 mg/L 0.4109 25.035 mg/L 0.4109 1.64%
 QC value within limits for K 766.490 Recovery = 100.14%
 All analyte(s) passed QC.

Sequence No.: 6

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 9/4/2012 3:48:45 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 360.073	1795946.5	102.29 %		1.480			1.45%
Lu 261.542	1150264.0	101.9 %		1.32			1.29%
Ag 328.068	-128.2	-0.00081 mg/L		0.000331	-0.00081 mg/L	0.000331	40.63%
QC value within limits for Ag 328.068							Recovery = Not calculated
Al 308.215	82.4	0.00446 mg/L		0.001201	0.00446 mg/L	0.001201	26.91%
QC value within limits for Al 308.215							Recovery = Not calculated
As 188.979	0.9	0.00167 mg/L		0.001987	0.00167 mg/L	0.001987	119.15%
QC value within limits for As 188.979							Recovery = Not calculated
Ba 233.527	21.1	0.00027 mg/L		0.000177	0.00027 mg/L	0.000177	64.67%
QC value within limits for Ba 233.527							Recovery = Not calculated
Be 313.107	5.0	0.00000 mg/L		0.000005	0.00000 mg/L	0.000005	249.25%
QC value within limits for Be 313.107							Recovery = Not calculated
Co 228.616	-3.0	-0.00009 mg/L		0.000124	-0.00009 mg/L	0.000124	135.35%
QC value within limits for Co 228.616							Recovery = Not calculated
Cr 267.716	-6.7	-0.00010 mg/L		0.000140	-0.00010 mg/L	0.000140	133.44%
QC value within limits for Cr 267.716							Recovery = Not calculated
Cu 324.752	25.3	0.00013 mg/L		0.000258	0.00013 mg/L	0.000258	203.17%
QC value within limits for Cu 324.752							Recovery = Not calculated
Fe 273.955	-20.9	-0.00095 mg/L		0.000462	-0.00095 mg/L	0.000462	48.64%
QC value within limits for Fe 273.955							Recovery = Not calculated
Mg 279.077	118.9	0.00747 mg/L		0.004697	0.00747 mg/L	0.004697	62.88%
QC value within limits for Mg 279.077							Recovery = Not calculated
Mn 257.610	30.4	0.00006 mg/L		0.000071	0.00006 mg/L	0.000071	125.03%
QC value within limits for Mn 257.610							Recovery = Not calculated
Ni 231.604	10.8	0.00040 mg/L		0.000304	0.00040 mg/L	0.000304	75.38%
QC value within limits for Ni 231.604							Recovery = Not calculated
Pb 220.353	3.0	0.00065 mg/L		0.001074	0.00065 mg/L	0.001074	166.30%
QC value within limits for Pb 220.353							Recovery = Not calculated
Sb 206.836	-2.1	-0.00201 mg/L		0.005354	-0.00201 mg/L	0.005354	266.85%
QC value within limits for Sb 206.836							Recovery = Not calculated
Se 196.026	4.4	0.01010 mg/L		0.001130	0.01010 mg/L	0.001130	11.19%
QC value within limits for Se 196.026							Recovery = Not calculated
Tl 190.801	-0.5	-0.00086 mg/L		0.002139	-0.00086 mg/L	0.002139	248.85%
QC value within limits for Tl 190.801							Recovery = Not calculated
V 292.402	-35.6	-0.00032 mg/L		0.000126	-0.00032 mg/L	0.000126	39.51%
QC value within limits for V 292.402							Recovery = Not calculated
Zn 206.200	20.2	0.00106 mg/L		0.000206	0.00106 mg/L	0.000206	19.39%
QC value within limits for Zn 206.200							Recovery = Not calculated
Cd 226.502	6.9	0.00014 mg/L		0.000069	0.00014 mg/L	0.000069	49.66%
QC value within limits for Cd 226.502							Recovery = Not calculated
Ti 334.940	2.2	0.00000 mg/L		0.000021	0.00000 mg/L	0.000021	479.81%
QC value within limits for Ti 334.940							Recovery = Not calculated
Ca 227.546	-0.7	-0.00386 mg/L		0.026158	-0.00386 mg/L	0.026158	678.02%
QC value within limits for Ca 227.546							Recovery = Not calculated
Na 589.592	239.9	0.05182 mg/L		0.017213	0.05182 mg/L	0.017213	33.22%
QC value within limits for Na 589.592							Recovery = Not calculated
K 766.490	-1.7	-0.00167 mg/L		0.010521	-0.00167 mg/L	0.010521	628.51%
QC value within limits for K 766.490							Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: L1820-03B-SL-MW-6A

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 46

Date Collected: 9/4/2012 3:52:27 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-03B-SL-MW-6A

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1759651.5	100.23	%	0.943				0.94%
Lu 261.542	1134987.3	100.6	%	0.98				0.97%
Ag 328.068	-122.9	-0.00084	mg/L	0.000245	-0.00084	mg/L	0.000245	29.29%
Al 308.215	30565.7	1.6493	mg/L	0.00975	1.6493	mg/L	0.00975	0.59%
As 188.979	1.3	0.00333	mg/L	0.003659	0.00333	mg/L	0.003659	109.94%
Ba 233.527	5565.5	0.07216	mg/L	0.000346	0.07216	mg/L	0.000346	0.48%
Be 313.107	-230.7	-0.00002	mg/L	0.000007	-0.00002	mg/L	0.000007	43.31%
Co 228.616	49.2	0.00138	mg/L	0.000047	0.00138	mg/L	0.000047	3.42%
Cr 267.716	4349.9	0.06810	mg/L	0.000565	0.06810	mg/L	0.000565	0.83%
Cu 324.752	5085.7	0.02571	mg/L	0.000191	0.02571	mg/L	0.000191	0.74%
Fe 273.955	31863.8	1.4449	mg/L	0.01098	1.4449	mg/L	0.01098	0.76%
Mg 279.077	58778.6	3.6940	mg/L	0.02555	3.6940	mg/L	0.02555	0.69%
Mn 257.610	161781.8	0.30287	mg/L	0.002195	0.30287	mg/L	0.002195	0.72%
Ni 231.604	392.7	0.01466	mg/L	0.000376	0.01466	mg/L	0.000376	2.57%
Pb 220.353	57.5	0.01271	mg/L	0.000488	0.01271	mg/L	0.000488	3.84%
Sb 206.836	2.3	0.00062	mg/L	0.001071	0.00062	mg/L	0.001071	171.90%
Se 196.026	0.5	0.00185	mg/L	0.007670	0.00185	mg/L	0.007670	413.97%
Tl 190.801	1.7	0.00315	mg/L	0.007139	0.00315	mg/L	0.007139	226.68%
V 292.402	370.6	0.00346	mg/L	0.000087	0.00346	mg/L	0.000087	2.52%
Zn 206.200	1408.1	0.07460	mg/L	0.000102	0.07460	mg/L	0.000102	0.14%
Cd 226.502	23.4	0.00030	mg/L	0.000069	0.00030	mg/L	0.000069	22.78%
Ti 334.940	22446.0	0.04589	mg/L	0.001367	0.04589	mg/L	0.001367	2.98%
Ca 227.546	3941.7	22.555	mg/L	0.0489	22.555	mg/L	0.0489	0.22%
Na 589.592	238631.8	51.541	mg/L	0.5326	51.541	mg/L	0.5326	1.03%
K 766.490	4296.9	4.1926	mg/L	0.12457	4.1926	mg/L	0.12457	2.97%

=====

Sequence No.: 8

Sample ID: L1820-03C-SL-MW-6A

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 47

Date Collected: 9/4/2012 3:56:15 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-03C-SL-MW-6A

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1721996.0	98.080	%	0.2711				0.28%
Lu 261.542	1112018.9	98.52	%	0.413				0.42%
Ag 328.068	-21.9	-0.00021	mg/L	0.000209	-0.00021	mg/L	0.000209	100.72%
Al 308.215	280.7	0.00988	mg/L	0.002681	0.00988	mg/L	0.002681	27.13%
As 188.979	-0.1	0.00010	mg/L	0.003841	0.00010	mg/L	0.003841	>999.9%
Ba 233.527	5631.8	0.07301	mg/L	0.000443	0.07301	mg/L	0.000443	0.61%
Be 313.107	20.8	0.00001	mg/L	0.000019	0.00001	mg/L	0.000019	238.60%
Co 228.616	14.8	0.00046	mg/L	0.000175	0.00046	mg/L	0.000175	38.12%
Cr 267.716	41.0	0.00058	mg/L	0.000619	0.00058	mg/L	0.000619	107.23%
Cu 324.752	298.0	0.00150	mg/L	0.000286	0.00150	mg/L	0.000286	19.05%
Fe 273.955	91.6	0.00415	mg/L	0.000355	0.00415	mg/L	0.000355	8.56%
Mg 279.077	57448.1	3.6105	mg/L	0.02107	3.6105	mg/L	0.02107	0.58%
Mn 257.610	169271.6	0.31689	mg/L	0.000745	0.31689	mg/L	0.000745	0.23%
Ni 231.604	92.4	0.00344	mg/L	0.000158	0.00344	mg/L	0.000158	4.60%
Pb 220.353	3.4	0.00076	mg/L	0.001364	0.00076	mg/L	0.001364	179.71%
Sb 206.836	0.4	0.00005	mg/L	0.003118	0.00005	mg/L	0.003118	>999.9%
Se 196.026	4.3	0.00988	mg/L	0.014572	0.00988	mg/L	0.014572	147.47%
Tl 190.801	2.2	0.00380	mg/L	0.001173	0.00380	mg/L	0.001173	30.82%
V 292.402	-75.0	-0.00067	mg/L	0.000243	-0.00067	mg/L	0.000243	36.13%
Zn 206.200	319.9	0.01699	mg/L	0.000281	0.01699	mg/L	0.000281	1.65%
Cd 226.502	12.8	0.00020	mg/L	0.000078	0.00020	mg/L	0.000078	39.97%
Ti 334.940	-238.8	-0.00016	mg/L	0.000094	-0.00016	mg/L	0.000094	59.69%
Ca 227.546	4095.9	23.451	mg/L	0.0633	23.451	mg/L	0.0633	0.27%
Na 589.592	266507.4	57.562	mg/L	0.5459	57.562	mg/L	0.5459	0.95%

K 766.490 3675.5 3.5863 mg/L 0.00703 3.5863 mg/L 0.00703 0.20%

Sequence No.: 9

Sample ID: L1820-04B-SL-MW-6B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 48

Date Collected: 9/4/2012 4:00:03 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-04B-SL-MW-6B

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1783506.4	101.58	%	0.650				0.64%
Lu 261.542	1145987.0	101.5	%	0.73				0.72%
Ag 328.068	-115.6	-0.00073	mg/L	0.000125	-0.00073	mg/L	0.000125	17.11%
Al 308.215	74495.8	4.0297	mg/L	0.03890	4.0297	mg/L	0.03890	0.97%
As 188.979	4.5	0.00866	mg/L	0.001152	0.00866	mg/L	0.001152	13.30%
Ba 233.527	2331.5	0.03024	mg/L	0.000149	0.03024	mg/L	0.000149	0.49%
Be 313.107	-562.8	-0.00001	mg/L	0.000007	-0.00001	mg/L	0.000007	126.87%
Co 228.616	50.8	0.00120	mg/L	0.000013	0.00120	mg/L	0.000013	1.12%
Cr 267.716	848.2	0.01328	mg/L	0.000057	0.01328	mg/L	0.000057	0.43%
Cu 324.752	7732.6	0.03917	mg/L	0.000047	0.03917	mg/L	0.000047	0.12%
Fe 273.955	67902.2	3.0791	mg/L	0.02519	3.0791	mg/L	0.02519	0.82%
Mg 279.077	28722.3	1.8051	mg/L	0.01439	1.8051	mg/L	0.01439	0.80%
Mn 257.610	36987.4	0.06923	mg/L	0.007730	0.06923	mg/L	0.007730	11.16%
Ni 231.604	224.6	0.00832	mg/L	0.000292	0.00832	mg/L	0.000292	3.51%
Pb 220.353	99.1	0.02204	mg/L	0.001621	0.02204	mg/L	0.001621	7.36%
Sb 206.836	5.0	0.00436	mg/L	0.001733	0.00436	mg/L	0.001733	39.74%
Se 196.026	5.7	0.01446	mg/L	0.000938	0.01446	mg/L	0.000938	6.49%
Tl 190.801	-0.2	0.00011	mg/L	0.003614	0.00011	mg/L	0.003614	>999.9%
V 292.402	912.1	0.00813	mg/L	0.000605	0.00813	mg/L	0.000605	7.44%
Zn 206.200	1527.2	0.08084	mg/L	0.000132	0.08084	mg/L	0.000132	0.16%
Cd 226.502	25.0	0.00024	mg/L	0.000065	0.00024	mg/L	0.000065	27.30%
Ti 334.940	63395.9	0.12892	mg/L	0.008346	0.12892	mg/L	0.008346	6.47%
Ca 227.546	2061.3	11.776	mg/L	0.0758	11.776	mg/L	0.0758	0.64%
Na 589.592	15576.6	3.3643	mg/L	0.02679	3.3643	mg/L	0.02679	0.80%
K 766.490	3159.9	3.0833	mg/L	0.01990	3.0833	mg/L	0.01990	0.65%

Sequence No.: 10

Sample ID: L1820-04C-SL-MW-6B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 49

Date Collected: 9/4/2012 4:03:45 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-04C-SL-MW-6B

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1826310.8	104.02	%	0.935				0.90%
Lu 261.542	1176139.0	104.2	%	0.90				0.86%
Ag 328.068	-142.5	-0.00091	mg/L	0.000469	-0.00091	mg/L	0.000469	51.78%
Al 308.215	1668.3	0.08673	mg/L	0.000696	0.08673	mg/L	0.000696	0.80%
As 188.979	1.8	0.00336	mg/L	0.002458	0.00336	mg/L	0.002458	73.23%
Ba 233.527	1123.1	0.01456	mg/L	0.000108	0.01456	mg/L	0.000108	0.74%
Be 313.107	39.4	0.00002	mg/L	0.000024	0.00002	mg/L	0.000024	140.23%
Co 228.616	0.2	0.00001	mg/L	0.000154	0.00001	mg/L	0.000154	>999.9%
Cr 267.716	-3.3	-0.00005	mg/L	0.000544	-0.00005	mg/L	0.000544	998.48%
Cu 324.752	1063.7	0.00535	mg/L	0.000226	0.00535	mg/L	0.000226	4.22%
Fe 273.955	184.7	0.00838	mg/L	0.000631	0.00838	mg/L	0.000631	7.53%
Mg 279.077	40128.5	2.5220	mg/L	0.03789	2.5220	mg/L	0.03789	1.50%
Mn 257.610	6317.4	0.01180	mg/L	0.000137	0.01180	mg/L	0.000137	1.16%
Ni 231.604	59.4	0.00221	mg/L	0.000232	0.00221	mg/L	0.000232	10.48%
Pb 220.353	7.4	0.00161	mg/L	0.001649	0.00161	mg/L	0.001649	102.55%
Sb 206.836	3.1	0.00279	mg/L	0.002347	0.00279	mg/L	0.002347	84.26%
Se 196.026	2.2	0.00503	mg/L	0.012782	0.00503	mg/L	0.012782	253.95%
Tl 190.801	0.2	0.00034	mg/L	0.004096	0.00034	mg/L	0.004096	>999.9%
V 292.402	32.3	0.00029	mg/L	0.000355	0.00029	mg/L	0.000355	123.11%
Zn 206.200	177.9	0.00938	mg/L	0.000118	0.00938	mg/L	0.000118	1.26%
Cd 226.502	7.6	0.00011	mg/L	0.000095	0.00011	mg/L	0.000095	89.09%

Ti 334.940	-33.3	0.00018 mg/L	0.000130	0.00018 mg/L	0.000130	73.03%
Ca 227.546	3032.8	17.365 mg/L	0.1039	17.365 mg/L	0.1039	0.60%
Na 589.592	49351.2	10.659 mg/L	0.1150	10.659 mg/L	0.1150	1.08%
K 766.490	2320.8	2.2645 mg/L	0.05529	2.2645 mg/L	0.05529	2.44%

Sequence No.: 11

Sample ID: L1820-06B-SL-MW-5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 50

Date Collected: 9/4/2012 4:07:27 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-06B-SL-MW-5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1744937.9	99.387	%	0.5510				0.55%
Lu 261.542	1127620.2	99.90	%	0.553				0.55%
Ag 328.068	358.2	0.00125	mg/L	0.000294	0.00125	mg/L	0.000294	23.48%
Al 308.215	1119.2	0.04931	mg/L	0.008851	0.04931	mg/L	0.008851	17.95%
As 188.979	1.9	0.00282	mg/L	0.002084	0.00282	mg/L	0.002084	73.88%
Ba 233.527	3060.3	0.03968	mg/L	0.000244	0.03968	mg/L	0.000244	0.62%
Be 313.107	-53.1	-0.00002	mg/L	0.000012	-0.00002	mg/L	0.000012	56.32%
Co 228.616	8.9	0.00027	mg/L	0.000103	0.00027	mg/L	0.000103	38.48%
Cr 267.716	2351.2	0.03587	mg/L	0.000673	0.03587	mg/L	0.000673	1.88%
Cu 324.752	436.8	0.00221	mg/L	0.000276	0.00221	mg/L	0.000276	12.48%
Fe 273.955	4148.0	0.18809	mg/L	0.004100	0.18809	mg/L	0.004100	2.18%
Mg 279.077	39464.7	2.4802	mg/L	0.01884	2.4802	mg/L	0.01884	0.76%
Mn 257.610	2554614.4	4.7830	mg/L	0.01675	4.7830	mg/L	0.01675	0.35%
Ni 231.604	145.9	0.00545	mg/L	0.000115	0.00545	mg/L	0.000115	2.11%
Pb 220.353	3.7	0.00110	mg/L	0.001086	0.00110	mg/L	0.001086	98.81%
Sb 206.836	2.2	0.00119	mg/L	0.004643	0.00119	mg/L	0.004643	390.01%
Se 196.026	5.2	0.01203	mg/L	0.005918	0.01203	mg/L	0.005918	49.20%
Tl 190.801	3.2	0.00696	mg/L	0.005248	0.00696	mg/L	0.005248	75.42%
V 292.402	-78.7	-0.00062	mg/L	0.000369	-0.00062	mg/L	0.000369	59.56%
Zn 206.200	27.1	0.00342	mg/L	0.000250	0.00342	mg/L	0.000250	7.30%
Cd 226.502	28.5	0.00051	mg/L	0.000048	0.00051	mg/L	0.000048	9.40%
Ti 334.940	489.2	0.00126	mg/L	0.001216	0.00126	mg/L	0.001216	96.31%
Ca 227.546	3339.4	19.101	mg/L	0.1242	19.101	mg/L	0.1242	0.65%
Na 589.592	597274.0	129.00	mg/L	0.471	129.00	mg/L	0.471	0.36%
K 766.490	1927.9	1.8811	mg/L	0.05835	1.8811	mg/L	0.05835	3.10%

Sequence No.: 12

Sample ID: L1820-06C-SL-MW-5

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 51

Date Collected: 9/4/2012 4:11:15 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-06C-SL-MW-5

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 360.073	1759249.6	100.20	%	0.783				0.78%
Lu 261.542	1137081.6	100.7	%	0.88				0.88%
Ag 328.068	207.4	0.00033	mg/L	0.001002	0.00033	mg/L	0.001002	303.88%
Al 308.215	294.5	0.00503	mg/L	0.003845	0.00503	mg/L	0.003845	76.45%
As 188.979	2.8	0.00416	mg/L	0.003435	0.00416	mg/L	0.003435	82.62%
Ba 233.527	2980.3	0.03864	mg/L	0.000185	0.03864	mg/L	0.000185	0.48%
Be 313.107	16.0	0.00001	mg/L	0.000017	0.00001	mg/L	0.000017	274.03%
Co 228.616	-0.1	0.00000	mg/L	0.000325	0.00000	mg/L	0.000325	>999.9%
Cr 267.716	203.8	0.00225	mg/L	0.000258	0.00225	mg/L	0.000258	11.49%
Cu 324.752	136.0	0.00068	mg/L	0.000042	0.00068	mg/L	0.000042	6.14%
Fe 273.955	11.6	0.00053	mg/L	0.000378	0.00053	mg/L	0.000378	71.77%
Mg 279.077	38633.8	2.4281	mg/L	0.01839	2.4281	mg/L	0.01839	0.76%
Mn 257.610	2473122.5	4.6304	mg/L	0.02469	4.6304	mg/L	0.02469	0.53%
Ni 231.604	104.8	0.00391	mg/L	0.000413	0.00391	mg/L	0.000413	10.58%
Pb 220.353	-2.6	-0.00027	mg/L	0.001518	-0.00027	mg/L	0.001518	555.23%
Sb 206.836	-0.6	-0.00083	mg/L	0.002102	-0.00083	mg/L	0.002102	252.42%
Se 196.026	3.3	0.00766	mg/L	0.001541	0.00766	mg/L	0.001541	20.11%
Tl 190.801	5.7	0.01105	mg/L	0.003615	0.01105	mg/L	0.003615	32.72%

V 292.402	-95.4	-0.00085 mg/L	0.000355	-0.00085 mg/L	0.000355	41.78%
Zn 206.200	22.5	0.00305 mg/L	0.000286	0.00305 mg/L	0.000286	9.36%
Cd 226.502	19.8	0.00035 mg/L	0.000080	0.00035 mg/L	0.000080	22.84%
Ti 334.940	-216.3	-0.00017 mg/L	0.000065	-0.00017 mg/L	0.000065	37.04%
Ca 227.546	3235.1	18.506 mg/L	0.0824	18.506 mg/L	0.0824	0.45%
Na 589.592	576370.0	124.49 mg/L	1.227	124.49 mg/L	1.227	0.99%
K 766.490	1984.2	1.9360 mg/L	0.09775	1.9360 mg/L	0.09775	5.05%

Sequence No.: 13

Sample ID: L1820-07B-SL-MW-4

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 52

Date Collected: 9/4/2012 4:15:03 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-07B-SL-MW-4

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD	
	Intensity	Conc.			Conc.	Units		Std.Dev.
Y 360.073	1791626.7	102.05	%	0.995			0.98%	
Lu 261.542	1152441.8	102.1	%	0.96			0.94%	
Ag 328.068	185.5	0.00106	mg/L	0.000183	0.00106	mg/L	0.000183	17.34%
Al 308.215	348.6	0.01656	mg/L	0.005486	0.01656	mg/L	0.005486	33.13%
As 188.979	3.4	0.00680	mg/L	0.003560	0.00680	mg/L	0.003560	52.37%
Ba 233.527	1161.6	0.01506	mg/L	0.000036	0.01506	mg/L	0.000036	0.24%
Be 313.107	101.5	0.00004	mg/L	0.000020	0.00004	mg/L	0.000020	46.85%
Co 228.616	328.0	0.00992	mg/L	0.000069	0.00992	mg/L	0.000069	0.70%
Cr 267.716	34.6	0.00043	mg/L	0.000198	0.00043	mg/L	0.000198	46.23%
Cu 324.752	56.0	0.00113	mg/L	0.000084	0.00113	mg/L	0.000084	7.41%
Fe 273.955	202727.2	9.1929	mg/L	0.08140	9.1929	mg/L	0.08140	0.89%
Mg 279.077	17592.3	1.1057	mg/L	0.01039	1.1057	mg/L	0.01039	0.94%
Mn 257.610	299161.2	0.56011	mg/L	0.005072	0.56011	mg/L	0.005072	0.91%
Ni 231.604	85.8	0.00321	mg/L	0.000207	0.00321	mg/L	0.000207	6.45%
Pb 220.353	5.4	0.00101	mg/L	0.001737	0.00101	mg/L	0.001737	171.92%
Sb 206.836	1.8	0.00109	mg/L	0.002994	0.00109	mg/L	0.002994	275.09%
Se 196.026	-0.9	0.00175	mg/L	0.012475	0.00175	mg/L	0.012475	711.99%
Tl 190.801	1.5	0.00381	mg/L	0.006488	0.00381	mg/L	0.006488	170.18%
V 292.402	-133.7	-0.00092	mg/L	0.000243	-0.00092	mg/L	0.000243	26.45%
Zn 206.200	217.9	0.01218	mg/L	0.000257	0.01218	mg/L	0.000257	2.11%
Cd 226.502	44.5	0.00018	mg/L	0.000106	0.00018	mg/L	0.000106	58.19%
Ti 334.940	-55.5	-0.00002	mg/L	0.000130	-0.00002	mg/L	0.000130	829.61%
Ca 227.546	1225.9	6.9421	mg/L	0.08047	6.9421	mg/L	0.08047	1.16%
Na 589.592	44709.2	9.6565	mg/L	0.02075	9.6565	mg/L	0.02075	0.21%
K 766.490	2651.0	2.5867	mg/L	0.10789	2.5867	mg/L	0.10789	4.17%

Sequence No.: 14

Sample ID: L1820-07C-SL-MW-4

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 53

Date Collected: 9/4/2012 4:18:45 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: L1820-07C-SL-MW-4

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Y 360.073	1802553.1	102.67	%	1.199			1.17%
Lu 261.542	1160327.3	102.8	%	1.30			1.27%
Ag 328.068	236.5	0.00138	mg/L	0.000419	0.00138	mg/L	30.37%
Al 308.215	216.7	0.00945	mg/L	0.003276	0.00945	mg/L	34.66%
As 188.979	3.6	0.00726	mg/L	0.001683	0.00726	mg/L	23.17%
Ba 233.527	1154.4	0.01496	mg/L	0.000176	0.01496	mg/L	1.18%
Be 313.107	117.3	0.00005	mg/L	0.000003	0.00005	mg/L	6.83%
Co 228.616	325.0	0.00983	mg/L	0.000210	0.00983	mg/L	2.14%
Cr 267.716	14.4	0.00011	mg/L	0.000396	0.00011	mg/L	347.61%
Cu 324.752	-87.2	0.00039	mg/L	0.000266	0.00039	mg/L	68.72%
Fe 273.955	196996.9	8.9331	mg/L	0.11969	8.9331	mg/L	1.34%
Mg 279.077	17416.8	1.0946	mg/L	0.00421	1.0946	mg/L	0.38%
Mn 257.610	291154.1	0.54512	mg/L	0.007009	0.54512	mg/L	1.29%
Ni 231.604	84.7	0.00317	mg/L	0.000409	0.00317	mg/L	12.91%
Pb 220.353	6.7	0.00130	mg/L	0.001628	0.00130	mg/L	124.84%

Sb 206.836	-0.2	-0.00080 mg/L	0.002991	-0.00080 mg/L	0.002991	375.97%
Se 196.026	0.9	0.00573 mg/L	0.007857	0.00573 mg/L	0.007857	137.07%
Tl 190.801	-1.6	-0.00134 mg/L	0.004902	-0.00134 mg/L	0.004902	365.11%
V 292.402	-200.7	-0.00153 mg/L	0.000101	-0.00153 mg/L	0.000101	6.63%
Zn 206.200	128.6	0.00745 mg/L	0.000280	0.00745 mg/L	0.000280	3.76%
Cd 226.502	34.7	0.00001 mg/L	0.000066	0.00001 mg/L	0.000066	>999.9%
Ti 334.940	-77.1	-0.00006 mg/L	0.000075	-0.00006 mg/L	0.000075	127.78%
Ca 227.546	1220.4	6.9129 mg/L	0.01881	6.9129 mg/L	0.01881	0.27%
Na 589.592	44747.6	9.6648 mg/L	0.11139	9.6648 mg/L	0.11139	1.15%
K 766.490	2637.8	2.5737 mg/L	0.04183	2.5737 mg/L	0.04183	1.63%

Sequence No.: 15

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 3

Date Collected: 9/4/2012 4:22:25 PM

Data Type: Original

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	1724770.3	98.238 %	0.5527			0.56%
Lu 261.542	1112587.6	98.57 %	0.440			0.45%
Ag 328.068	199236.4	1.2682 mg/L	0.01246	1.2682 mg/L	0.01246	0.98%
QC value within limits for Ag 328.068 Recovery = 101.45%						
Al 308.215	188366.5	10.185 mg/L	0.0969	10.185 mg/L	0.0969	0.95%
QC value within limits for Al 308.215 Recovery = 101.85%						
As 188.979	277.6	0.50424 mg/L	0.004883	0.50424 mg/L	0.004883	0.97%
QC value within limits for As 188.979 Recovery = 100.85%						
Ba 233.527	817945.4	10.608 mg/L	0.0764	10.608 mg/L	0.0764	0.72%
QC value within limits for Ba 233.527 Recovery = 106.08%						
Be 313.107	582972.4	0.25255 mg/L	0.001590	0.25255 mg/L	0.001590	0.63%
QC value within limits for Be 313.107 Recovery = 101.02%						
Co 228.616	85452.5	2.6402 mg/L	0.02659	2.6402 mg/L	0.02659	1.01%
QC value within limits for Co 228.616 Recovery = 105.61%						
Cr 267.716	64705.5	1.0142 mg/L	0.01025	1.0142 mg/L	0.01025	1.01%
QC value within limits for Cr 267.716 Recovery = 101.42%						
Cu 324.752	251246.2	1.2646 mg/L	0.00988	1.2646 mg/L	0.00988	0.78%
QC value within limits for Cu 324.752 Recovery = 101.17%						
Fe 273.955	114173.4	5.1815 mg/L	0.05187	5.1815 mg/L	0.05187	1.00%
QC value within limits for Fe 273.955 Recovery = 103.63%						
Mg 279.077	411837.2	25.881 mg/L	0.2077	25.881 mg/L	0.2077	0.80%
QC value within limits for Mg 279.077 Recovery = 103.52%						
Mn 257.610	1375063.6	2.5742 mg/L	0.01865	2.5742 mg/L	0.01865	0.72%
QC value within limits for Mn 257.610 Recovery = 102.97%						
Ni 231.604	69813.5	2.6126 mg/L	0.02931	2.6126 mg/L	0.02931	1.12%
QC value within limits for Ni 231.604 Recovery = 104.50%						
Pb 220.353	2334.9	0.50993 mg/L	0.002840	0.50993 mg/L	0.002840	0.56%
QC value within limits for Pb 220.353 Recovery = 101.99%						
Sb 206.836	557.6	0.52335 mg/L	0.004182	0.52335 mg/L	0.004182	0.80%
QC value within limits for Sb 206.836 Recovery = 104.67%						
Se 196.026	221.0	0.51154 mg/L	0.009116	0.51154 mg/L	0.009116	1.78%
QC value within limits for Se 196.026 Recovery = 102.31%						
Tl 190.801	305.7	0.48342 mg/L	0.008795	0.48342 mg/L	0.008795	1.82%
QC value within limits for Tl 190.801 Recovery = 96.68%						
V 292.402	283522.4	2.5490 mg/L	0.02359	2.5490 mg/L	0.02359	0.93%
QC value within limits for V 292.402 Recovery = 101.96%						
Zn 206.200	48779.6	2.5774 mg/L	0.03361	2.5774 mg/L	0.03361	1.30%
QC value within limits for Zn 206.200 Recovery = 103.09%						
Cd 226.502	12475.5	0.24955 mg/L	0.002371	0.24955 mg/L	0.002371	0.95%
QC value within limits for Cd 226.502 Recovery = 99.82%						
Ti 334.940	257207.3	0.52213 mg/L	0.003021	0.52213 mg/L	0.003021	0.58%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Ca 227.546	4466.6	24.695 mg/L	0.1694	24.695 mg/L	0.1694	0.69%
QC value within limits for Ca 227.546 Recovery = 98.78%						
Na 589.592	118976.9	25.697 mg/L	0.2531	25.697 mg/L	0.2531	0.98%
QC value within limits for Na 589.592 Recovery = 102.79%						
K 766.490	26176.7	25.541 mg/L	0.2317	25.541 mg/L	0.2317	0.91%
QC value within limits for K 766.490 Recovery = 102.17%						

All analyte(s) passed QC.

Sequence No.: 16

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 9/4/2012 4:26:09 PM

Data Type: Original

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	1795492.1	102.27	%	0.553			0.54%
Lu 261.542	1149888.6	101.9	%	0.60			0.58%
Ag 328.068	-223.7	-0.00142	mg/L	0.000546	-0.00142 mg/L	0.000546	38.45%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 308.215	105.4	0.00572	mg/L	0.001955	0.00572 mg/L	0.001955	34.20%
QC value within limits for Al 308.215 Recovery = Not calculated							
As 188.979	2.5	0.00448	mg/L	0.001640	0.00448 mg/L	0.001640	36.62%
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527	25.8	0.00033	mg/L	0.000237	0.00033 mg/L	0.000237	70.94%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107	111.9	0.00005	mg/L	0.000011	0.00005 mg/L	0.000011	22.50%
QC value within limits for Be 313.107 Recovery = Not calculated							
Co 228.616	-5.7	-0.00018	mg/L	0.000356	-0.00018 mg/L	0.000356	200.28%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716	-12.5	-0.00020	mg/L	0.000137	-0.00020 mg/L	0.000137	69.57%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752	-43.2	-0.00022	mg/L	0.000246	-0.00022 mg/L	0.000246	113.40%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 273.955	3.7	0.00017	mg/L	0.000516	0.00017 mg/L	0.000516	304.82%
QC value within limits for Fe 273.955 Recovery = Not calculated							
Mg 279.077	53.5	0.00337	mg/L	0.003666	0.00337 mg/L	0.003666	108.95%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610	78.7	0.00015	mg/L	0.000049	0.00015 mg/L	0.000049	33.12%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Ni 231.604	-0.5	-0.00002	mg/L	0.000190	-0.00002 mg/L	0.000190	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353	3.0	0.00066	mg/L	0.000780	0.00066 mg/L	0.000780	118.04%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836	6.3	0.00606	mg/L	0.001945	0.00606 mg/L	0.001945	32.12%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026	5.3	0.01221	mg/L	0.001732	0.01221 mg/L	0.001732	14.18%
QC value within limits for Se 196.026 Recovery = Not calculated							
Tl 190.801	-2.6	-0.00427	mg/L	0.000234	-0.00427 mg/L	0.000234	5.47%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 292.402	-34.1	-0.00031	mg/L	0.000289	-0.00031 mg/L	0.000289	94.21%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.200	13.9	0.00073	mg/L	0.000186	0.00073 mg/L	0.000186	25.56%
QC value within limits for Zn 206.200 Recovery = Not calculated							
Cd 226.502	4.0	0.00008	mg/L	0.000096	0.00008 mg/L	0.000096	121.56%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Ti 334.940	-11.2	-0.00002	mg/L	0.000122	-0.00002 mg/L	0.000122	526.26%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Ca 227.546	-11.9	-0.06834	mg/L	0.066598	-0.06834 mg/L	0.066598	97.46%
QC value within limits for Ca 227.546 Recovery = Not calculated							
Na 589.592	208.4	0.04502	mg/L	0.006576	0.04502 mg/L	0.006576	14.61%
QC value within limits for Na 589.592 Recovery = Not calculated							
K 766.490	5.9	0.00574	mg/L	0.022900	0.00574 mg/L	0.022900	398.85%
QC value within limits for K 766.490 Recovery = Not calculated							
All analyte(s) passed QC.							

Sequence No.: 17

Sample ID: 2925~PBW

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 54

Date Collected: 9/4/2012 4:29:50 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: 2925~PBW

=====
Analysis Begun

Logged In Analyst: mitFIMS2
Spectrometer Model: FIMS-100, S/N B050-9550

Technique: AA FIMS-MHS
Autosampler Model: AS-90

Sample Information File: C:\data-AA\mitFIMS2\Sample Information\0904B.sif
Batch ID: Null
Results Data Set: HG12090402
Results Library: C:\data-AA\mitFIMS2\Results\Results.mdb

=====
Method Loaded

Method Name: Comm Hg

Method Last Saved: 7/27/2011 10:10:28 AM

Method Description: Hg Analysis by Cold Vapor AA

Analyte	Calibration Equation	Wavelength
Hg 253.7	Lin Thru 0	253.7

=====
Sequence No.: 1

Sample ID: S0

Autosampler Location: 1

Date Collected: 9/4/2012 2:36:56 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0014	0.0076	0.0014	14:37:55	Yes
2		[0.00]	0.0013	0.0070	0.0013	14:38:35	Yes
Mean:		[0.00]	0.0014				
SD:		0.00	0.0000				
%RSD:		0.00	2.33				

Auto-zero performed.

=====
Sequence No.: 2

Sample ID: S0.20

Autosampler Location: 2

Date Collected: 9/4/2012 2:38:37 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0.20

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0026	0.0194	0.0039	14:39:35	Yes
2		[0.2]	0.0024	0.0184	0.0038	14:40:15	Yes
Mean:		[0.2]	0.0025				
SD:		0.0	0.0001				
%RSD:		0.0	4.04				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01251 Intercept: 0.00000

=====
Sequence No.: 3

Sample ID: S1.0

Autosampler Location: 3

Date Collected: 9/4/2012 2:40:17 PM

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S1.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[1]	0.0135	0.0719	0.0149	14:41:14	Yes
2		[1]	0.0131	0.0715	0.0145	14:41:54	Yes
Mean:		[1]	0.0133				

SD: 0 0.0003
%RSD: 0 2.24
Standard number 2 applied. [1]
Correlation Coef.: 0.999770 Slope: 0.01330 Intercept: 0.00000

=====

Sequence No.: 4	Autosampler Location: 4
Sample ID: S2.0	Date Collected: 9/4/2012 2:41:56 PM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2]	0.0272	0.1403	0.0286	14:42:54	Yes
2		[2]	0.0267	0.1375	0.0280	14:43:34	Yes
Mean:		[2]	0.0269				
SD:		0	0.0004				
%RSD:		0	1.38				

Standard number 3 applied. [2]
Correlation Coef.: 0.999917 Slope: 0.01343 Intercept: 0.00000

=====

Sequence No.: 5	Autosampler Location: 5
Sample ID: S5.0	Date Collected: 9/4/2012 2:43:36 PM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Replicate Data: S5.0

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5]	0.0669	0.3302	0.0683	14:44:34	Yes
2		[5]	0.0646	0.3203	0.0659	14:45:14	Yes
Mean:		[5]	0.0657				
SD:		0	0.0017				
%RSD:		0	2.54				

Standard number 4 applied. [5]
Correlation Coef.: 0.999915 Slope: 0.01320 Intercept: 0.00000

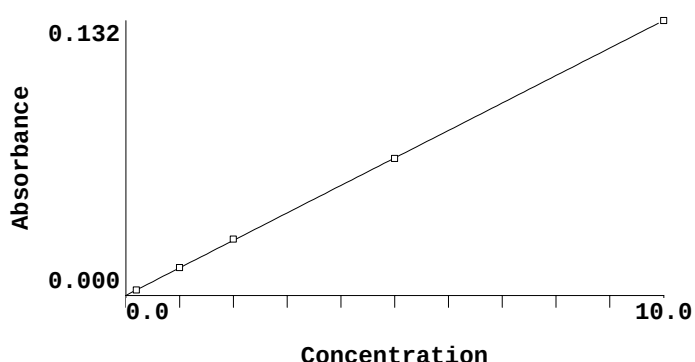
=====

Sequence No.: 6	Autosampler Location: 6
Sample ID: S10.0	Date Collected: 9/4/2012 2:45:16 PM
Analyst:	Data Type: Original
Initial Sample Wt:	Initial Sample Vol:
Dilution:	Sample Prep Vol:

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10]	0.1342	0.6588	0.1356	14:46:13	Yes
2		[10]	0.1299	0.6401	0.1312	14:46:53	Yes
Mean:		[10]	0.1320				
SD:		0	0.0031				
%RSD:		0	2.32				

Standard number 5 applied. [10]
Correlation Coef.: 0.999982 Slope: 0.01320 Intercept: 0.00000



Calibration data for Hg 253.7

Equation: Linear Through Zero

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
S0	0.0000	0	0.000	0.00	2.3
S0.20	0.0025	0.2	0.190	0.00	4.0
S1.0	0.0133	1.0	1.010	0.00	2.2
S2.0	0.0269	2.0	2.040	0.00	1.4
S5.0	0.0657	5.0	4.980	0.00	2.5
S10.0	0.1320	10.0	10.001	0.00	2.3

Correlation Coef.: 0.999982 Slope: 0.01320 Intercept: 0.00000

Sequence No.: 7

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 9/4/2012 2:46:55 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.301	5.301	0.0700	0.3451	0.0713	14:47:53	Yes
2	5.181	5.181	0.0684	0.3402	0.0698	14:48:33	Yes
Mean:	5.241	5.241	0.0692				
SD:	0.085	0.085	0.0011				
%RSD:	1.616	1.616	1.62				

QC value within limits for Hg 253.7 Recovery = 104.82%
All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 9/4/2012 2:48:35 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0074	0.0015	14:49:35	Yes
2	0.007	0.007	0.0001	0.0071	0.0015	14:50:15	Yes
Mean:	0.007	0.007	0.0001				
SD:	0.000	0.000	0.0000				
%RSD:	1.667	1.667	1.67				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9

Sample ID: MB-67952

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 17

Date Collected: 9/4/2012 2:50:17 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: MB-67952

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.091	-0.091	-0.0012	0.0008	0.0002	14:51:16	Yes
2	-0.092	-0.092	-0.0012	0.0001	0.0001	14:51:55	Yes
Mean:	-0.091	-0.091	-0.0012				
SD:	0.001	0.001	0.0000				
%RSD:	1.460	1.460	1.46				

Sequence No.: 10

Sample ID: LCS-67952

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 18

Date Collected: 9/4/2012 2:51:57 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LCS-67952

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.765	4.765	0.0629	0.3147	0.0643	14:52:55	Yes
2	4.671	4.671	0.0617	0.3060	0.0630	14:53:35	Yes
Mean:	4.718	4.718	0.0623				
SD:	0.066	0.066	0.0009				
%RSD:	1.409	1.409	1.41				

Sequence No.: 11

Sample ID: L1820-01B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 19

Date Collected: 9/4/2012 2:53:37 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-01B

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.021	-0.021	-0.0003	0.0049	0.0011	14:54:34	Yes
2	-0.022	-0.022	-0.0003	0.0056	0.0011	14:55:14	Yes
Mean:	-0.021	-0.021	-0.0003				
SD:	0.000	0.000	0.0000				
%RSD:	1.510	1.510	1.51				

Sequence No.: 12

Sample ID: L1820-01C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 20

Date Collected: 9/4/2012 2:55:16 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-01C

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.092	-0.092	-0.0012	0.0005	0.0002	14:56:14	Yes
2	-0.096	-0.096	-0.0013	-0.0002	0.0001	14:56:54	Yes
Mean:	-0.094	-0.094	-0.0012				
SD:	0.003	0.003	0.0000				
%RSD:	3.380	3.380	3.38				

Sequence No.: 13

Sample ID: L1820-02B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 21

Date Collected: 9/4/2012 2:56:56 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-02B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.040	-0.040	-0.0005	0.0038	0.0008	14:57:53	Yes
2	-0.040	-0.040	-0.0005	0.0045	0.0008	14:58:33	Yes
Mean:	-0.040	-0.040	-0.0005				
SD:	0.000	0.000	0.0000				
%RSD:	1.086	1.086	1.09				

Sequence No.: 14

Sample ID: L1820-02C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 22

Date Collected: 9/4/2012 2:58:35 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-02C

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.091	-0.091	-0.0012	0.0000	0.0002	14:59:33	Yes
2	-0.094	-0.094	-0.0012	0.0002	0.0001	15:00:13	Yes
Mean:	-0.092	-0.092	-0.0012				
SD:	0.002	0.002	0.0000				
%RSD:	2.367	2.367	2.37				

Sequence No.: 15

Sample ID: L1820-03B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 23

Date Collected: 9/4/2012 3:00:15 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-03B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.047	-0.047	-0.0006	0.0037	0.0008	15:01:12	Yes
2	-0.050	-0.050	-0.0007	0.0031	0.0007	15:01:52	Yes
Mean:	-0.048	-0.048	-0.0006				
SD:	0.002	0.002	0.0000				
%RSD:	4.817	4.817	4.82				

Sequence No.: 16

Sample ID: L1820-03C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 24

Date Collected: 9/4/2012 3:01:54 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-03C

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0013	-0.0003	0.0001	15:02:52	Yes
2	-0.097	-0.097	-0.0013	0.0000	0.0001	15:03:32	Yes
Mean:	-0.098	-0.098	-0.0013				
SD:	0.002	0.002	0.0000				
%RSD:	1.638	1.638	1.64				

Sequence No.: 17

Sample ID: L1820-04B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 25

Date Collected: 9/4/2012 3:03:34 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-04B

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.059	-0.059	-0.0008	0.0028	0.0006	15:04:31	Yes

2	-0.058	-0.058	-0.0008	0.0031	0.0006	15:05:12	Yes
Mean:	-0.058	-0.058	-0.0008				
SD:	0.001	0.001	0.0000				
%RSD:	1.420	1.420	1.42				

Sequence No.: 18

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 9/4/2012 3:05:14 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.249	5.249	0.0693	0.3480	0.0707	15:06:12	Yes
2	5.210	5.210	0.0688	0.3433	0.0701	15:06:52	Yes
Mean:	5.230	5.230	0.0690				
SD:	0.028	0.028	0.0004				
%RSD:	0.528	0.528	0.53				

QC value within limits for Hg 253.7 Recovery = 104.59%
All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 9/4/2012 3:06:54 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0068	0.0015	15:07:55	Yes
2	0.010	0.010	0.0001	0.0073	0.0015	15:08:35	Yes
Mean:	0.009	0.009	0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	21.68	21.68	21.68				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 20

Sample ID: L1820-04C

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 26

Date Collected: 9/4/2012 3:08:36 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-04C

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.090	-0.090	-0.0012	0.0004	0.0002	15:09:37	Yes
2	-0.088	-0.088	-0.0012	0.0006	0.0002	15:10:17	Yes
Mean:	-0.089	-0.089	-0.0012				
SD:	0.001	0.001	0.0000				
%RSD:	1.624	1.624	1.62				

Sequence No.: 21

Sample ID: L1820-06B

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 27

Date Collected: 9/4/2012 3:10:19 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1820-06B

Repl #	SampleConc ug/L	StdConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
--------	-----------------	--------------	-----------------	-----------	-------------	------	-------------

1	-0.095	-0.095	-0.0013	-0.0007	0.0001	15:11:16	Yes
2	-0.092	-0.092	-0.0012	0.0002	0.0002	15:11:57	Yes
Mean:	-0.093	-0.093	-0.0012				
SD:	0.002	0.002	0.0000				
%RSD:	2.557	2.557	2.56				

Sequence No.: 22
Sample ID: L1820-06C
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 28
Date Collected: 9/4/2012 3:11:58 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1820-06C

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.099	-0.099	-0.0013	-0.0003	0.0001	15:12:56	Yes
2	-0.097	-0.097	-0.0013	-0.0004	0.0001	15:13:35	Yes
Mean:	-0.098	-0.098	-0.0013				
SD:	0.001	0.001	0.0000				
%RSD:	1.172	1.172	1.17				

Sequence No.: 23
Sample ID: L1820-07B
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 29
Date Collected: 9/4/2012 3:13:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1820-07B

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.100	-0.100	-0.0013	-0.0005	0.0001	15:14:35	Yes
2	-0.097	-0.097	-0.0013	0.0005	0.0001	15:15:14	Yes
Mean:	-0.098	-0.098	-0.0013				
SD:	0.002	0.002	0.0000				
%RSD:	2.165	2.165	2.17				

Sequence No.: 24
Sample ID: L1820-07C
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 30
Date Collected: 9/4/2012 3:15:16 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1820-07C

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.097	-0.097	-0.0013	0.0001	0.0001	15:16:14	Yes
2	-0.098	-0.098	-0.0013	-0.0010	0.0001	15:16:53	Yes
Mean:	-0.098	-0.098	-0.0013				
SD:	0.001	0.001	0.0000				
%RSD:	0.689	0.689	0.69				

Sequence No.: 25
Sample ID: L1823-01C
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 31
Date Collected: 9/4/2012 3:16:55 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1823-01C

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.058	-0.058	-0.0008	0.0028	0.0006	15:17:53	Yes
2	-0.064	-0.064	-0.0008	0.0014	0.0005	15:18:33	Yes
Mean:	-0.061	-0.061	-0.0008				

SD: 0.005 0.005 0.0001
%RSD: 7.679 7.679 7.68

Sequence No.: 26
Sample ID: L1823-03D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 32
Date Collected: 9/4/2012 3:18:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1823-03D

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.071	-0.071	-0.0009	0.0018	0.0004	15:19:36	Yes
2	-0.072	-0.072	-0.0010	0.0011	0.0004	15:20:16	Yes
Mean:	-0.072	-0.072	-0.0009				
SD:	0.001	0.001	0.0000				
%RSD:	1.333	1.333	1.33				

Sequence No.: 27
Sample ID: L1823-05D
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 33
Date Collected: 9/4/2012 3:20:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1823-05D

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.075	-0.075	-0.0010	0.0009	0.0004	15:21:15	Yes
2	-0.073	-0.073	-0.0010	0.0015	0.0004	15:21:55	Yes
Mean:	-0.074	-0.074	-0.0010				
SD:	0.002	0.002	0.0000				
%RSD:	2.082	2.082	2.08				

Sequence No.: 28
Sample ID: L1829-01A
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 34
Date Collected: 9/4/2012 3:21:57 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: L1829-01A

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.034	-0.034	-0.0005	0.0041	0.0009	15:22:54	Yes
2	-0.035	-0.035	-0.0005	0.0041	0.0009	15:23:34	Yes
Mean:	-0.035	-0.035	-0.0005				
SD:	0.001	0.001	0.0000				
%RSD:	2.340	2.340	2.34				

Sequence No.: 29
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 9/4/2012 3:23:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.207	5.207	0.0687	0.3451	0.0701	15:24:37	Yes
2	5.107	5.107	0.0674	0.3406	0.0688	15:25:17	Yes
Mean:	5.157	5.157	0.0681				
SD:	0.071	0.071	0.0009				
%RSD:	1.377	1.377	1.38				

QC value within limits for Hg 253.7 Recovery = 103.14%

All analyte(s) passed QC.

Sequence No.: 30

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 9/4/2012 3:25:19 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	-0.0000	0.0061	0.0013	15:26:19	Yes
2	0.000	0.000	-0.0000	0.0065	0.0014	15:26:59	Yes
Mean:	-0.001	-0.001	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	99.85	99.85	99.85				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 31

Sample ID: L1829-06A

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 35

Date Collected: 9/4/2012 3:27:01 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1829-06A

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.175	0.175	0.0023	0.0180	0.0037	15:28:00	Yes
2	0.180	0.180	0.0024	0.0178	0.0037	15:28:40	Yes
Mean:	0.178	0.178	0.0023				
SD:	0.003	0.003	0.0000				
%RSD:	1.952	1.952	1.95				

Sequence No.: 32

Sample ID: L1837-03A

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 36

Date Collected: 9/4/2012 3:28:42 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: L1837-03A

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.056	-0.056	-0.0007	0.0026	0.0006	15:29:39	Yes
2	-0.054	-0.054	-0.0007	0.0032	0.0007	15:30:19	Yes
Mean:	-0.055	-0.055	-0.0007				
SD:	0.002	0.002	0.0000				
%RSD:	3.354	3.354	3.35				

Sequence No.: 33

Sample ID: MB-67951

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 37

Date Collected: 9/4/2012 3:30:21 PM

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: MB-67951

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.091	-0.091	-0.0012	-0.0002	0.0002	15:31:18	Yes
2	-0.091	-0.091	-0.0012	0.0003	0.0002	15:31:58	Yes
Mean:	-0.091	-0.091	-0.0012				
SD:	0.000	0.000	0.0000				
%RSD:	0.508	0.508	0.51				

Prep Start Date: 9/4/2012 11:30:00

Prep End Date: 9/4/2012 1:30:00 P

Prep Batch ID: 67952

Prep Code: SW7470A_PR

Prep Type: 7470A/METHOD

Prep Factor Units:
mL / mL

Technician: Jill L Cartwright

QC Matrix: N/A

Conc H2SO4 3110100

5% KMnO4 IR12082808

Reagent 5 Lot: N/A

QC Matrix Lot: N/A

Conc H2SO4 (mL): 5.0

5% KMnO4 (mL): 15.0

Reagent 5 (mL): N/A

Filter?: N/A

Conc HNO3 1112012

5% K2S2O8 IR12082809

Reagent 6 Lot: N/A

Filter Lot: N/A

Conc HNO3 (mL): 2.5

5% K2S2O8 (mL): 8.0

Reagent 6 (mL): N/A

Digestion Start Time 1: 09/04/2012 11:30

Digestion Start Time 2: N/A

Therm ID1: MT-47

Digestion End Time 1: 09/04/2012 13:30

Digestion End Time 2: N/A

Block Temp (C): 97

Corr Fac-3

Mikem Sample ID	Client Samp ID	Final L/g	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11 <2	HOT BLOCK
S0		100	--	--	--	--			09/04/12	JLC			☐	HB-A
S0.2		100	--	--	--	--			09/04/12	JLC			☐	HB-A
40 uL III 20830A														
S1.0		100	--	--	--	--			09/04/12	JLC			☐	HB-A
200 uL III 20830A														
S2.0		100	--	--	--	--			09/04/12	JLC			☐	HB-A
400 uL III 20830A														
S5.0		100	--	--	--	--			09/04/12	JLC			☐	HB-A
1000 uL III 20830A														
S10.0		100	--	--	--	--			09/04/12	JLC			☐	HB-A
2000 uL III 20830A														
ICV		100	--	--	--	--			09/04/12	JLC			☐	HB-A
1000 uL III 20828A														
ICB		100	--	--	--	--			09/04/12	JLC			☐	HB-A
CCV		100	--	--	--	--			09/04/12	JLC			☐	HB-A
1000 uL III 20828A														
CCB		100	--	--	--	--			09/04/12	JLC			☐	HB-A
MB-67952		100	--	--	--	--			09/04/12	JLC			☐	HB-A
LCS-67952		100	--	--	--	--			09/04/12	JLC			☐	HB-A
1000 uL III 20828B														
L1820-01B	SL-MW-3A	A	100	--	--	--	09/18/12	01	09/04/12	JLC		2	☐	HB-2
TAL														
L1820-01C	SL-MW-3A	A	100	--	--	--	09/18/12	01	09/04/12	JLC		2	☐	HB-2
TAL														
L1820-02B	SL-MW-3B	A	100	--	--	--	09/18/12	01	09/04/12	JLC		2	☐	HB-2
TAL														
L1820-02C	SL-MW-3B	A	100	--	--	--	09/18/12	01	09/04/12	JLC		2	☐	HB-2
TAL														
L1820-03B	SL-MW-6A	A	100	--	--	--	09/18/12	01	09/04/12	JLC		2	☐	HB-2
TAL														
L1820-03C	SL-MW-6A	A	100	--	--	--	09/18/12	01	09/04/12	JLC		2	☐	HB-2
TAL														

Logbook ID: 100.0128 -08/12

18

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

Prep Start Date: 9/4/2012 11:30:00
 Prep End Date: 9/4/2012 1:30:00 P
 Prep Batch ID: 67952

Prep Code: SW7470A_PR
 Technician: JILL L Cartwright

Prep Type: 7470A/METHOD
 Prep Factor Units: mL / mL

QC Matrix: N/A
 QC Matrix Lot: N/A
 Filter?: N/A
 Filter Lot: N/A

Conc H2SO4 3110100
 Conc H2SO4 (mL): 5.0
 Conc HNO3 1112012
 Conc HNO3 (mL): 2.5

Reagent 5 Lot: N/A
 Reagent 5 (mL): N/A
 Reagent 6 Lot: N/A
 Reagent 6 (mL): N/A

Digestion Start Time 1: 09/04/2012 11:30
 Digestion End Time 1: 09/04/2012 13:30
 Digestion Start Time 2: N/A
 Digestion End Time 2: N/A

Block Temp (C): 97
 Therm ID1: MT-47
 Corr Fac-3

Mitkem Sample ID	Client Samp ID	Final (L/g)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11 <2	HOT BLOCK
L1820-04B	SL-MW-6B	100	--	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-2
L1820-04C	SL-MW-6B	100	--	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-2
L1820-06B	SL-MW-5	100	--	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-2
L1820-06C	SL-MW-5	100	--	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-2
L1820-07B	SL-MW-4	100	--	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-2
L1820-07C	SL-MW-4	100	--	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-2
L1823-01C	EW-2 82812	100	--	--	--	--	09/14/12	01	09/04/12	JLC		2		HB-C
L1823-03D	EW2 82912	100	--	--	--	--	09/14/12	01	09/04/12	JLC		2		HB-C
L1823-05D	EW2 83012	100	--	--	--	--	09/14/12	01	09/04/12	JLC		2		HB-C
L1829-01A	TP-A1/D1	100	--	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-C
L1829-06A	DW-I/J/V/S	100	--	--	--	--	09/18/12	01	09/04/12	JLC		2		HB-C
L1837-03A	TP-E/G/01	100	--	--	--	--	09/21/12	01	09/04/12	JLC		2		HB-C
MB-67951		100	--	--	--	--	09/04/12		09/04/12	JLC		2		HB-C
L1837-09A	TP C1/C2/C3/C4/H-1	100	--	--	--	--	09/21/12		09/04/12	JLC		2		HB-C
L1837-09AMS	TP C1/C2/C3/C4/H-1	100	--	--	--	--	09/21/12		09/04/12	JLC		2		HB-C

Jill L Cartwright
 Analyst Reviewed
 Date: 09/04/2012
 Manager Reviewed
 Date: 9/5/12

Logbook ID: 100.0128 -08/12

8 9/4/12 JC 9/4/12 JC

Start time:

Prep Start Date: 9/4/2012 10:00:00

Prep End Date: 9/4/2012 2:00:00 P

Prep Batch ID: 67953

Spectrum Analytical, Inc. RI Division: Aqueous Metals Preparation Logbook

Prep Code: ICP_W_PR

Prep Type: 3005A/SW3005A

Technician: David T Camara

Prep Factor Units:
mL / mL

QC Matrix: N/A

QC Matrix Lot: N/A

Filter?: N/A

Filter Lot: N/A

Digestion Start Time 1: 09/04/2012 10:00

Digestion End Time 1: 09/04/2012 14:00

Reagent 5 Lot: N/A

Reagent 5 (mL): N/A

Reagent 6 Lot: N/A

Reagent 6 (mL): N/A

Digestion Start Time 2: N/A

Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-111
Corr Fac-2

Mitkem Sample ID	Client Samp ID	Final (L/g)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	HOT BLOCK
MB-67953		50	--	--	--	--			09/04/12	DTC	ICPLab	2	☐	HB-K
LCS-67953		50	--	--	--	--			09/04/12	DTC	ICPLab	2	☐	HB-K
455 uL III120727B, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP120321A														
LCSD-67953		50	--	--	--	--			09/04/12	DTC	ICPLab	2	☐	HB-K
455 uL III120727B, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP120321A														
MB-67951		50	--	--	--	--			09/04/12	DTC	ICPLab	2	☐	HB-K
L1829-01A	TP-A1/D1	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TCLP METALS														
L1829-06A	DW-I/J/V/S	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TCLP METALS														
L1837-03A	TP-E/G/J01	50	--	--	--	--	09/21/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TCLP METALS														
L1837-09A	TP C1/C2/C3/C4/H-1	50	--	--	--	--	09/21/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TCLP METALS														
L1837-09AMS	TP C1/C2/C3/C4/H-1	50	--	--	--	--	09/21/12		09/04/12	DTC	ICPLab	2	☐	HB-K
455 uL III120727B, 45.5 uL IP110822C, 45.5 uL IP110822D, 455 uL IP120321A, TCLP METALS														
L1820-01B	SL-MW-3A	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-01C	SL-MW-3A	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-02B	SL-MW-3B	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-02C	SL-MW-3B	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-03B	SL-MW-6A	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-03C	SL-MW-6A	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-04B	SL-MW-6B	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														
L1820-04C	SL-MW-6B	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	☐	HB-K
TAL														

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

Prep Start Date: 9/4/2012 10:00:00

Prep End Date: 9/4/2012 2:00:00 P

Prep Batch ID: 67953

Prep Code: ICP_W_PR
Technician: David T Camara

Prep Type: 3005A/SW3005A

Prep Factor Units:
mL / mL

QC Matrix: N/A
QC Matrix Lot: N/A

Reagent 5 Lot: N/A
Reagent 5 (mL): N/A

Filter?: N/A
Filter Lot: N/A

Reagent 6 Lot: N/A
Reagent 6 (mL): N/A

Digestion Start Time 1: 09/04/2012 10:00
Digestion End Time 1: 09/04/2012 14:00

Digestion Start Time 2: N/A
Digestion End Time 2: N/A

Block Temp (C): 97

Therm ID1: MT-111
Corr Fac-2

Mitkem Sample ID	Client Samp ID	Final (mL)	Sample Color	Sample Clarity	Extract Color	Extract Clarity	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH	HOT BLOCK
L1820-06B	SL-MW-5	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2	>11 <2	HB-K
TAL														
L1820-06C	SL-MW-5	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2		HB-K
TAL														
L1820-07B	SL-MW-4	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2		HB-K
TAL														
L1820-07C	SL-MW-4	50	--	--	--	--	09/18/12	01	09/04/12	DTC	ICPLab	2		HB-K
TAL														

David T Camara
Analyst Reviewed

Manager Reviewed

9/5/12
Date

Comments:

100-9412

Internal Chain of Custody

Client: AECOM_CHSNTRDG

Work Order: L1820

Profile Name: MULTI_SITE

MATRIX Aqueous

Samp #	Bottle	Test	Status	Received	Date
01A	001	SW8260_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
01A	002	SW8260_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
01B	001	SW6010_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
01B	001	SW7470	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
01C	001	SW6010_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
01C	001	SW7470	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
02A	001	SW8260_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
02A	002	SW8260_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
02B	001	SW6010_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
02B	001	SW7470	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
02C	001	SW6010_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
02C	001	SW7470	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
03A	001	SW8260_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
03A	002	SW8260_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
03B	001	SW6010_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
03B	001	SW7470	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
03C	001	SW6010_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
03C	001	SW7470	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
04A	001	SW8260_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
04A	002	SW8260_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
04B	001	SW6010_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
04B	001	SW7470	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
04C	001	SW6010_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
04C	001	SW7470	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
05A	001	SW8260_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
05A	002	SW8260_W	In	LOGIN: jwarner	8/28/2012 4:06:00 PM
06A	001	SW8260_W	In	LOGIN: jvales	8/30/2012 2:44:00 PM
06A	002	SW8260_W	In	LOGIN: jvales	8/30/2012 2:44:00 PM
06B	001	SW6010_W	In	LOGIN: jvales	8/30/2012 2:44:00 PM
06B	001	SW7470	In	LOGIN: jvales	8/30/2012 2:44:00 PM
06C	001	SW6010_W	In	LOGIN: jvales	8/30/2012 2:44:00 PM
06C	001	SW7470	In	LOGIN: jvales	8/30/2012 2:44:00 PM

Internal Chain of Custody

Client: AECOM_CHSNTRDG

Work Order: L1820

Profile Name: MULTI_SITE

MATRIX **Aqueous**

Samp #	Bottle	Test	Status	Received	Date
07A	001	SW8260_W	In	LOGIN: jvales	8/30/2012 2:44:00 PM
07A	002	SW8260_W	In	LOGIN: jvales	8/30/2012 2:44:00 PM
07B	001	SW6010_W	In	LOGIN: jvales	8/30/2012 2:44:00 PM
07B	001	SW7470	In	LOGIN: jvales	8/30/2012 2:44:00 PM
07C	001	SW6010_W	In	LOGIN: jvales	8/30/2012 2:44:00 PM
07C	001	SW7470	In	LOGIN: jvales	8/30/2012 2:44:00 PM
08A	001	SW8260_W	In	LOGIN: jvales	8/30/2012 2:44:00 PM
08A	002	SW8260_W	In	LOGIN: jvales	8/30/2012 2:44:00 PM

Last Page of Data Report